

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	PORT LINCOLN SA 5606
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
✓	A private citizen
Other:	

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The aspects of the proposal I wish to make comment on are (add pages as required):

<p>+ Bushfire Risk ~ particular concern about risk ↳ + SEP informing "Appendix AB; (however it is <u>not</u> in the EIS.) have been redacted from <u>public consultation</u> due to the risk that making such information available could <u>compromise future security measures for the site</u>"</p>
<p>* Economics ~ "This development will significantly affect these tourism figures" FOR MINIMAL EMPLOYMENT OPPORTUNITIES OVER A 10 YEAR PREDICTION</p>
<p>* NOISE LEVELS - larger rockets 140 decibals. ↳ hearing lost / impact on birds & whales.</p>

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Re: Industrial Zone.

"None of the reports consider the complex in its entirety, which will regularly feature continuous coming and going of heavy vehicles between the sites"

→ Huge concerns re impacts on our pristine wilderness

This area should remain a place of conservation and protection

FIND A DIFFERENT SITE.

The impact will be devastating on the pristine environment and wildlife and our local community.

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Upon reviewing Southern Launch's EIS it is quite clear that there has been little effort to investigate the actual environmental impacts of this project. Their report dismisses the threat to many native species (some threatened and endangered) in the area, instead it claims that most of the wildlife in the area is introduced species such as Starlings, Rabbits and Foxes. As a local who has been exploring this area for over 20 years, I can say that this couldn't be further from the truth. This area is a haven for wildlife and many of the species I have observed here, I haven't been able to find in any other location on the Eyre Peninsula. This includes Southern Emu Wrens and Western Whip Birds. Raptors also nest on the pinnacles and cliffs at Whalers Way. The direction that Southern Launch are proposing the launch of rockets is directly over a major breeding population of endangered Australian Sea Lions.

This project requires an independent review. A survey conducted by the company that stands to benefit from the project is simply not good enough. Moreover, there has not been enough time for public consultation. There is a petition (Save Whalers Way) which has been rapidly gaining signatures in the last 24 hours, as people are becoming aware of what Southern Launch are proposing. I believe Southern Launch conducted a test launch this morning and as far as I am aware, they have no approval for this. They have also started construction at Whalers Way. This is not the behaviour of an ethical company, in fact it is a slap in the face to

the local people, visitors, and the environment. Not to mention illegal.
 Scan and email to spcmbs@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Whalers Way is a pristine paradise for wildlife, local people, and tourists alike. It has been an asset to the community both as a major tourist attraction and a wildlife sanctuary. On the

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The aspects of the proposal I wish to make comment on are (add pages as required):

I have lived in Port Jucob for more than 50 years. Whalers Way has been a wonderful, pristine environment to be enjoyed by family and visitors throughout that time. Just recently we went with others to photograph the magnificent ocean swells and the wild life. We took our picnic lunch to enjoy the beauty of the area in a day's outing, as did many other local and visiting people. This development will seriously impede free access to Whalers Way which should remain available to local people and tourists. (Loss of popular tourist destination)

During my High School time, class excursions were made to Whalers Way to study unique geological features and increase awareness of local history (Whaling). Such

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local study should not be interfered with by this proposed development.

Eyre Peninsula is already experiencing water shortages (as indicated by moves to build a desalination plant to meet household demands for fresh water).

The bore water will not support ongoing launches water needs. We cannot jeopardise our precious water supply in this way.

The proposed development will have a hugely detrimental effect on wild life in the area. Not just the launches themselves, but the increased activity and traffic will create an unsafe environment for birds and animals both within Whalers Way and along the roads to and from the site. Endangered species such as the Osprey and other creatures will be lost to the area.

I have grave concerns about the condition of the road between Port Lincoln and Whalers Way. It is already quite a busy road used by local landholders, school bus, tourists and recreational fishing, surfing and other beach going families. The roads had been intended for all the extra trucks servicing the proposed development.

Surely a more suitable site could be found which does not involve destroying the precious environmental, recreational and tourism site of Whalers Way.

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Email:	
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Affected property (if different from postal address)	120 HOWARD AVE.
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The aspects of the proposal I wish to make comment on are (add pages as required):

IN A STATE WHICH IS THREE QUARTERS DESERT, AND HAS AN EXCELLENT ROCKET LAUNCH FACILITY, IT IS PREPOSTEROUS TO SITE A NEW ONE ON ONE OF THE UNSPOILT COASTLINE GEMS

EVERY YEAR THE NUMBER AND FEROCITY OF BUSHFIRES INCREASE, WHY RISK STARTING MORE? THERE WILL BE DISASTERS WITH FAULTY ROCKETS

THE EXISTING ROADS CAN BARELY COPE WITH TRAFFIC NOW, THE DISTRICT COUNCIL RESPONSIBLE IS ALREADY PLEADING FOR MATERIALS TO REBUILD THEM

THE SMOKE AND GASSES FROM EVERY LAUNCH ARE TOXIC.

THE WHOLE OF EYRE PENINSVLA IS ALREADY SHORT OF FRESH WATER.

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THERE IS CONSIDERABLE MARINE TRAFFIC AROUND THIS COAST FOR RECREATION, FISHING AND FREIGHT. MANY ARE SMALL VESSELS

TOURISM IS VERY IMPORTANT TO THE LOCAL ECONOMY. NO ONE WILL COME TO VIEW A TOXIC INDUSTRIAL SITE. THE THRIVING WHALE NURSERY WILL BE ENDANGERED.

APART FROM THE DANGERS OF THE ROCKETS, THE PROPOSED INSTALLATION IS HUGE, CONSPICUOUS, INDUSTRIAL AND UGLY.

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The aspects of the proposal I wish to make comment on are (add pages as required):

<p>I believe that this project will be very good for our community. It will provide extra employment and more money going into local businesses.</p> <p>The impact on the environment will be very minimal & the company has addressed this issue very well.</p>

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Other:	[REDACTED]

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a) We surf (closest area for surfing and beach recreation where children can experience actual wave action.)
b) Sick seals come to Fisheries Bay and recuperated on the beach.
c) Kaala's, Emu's, Kangaroo - danger on the roads day-time and night. More people own Utes so they go faster (4x4's) therefore dig up the beaches (beach access) and trample ^{over} more sensitive Flora Flora
d) The area has no future as a natural environment (with rockets)
e) Clearing of land at Whalers when we are supposed to be conserving and planting.
f) I am an older parent with 2 children, Fisheries Bay

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(has only scrapes for car parks or the beach which all locals and a few tourists use) With many many more tourists (fostered by the Rocket company) there is no room. Even now when the surf is running - all car-parks are full and the beach is topped up with families. (most of summer)*

At the moment it is friends and families who inhabit the beach and point areas.

g) This is a pristine environment where most people know each other.,.,

h) At whalers we remember our heritage and also remember those who have lost their lives in this rugged coastline. At the moment families of these loved ones can pay homage in the direct areas where people have lost their lives; so as to ^{show love and respect} ~~pay homage~~.

i) We teach our children the diverseness of nature both in the sea and on land. Rockets will make us hypocrites about protection of this area.

j) Koalas Emus kangaroos at peace now in our area.

i) We and others teach our children to be careful of their "FOOT PRINT" on the earth - Rockets in this area?
"NO Rockets"

k) This is truly breaking our hearts and makes a mockery of what we teach our children. They are our future custodians of these precious areas.

l) We must show our children the environment matters even in rural and regional areas; Whalers way staying as is with its natural splendour and beauty is the only way to say; The ~~N~~ Natural Environment matters and it will always give you life with happiness and true hope for the future

~~Do not~~

Thank you

N.B. Acid Rain - whats next - who is going to suffer?

Port Lincoln Times
2-9-21

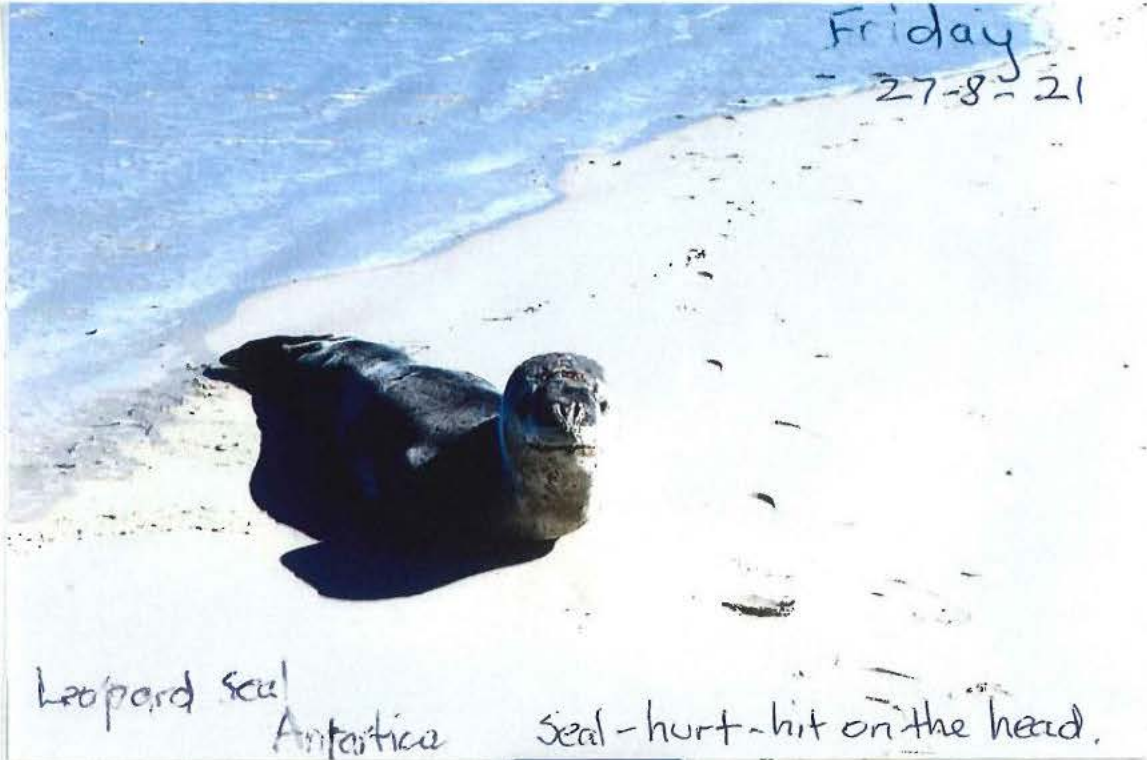


IMAGE: Flynn Webb.

RARE SEAL SIGHTED AT LOCAL BEACH

A VIDEO shared to popular video app TikTok has gone viral after local Flynn Webb posted his sighting of a leopard seal on a beach near Port Lincoln at the weekend. He and friend Wayne Letton were fishing when they came across the seal, native to Antarctica. The video, which has been viewed more than 17 million times, shows Flynn being startled when the seal moved. "I thought it was dead - it must have been sleeping," he said. Leopard seal sightings in Australia are considered rare. 2/9/21

Friday
- 27-8-21



Leopard Seal
Antarctica Seal - hurt - hit on the head.



Fisheries Bay
- Looking to whalers
Pristine Area

[REDACTED]

Rare Leopard seal from Antarctica
hurt on head - open wound.
Resting on our beach:
Fisheries Bay
overlooking Whalers Way.

[REDACTED]

Leopard Seal 27-8-21

Port Lincoln Times.

"Rare Seal sighted at Local Beach."

(What would have happened on
Rocket Launch day,
100's maybe 1000's people -
disturbing this fantastic sea animal.)

saltwater people

of the fatal shore

Touch the Earth lightly!
 Warmy Regards,
 Jh Gh



"We are all visitors to this time, this place. We are just passing through. Our purpose here is to observe, to learn, to grow, to love ... and then we return home."

Australian Aboriginal Proverb

Above: English
 the Woods
 New South
 Australia 1840
 Previous spread

Rockets drop sulphuric acid
 August 2021

NEWS 19

Acid leak cops a fine

Nyrstar hit with \$35k penalty

JOURNALISM SCHEMER

Judge Muscat said aquatic organisms were "potentially exposed to toxic conditions and potential harm for between five hours and three days."

He said the spill sat at the lower end of the scale for contraventions and the potential harm occurred in a heavily modified environment.

"An incident of this general nature was not entirely unforeseeable and effective mechanisms to prevent it could and should have been implemented," he said.

"These systems and processes were clearly insufficiently designed and not implemented to the required standard."

A spokesman for Nyrstar said the unintended spill followed a contractor's mistaken installation of a valve not resistant to acid corrosion.

"Nyrstar has fully co-operated from the outset with the EPA investigation and subsequent court proceedings," he said.

"Nyrstar has also made adjustments and upgrades to ancillary equipment to reduce the likelihood of further spills."

He said the smelter's new management had "driven further significant environment and safety-related upgrades at the Port Pirie site".

PORT Pirie lead smelter owner Nyrstar has been fined \$35,000 for a "combination of small failures" which led to 700 litres of sulphuric acid spilling into local waterways.

In a decision handed down in the Environment, Resources and Development Court on Tuesday, Judge Paul Muscat found the spill in early 2019 was "not a flagrant disregard" but "a combination of small failures in processes and human error that led to environmental harm".

The spill of 98 per cent concentrated sulphuric acid occurred when a leaking valve, later identified as corroding because it was made from the wrong materials, failed to prevent the spill. It was supposed to safeguard against.

The acid travelling 1.4km through tidal creeks, First Creek, and into Spencer Gulf. No action was taken when the spill was first discovered because the liquid was coming from a pipe labelled "weak acid".

The spill caused the pH levels in and near First Creek to "drop to levels that were potentially harmful to fish and other biota" and levels of metals to rise.

More Acid - whatever is a sensitive Area

[REDACTED]

Author sending an environmental lesson
to my children.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 12:16 PM
To: DIT:SPC Reps
Subject: Whalers way

[REDACTED]
[REDACTED]
[REDACTED]

I strongly oppose the use of whalers way reserve for Southern Launch use. Our town mayor has a conflict of interest at hand, being the range operations manager. Our towns pristine beaches, endangered wildlife, water supply and fresh air are about to become a thing of the past because the mayor has his hands in two honeypots, with the environment and locals being the bottom priority.

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 12:52 PM
To: DIT:SPC Reps
Subject: southern launch development

I support the whalers way rocket launch development

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 1:27 PM
To: DIT:SPC Reps
Subject: Southern launch development

I support the Whaler's Way rocket launch development.

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 1:28 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 1:43 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

Hi,

I support the Whalers Way rocket launch development

Regards,

[REDACTED]

[REDACTED]

From: Catherine Veldhuyzen [REDACTED]
Sent: Wednesday, 15 September 2021 1:59 PM
To: DIT:SPC Reps
Subject: Minister for Planning & local Government re: Southern Launch site

Please add my name:

Catherine Veldhuyzen
[REDACTED]
[REDACTED]
[REDACTED]

to the list of residents in opposition to allowing the
Whalers Way Orbital Launch Complex development to continue.
It is simply the WRONG LOCATION for a number of reasons as has already been forwarded to the State
Government.
Thankyou

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 2:17 PM
To: DIT:SPC Reps
Subject: Shouthern Launch Development

I support the whalers way rocket launch development

WHALERS WAY ORBITAL LAUNCH COMPLEX PROPOSAL – DEVELOPMENT
NUMBER 932/P007/10

I would like to submit my opposition to the above proposal .

My concerns are as follows:

BUSHFIRE: this area is near national park. Bushfires are becoming increasingly regular and to have a rocket right on the doorstep with flammable fuels on site is dangerous. Also, close by also is Mikkeria which accommodates a growing number of Koala population. As Koala populations are dwindling around the country, it is reassuring that our population in the local area is thriving and a popular destination for tourists and locals alike.

Tulka is also a little community not far from this site which has already gone through a devastating bushfire a few years ago. Being on the edge of the National Park, the imminent threat of a bushfire is clearly on the resident's minds (as posted on social media in the area).

WHALES: We have been blessed to have the Southern Right Whale come back to our southern coasts and their numbers are increasing also. This is a huge tourist attraction and as a local, see these creatures as part of our wonderful Eyre Peninsula coastline.

The launch noise will reach up to 140 decibels. I have read that this can cause temporary hearing loss to the whales (also to birds) which is not acceptable. Fishery Bay will have a decibel reading of 95. All that should be heard in the area are the waves crashing on the shore or cliffs.

Any disruption to the whale's migration is devastating to both tourism in the area and to the whales themselves.

BEACHES: I have lived in Port Lincoln all my life. Fishery Bay, Sleaford Bay, National Park, Whalers Way have always been part of my and my family's life. Surfing, swimming, fishing, lazing on the beach, picnics, camping – all this has been a way of life for many in the community. The freedom to come and go to the area.

With a rocket launch site in the area, freedoms like this will be restricted. This includes time to set up and dismantle. Our leisurely drives to the beach or National Park will be restricted.

RESTRICTIONS WITH COMMERCIAL FISHING: I have spoken to locals who have been restricted already with the times and days they can and cannot pass the area with their boats. This is restricting their business and livelihood.

Our region's backbone is its seafood. With this being restricted, our area's impeccable image as a frontrunner in seafood is in jeopardy.

TRAVELLING WITHIN THE STATE: with Covid restrictions, South Australians have been encouraged to travel within the State. Our beaches, parks, open spaces, freedom have all been showcased and encouraged by the State Government to visit. This has been a terrific initiative and popular with tourists hooking up their caravans and coming to ours and other South Australian spots for a look at our pristine environment – and of course, the whales.

Their visits will be restricted and the untouched environment that they crave and are in awe of, will be spoiled and dare I say, wiped out.

ROAD ACCESS: At present, and for quite some time, the Right Whale Road has warning signs that the fragile overhanging cliffs were to be kept away from. What will happen when launch vehicles, cranes, fuel trucks and other heavy vehicles frequent this road. It will certainly interfere with the cliff face and make it even more dangerous for cyclists, local road users, beach visitors, surfers.

ENDANGERED SPECIES: There are several critically endangered species in the area such as; Western Whipbird, Southern Emu wren, Diamond Firetail Finch, Eastern Osprey, White bellied Sea Eagle and the Rock Parrot.

The Australian Sea Lion, long nose fur seal will be impacted by this program and the decibel levels will frighten seals on Liguanea Island and Cape Wiles. Should this project get approval from the EPA, rocket debris will be discharged into the ocean – hazards not only for the ocean mammals but for boats in danger of colliding with such debris.

WATER USAGE: It is reported that water for the site will be sourced from Port Lincoln's catchment. This is unacceptable. They say there is a plan to catch storm water themselves. This catchment will obviously not be sufficient for the amount of water they need. Port Lincoln has a limited water supply for its communities and to have that exhausted even more for a money making venture that will not benefit our area is unacceptable.

The water apparently becomes a cloud of steam which will drift (along with the chemicals laden in the steam) onto land and ocean.

Finally, I would like to say that as a lifetime resident of this beautiful area, I would be devastated to see our wonderful Lower Eyre Peninsula succumb to a project that seems nothing more than a money making/saving venture which would line the pockets of a 'NON-LOCAL COMPANY'. I believe this rocket should be launched in an area which has a less environmental impact exposure such as Woomera or the like. **THERE IS MUCH TO LOSE AND NOTHING TO GAIN.**

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 2:42 PM
To: DIT:SPC Reps
Subject: URGENT - Development 932/P007/19 Whalers Way orbital launch complex proposal

Dear Minister,

I write to you as a concerned citizen and completely oppose the development at Whalers Way for Southern Launch and their proposal to launch rockets there.

Having visited the area and experiencing the spectacular beauty of the rugged coast and the incredible wildlife there it would be a disaster to destroy such a loved and pristine area when the rocket launches could happen in already affected areas previously used.

Sleaford bay currently has two Southern Right Whale pairs (Mothers and calves) who are using the area to rest and feed before making their long journey back to sub Antarctica. We have a duty of care as citizens and humans to protect these endangered and incredible mammals that rely on the Great Australian Bight to thrive in the safety of the marine parks. South Australia is incredibly lucky to have these Whales and watch their numbers increase, although slowly there is progress.

I fear the disturbance the rocket launches would create will drive the whales away making them vulnerable as they are not strong enough to leave our coast yet.

The proposed area lists 11 conservation significant flora species, 34 fauna species. 28 bird species, 4 mammal species and 2 reptile species. many of these are threatened, vulnerable or endangered. Scrub clearing, water contamination and consumption that many species rely on for survival will be at risk.

The Eyre Peninsula is a spectacular and special place, like no other in the world.

Please do not go ahead with this plan and choose a place that will have much lower impact to the environment.

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

From: DIT:SPC Reps
Sent: Tuesday, 14 September 2021 3:12 PM
To: [REDACTED]
Subject: FW: Southern launch development

OFFICIAL

State Planning Commission - Representations Planning and Land Use Services Attorney General's Department
• spcreps@sa.gov.au Level 5, 50 Flinders Street, Adelaide SA 5000 • PO Box 1815, Adelaide SA 5001 • DX 171

-----Original Message-----

From: [REDACTED]
Sent: Tuesday, 14 September 2021 3:01 PM
To: DIT:SPC Reps <scapreps@sa.gov.au>
Subject: Southern launch development

I support the whalers way launch complex project

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I believe it poses too high of a risk of bushfires due to the kerosene, liquid oxygen, HTPB, ammonium
Perchlorate and other dangerous chemicals used.
Tourism will be restricted when launches are taking place and limit the area tourists who want to enjoy the coast will be able to access.
There will not be enough jobs generated too benefit the local community.
There will be too much greenhouse emissions estimated at 1.6% of SA's annual emissions!

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The aspects of the proposal I wish to make comment on are (add pages as required):

As a long term citizen of Port Lincoln, currently raising my 3 children here, I have grave concerns for the proposal regarding whalers way orbital launch.

I oppose this decision because –

- bushfire risk
- noise level impact on nature - animal sustainability
- industrial zone - heavy vehicles impact on pristine wilderness.

This should remain a natural asset

Subject:

FW: Whalers Way Orbital Launch Complex Proposal

From:

Sent: Wednesday, 15 September 2021 6:34 PM

To: DIT:SPC Reps <SPCReps@sa.gov.au>

Subject: Re: Whalers Way Orbital Launch Complex Proposal

Thanks please find it below.

OPPOSITION TO MAJOR DEVELOPMENT PROPOSAL - WHALERS WAY ORBITAL LAUNCH COMPLEX

Introduction

I strongly believe that the Major Development proposal associated with the Whalers Way Orbital Launch Complex ought be refused planning consent.

The reasons for this are many and wide-ranging. They include:

1. The devastating impacts the development will have on flora and fauna, including several endangered marine and bird species that are found nowhere else on Earth;
2. The unsuitability of the access road and the real danger that increased heavy vehicle traffic presents to local residents and road users;
3. The bushfire risk, which has been redacted from the Environmental Impact Statement;
4. The economic consequences that will result from permanently altering access arrangements to Whalers Way, the jewel in the crown of Lower Eyre Peninsula's tourism strategy;
5. The considerable water requirements associated with the development in such a low rainfall area, and the strain this will place on both the critically important Uley basin and the underground aquifers both in and around Whalers Way.
6. Impacts on sacred sites which are the subject of Native Title claims and are considered of high archaeological significance and cultural importance to the Barngarla and Nauo people.
7. The use of public resources to ensure security from the public in such difficult and challenging terrain, and the invasive use of camera devices, security guards, lighting and fencing;
8. Increased dust, light and noise pollution in a scenic and heavily visited rural beauty spot;
9. Pollution fallout and the impacts this will have on Port Lincoln's sustainable, profitable and internationally renowned fishing industry;
10. The negative impacts on local businesses whose economic models rely upon the perception of Port Lincoln and the Lower Eyre Peninsula as a place of eco-tourism, sustainability, unique wildlife and natural beauty.

I believe that the orbital launch facility proposed by Southern Launch is completely inconsistent with the stated principles of the Conservation Zone, as set out by the South Australian government in its development framework, as well as the *Coast Protection Act 1972*. I have addressed specific breaches and areas of concern in the sub-headings below.

As part of my submission I have also included a series of photographs which contrast the way Southern Launch wish to present the landscape with the reality of the native vegetation, thick unburnt mallee forest and wildlife that exist there. I have also included my original plea to the State Commission Assessment Panel to preserve the area, as well as a poem recited on country during the consultation period which reflects how I feel about this place that I have always called home.

I urge you, Ms Chapman, to use your position of power to do genuine good in this world, and save Whalers Way.



What does Whalers Way mean to me?

Whalers Way is the echo of the sea in my chest, of the ocean pounding its fury against unforgiving rocks.

Whalers Way is the cry of the wind in my veins.

Whalers Way is salt air and dry stone, thin edges and cracks of unimaginable light.

It is the drum of an emu in the deep; the thud of a kangaroo rushing through the night.

It is the slide of snake

belly on hot sand, the creep of a lizard over stone; the slow march of nature's unravellings.

Whalers Way is crystal clear water and snow-white foam, crumbling limestone and the spine of the earth holding up the sky. It is deep silence and unending roar.

Whalers Way is the ache of summer and the long, hot nights. It is winter's chill and the kiss of the south wind on my cheek.

It is orchids and starfish and silence and heart song, and freedom in the soaring eagle high above and the whales deep below.

Whalers Way is the place I come to shed my skin, to cry my tears and sing my joys; to hold time like a jewel in the palm of my hand.

It is the loving arms of my mother, the strength of my father, the joy of my siblings and the hope of my children.

It is the blood in my blood and the air in my lungs and when you gouge out her belly for your hunger and greed, I feel the ache of her grief deep in my own bones.

Whalers Way is the endless night sky, the heartbeat of the earth as the moon rises to kiss the waves.

It is the song I sing when I turn my face to the sun. It is the smile on my lips. It is the freedom in my heart. And it is the wild spirit within me that fights for what is right, for what is sacred and precious and true. And for this place that is, was, and always will be, the place that I call home.

So what does Whalers Way mean to me? Oh, only everything.

ORAL SUBMISSION DELIVERED TO SCAP 16 JUNE 2021

My written submission outlines the many practical, logistical and legislative reasons why the launch of orbital rockets from Whalers Way should not be approved. I will not repeat these here today. Today, I would like to address you not from a place of logic or reason, or even statute, but from the heart.

On 23 September 2019, United Nations secretary-general Antonio Guterres convened a Climate Summit that brought together the world leaders of governments, private sectors and civil society. In it, he implored nations for “more concrete plans, more ambition from more countries and more governments” and for all of us, public and private, to choose, once and for all, the green way forward.

Two months later, an unstoppable and unprecedented bushfire broke out on Kangaroo Island, ripping through almost half of the landmass and devastating homes, communities and wildlife. Over 96% of the world-renowned Flinders Chase National Park was destroyed, and many threatened and vulnerable species were pushed to the brink of extinction.

So what does all this have to do with Whalers Way, an ostensibly privately owned piece of land located at the ends of the earth, far from the decision makers and movers and shakers of Adelaide and Canberra? Whalers Way, which to someone glancing at a map is just another dot on the landscape.

Well, I am here today to tell you that Whalers Way is so much more than that. It is more than that to the residents of the Eyre Peninsula who have camped, fished, swum and surfed there for decades; it is more than that to the Barnjarla and Nauo people whose song lines weave across it; and it is more than that to the precious plants and animal species that call Whalers Way home.

It might not seem like it from here, in an office building in the centre of the city, but what Whalers Way represents is actually bigger than all of us. What Whalers Way represents is something wild and sacred and precious; something that is growing ever rarer as humanity pushes itself to the brink of climate catastrophe; something that is worth fighting for, that is worth standing here today and pleading with those of you who hold the power to stand up, for the planet, for its plants and animals, and for its soul. To stand up for Whalers Way.

Ultimately, I can sit here and give you every reason under the sun as to why this development should not be granted consent. I could speak to you of the Southern Right Whales that come to birth their calves each winter; of the playful sea lions who frolic just off the cliffs. I could talk to you of the sheltered gullies stretching away from the coastline and the ancient mallee and sheoak that grow there. I could talk of the carpets of native wildflowers that blanket those same gullies in spring. Of how all of that is threatened and put at risk by this proposal.

I could talk about the fierce, proud Southern Ocean, and the mockery it makes of man’s attempts to tame it. I could talk about how unsuitable this place is for a development of this kind; how fragile and harsh and wild the landscape truly is.

Yes, I could talk about all of these things, at length and in detail, until the stars have come out over Whalers Way, a trillion galaxies that shine down upon that unpolluted, wild space.

But what I really want to say is this: as humans, as society, we face a stark and impending choice. The decisions we make now will echo through the generations, and the consequences of them will fall onto our children, and our children’s children, long after we have ceased to have any ability to apologise for our mistakes.

So, while I come here today to speak on behalf of the wrens, the orchids, the emus and the snakes, the sea eagles and the whales and everything in between, I also come on behalf of my children, and your children, and all the children of Australia.

On their behalf, I ask you to please preserve this sanctuary. Please safeguard what little of the wild world is left, so that Whalers Way does not become just another lost sanctuary, another space on the map, gone forever. So that we do not wake up one morning, after a rocket spark has ignited a bushfire which rips through this untouched, unburnt sanctuary, and have to face the mirror knowing we had the power to prevent this, and did not.

I am just one person. I cannot fight all the battles that rage across the Earth. I cannot save every sacred space, every river or forest or coral reef. But I can stand here, right now, and speak the truth of this, this place of my childhood that I know better than the backs of my own hands. And I can tell you that this place, Whalers Way, is worth saving.

In closing the summit, Antonio Guterres also said this: “When you are on the verge of the abyss, you must make sure your next step is in the right direction”. Please PlanSA, take this step in the right direction, and leave Whalers Way to be the conservation sanctuary it has been for so long. Do not lead us one step closer into the abyss.

Thank you.

Contrary to the Stated Objectives of the Conservation Zone

Under the Principles of Development Control, development within the Conservation Zone should not be undertaken unless it is consistent with the desired character for the zone.

Coastal areas are important for their onshore and marine environmental and landscape values, as well as for developed uses such as tourism, aquaculture and recreation. Development can affect all these areas if it influences the environment, general character and amenity of the coastal area or interferes with coastal processes such as erosion, tide and storm flooding or sand drift.

There is evidence of spectacular wave activity at Whalers Way, where large boulders have been thrown up at least 20 metres above present sea level.¹ This is a fragile and environmentally significant landscape, with several unique geological features including sinkholes, crevasses and underground caves. It features significant native vegetation and a heritage-protected historic whaling station, and attracts tens of thousands of tourists annually.² To allow an orbital rocket launch facility in such a place would be to fundamentally alter the character of this area.

Under the Eyre and Western Region Plan for SA, sustainability and resilience against climate change are given key importance in the overall strategy and objectives for the region. Conservation and restoration of the natural environment is fundamental. Whalers Way is an area of significant coastal conservation, the importance of which is becoming increasingly paramount in the face of rising sea levels, more frequent droughts and increased bushfire risks. The safeguarding of this area, with its significant native vegetation, vulnerable species' habitat, water sources and coastal buttress against the Southern Ocean, against unsuitable development applications is of fundamental importance not just to local residents, but the entire state of South Australia.

Also of concern and contrary to the stated development goals of this region is the impact a rocket launching facility would have on this area's already fragile Ozone layer. The southern hemisphere is particularly vulnerable to Ozone depletion. If this major development proposal were to be granted planning consent, the potential for catastrophic Ozone depletion and the attendant negative consequences on health and wellbeing of the population is a very real threat. This has not been adequately addressed in Southern Launch's Environmental Impact Statement, and the Minister cannot satisfy herself that this development meets the principles of development control for the Lower Eyre Peninsula.

To permit commercial/industrial use in an area of significant coastal conservation is not within the framework and guidelines of the Planning and Design Code. The Minister should not grant this development planning consent.

¹ Bourman, R., Murray-Wallace, C., and Harvey, N., *Coastal Landscapes of South Australia*, University of Adelaide Press, 2016, p.273.

² 'Native Plants of Eyre Peninsula', *Landscape South Australia*, 2020.

Significant Negative Consequences for Flora and Fauna

The land in question borders a Marine Sanctuary well recognised for its established Australian Sea Lion colony³, the locally threatened Little Penguin *Eudyptula Minor*, as well as Osprey (sea hawk), White-Bellied Sea Eagles, and 10,000 hectares of native vegetation which supports an array of native wildlife including nationally endangered birds.

Some species, such as the Southern Emu-Wren and Western Whipbird, are now only found in this remnant vegetation after bushfires, clearing and habitat loss has led to population collapse in other areas⁴. Habitat loss through weed invasion, erosion, industry and development has been shown to directly impact on the number and health of these populations⁵. If change in land use occurs within Whalers Way which impacts upon these species, they could be pushed to extinction and lost to us forever. Terry Dennis, a leading Osprey expert, has said that "the prospect of industrial development being permitted over yet another stretch of critical habitat must be regarded as grossly irresponsible".⁶

This area falls within the annual migratory route of the Southern Right Whale, which is of particular cultural and environmental significance, and protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. Migration occurs from May to October, and the calm waters of Sleaford Bay are often host to nursing mothers and calves. This brings significant tourism to the area and is a source of pride and financial benefit for the Port Lincoln community⁷.

The scientific consequence of noise pollution and excessive vibrations on marine life, particularly nursing Southern Right Whales, is understudied and requires further assessment; however, preliminary data suggests that short, loud blasts of sound (such as a rocket blast) can cause physical damage, while persistent background noise (such as that of heavy industry, machinery and traffic) can alter a host of systems and behaviours, from communication to feeding.⁸ Southern Launch themselves admit in their EIS that their activities are "likely to cause temporary hearing loss" in nearby marine life.⁹

I believe that the potential for distress and negative consequences to threatened and vulnerable animal populations in this marine sanctuary represents an unacceptable risk and renders the proposed development significantly non-compliant, and quite frankly dangerous to the future of the region.

There have been referrals required under the *EPBC Act* for the Southern Right Whale, Australian Sea Lion, Southern Emu-Wren, Western Whipbird and Osprey. The Minister's decision on the outcome of these referrals is still outstanding as at 13 September 2021.

Although Southern Launch previously assured residents that they 'would not launch if a whale was in the area',¹⁰ this was later revealed to mean 'the exclusion zone', a narrow band stretching from Cape Wiles to Cape Carnot. Considering the EIS makes clear that whales will suffer from the noise impacts well beyond the exclusion zone, this makes a mockery of any supposed mitigation strategies Southern Launch purports to employ.

Please see Appendix B for further photographic information on the protected species who risk being negatively impacted by this proposed development. The Minister cannot possibly grant planning consent whilst the grave concerns surrounding the impact on endangered species remains unaddressed.

³ Lincoln Marine Science Centre, *Flinders University*, 2020.

⁴ 'How the Emu-Wren is Faring Post-Bushfire', *DEWNR Report*, September 2020; Chapman, G., *Western Whipbird Declining Populations*, 2016.

⁵ Dann, P., 'Independent Report on the Risk Assessment for Little Penguins in South Australia', *DEWNR Report*, August 2016.

⁶ Dennis, T, 11 September 2021.

⁷ Department For the Environment and Water, *Top Spots for Whale-Watching in South Australia*, April 2021.

⁸ Weilgart, L. 'The Impact of Ocean Noise Pollution on Fish and Invertebrates', *OceanCare*.

⁹ Southern Launch, *Environmental Impact Statement*, Appendix S: Marine Ecological Assessment, p.6.

¹⁰ Community Meeting, Port Lincoln Hotel, 24 August 2021.

Access Issues and Road Instability

Access to the proposed site is along a highly unstable limestone cliff-edge, with significant issues of erosion, degradation and land slips. The road is a limestone bedrock which has been designed and maintained for low traffic levels, and is graded once a year by local council. In order to keep corrugation and potholes at a safe level, it is necessary that minimal heavy-vehicle traffic occurs along this road.¹¹

Any additional use of this road, including by heavy machinery involved in the creation of launch pads, cement trucks, earthmoving equipment necessitated by the proposed development would have significant negative impacts on both local road users and tourists, as well as financial implications for council with associated higher costs of maintenance and repair.

The sensitive and erosive nature of the cliffs presents a substantial safety hazard.¹² The road skirts the edge of highly fragile and porous limestone cliffs, at some points less than 10 metres from areas that are already actively eroding.¹³ Rock falls and land slips are common occurrences and loss of life and machinery due to unstable edges has occurred.¹⁴

The road already fails to cope with current levels of traffic, particularly in the summer months. Any additional use would present an unacceptable safety hazard and financial burden.

I believe the risks associated with the proposed development and the risk of catastrophic damage to the cliff-edge road leading to the site, as well as safety issues for road users, mean the development must be refused planning consent.

Since construction works began after the grant of temporary development approval for three test launches, considerable damage to the road has occurred. Evidence of damage includes broken drainpipes previously installed to prevent flooding along the low portions of the road, increased corrugation and potholes, and evidence of dislodged boulders from the cliff face directly adjacent to the road along Right Whale Road. These boulders have fallen onto the beach below, onto a place where families and young children are often seen.

There is a real and genuine risk of complete destabilisation of this road if the level of heavy traffic associated with this development were to be allowed. Council have stated that they are unequivocally unable to provide further grading and road upgrades, due to both financial restraints and the limited raw materials that are available.¹⁵ Southern Launch have made minimal mention of this road in their EIS, and have offered no commitments to financially contribute to the road's upkeep. Their reports are concerned primarily with the road within Whalers Way itself, and they are seemingly hopeful that Council will simply take care of the rest of the public road for them.¹⁶

This is manifestly unfeasible for a number of reasons, and hence the development must be refused planning consent on this basis alone.

Please see Appendix A for photographic evidence of the access road's unsuitable nature, as well as the documented damage that has occurred since works associated with the temporary development have commenced. Please also see Appendix F for evidence of correspondence with Council where our concerns have not been adequately addressed, demonstrating Council's inability to deal with this problem on their own.

¹¹ Hussey, S., 'Roads Need Grading', *Port Lincoln Times*, July 2015.

¹² Forti, P., 'The Scientific and Socio-Economic Importance of Karst and Caves and Their Vulnerability', *Global Sustainable Development Report*, June 2015.

¹³ Bourman, R., Murray-Wallace, C., and Harvey, N., *Coastal Landscapes of South Australia*, University of Adelaide Press, 2016, p.315.

¹⁴ Keane, D., 'Father and Daughter Drownings at Cape Carnot Could Prompt Tourist Hotspot's Closure', *ABC News*, April 2019; Slessor, C., 'Dramatic Boat Rescue of Swimmer Swept off Rocks at Whalers Way', *ABC News*, Dec 2019.

¹⁵ Mayoral Meeting, Tulka Progress Association, Tulka, 5 September 2021.

¹⁶ Southern Launch, *Environmental Impact Statement*, Appendix AA – Traffic Impact Assessment, p.47.

Significant Bushfire Risk

The area within the proposed development represents an extremely high bushfire risk, encompassing the development site, neighbouring land, and important tourist and local attractions. Bushfire is a common occurrence in the wider area, with devastating fires in 2001, 2005, 2009 and 2015 resulting in loss of property and life and significant community trauma.¹⁷

There is no firefighting equipment or capability within the local area and resources are thinly stretched and often inadequate in times of high fire danger. With prevailing winds in the summer months and over 10,000 hectares of impenetrable mallee scrub in the surrounding area, our property and several other landholders, as well as local beauty spots, are at heightened risk of fire from any activity in the proposed development zone. Given that highly flammable propellants and other equipment will be stored and used on site this presents an unacceptably high risk to both nearby residents and the wider community.¹⁸

Studies on the impact of climate change indicate that bushfire seasons in southern Australia will get longer, and fires will burn more intensely and cause greater threat to life, livelihood and property.¹⁹ As such, the proposed development represents an unacceptable safety risk, and must be refused planning consent.

Southern Launch's bushfire risk mitigation strategy has been redacted from their Environmental Impact Statement, meaning at this time we are unable to comment on either its suitability, nor how it will directly impact upon us as adjoining landowners. Despite repeated requests that it be provided, this information has not been forthcoming at the time of sending this submission.

Of particular concern to many residents is the use of public and volunteer resources for a private, for-profit company. Southern Launch have stated that they intend to have 'permanent CFS on site during any launch' as part of their bushfire mitigation strategy, including trucks and firefighters.²⁰ Considering this is a volunteer force servicing a sparsely populated but high-demand region of almost 5000 km², it is highly concerning that a significant amount of these precious resources could be diverted to a private site, especially at times of high bushfire danger.

The geographical location of the site, located more than 45 minutes south of Port Lincoln, which is itself located in the southernmost portion of the district, means that the timeframe with which crews located on site for Southern Launch could be called upon to respond to an emergency in another part of the LEP would render them effectively useless. Given that any bushfire emergency during fire season is an 'all hands on deck' situation, the residents and ratepayers of this region are highly concerned at the diversion of their funded resources in this manner.

This is an issue that has either not been addressed by Southern Launch in their EIS, or, if it was addressed, has been withheld from the people of this region for public comment under the guise of 'security'. Given what a critically important resource the CFS and other emergency services play in preventing catastrophic bushfires in this region, the community finds this to be a wholly inadequate response.

The question of bushfire risk remains ongoing, and the very real threat to life and property as a result of this proposed development ought satisfy the Minister that she cannot possibly grant it planning consent.

¹⁷ Bushfire History, CFS, May 2021.

¹⁸ SouthernLaunch Development Application, April 2021, p.19.

¹⁹ Gunia, A., 'Australia's Bushfires to Get Worse with Climate Change', *TIME*, October 2020.

²⁰ Lloyd Damp, Community Meeting, Port Lincoln Hotel, 24 August 2021.

Tourism Impacts

According to the South Australian Tourism Commission, tourism brings an estimated \$400 million to the Lower Eyre Peninsula annually.²¹ This is expected to rise to \$500 million by the year 2030.²²

Surveys done of visitor to the region show that the most frequent activities undertaken include going to the beach (35% of domestic visitors), sightseeing (32%), visiting national parks (17%) and bushwalking (17%).²³ These are all activities that can be undertaken either at Whalers Way or very near to the vicinity (ie Lincoln National Park which shares many kilometres of the same access road that Southern Launch are proposing to use).

This regional tourism contributes 1,700 jobs for people directly employed in the tourism industry, 600 indirect jobs and a total employment impact of 2,300 people.²⁴ For comparison, Southern Launch's best case 10 year analysis offers 59.7 FTE positions and gross GSP of \$35.4 million (including all capital works).²⁵ The average gross impact on employment, including one-off costs, is estimated at 76.1 FTE positions.²⁶ It is not clarified how many of those jobs will be located in Adelaide.

It can be stated with a high degree of certainty that the economic benefits of tourism to the Lower Eyre Peninsula vastly outweighs the best projected benefits of the current development proposal.

Whalers Way is a jewel in the crown of Eyre Peninsula tourism. It frequently features on 'top lists' of things to do, places to visit, and day trips to undertake in visitor guides to the region.²⁷ It is currently listed as the number one visitor attraction in Port Lincoln on TripAdvisor.²⁸ It regularly attracts tens of thousands of visitors annually, from South Australia, interstate and overseas, and brings in an average annual income of well over \$60,000 in direct gate fees to the owner.²⁹

Given that the largest cohort of international visitors are between 25-34 years of age, and 44% of domestic visitors are under 45,³⁰ and given that studies of this demographic show they are particularly interested in outdoor pursuits, wildlife and nature, it can be safely assumed that many visitors to this region are familiar with and attracted to Whalers Way.

Southern Launch have admitted in their EIS that tourist and recreational access to Whalers Way will be "more limited/better managed" once operations commence.³¹ This is a cursory comment and no further information is provided to clarify what this means in terms of the practical details of daily visiting, other than an indication that Southern Launch would prefer 'buses' of regulated visitors rather than independent access. Given that the vast majority of visitors to Whalers Way are independent travellers, and that people are accustomed to simply being able to purchase a gate key at the local visitor information centre or service station, it seems highly likely that the proposed development will heavily disrupt tourist access to Whalers Way.

This development will have devastating economic consequences for the region that will not be off-set by any growth in 'rocket tourism', and therefore ought to be refused planning consent.

²¹ South Australian Tourism Commission, *Annual Visitor Summary*, December 2019.

²² South Australian Tourism Commission, *Corporate Affairs and Research Insight*, p.1.

²³ Ibid.

²⁴ Ibid.

²⁵ Southern Launch, *Environmental Impact Statement*, Appendix N – Economic Analysis, p.11.

²⁶ Ibid, p.9.

²⁷ See for example: The Crazy Tourist, '15 Best Things to do in Port Lincoln', <https://www.thecrazytourist.com/15-best-things-to-do-in-port-lincoln-australia/>, 2021.

²⁸ https://www.tripadvisor.com.au/Attractions-g499726-Activities-Port_Lincoln_South_Australia.html, 2021.

²⁹ The Theakstone Family, 2021.

³⁰ South Australian Tourism Commission, *Corporate Affairs and Research Insight*, p.2.

³¹ Southern Launch, *Environmental Impact Statement*, Appendix AA – Traffic Assessment, p.43.

Water Impacts

The total water demand across the Eyre Peninsula in the financial year 16/17 was 6.4GL.³² This represents 'close to the available yield' of the water reserves of this region, and 70% of the total reticulated water use for Eyre Peninsula.³³ Fresh groundwater lenses are at risk of degradation of quantity and quality if over-exploited, and there is ongoing concern about climactic variability, local rainfall patterns and global warming.³⁴ Any additional development within Eyre Peninsula could increase water supply pressure, particularly on the Uley South lens.³⁵

Southern Launch's proposed development will have a significant negative impact on local water harvesting and usage. In the interim, until formal water capture processes can be installed, they plan to 'tank' water in to the site from Port Lincoln.³⁶ There has been no regard to this usage in either their temporary development application or the EIS. Concerns have been raised in the community about the viability of this plan, considering levels in the Uley Basin remain low at the end of the rainy season and drought restrictions may soon apply to residents of Port Lincoln.

On a longer view, Southern Launch aim to construct a 30 megalitre dam, and harvest over 17 million litres of water 'from run off on the surrounding undeveloped land'.³⁷ It is unclear what impact this will have on a fragile karst landscape whose stability is highly dependent on subsurface moisture levels.

It should be noted that Southern Launch's Water Appendix incorrectly refers to the Sleaford Bay desalination plant as being 'due to begin construction in 2022'.³⁸ It was decided last year by SA Water to move the desalination plant away from Sleaford, to an as yet undecided location, due to the sensitive ecology of the Sleaford area and the number of threatened and endangered species present.³⁹

According to Southern Launch in their EIS, each rocket launch associated with the proposed development will use between 50,000 – 70,000 litres of water for dampening purposes.⁴⁰ This figure was stated by a representative of Southern Launch at their community meeting to be an 'underestimate', with figures closer to 150,000 litres being required.⁴¹ The impact of drawing this much water from either the Uley Basin or underground aquifers, if capacity in the custom built dam is less than required, has not been adequately addressed in their EIS.

The sheer amount of water required for this development should cause the Minister grave concern about its long term viability and sustainability in this region. With fresh water becoming an ever more precious resource in the Eyre Peninsula as climate change advances, and critically important both for population growth and agriculture, and with plans for a desalination plant still many years away, it is imperative that projects which threaten this critical resource are restricted. The Minister cannot satisfy herself that Southern Launch have adequately addressed this crucially important aspect of their development plan, and therefore must refuse planning consent.

On a separate note, Southern Launch admit they are 'unable to estimate' the potential amount of contaminants which may enter the water from fuels, lubricants, cleaners, and firefighting foams'.⁴²

³² SA Water, 'Water in Your Home and Garden', 2018.

³³ DWLBC Report, 'Uley Basin Groundwater Modelling', Volume 1, p.1.

³⁴ Ibid, p.5.

³⁵ Ibid.

³⁶ Andrew Curran, Community Meeting, Port Lincoln Hotel, 24 August 2021.

³⁷ Southern Launch, *Environmental Impact Statement*, Appendix V – Water Environmental Management Plan, p.4.

³⁸ Ibid, p.12.

³⁹ Delaney, J., 'SA Water to Move Desalination Plant Away from Sleaford Mere', *Port Lincoln Times*, 28 July 2020.

⁴⁰ Southern Launch, *Environmental Impact Statement*, Appendix V –Water Environmental Management Plan, p.6.

⁴¹ Andrew Curran, Community Meeting, Port Lincoln Hotel, 24 August 2021.

⁴² Southern Launch, *Environmental Impact Statement*, Appendix V –Water Environmental Management Plan, p.25.

Sacred Sites

In 2018 Native Title was granted to the Barngarla community over 44,500 hectares of the Eyre Peninsula, including the cities of Port Lincoln, Whyalla and Port Augusta.⁴³ Premier Steven Marshall, speaking at the official handover ceremony, said the decision was, 'A recognition that long before European settlement, much of the land that became known as Eyre Peninsula was occupied by Barngarla people'.⁴⁴

There is a current Native Title claim over the area including Whalers Way that has been accepted for registration on behalf of the Nauo people. As of September 2021, no determination has been made on the accepted decision of the Native Title Tribunal that a claim exists.⁴⁵

Mention is made of the Barngarla Native Title determination in Southern Launch's Environmental Impact Statement only to the extent of the author of Appendix Y, the Cultural Heritage Assessment, stating that he 'does not support the view that Barngarla people ever owned or succeeded to the lands contained by the Subject Area'.⁴⁶ This statement, however, appears to be contradicted later in the report when the author comments that the presence of chalcedonies within the proposed development site indicates 'the presence of desert people' and people from different regions 'travelling with their stone tools and camping' in the region.⁴⁷ These artefacts, according to the author, are 'consistent with use and occupation of the area by neighbouring people and the harvesting of *Nondo* seeds'.⁴⁸

No mention is made in the report of the Nauo Native Title claim that is yet to be finally determined. It is not clarified how a successful Native Title determination would impact upon the development, nor if any issues would arise as a result at some point in the future.

The site of the proposed development is undoubtedly sacred to the local Indigenous people. It holds both areas of archaeological and mythological significance, including locations associated with the narrative of the 'Seven Sisters'.⁴⁹ The area was an important gathering site for ceremony, particularly during the annual *Nondo* bean harvests.⁵⁰ The quantity, diversity and density of artefacts is 'high' and suggests 'reasonably intense settlement' at certain locations within the proposed development.⁵¹

There are some issues with knowing exactly to what extent settlement has been covered up by geographical circumstance, thus concealing areas which may be archeologically significant. For instance, 'soil coverage is likely to have concealed' evidence of Aboriginal occupation in Area A, according to the author of the report.⁵² Other areas of occupation, such as a potential Aboriginal soak in Area D, were discounted solely on the evidence of the landowner's estimation of where modern water exists, which may not necessarily correspond to historic levels.⁵³

Overall, the great mythological and cultural importance of this site to the local Indigenous people renders it an entirely inappropriate location for a development of the kind proposed. There is a genuine risk of damage to sites of archaeological significance, as well as more intangible cultural damage to mythological sites and song lines, a critically important part of Indigenous cultural heritage.

The Minister cannot satisfy herself that serious disturbance arising from the development can be adequately mitigated or rectified. Consequently, the Minister must refuse planning consent.

⁴³ Delaney, J., 'Barngarla Community Celebrates Native Title Handover', *Port Lincoln Times*, 27 June 2018.

⁴⁴ *Ibid.*

⁴⁵ National Native Title Tribunal, *Nauo No 2 (SC2016/003)*, 21 June 2016.

⁴⁶ Southern Launch, *Environmental Impact Statement, Appendix Y – Cultural Heritage Assessment*, p.5-6.

⁴⁷ *Ibid.*, p.13.

⁴⁸ *Ibid.*, p.15.

⁴⁹ *Ibid.*, p.12.

⁵⁰ *Ibid.*, p.13.

⁵¹ *Ibid.*

⁵² *Ibid.*, p.16.

⁵³ *Ibid.*

Security Arrangements

Appendix AB and AC have been redacted from Southern Launch's Environmental Impact Statement. Consequently, our ability to comment upon the impacts that their security arrangements may have upon nearest sensitive receptors, local residents and the wider community is severely limited.

However, some degree of comment on the negative impacts that have arisen as a result of the temporary development approval are possible, and give rise to a number of significant concerns that may attach themselves to the proposed major development.

Southern Launch have installed PTZ cameras along the perimeter fence of Whalers Way, including where it abuts public Council land and a well-known local beauty spot. This has raised significant alarm and concern in the community, who are accustomed to being able to access this area in a free and undisturbed manner. Reports have circulated in the last month that footage of females undressing at Right Point have circulated amongst Southern Launch's private employees. Attached in Appendix F is the response from Council when I have raised these concerns with them. As at 13 September, I am yet to receive a more substantive reply.

The use of highly invasive CCTV cameras along a previously pristine coastline will fundamentally alter the character and amenity of this area. There is a high degree of risk regarding inappropriate use of this footage, and no mention in the publicly available Environmental Impact Statement as to how this risk will be managed or mitigated. This is not a satisfactory situation and I submit that the Minister cannot satisfy herself that this risk has been adequately addressed.

Security breaches have occurred already at the proposed development site in association with the temporary test campaign. Police have called upon neighbouring properties multiple times due to complaints by the company of damage to equipment and infrastructure, despite absolutely no indication that anyone from these properties was remotely connected to any incidents. As has been explained to government previously, the perimeter of Whalers Way is multiple kilometres of unfenced or poorly fenced thick mallee scrub, which can be traversed by anyone either on foot or in some parts by a two wheeler more or less unobserved. That anonymous members of the public have been able to breach security control measures and inflict serious damage on the company's infrastructure (including cutting the fibre optic cable which is critical launch equipment) should give the Minister grave concern that the security arrangements outlined and implemented by Southern Launch are adequate to address the geographical realities of this location. Southern Launch have not addressed the fencing question in their EIS.

On Friday 10 September, over 20 police officers were called to a peaceful protest held outside the gate of Whalers Way.⁵⁴ Private security guards were also involved in this and were captured behaving aggressively towards protestors well outside the borders of the development site. When questioned, police confirmed they had been called in from as far away as Whyalla, roughly 300 kilometres from Port Lincoln.⁵⁵ It is highly concerning to local residents that police resources are being drawn from so far afield, and in a region where publicly funded resources are scarce and sorely stretched.

The Minister ought not be satisfied that the security arrangements associated with the proposed development are adequate, feasible, or realistic, and thus the development should not be granted planning consent.

⁵⁴ Leckie, E., 'Protesters and Security Guards Clash Ahead of Failed Rocket Launch at Whalers Way', *ABC News*, 10 Sep 2021.

⁵⁵ Taylor, A., Video Footage, 10 Sep 2021.

Noise

Noise pollution in a scenic rural area known for its pristine and quiet environment is highly concerning, not just for the impacts upon threatened wildlife species and sensitive receivers, but also all visitors to the area who come specifically because it is a peaceful and industry-free region.

Noise associated with the proposed development include industrial noise such as generators, vehicle movements and other typical operational noise.⁵⁶ It also includes increased aerial traffic such as helicopter fly overs, light air craft, and drones.

The noise associated with the proposed development is anticipated, according to Southern Launch's EIS, to reach the nearest sensitive receivers at around 95 – 115 dB.⁵⁷ For context, this was described as a comparable sound level to standing close to a train, or below an aircraft flyover at low altitude.⁵⁸ This level of noise is known to cause sleep disturbance, productivity loss and negative health effects in humans.⁵⁹ In animals, the impacts may include changes in behaviour and physical harm, including disruption to breeding patterns, habitat and fecundity.⁶⁰

Southern Launch admitted in their community meetings that, since satellites are 'not restricted to time zones', the company were hoping to be able to launch at 'any time of the day or night'.⁶¹ This is highly concerning as no indication is given in the Environmental Impact Statement as to what mitigation strategies will be employed to limit disturbance to the nearest sensitive receivers in this scenario.

There is a high degree of probability that the critically endangered Southern Emu-Wren and Western Whipbird will experience increased stress, adverse behaviour reactions and physiological impacts as a result of increased noise disruption.⁶²

Studies of terrestrial mammals have shown that noise levels of 120 dBA can damage mammals' ears, and levels at 95 dBA can cause temporary hearing loss.⁶³ The mitigation measures suggested, such as 'scare guns' (120 dBA) are manifestly inadequate and do not address long term behaviour disruption. Notably, no mitigation strategies are presented for Liguanea Island, where several threatened bird species and endangered Australia Sea Lions live, and where noise levels as a result of the development would be 'close to the threshold at which temporary hearing loss may occur'.⁶⁴

Also affected by noise are Southern Right Whales, an endangered species which is critical to the tourism industry of Lower Eyre Peninsula. According to the EIS, Southern Right Whales 'may be exposed to sound levels approaching the threshold for temporary hearing loss', but could 'avoid the noise by submerging for two minutes'.⁶⁵

The noise levels associated with this development are utterly inappropriate in a rural Conservation Zone, and no adequate mitigation strategies have been identified. The Minister must refuse planning consent on these grounds.

⁵⁶ Southern Launch, *Environmental Impact Statement*, Appendix O – Noise Assessment, p.25.

⁵⁷ Ibid, pp.38-42.

⁵⁸ Ibid, p.43.

⁵⁹ Ibid, p.6.

⁶⁰ Ibid; Dennis, T.E., McIntosh, R. R. and Shaughnessy, P.D. 2011b. Effects of human disturbance on productivity of White-Bellied Sea Eagles *Haliaeetus leucogaster*. *Emu – Austral Ornithology* 111: 179-185.

⁶¹ Damp, L. Tulka Community Meeting, 5 Sep 2021.

⁶² Southern Launch, *Environmental Impact Statement*, Appendix O – Noise Assessment, p.77.

⁶³ Ibid, p.78; Wyle, 2003.

⁶⁴ Southern Launch, *Environmental Impact Statement*, Appendix S – Marine Ecological Assessment, p.6.

⁶⁵ Ibid.

Air Pollution

There is considerable concern surrounding the fuels associated with the major development, and the negative impacts they will have on the wider Port Lincoln and Lower Eyre Peninsula environment, an area renowned for its clear airs, clean seas, and pristine environment.

Southern Launch's rockets will use either regular liquid fuel or solid fuel. No guarantees or assurances have been given as to how many of each would be used, or the degree of frequency with which solid fuels (the most polluting) would be used, as this is entirely dependent on commercial interests.⁶⁶

Regardless of frequency, the Minister should have grave concerns about the consequences of these fuels, on a long term basis, polluting the surrounding area and causing catastrophic damage, both to Port Lincoln's clean, green and sustainable fishing industry, renowned internationally, and also to the tourism strategy of the Lower Eyre Peninsula which relies on a pristine environment to attract visitors.

Of most concern, solid fuels used in relation to the launch of rockets associated with the major development proposal consist of hydrogen chloride, which on reaction with the atmosphere becomes hydrochloric acid, particulate matter 2.5, carbon monoxide and nitrous oxides.⁶⁷

Particulate matter 2.5 is heavily associated with all-cause mortality and environmental degradation. Breathing in PM2.5 particles can affect your health.⁶⁸ There are current legal actions in the United States against the Environmental Protection Authority for its refusal to update its air quality standards to reflect decades of research indicating that PM2.5 is a critical environmental toxin.⁶⁹ World Health Organisation guidelines for the reduction of pollution related deaths suggest that PM_{2.5} µg/m³ per 24 hour period is the amount at which all-cause mortality begins to increase.⁷⁰

The Minister should be gravely concerned not just about the impact this increased PM2.5 pollution will have on nearby residents and sensitive receivers, but also the potential to permanently damage the image of the Lower Eyre Peninsula as a clean air destination, and harm the agricultural and fishing industries who rely and profit from the pristine environment of this region.

Southern Launch have demonstrated minimal willingness to engage in mitigation strategies concerning air pollution. Their emissions estimate in the EIS was based 'on a conservative selection of emissions data' with no explanation as to what this conservative selection excludes.⁷¹ Further, there are considerable issues with the way in which wind data has been manipulated in the EIS to draw favourable conclusions. Whilst it is true that the prevailing winds in this region are from the south-east, which would not blow pollution towards the nearest sensitive receivers or the highly popular tourist destination of Fisheries Beach, the second highest wind direction is from the south-west, which would do exactly that.⁷² To use the data in such a way demonstrates a disingenuity that should give the Minister considerable concern that the full extent to which pollution fall out may impact this area has not been fully considered.

The potential damage to the Eyre Peninsula's green image and the harm to the health of residents and visitors as a result of pollution associated with the major development mean the Minister cannot reasonable and justifiably grant this development planning consent.

⁶⁶ Damp, L. Community Meeting, Port Lincoln Hotel, 24 August 2021.

⁶⁷ Southern Launch, *Environmental Impact Statement*, Appendix W – Air Quality Assessment, p.10.

⁶⁸ EPA Victoria, 'PM2.5 Particles in the Air', <https://www.epa.vic.gov.au/for-community/environmental-information/air-quality/pm25-particles-in-the-air>.

⁶⁹ 'Lawsuit Filed Against EPA for its Failure to Protect Public Health and National Parks', *NPCA*, 19 Jan 2021.

⁷⁰ World Health Organisation, 'Air Quality Guidelines', p.11.

⁷¹ Southern Launch, *Environmental Impact Statement*, Appendix W – Air Quality Assessment, p.12.

⁷² *Ibid*, p.2.

Addendum: the Environmental Impact Statement

I am highly concerned about the manner in which Southern Launch have approached the composition and release of their Environmental Impact Statement.

Attached as Appendix E to this submission is a list of some of the disclaimers that were included in various Appendices to the Environmental Impact Statement.

I would submit that the Minister cannot possibly satisfy herself that even the limited standards and thresholds of risk management identified in the Environment Impact Statement can be adequately relied upon, or the consequences thereof known, considering the unwillingness of most report authors to be held accountable for their opinions.

Further, there is significant concern over some of the methodology by which information was collected and compiled for the EIS. For instance, the failure of Southern Launch to obtain a qualified raptor expert as requested, instead using independent consultants, ecologists who specifically professed to 'not being raptor experts' and the CEO's father to verify that nests were inactive.⁷³ I would submit to the Minister that there is high degree of questionability over some of the data gathered, and therefore an inability to confidently say that the development satisfies its legislative requirements.

There have also been a number of breaches by Southern Launch of their temporary development approval, which casts a shadow on any future compliance, and the ability of either state government regulators or the local Council to enforce compliance. After barely a month of operation, there are legitimate community concerns around inappropriate road use (trucks operating outside of permitted hours and driving on the wrong side of the road), erosion and damage to public infrastructure, use of public resources including CFS and police crews, privacy infringements surrounding inappropriate use of CCTV footage, noise and light pollution levels and excessive use of force by private security guards.

It should also be noted that Southern Launch were recorded commencing work on the development site three days prior to being granted full development approval by Council. Included in Appendix F to this submission are a series of emails between myself and Council/state government which demonstrate the difficulties in trying to enforce compliance, which ought give the Minister significant concern that, due to the sheer remoteness of the site, difficulty of access and remoteness from Council head office in Cummins (100km away), any future breaches of the development approval could result in catastrophic outcomes before compliance could be enforced by the regulator.

The Minister ought refuse this development consent not only because of the attendant negative environmental implications, unacceptable bushfire risk, negative tourist outcomes, risk of coastal erosion, consequences to sacred Indigenous sites, unacceptable water usage, noise and light pollution and threats to endangered wildlife, but also because the manner in which the Environmental Impact Statement has been completed should raise genuine concerns as to whether the information within can a) be trusted to be an accurate reflection of the facts on the ground, and b) be relied upon as a measurable yardstick against which to measure compliance.

⁷³ Southern Launch, *Environmental Impact Statement*, Appendix R – Raptor Assessment, pp.1, 9.

Conclusion

Whalers Way is a much loved and cherished wildlife and marine sanctuary, situated at the tip of the Lower Eyre Peninsula. The area attracts considerable tourist visitation, as well as providing an array of activities for local residents, including camping, bushwalking, wildlife-watching, fishing, cave diving, and many more.

The area is home to many threatened and vulnerable species under siege from habitat destruction, climate change and development. Several of these species are endangered in South Australia, particularly after the devastating bushfires in Kangaroo Island. If further land clearance or disruption of breeding patterns occurs in one of the few remaining undeveloped habitats for these species they could be lost to South Australia forever.

The risk associated with disturbance to protected and threatened species, the bushfire danger, the damage to a fragile coastal road and other local enjoyment of the area far outweighs the promised economic benefit upon which Southern Launch base most of their argument for planning consent.

The clean, green and sustainable eco-tourism industry of Lower Eyre Peninsula is currently thriving and only predicted to grow in the coming years. As pollution increases globally and ecosystems come under greater threat, places of genuine wilderness will become ever more precious and attractive on an international scale. As such Whalers Way, either as it currently exists or with added environmental protections, could become an even greater source of pride and tourist revenue for South Australia into the future.

Ultimately, an industrial rocket launch facility is not appropriate land use in a conservation zone. Its potential impacts do not meet the criteria for small-scale, low-impact land uses which would safeguard and protect the character of the area. There are a myriad of concerns which have been highlighted from experts and which cannot be successfully mitigated against in any development proposal by the proponent.

It is for our children and our grandchildren that I advocate to protect this environmentally significant sanctuary and heritage-listed conservation zone, and I implore the Minister for Planning to stand on the right side of history and refuse Southern Launch planning consent.

Thank you,

██████████

APPENDIX A: ROAD INSTABILITY



Figures 1 and 2: The road in some places skirts less than 10 metres from highly unstable limestone cliff edges.



Figure 3: Significant pot holes take up large portions of the access road.



Figures 4 and 5: Large and dangerous pot holes along access road. Many parts of this road are subject to flooding during the rainy season which further exacerbates the instability and erosion.



Figure 6: Truck associated with temporary development driving on the wrong side of Right Whale Road over a blind hill, metres from the cliff edge, August 2021.



Figure 7: Truck associated with the temporary development driving on the wrong side of Right Whale Road, metres from the cliff edge, August 2021.



Figures 8, 9 and 10: Areas of significant erosion along access road.



Figure 11: Broken Drainpipe on Fishery Bay Road as a result of increased traffic associated with temporary development.

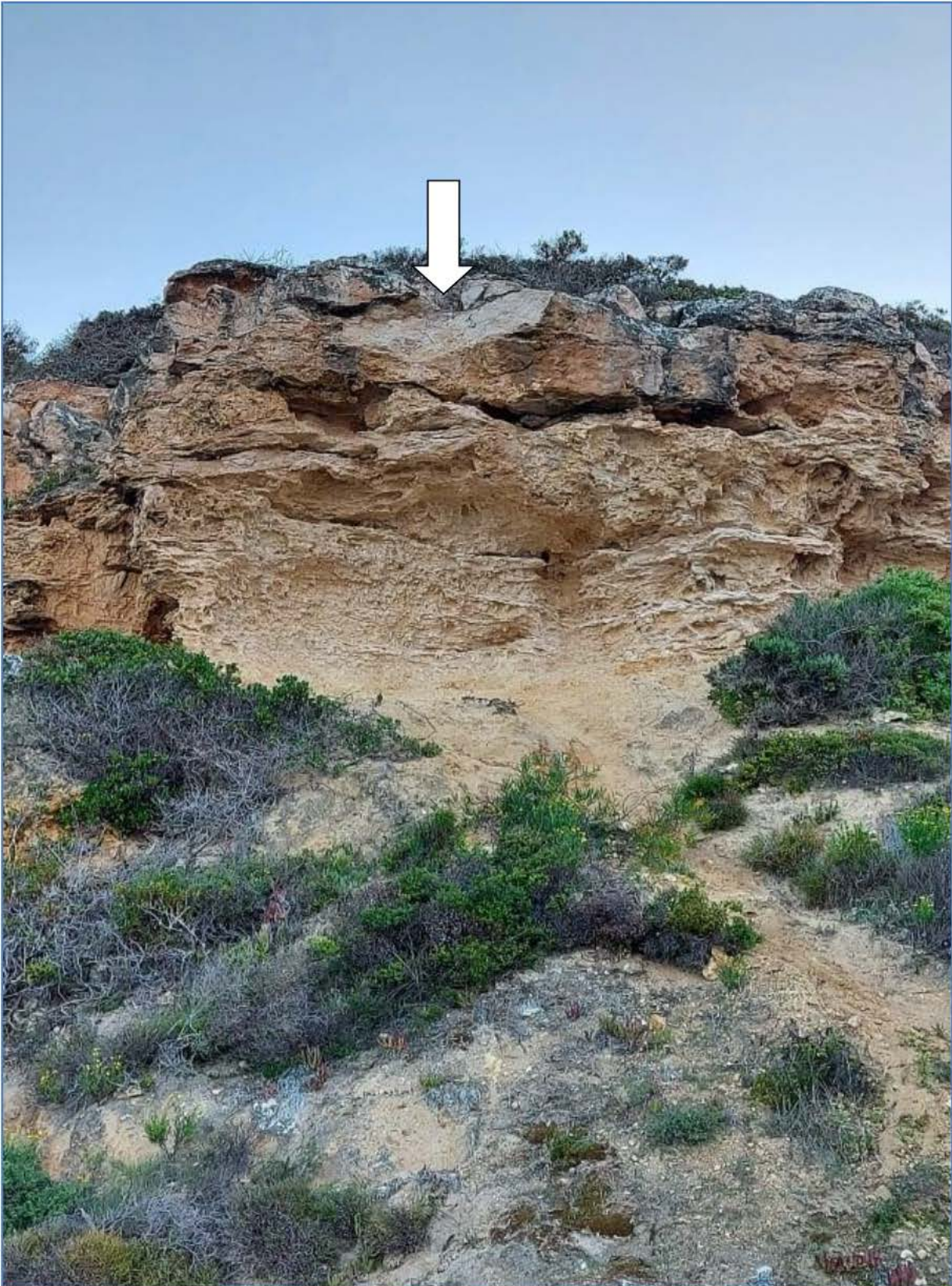
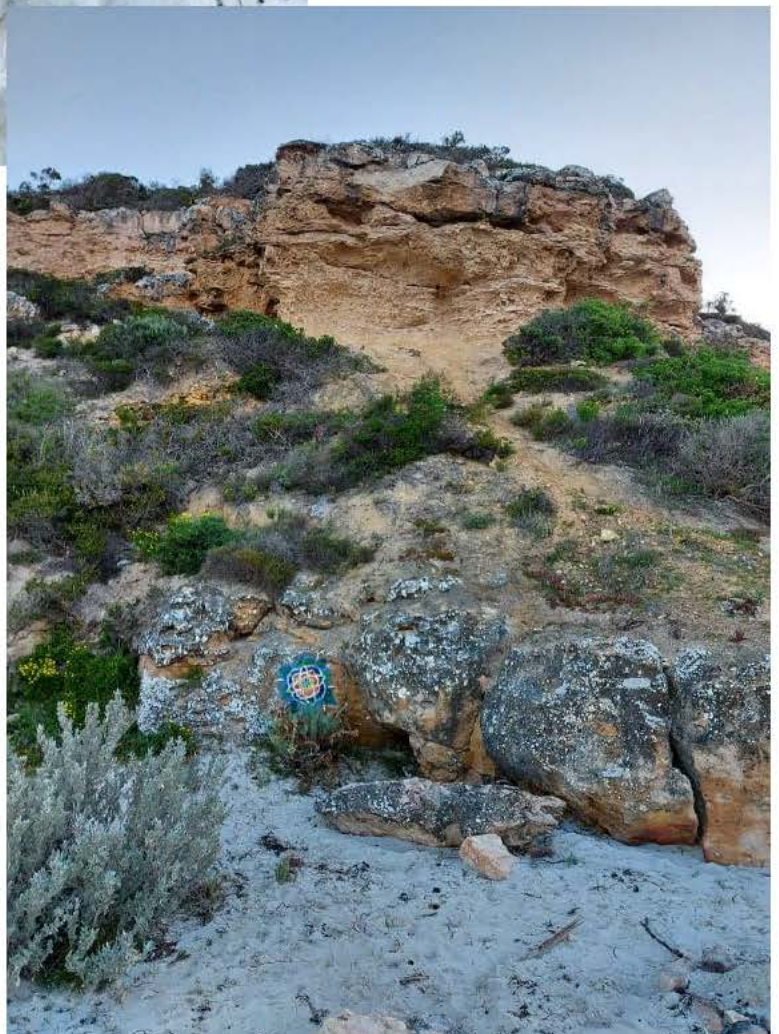


Figure 12: Evidence of the broken cliff edge as a result of increased traffic associated with the temporary development.



Figures 13 and 14: Evidence of the broken boulder at Fisheries Beach as a result of increased traffic associated with the temporary development.



APPENDIX B: VULNERABLE AND THREATENED SPECIES



Figure 1: The emu wren, threatened in SA. The population at Whalers Way is recognised under national environmental legislation as of particular importance.



Figure 2: The pygmy possum. Populations have been decimated by Kangaroo Island fires.



Figures 3 and 4: Cape Wiles in Whalers Way, home to an established Australian Sea Lion colony, a threatened and protected species.



Figures 5 and 6: The White Bellied Sea Eagle and Western Whipbird, both threatened bird species found in Whalers Way.



Figure 7: The Osprey nest at Whalers Way.



Figure 8: Emus are frequently seen in the proposed development site.



Figure 9: Mother and calf Southern Right Whale resting in the calm waters of Whalers Way.

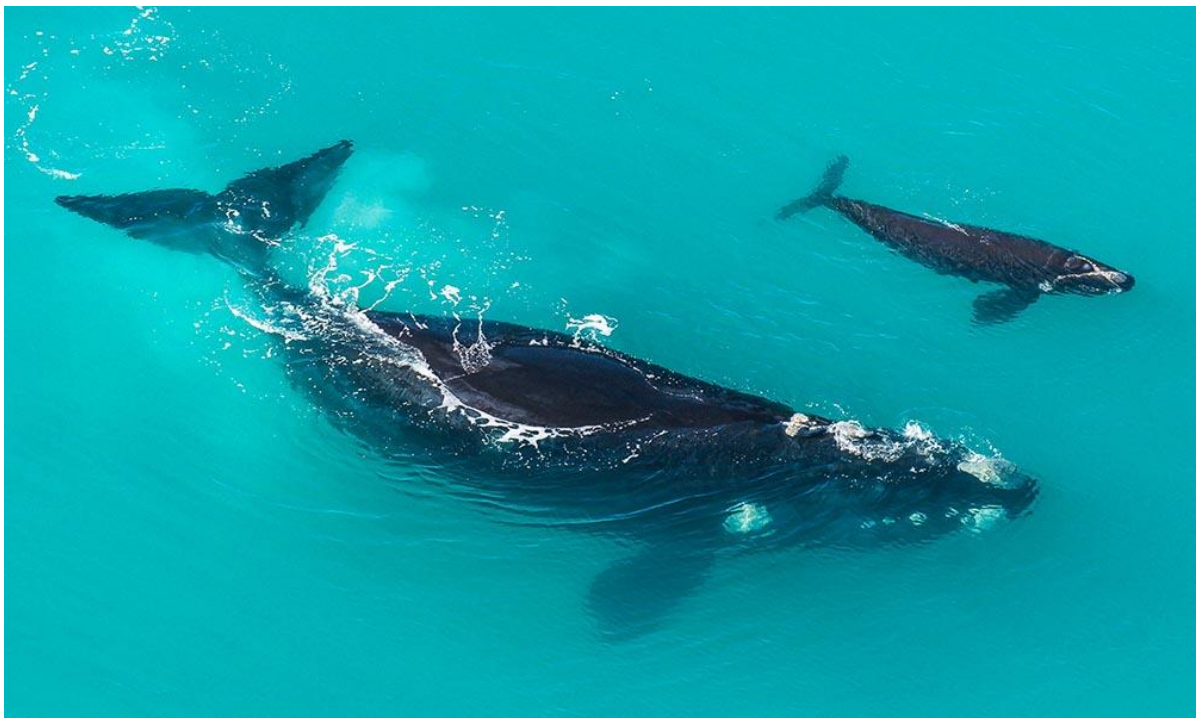


Figure 10: The Southern Right Whale, a protected species, migrates annually through the waters of Whalers Way.

APPENDIX C: GEOLOGICAL INSTABILITY



Figure 1: Whalers Way is home to some of the oldest rocks in the world.



Figure 2: The area is highly unstable and loss of life has occurred in the past.



Figure 3: A sinkhole at Whalers Way. The karst limestone is notorious for geological instability.



Figure 4: A warning sign at Whalers Way. This area is not appropriate for the proposed change in land use to accommodate rocket launches.

APPENDIX D: WORLD CLASS TOURIST ATTRACTIONS

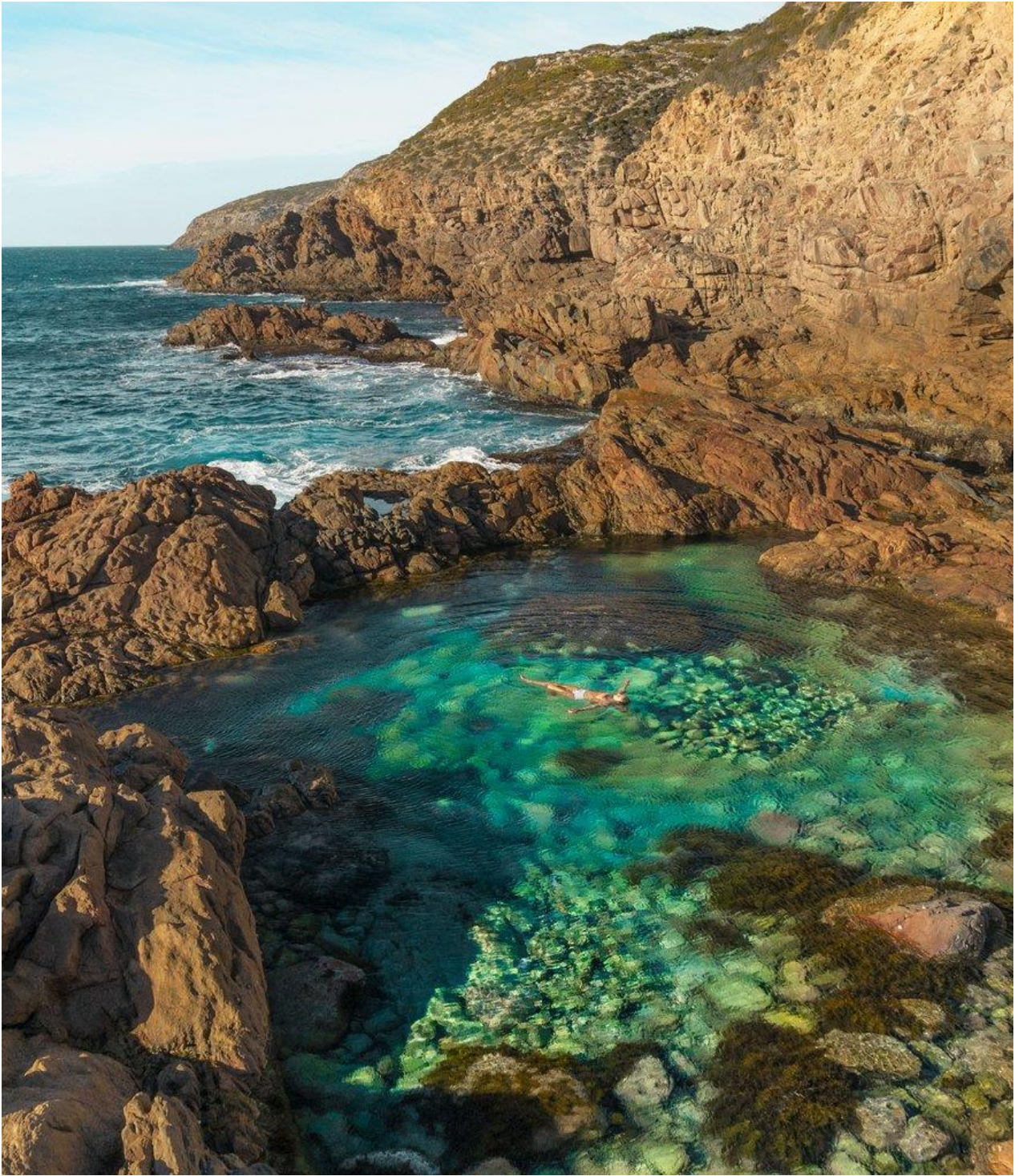


Figure 1: The area is famous for rock pools, crevasses and caves. A swimming hole in Whalers Way.



Figure 2: One of the Cape Carnot Caves at Whalers Way. The underground cave and aquifers of Whalers Way makes any rocket launches unsuitable and potentially very dangerous.



Figure 3: The original whalers pot found at the entrance to Whalers Way. This area has significant cultural and historical heritage.



Figure 4: Theakstone's Crevasse, one of the many interesting geological features in Whalers Way.



Figure 5: One of the many tourist attractions that would be off limits were this development to go ahead.

APPENDIX E: EIS APPENDIX DISCLAIMERS

The following are a collection of official disclaimers in some of the Appendices included as part of Southern Launch's Environmental Impact Statement.

Appendix S - Marine Ecological Assessment

Disclaimer "The findings and opinions expressed in this publication are those of the author and do not necessarily reflect those of Southern Launch Pty Ltd. While reasonable efforts have been made to ensure the contents of this report are factually correct, the author does not accept responsibility for the accuracy and completeness of the contents. The author does not accept liability for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this report."

Appendix R - Raptor Assessment

Southern Launch were advised to obtain an assessment by a suitably qualified coastal raptor expert.

In reply, they engaged Dr Zeta Bull, who confesses she is "not a qualified coastal raptor expert" (p.1, Appendix R, Coastal Raptor Assessment). They also engaged Larry Bebbington, an "independent consultant" (p.1, Appendix R).

Stated in the report, "bird enthusiast associated with the project (Mike Damp) also recalls two nests close to the site have not been active for about 5 years." Mike Damp is the father of SouthernLaunch CEO Lloyd Damp.

Appendix V - Water

"The advice presented in this report has been prepared at the request and for the purposes of the client only. Environmental Advice Pty Ltd does not accept ownership or any responsibility for the materials assessed, or responsibility for any associated claims arising directly or indirectly from the discharge, dispersal, release or escape of pollutants into or upon land, the atmosphere, or any water course or body of water."

Appendix P – Terrestrial Biodiversity Technical Report

"AECOM has prepared this document for the sole use of the Client and for a specific purpose, each as expressly stated in the document. No other party should rely on this document without the prior written consent of AECOM. AECOM undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. This document has been prepared based on the Client's description of its requirements and AECOM's experience, having regard to assumptions that AECOM can reasonably be expected to make in accordance with sound professional principles. AECOM may also have relied upon information provided by the Client and other third parties to prepare this document, some of which may not have been verified. Subject to the above conditions, this document may be transmitted, reproduced or disseminated only in its entirety."

Appendix T – Geotechnical Assessment

"Structural loads from the launch pad, assembly shed, and ancillary structures were not known at the time of reporting."

Appendix O – Noise and Vibration Assessment

"The above levels have not been produced for the purpose of determining compliance, as there are no regulations that specify required levels for the operation of space facilities in Australia."

Appendix W – Air Quality Assessment

"SLR Consulting Australia disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of this work."

From a literature review for references to emissions data for orbital launch facilities, it appears facilities are typically located in remote areas without nearby receptors. Given this, assessments are typically more qualitative than quantitative, and the level of detail available on rocket engine exhaust launch emissions is limited."

APPENDIX F: DCLEP EMAIL CORRESPONDENCE

 **[Redacted]** <[Redacted]@dkm.minecast.org>
to me ▾ Thu, Sep 2, 4:40 PM (11 days ago) ☆ ↶ ⋮

 Images are not displayed. Display images below · Always display images from [Redacted]

OFFICIAL

Good afternoon Athena,

Thank you for your email. For any concerns relating to a potential breach of a condition, the Council is the enforcement authority who are legally required to undertake general inspections, complaints and follow-ups of developments that have gained development approval. Further information can be obtained from Council or the DCLEP website: <https://www.lowereyrepeninsula.sa.gov.au/services/development>

Alternatively, if you remain dissatisfied with this enforcement process required to be undertaken by Council, you are entitled to exercise your rights and lodge a complaint with the South Australian Ombudsman. Further information about making a complaint to the Ombudsman can be found at <https://www.ombudsman.sa.gov.au> or (08) 8226 8699.

In regard to Australian Standards, they are available via the following website: <https://www.standards.org.au/> - I do note there is a charge. You may wish to follow up with a local Library or local Council in the area to ascertain if they have a copy of any standard you require, which then may be free of charge.

In any case, if you have not spoken to Council regarding this compliance matter, you may wish to speak to them directly to further to ensure your concerns can be resolved.

I hope this information is of help.

Response - Information regarding Australian Standards Inbox  

 **DCLEP Development** <development@dclep.sa.gov.au>
to me ▾ Tue, Sep 7, 11:15 AM (6 days ago) ☆ ↶ ⋮

Hi Athena,

On behalf of Council's Direct of Development and Environmental Services Laith Backer I can advise that as Australian Standards are a proprietary product that have to be bought from SAI Global, we cannot give out copies.

The planning condition was imposed by the State Commission Assessment Panel (SCAP) and as such Council recommends that you contact them to discuss your query.

SCAP's contact details are: phone: 1800 752 664, email: scapadmin@sa.gov.au

Kind Regards,

Olivia Barnes
Senior Development Administration Officer



District Council of Lower Eyre Peninsula
PO Box 130 | Port Lincoln SA | 5606

Website www.lowereyrepeninsula.sa.gov.au

"Working with our Rural and Coastal Communities"

 **Delfina Lanzilli**
to me ▾ Wed, Sep 8, 10:55 AM (5 days ago) ☆ ↶ ⋮

Dear Athena

It was a pleasure meeting you last night and thank you for your documentation highlighting your concerns with the Southern Launch project.

Should you wish to discuss further, please feel free to contact me directly.

Kind Regards

Delfina Lanzilli
Chief Executive Officer



District Council of Lower Eyre Peninsula
PO Box 41 | Cummins SA | 5631
Ph: (08) 8676 0400 | Fax: (08) 8676 2375

Website www.lowereyrepeninsula.sa.gov.au

"Working with our Rural and Coastal Communities"



From: Athena Tauler [mailto:athena.tauler77@gmail.com]

Photographs of Interest - What We Stand To Lose



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be a featureless coastline.

REALITY: World class geological formations that draw visitors to the region.

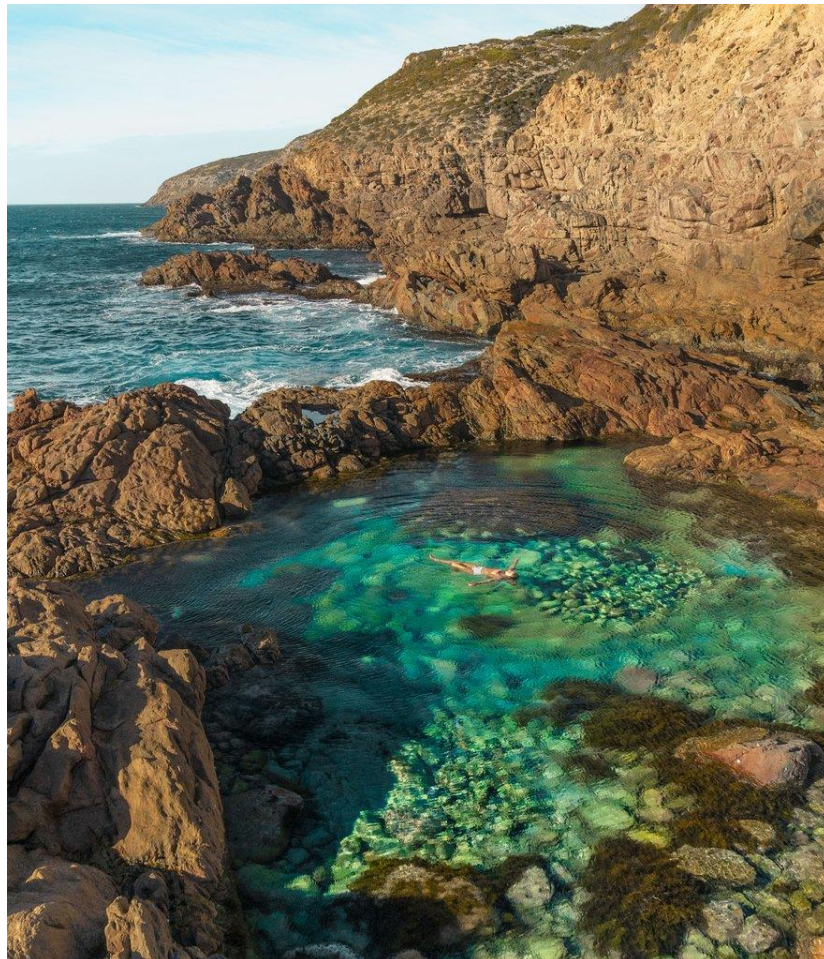


PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be a featureless coastline.

REALITY: World class tourist attractions which draw visitors to Port Lincoln.

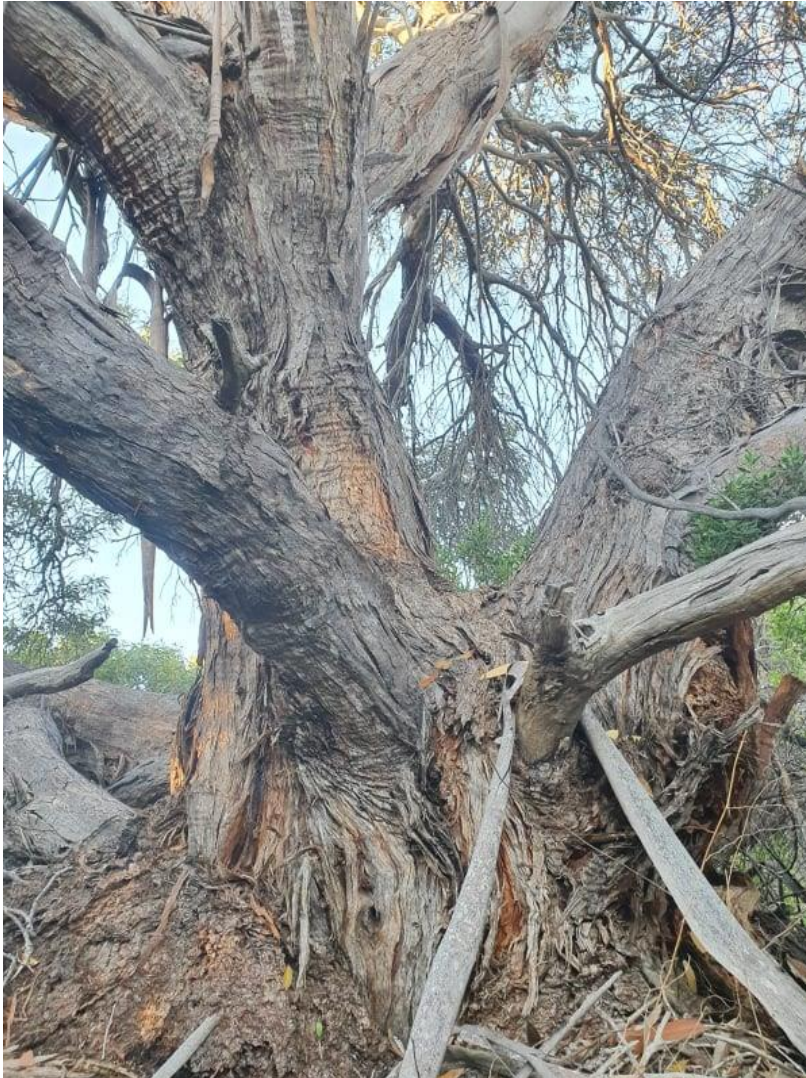


PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this area is denuded of vegetation

REALITY: Old growth forests grow in this region.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be a featureless landscape.

REALITY: Coastal gullies filled with native vegetation.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim the roads are adequate for the development.

REALITY: Evidence of significant erosion and degradation on the road leading to the site.

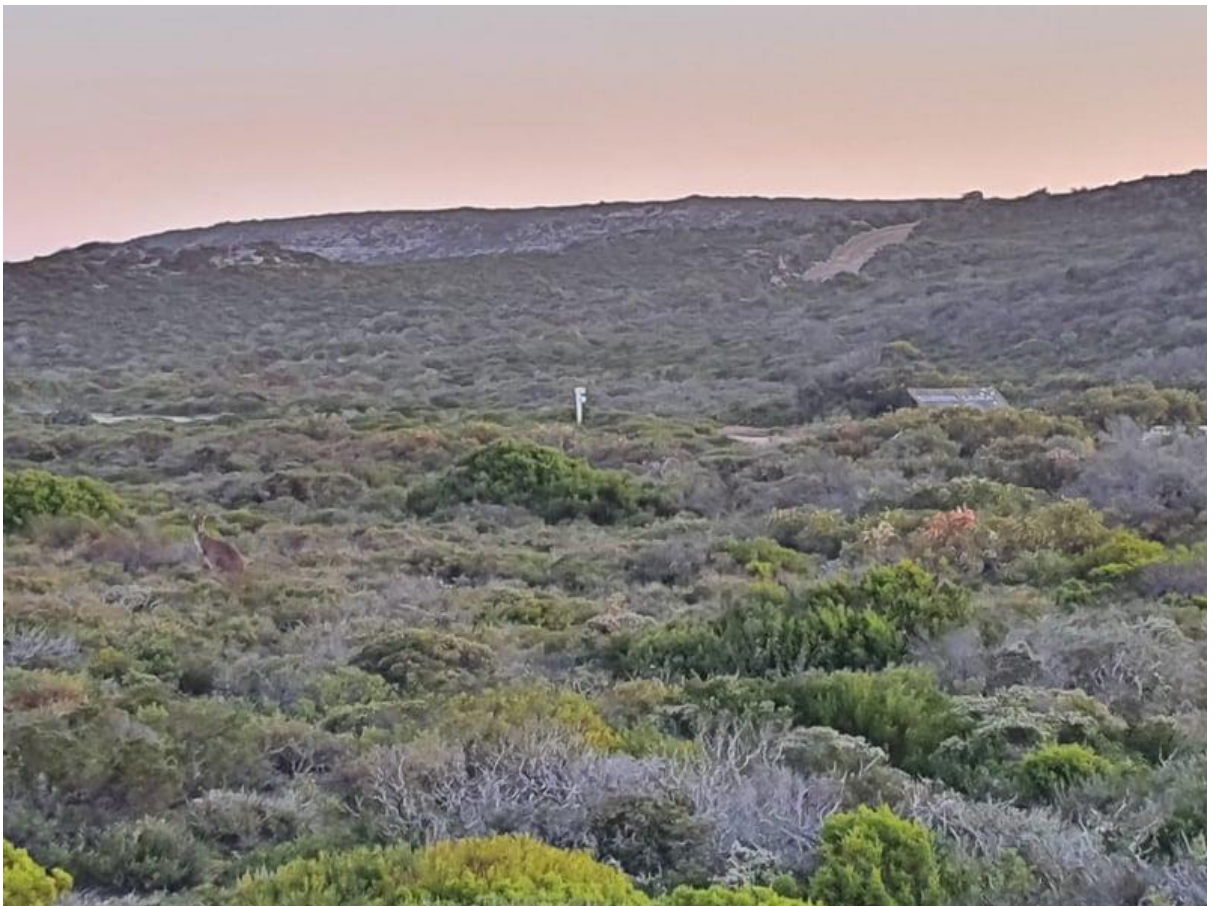


PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim the proposed launch site is barren and clear.

REALITY: The site is clearly heavily vegetated.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim the area is low lying.

REALITY: There are clearly defined gullies in which thick remnant, unburnt vegetation exists.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be a denuded landscape.

REALITY: Clear evidence of the biodiversity that exists in this region.



PROPAGANDA VS REALITY



Plate 1: Jody Miller standing on exposed calcrete and low vegetation on the western side of LaunchArea A.



Plate 2: [REDACTED] walking through scrub in Launch Area B.

PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be an area with minimal tall vegetation.

REALITY: Clear proof of old growth mallee and she-oak vegetation.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this landscape is denuded.

REALITY: Thick forest in the gullies behind the site.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be a featureless coastline.

REALITY: World class tourist attractions which draw visitors to Port Lincoln.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim there to be minimal wildlife in this area.

REALITY: Emus, kangaroos and koalas are regularly sighted in this area.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be an area with minimal tall vegetation.

REALITY: Thick native vegetation blankets the gullies behind the site.



PROPAGANDA VS REALITY



PROPAGANDA: Southern Launch claim this to be a featureless landscape.

REALITY: World class tourist attractions that draw visitors to this region.



PROPAGANDA VS REALITY



PROPAGANDA: Overall map of the Whalers Way region.

REALITY: The scope and extent of potential launch pads across Whalers Way.



<ul style="list-style-type: none"> — Subject Site — Lease Boundary (Northern Extent) - - - Council Boundary — Zone Boundary 	<p>Zones</p> <ul style="list-style-type: none"> CP Caravan & Tourist Park CstCon Coastal Development PrPro Primary Production 	<p>Launch Site Options</p> <ul style="list-style-type: none"> 200m x 500m 150m x 300m 200m x 200m 500m x 200m 400m x 150m 350m x 120m 	<ul style="list-style-type: none"> — Main Access Road — Alternate Access Lookout — Tourist Coastal Access — Rte Access — Cape Wilkes Radio Station 	<p>Site Plan</p> <p>WHALERS WAY ORBITAL LAUNCH COMPLEX for Southern Launch</p> <p>MASTERPLAN ORBITAL LAUNCH COMPLEX</p>
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MASTERPLAN.COM.AU
NO 1471 4540
© NOV 2010 HR 51284 02-00

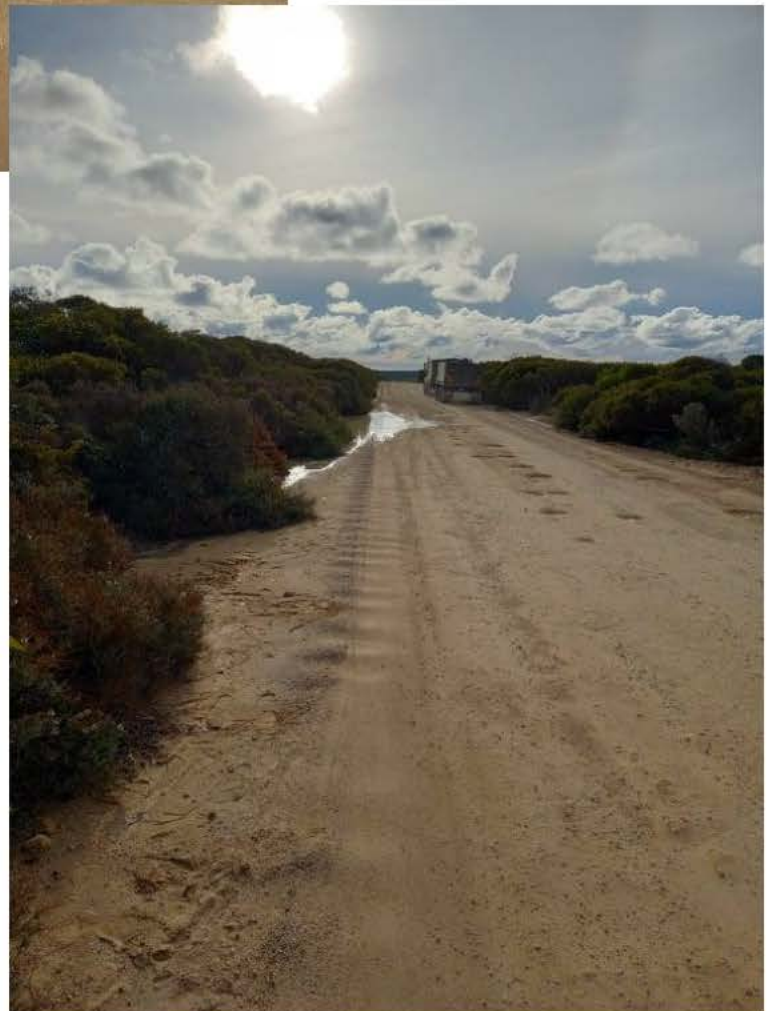
PROPAGANDA VS REALITY



PROPAGANDA: The road is adequate to cope with increased traffic volumes

REALITY:

Clear dangerous driving by Southern Launch contractors on an unsealed road



PROPAGANDA VS REALITY



PROPAGANDA: There will be minimal negative consequences on local bird life.

REALITY: The Southern Emu Wren and Western Whipbird are threatened with extinction. Whalers Way is one of their few remaining habitats.



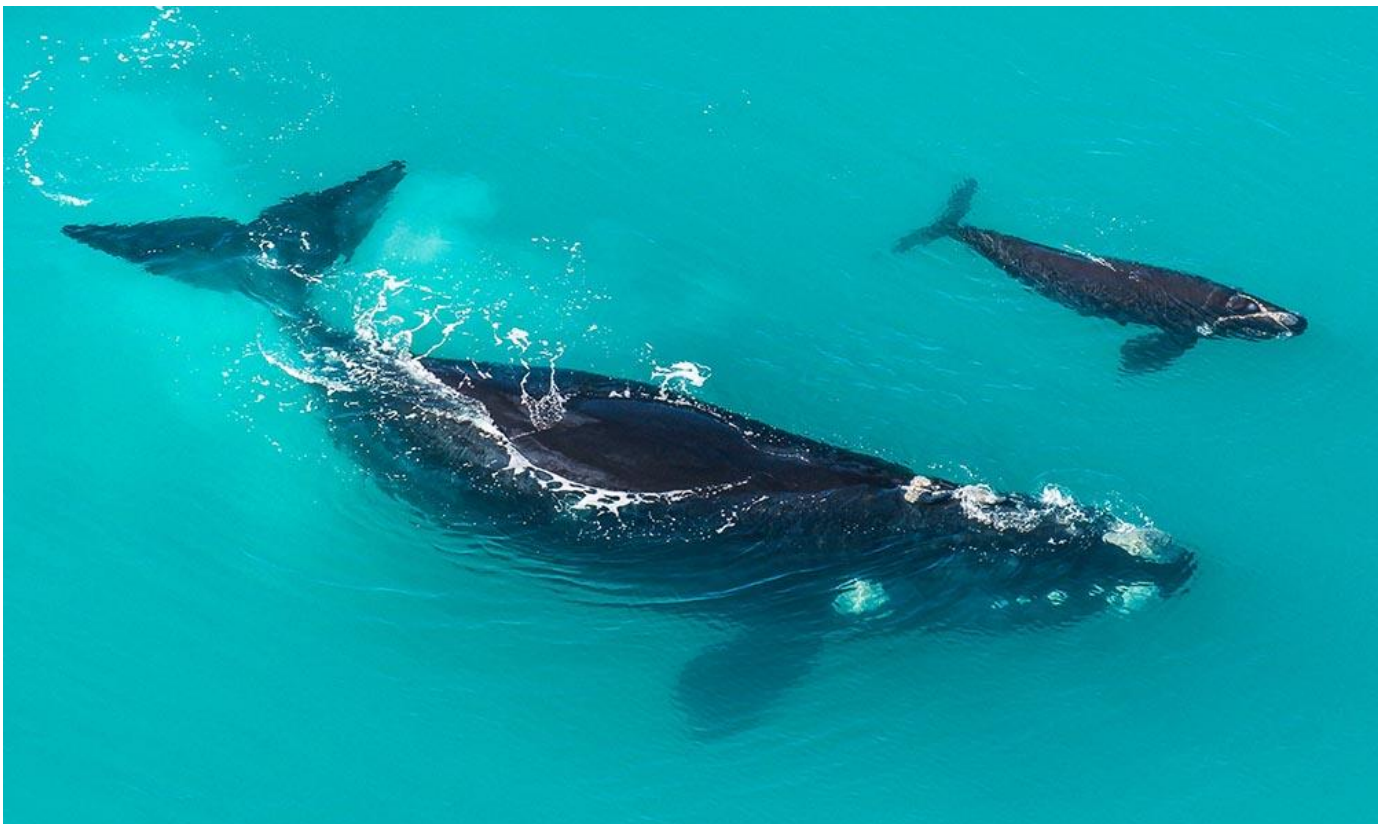
PROPAGANDA VS REALITY



PROPAGANDA: The development will not impact local marine life.

REALITY: The Australian sea lion, an endangered animal has an established colony at Whalers Way.

REALITY: Southern Right Whales, a protected species migrate annually past Whalers Way, and are highly sensitive to noise pollution.



PROPAGANDA VS REALITY



PROPAGANDA: The development will not impact local marine life.

REALITY: The Western Pygmy Possum, whose habitats were destroyed in the Kangaroo Island bushfires, clings on in Whalers Way. Any fire or habitat loss would be devastating to this species.

REALITY: The Osprey nest at Whalers Way, is highly sensitive to noise pollution.



PROPAGANDA VS REALITY



PROPAGANDA: The road to the site is adequate for increased traffic volumes.

REALITY: Evidence of the potholes and corrosion on Fishery Bay Road. Potential increases of 19 semi-trailers and 25 vehicles per launch would be catastrophic on this road.



[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 5:10 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 684
Close Date: 16 September 2021

Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I love visiting Whalers Way with my partner. It's a beautiful, pristine location and knowing that we won't be able to appreciate its splendor any more is a huge disappointment. So many places lack something as beautiful as Whalers Way and it would be a shame to have to say the same of Port Lincoln.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I wish to submit my comments in opposition of the proposal at Whalers Way.

- * Concerns for increased risk of bushfire due to flare stack, flame trench + high voltage power lines between sites.
- * Impact on economics due to the impact on tourism - which this town relies on.
- * Tourism has increased lately due to more and more people exploring the state. Our beautiful environment is becoming more and more recognised as a preferred holiday destination, and this proposal will diminish this option for not only tourists, but locals who love to explore and appreciate our very special environment.

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

- * High concerns about the impact of the noise, which will be incredibly damaging to the local wildlife and sea life. - birds, whales.
- * The proposal is showing significantly detrimental effects to the environment, to the local and broader communities, to animals and birds, and the economic and tourism value.
- * It will be completely devastating for the Eyre Peninsula and the coast surrounding if this proposal goes ahead.

negative

Please, please consider the negative impacts this will have on our whole community, wildlife & oceans and sealife if this goes ahead.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
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	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

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The aspects of the proposal I wish to make comment on are (add pages as required):

I've been going to Fisheries for 45 yrs & the amount of wildlife you have to give way to on the way out is huge so all the extra traffic especially trucks will mean more deaths the helicopter going back and forth over the beach is a massive invasion everyone that visits the area visits WW that'll stop now. All the animals it will disturb is enormous. Least of all all the toxic waste on the ground & air this is our main local beach that everyone comes to & its pristine why

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

not go into the middle of nowhere & cause no disturbance.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
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<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

- ⊗ Environmental - concerns about chemicals & petrol agents used. Green house emissions
• waste into the water. Impact of noise pollution on marine and local wildlife.
- ⊗ Tourism Industry detrimental to fishing/surfing/tourism sector
- ⊗ Off Shore Interests - why are we facilitating this investment??

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 7:34 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Get [Outlook for Android](#)

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 7:50 PM
To: DIT:SPC Reps
Subject: Submission of opposition to the proposed rocket range at Whalers Way SA
Attachments: Tobes submission.png; letter.jpg; submission1b.jpg; Stop the rockets[135].docx

Please find enclosed submission ('stop the rockets') our submission applications and cover letter to The Hon Vickie Chapman MP . for as prepared by myself, [REDACTED] and my [REDACTED] both of [REDACTED]
[REDACTED] This property adjoins the proposed rocket range , and as such we request personal response to all numbered items of concern .
Thankyou . [REDACTED] both of [REDACTED]

Also if there is any problem with the preparation and presentation this submission please advise me so I may make appropriate adjustments .

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
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Close Date: 16 September 2021

Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	[REDACTED]
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	<input type="checkbox"/> A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Please see attached Letter.

Signed [REDACTED]

31/08/2021

Submission on Application
Development Act 1993

Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Type of Development: Whalers Way Orbital Launch Complex Proposal
Statement Level: Environmental Impact Statement
Site Land: Lot 101 Right Whale Road, Sleaford
Statement Number: 1800 752 664
Date: 16 September 2021

	[REDACTED]
Statement number:	[REDACTED]
	[REDACTED]
Address:	[REDACTED]
Is the property (if different from address)	
<i>You will be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
Who the interests are (tick or circle):	Owner of local property -
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
<input checked="" type="checkbox"/>	[REDACTED]

Responses will be made available for public inspection on the PlanSA Portal and will be addressed in the Applicant's Response Document (to be released for public information at a later date).

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

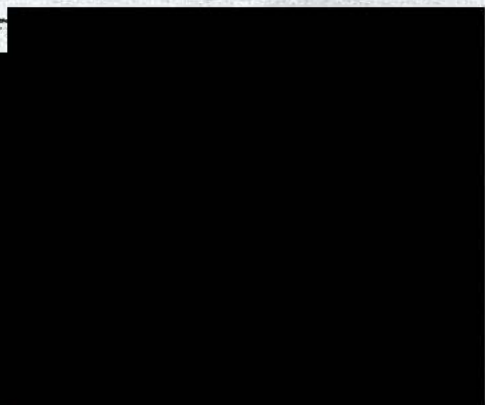
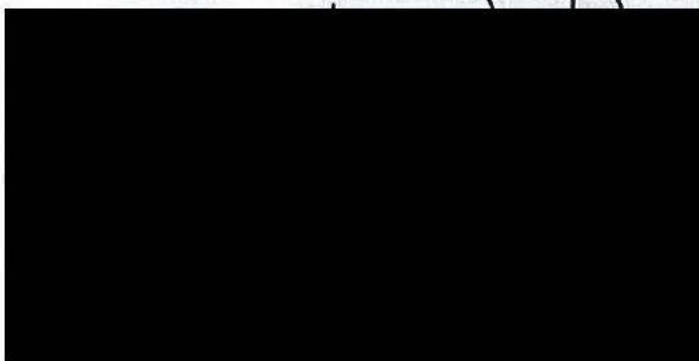
The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,



31/08/2021



Dear minister .

The location of the Southern Launch Rocket launching facility currently testing at Whalers Way near Port Lincoln is wrong with respect to so many considerations. Many of these issues have not been adequately assessed.

As residents of [REDACTED] and with our home land sharing an immediate boundary with Southern Launch rocket facility, my son [REDACTED] and I are appealing for the development of a rocket launching facility by Southern Launch at the area known as Whalers Way to cease operation for the following reasons:

Please consider that any impact study already undertaken cannot be valid without years of extensive observation , the things i talk about in this submission are more glossary than comprehensive , the considerations are far to complex to truly convey here, and too variable with weather/seasonal changes .

I am not a professional writer , please allow un-professional presentation and lets all consider as people with intelligent reasoning and compassion not statistical facts alone . also please forgive the repeating of some comments . i am sure you will get the essence of concerns .. and please let this be discussed further .

thankyou for taking the time to read and consider this correspondence

[REDACTED] 14/09/2021

1

*This area and the surrounding area is zoned COASTAL PROTECTION(CONSERVATION) /HERITAGE LISTED () as is the surrounding area also the area is heritage listed. There is NO PRECEDENT of a coastal protection (conservation) zone in this area being converted to industrial zone. Our home land adjoining the proposed rocket range is zoned coastal protection (conservation) and residential, it is wrong to allow an industrial zone in these circumstances.

the following comments are copied from a past interview with Lloyd Damp (CEO of Southern Launch)

*"And you can't be within a protected area – you can't go and convert a national park into a rocket launch site. "

*(As stated above the rocket range is sited on coastal PROTECTION land which is also heritage listed . and adjoining coastal protection residential propertys , the re-zoning to industrial is without precedent and unfair and inequitable to the residents of the area who have had all applied restrictions of coastal protection zoning . as well as believing the local zoning rules are to be applied for people for all time and as such we the residents of the area have developed our plans and invested time and finances for ourselves and our families for the living condition to which we are accustomed and believe would be securely maintained .

2

I/we(myself and my Son) have lived here for 30 yrs with all restrictions of development of coastal conservation this is what we have believed is to be rulings applied to all of the area. If this rocket facility is not ceased the disruption to our condition and status of living of which we are accustomed will be severely disrupted by regular excessive noise , toxic fumes, smoke and other rocket exhaust gasses,(there is no proof of future rockets to be launched will never emitt any toxic gases , no

matter what regulation applies it is undeniable that over an extended period of time there will be an accumulation of chemical residue deposited on the surrounding area , including my/our home property also increasingly heavy vehicle traffic and dust from road making etc. will be an overwhelming intrusion .

Neighbourhood Disturbances Statement

A neighbourhood nuisance is any adverse effect on an amenity value of an area that interferes or is likely to interfere, unreasonably with the enjoyment of the area by persons occupying a place within, or lawfully resorting to the area.

Nuisance can be in the form of dust, odour, noise, smoke, fumes, aerosols, vibration and insanitary or unsightly conditions from domestic, commercial and industrial premises.

For an activity to be considered a nuisance, it must unreasonably interfere with your ability to undertake the normal activities that you would reasonably expect to be able to do.

3

Water Use

The suggested catchment dam for water supply for this facility will obviously require a pumped supply if obtained locally there will be detrimental effect on the water tables, (DEWNR, 2017) including leaching of toxic chemicals into the aquifers and sea.

“Within the Southern Basin PWA, the Uley South Public Water Supply consumptive pool has been reserved exclusively for the purpose of providing public water supply. Licensed groundwater extractions occur predominantly from the fresh groundwater lenses within the Quaternary limestone aquifer. In 2015-16, metered extractions from Uley South totalled 5344 ML, which represents a 4% increase from both the previous water-use year and the five-year average annual extraction. This volume of extractions equates to 73% of the total allocation limit for the Uley South consumptive pool and accounts for 96% of the total licensed extractions within the Southern Basins PWA.” (DEWNR, 2017, p. 2).

DEWNR (2017). Southern Basins PWA Uley South 2016 Groundwater level and salinity status report, Government of South Australia, Department of Environment, Water and Natural Resources, Adelaide. This area has aquifers which we all use domestically , it is impossible to ensure there will NEVER be any contaminants leaching to the aquifers.

4

The area of Whalers Way is very rare and fragile. To consider any form of detriment to this area is very irresponsible. The noise, toxic exhaust chemical fallout, and the very presence of a busy industrial operation with all the imposed risk of fire and contamination will obviously be very harmful to the entire surrounding environment.

The endangered species of the area include:

Western whippbird

Southern emu wren

Australian sea lion

Southern Right whale

Migratory species include:

Osprey

White bellied sea eagle

Southern Right whale

5

The effects of toxic fallout will without doubt be very harmful to all life in the area, there are many delicate fauna and flora here as well as Kangaroos, emus, a very diverse bird population etc. As well as humans living here. Is the welfare of Australian native flora and fauna and that of Australian citizens. There can be no assurance of the safety of exhaust emissions of future rockets (any emission will eventually accumulate , and over time become harmful to all living organisms including the people living close to the rocket

range . Also there can be assurance of no occurrence of accidents , therefore the rocket range should be in a location with a substantial area of no population and no substantial amount of flora and fauna especially highly flammable , impenetrable scrub with residential properties adjoining and houses in very close proximity .

6

We (My Son and I) have a family of Kangaroos living close to our house, we have observed them daily for 28 years. We see how very afraid of sudden noise and disturbance they really are; we have witnessed them leave the area when a major disturbance occurred approximately 6 years ago. These were animals who were in a very ideal situation with permanent food and water and yet they still abandoned the area. Six years later there is only just now a new family of Kangaroos tentatively repopulating the same area, they are extremely sensitive to sudden noises and disturbances. The kangaroos are currently birthing Joeys.

The birds here also are accustomed to the sanctuary of quiet, now they are nesting, if scared away, even if eventually returning, the eggs or chicks will die if left unattended for too long.

7

As i suggested before all of South Australia has been promoted as Clean/Green and is very desired by international visitors. To blemish one of the main destinations with this industrial rocket launching facility is harmful to the many businesses that are supported by the Clean green seeking visitors ,after covid travel restrictions are lifted the visitor trade will resume and grow especially while other areas of the world are losing or have lost the natural beauty places. Is that not of national importance? This rocket launching facility would be far better sited in a remote unpopulated area of low environmental status , and develop it to the full potential including educational facility,, accomodation village , and tours , It would then create an entirely attraction for high tech loving visitors , The clean/green loving visitors want the SA GREAT pristine image . it is ridiculously irresponsible to pollute one of the most pristine natural environments with an industrial development ! After Covid travel restrictions ease there will be an influx of visitors seeking to escape their industrial noisy home land and find respite in our S.A. GREAT paradise , this will be a very lucrative income for all businesses across Eyre Peninsula , let the 2 attractions have their own

identity and visitor destination not many will want both in the same place and neither can flourish in that way .I have friends in China , Japan and Scotland , they are all appalled at the proposed rocket launching facility at Whalers Way !! SA GREAT reputation is being tarnished .

Also the Asian market for tuna and all of EP seafood is supported with the belief the tuna come from unblemished waters , Jaoanese and Asian people are extremely selective , This rocket range will likely be very damaging to the reputation .

8

The only way this rocket facility will employ any reasonable number of people will be if it grows to large proportions in which case it is definitely in the wrong place.

9

This area will very likely become a military target is this not of national importance?

10

The home property I share with my son is immediately adjoining the area occupied by Southern Launch.

There has been no consideration or consultation with us with regard to the obvious potential event of toxic exhaust chemicals being deposited on our home land other than to state the rockets are approved , without comment on what will potentially develop .

The terrible stressful noises and industrial activity that will be surrounding our home is a severe intrusion, and is already causing me/us great anxiety. in fact the stress is exacerbating my health issues of high blood pressure and heart condition (under care of a cardiologist and stress under care of a Doctor , it is irresponsible to allow this intrusion on an unwilling local population of residents . This rocket range is crushing many people with anxiety anger and disbelief , not just immediate residents but in surrounding towns as well .

Is the deliberate allowance of potentially toxic and potentially cancer causing agents being deposited on local flora and fauna and Australian citizens their home and home land not of national importance?? Again there can be no guarantee no emissions of future rockets will not contain any harmful elements at all , over some years these contaminants even if minor or miniscule will accumulate, as rockets become larger the surrounding areas will receive contamination . and again , there can be no assurance that there will not be an accident , today 15 september 2001 an attempt to launch resulted in a malfunction 1 of the 4 boosters /engines of the rocket , if this occurred after it launched there would be very high potential of a fatal accident , the adjoining residents would be at extreme risk of death , in the very least the resultant crash would be catastrophic to the environment and very high potential of a fire in dense impenetrable scrub surrounding residential properties , no fire action plan will be effective in the event of a bush fire if it is the impenetrable scrub surrounding the range .

11

Noise pollution

The Noise Policy controls the level of noise exposure that should not be exceeded for people living near industrial and other non-domestic premises.

Ideally, factories and houses should not be located near each other; however, when they are, both have to accept restrictions. Noise levels that should not be exceeded for both day and night have been set for premises operating in different areas, for example, lower noise levels apply to factories operating in a residential area than to those in an industrial area. This allows a balance between the needs of industry and housing.

The maximum permissible noise levels listed here are used as a guide in deciding whether the general environmental duty has been met. When assessing a complaint about noise from industrial or non-domestic premises, the authorised officer will take into account other factors such as other contributors to the ambient noise in the area, the reasonable and practicable measures available for noise reduction, the financial implications of those measures, and their likely success.

Land use category	Noise levels not to exceed in dB(A)*	
	7 am–10 pm	10 pm–7 am
Rural Living	47	40
Residential	52	45
Rural Industry	57	50
Light Industry	57	50
Commercial	62	55
General Industrial	65	55
Special Industry	70	60

* Measured according to the Noise Policy at any place, other than the premises from which the noise emanates, where a person lives or works.

Where different land uses for the noise source and the noise receiver interface, or where council development plans indicate a mixed use zone, the noise levels are averaged to give a noise level to be met at the noise receiver.

Where to get help

A range of local, state and Australian government bodies are responsible for managing problems arising from different types of noise. A chart detailing those responsibilities is included in the EPA publication, *Guidelines for the use of the Environment Protection (Noise) Policy 2007*.

12

Also as Cape canaveral have very extensive nautical safety /exclusion zones during launches, why has nothing been mentioned about exclusion zones for larger rockets when/if they/this facility doesnt relocate as it should ! the following is a comment that seems to indicate that even if the rockets proposed for Whalers Way facility are smaller , there will still be a need for an extensive exclusion zone , this will be disturbing to the fishing industry

III. Legal Authority and Need for Rule

The Coast Guard is issuing this rule under authority in 46 U.S.C. 70034. The Captain of the Port Jacksonville (COTP) has determined that potential hazards associated with a space vehicle launch, on August 27, 2020, will be a safety concern for anyone within a 240 square nautical mile (nm) area seaward of Cape Canaveral, FL. This rule is needed to protect personnel, vessels, and the marine environment in the navigable waters within the safety zone during launch.

13 cont.

While it is understood that the rockets proposed for the Whalers Way range are to be up to 30 mtrs high and the Cape Canaveral rockets are much larger , there will still be a nautical exclusion zone over an area frequented by commercial fishing boats and recreational boating including local and travelling yachts , the following comment made by Lloyd Damp is an indication of the intention to expand the range , with that the already imposing nautical exclusion zone will increase dramatically .

WATER TRAFFIC RESTRICTIONS

SOUTHERN EYRE PENINSULA

Notice is given that pursuant to Section 26 of the *Harbors and Navigation Act 1993*, the Department for Infrastructure and Transport has granted an Aquatic Activity Licence to SouthernLaunch.Space Pty. Ltd. during the conduct of up to three Rocket Launches from the Whalers Way Orbital Launch Complex across three launch campaigns totalling up to 15 notified launch occasions from Sunday 05/09/2021 to Friday 31/12/2021 as follows:

An area of water south of D'Anville Bay and Fishery Bay.

Bounded on the West side by a line between the shore at (34° 53' 27.0"S, 135° 36' 12.2"E) to (34° 56' 15.4"S, 135° 33' 32.8"E) and on to (35° 00' 00.0"S, 135°34'7.00"E).

On the East side by a line between the shore at (34°55'24.37"S 135°41'17.95"E) to (34° 56' 30.0"S 135° 43' 22.3"E) and on to (35° 00' 00.0"S 135° 135'45'6.87"E).

On the Southern side by Longitude line 35° 00' 00.0"S

For safety reasons, vessels and persons other than those participating in the event are prohibited from entering the above area of water on the notified launch occasions from Sunday 5th of September 2021 until Friday 31st of December 2021.

Boating and surfing access to Fisheries Bay and White Point will remain open at all times.

SouthernLaunch.Space Pty. Ltd.

14

The following comment by Lloyd Damp CEO indicates the intention to expand the range to enormous proportion

"When it comes to a more critical time in the lead up to launch we will blocking off 440 kilometres of air space down range. It gives you an idea of what this vehicle is capable of doing." (any area below the flight path will be at risk)

If we just look at going to the Moon as the end goal, besides planting the Australian flag on the moon, which I think would be awesome, the impact it will have for us here on Earth is astronomical.

So what time scale are we talking about here? The next decade? In our lifetime? The next 100 years?

Honestly, I believe that we could do this in probably five years – send something to map out the resources on the Moon.

Obviously large rockets are proposed . and the nautical exclusion zone will be very substantial . as will the risk to surrounding residents .

as an indication of what to expect as potential exclusion zone as the range expands operation the following is a comment from a Cape Canaveral internet site(not intended to be an accurate comparison , but rather an indication that the exclusion zone will indeed expand

III. Legal Authority and Need for Rule


The Coast Guard is issuing this rule under authority in 46 U.S.C. 70034. The Captain of the Port Jacksonville (COTP) has determined that potential hazards associated with a space vehicle launch, on August 27, 2020, will be a safety concern for anyone within a 240 square nautical mile (nm) area seaward of Cape Canaveral, FL. This rule is needed to protect personnel, vessels, and the marine environment in the navigable waters within the safety zone during launch.

15

Kooniba area was chosen for test launching by Southern launch and promises of much benefit for the local residents and 1st nation people of the area , it seems logical to find an unpopulated area of low environmental diversity and sensitivity and establish a permanent rocket range with view of expanding to globally recognised proportion , with that there would be an opportunity to establish accommodation /village safe viewing areas tours etc. and create an entirely new focus of attraction for visitors seeking the more high tech destinations of Australia , S.A .GREAT promotes South Australia as clean/green with wineries , beaches, unblemished nature zones etc. It is irresponsible to blemish the reputation with a rocket range amongst one of the most pristine beautiful coastal protected areas , an area already loved by international visitors , as well as Whalers Way the entire lower Eyre peninsula is desired as a destination , for people seeking to escape the industrial atmosphere of their home places , and Rocket Range 'village' would be an addition not a blemish. After covid travel restrictions ease there will be a flood influx of international visitors seeking the SA GREAT clean/green image , and also there could be a new genre of visitor attraction .

16

As the immediate adjoining neighbour i/we have had no consideration ,. despite the fact that when a few years ago an application for approval of tourist accommodation cabins to be established in the area all local residents likely to be impacted by the development were given an opportunity by council to approve or disapprove of the development , however when a rocket launching facility applied for approval to convert coastal protection/heritage listed land adjoining residential property and establish a rocket launching facility the local residents were not given the option of approval or disapproval , although there is clearly a precedent of this .. I/we request response from and contact with the Prime Minister and the Minister of Planning , and in order to discuss my/our concerns . please allow my/our rights of safety and status quo of dwelling as Australian citizens and residents of the area .

Yours sincerely 

with and behalf of [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

SUBMISSION

on

WHALERS WAY ORBITAL LAUNCH FACILITY

ENVIRONMENTAL IMPACT STATEMENT

by  Port Lincoln SA 5606

15 September 2021

Introduction

The Environment Impact Statement (EIS) has encapsulated the opportunities in space technology today, in addition to the entry to the industry of private organisations.

SouthernLaunch.Space Pty Ltd is not the only player in the game in Australia, for there is also Gilmour Space Technologies¹, a venture-backed rocket company founded in 2013, which is establishing a launch facility for Low Earth Orbit (LEO) payloads at Abbott Point in Queensland.

Southern Launch is a 2017 start-up business, and in its search for a suitable launch site, it is apparent that a coastal site was a pre-requisite. The choice of the Theakstone property at Whalers Way has presented a range of environmental, ecological, and social issues, and yet their importance has been diminished in order to allow the proposal to proceed.

We are only ever custodians of the land on which we are privileged the “right of ownership” under our democratic and economic systems. We do not own the ecology on it, nor the environment of it, nor the air above it, nor the earth below it, but we do have a responsibility to care for each of these systems. We can not do what we like with the land, air, or the waters connected thereto.

Just around the corner to the east from the Whalers Way property is Lincoln National Park, created in 2003 and containing the Memory Cove Wilderness Protection Area and a failed farming enterprise. The National Park was created in the interests of conserving the unique ecology and coastal environment of the bottom of Eyre Peninsula. The Whalers Way property is a contiguous remnant similar to Lincoln National Park but with its own unique environmental and ecological features.

And yet, decisions are made that will harm these natural systems. Decisions are made that conveniently forget that it is not just humans that occupy space on Earth. Decisions are made that forego all this with but an “eye on the prize”.

Reading through the EIS and all the 29 or so Appendices, it is apparent to me that there was but one primary objective - “to proceed and progress ... the approvals”²

A pathway has been constructed to achieve that end, regardless of the weight of environmental, ecological, and social values aligned with the subject property.

In this submission I have raised a number of concerns about the procedures adopted, environmental, ecological and social matters, and one aspect that the EIS has not countenanced - ethics.

¹ See <https://www.gspacetechnology.com/about>

² EIS Appendix A

Procedural concerns

1. Southern Launch has been privileged with “major project” status. Although it is important for the public to understand what this means, it is more important that the reasons for the declaration are made clear because the planning process is very different than for general developments.

PlanSA states that *“a development proposal can be declared as a major project by the Minister for Planning and Local Government if it is considered to be of economic, social or environmental importance to South Australia.”*³ Major project status was declared for the proposal on 22 August 2019. Assessment process steps are described at PlanSA⁴.

It is suspected that neither economic, social or environmental details would have been quantified in 2019, except for an economic advantage assessment in October 2019, for they are only detailed two years later in the EIS, the document to which this submission is about.

2. A further concern about the process adopted by the proponent and conjoined government entities, is about decisions being made without appropriate due diligence. These decisions are presumptive.

Consider the following;

- **selection of Whalers Way** BEFORE any environmental assessment, even the basic of assessments such as ecological status under the federal EPBC Act had been undertaken (ref. public announcement on **4 Dec. 2018**, <https://theleadsouthaustralia.com.au/industries/space/australias-first-commercial-orbital-launch-facility-to-be-built-in-south-australia/>)
- **declaration of major project** status by the state government on **22 August 2019**, and gazetting accordingly, PRIOR to any understanding of the environmental and social impacts
- **granting of a licence** for the Whalers Way launch facility by Australian Space Agency on **14 July 2021** (<https://www.industry.gov.au/news/australias-second-launch-facility-licence-granted>) WITHOUT an understanding of the social and environmental impacts
- **regulatory approval** by the federal government (press release **23 August 2021** by the Minister for Industry, Science and Technology (<https://www.minister.industry.gov.au/ministers/porter/media-releases/commercial-rocket-launch-permit-granted-south-australia>) WITHOUT reference from the federal Department of Environment, South Australian Department for Environment and Water, and SA EPA.

Of course, the general public would not know what happens in meetings behind closed doors, and what is said, what promises are made, what concessions are offered. The public expects however, that lawful procedures are strictly followed, because if they are not then the rule of law is broken.

3. The author of the EIS, MasterPlan, states in its Disclaimer ...

*“This **Draft EIS** has been prepared only for the purpose of initial regulatory assessment of the application by government, prior to its finalisation for formal agency and public exhibition.”*

³ Ref. https://plan.sa.gov.au/state_snapshot/development_activity/major_projects

⁴ Ref. https://plan.sa.gov.au/state_snapshot/development_activity/major_projects/how_major_projects_are_assessed

The problem here is that the EIS before the public at this moment is a Draft. Thus, is the Draft EIS the only opportunity for the public to present submissions, or will the final EIS offer the same opportunity (vis-a-vis public exhibition)?

If it is the former, then as we know, Draft documents can change, so is it fair that a Draft document is the only opportunity that the public has for its own assessment?

This matter needs to be clarified.

4. It is apparent that the overall project is being conducted in two parts. I have named Part 1 as the “Test Launch Campaign”, which has been subject to an initial approval process and is purportedly to acquire information to support what I call is Part 2, which is the Whalers Way Orbital Launch Complex (WWOLC) to which the Draft EIS has been prepared.

In a Development Application letter dated 23 April 2021 from MasterPlan⁵, Southern Launch’s planning consultant, to the Attorney-General’s Department in relation to Part 1 of the project, it is stated;

“The application herein is therefore seeking approval for a test campaign used to obtain empirical data in respect to two key aspects:

- *empirical noise and vibration data for rocket launches at this site; and,*
- *observational data on the behavioural effect on local fauna species during launch events.”*

In PlanSA’s “Assessment Guidelines” (Appendix D in the EIS), the following is stated;

*“An opportunity for public comment will occur when the **completed** EIS is released.”*⁶

The EIS is a draft that does not contain acoustic assessments and is therefore incomplete and has been released too early. However, if the “*completed EIS*” (which is assumed to be the final EIS) contains all information, as it needs to, then the public must be given the right to make its own assessment.

Conclusion **I believe the Draft EIS process should be terminated immediately until information from Part 1 is available to be included in the EIS document.**

5. Section 1.6 of the EIS provides details about legislative requirements to which the proposal must comply with and be assessed accordingly. The EIS does not contain much information about the initial Development Approval, however we know that it was for ;

“Temporary change of land use to enable the launch of three test rockets, prior to 31 December 2021, associated with the Whalers Way Orbital Launch Complex Test Campaign, including the construction of concrete pad,

⁵ Ref. https://plan.sa.gov.au/development_application_register/assets/get_document?applicationid=21006593&filename=51284let07-UpdatedNotificationPackage-350564.pdf

⁶ EIS, Appendix D, pg. 7

contained fuel tanks, 2 x 2.2m fence and pole mounted PTZ cameras. The proposed activity is short-term in nature for research purposes only.”⁷

But this followed the initial “Major Development Declaration Request” in a submission (Appendix A of the EIS) dated 13 May 2019 for the subject land at Whalers Way.

Although the submission acknowledged “*the proposed development raises issues of significant environmental, social and economic importance*”, the objective was made clear on “*the ways in which to proceed and progress the investigations and the approvals required for the development*”.

To reiterate, an approval pathway was devised, and I consider this to be wrong. The environmental significance and history of the subject land and locality has been completely over-ridden.

Thus, a “temporary change of land use” was devised because the subject land is in the **Coastal Conservation Zone** in the **District Council Lower Eyre Peninsula Development Plan (DCLEP DevPlan)**.

A long-established Heritage Agreement for conservation purposes, and long-standing tourist visits to the extraordinary coastline vistas of Whalers Way, also produced impediments for the proposed rocket launch facility.

Furthermore, endangered or vulnerable fauna species (e.g. Southern emu-wren, western whipbird, Australian fairy tern) claim this locality as natural habitat, as does threatened flora species (e.g. mint bush).

In various respects, there are lawful protections afforded to the existing conservation land use of the subject property, and the question is - can land have two very different land uses under the Development Act 1993? Does a temporary use conform with DCLEP’s Development Plan?

Given the sensitive environmental factors, it is confounding why this site became preferred, facilitated, and/or supported by many government agencies, which should have known of the limiting factors attendant with the subject land. These agencies are named variously in Appendix C of the EIS and are;

- Regional Development Australia Whyalla Eyre Peninsula
- state government (which established “Southern Launch Taskforce” consisting of representatives from 11 government agencies)
- Department of Planning, Transport, & Infrastructure
- District Council of Lower Eyre Peninsula
- City of Port Lincoln
- Department of Primary Industries and Regions

What does this say of the integrity of DCLEP’s Development Plan when it has been so easily dismissed? Section 33 (1) of the Development Act 1993 (the valid law for the EIS as advised by the Minister), requires

⁷ Documents available at...https://plan.sa.gov.au/development_application_register#view-21006593-DAP

assessment against the provisions of the DCLEP's Development Plan, so what does it say about application of the law?

Conclusion **There are a number of procedural questions to which there is no clear answer provided in the EIS.**

Justification for the Project

The EIS is not correct in stating that there are no other “advanced proposals for competing SSO launch facilities within Australia (and that) there is a high probability that, should the proposed project not proceed, the market for such launches will be met overseas.”⁸

As mentioned earlier, Gilmour Space is headquartered on the Gold Coast (Queensland), and is well advanced in small rocket technology and payload commissioning for both Sun Synchronous Orbits (SSO) and Equatorial Orbits.

Partnering with Gilmour is Fleet Space Technologies (based in Adelaide) which has already launched 6 satellites, with more to come in 2022⁹. Gilmour will use its rockets to launch Fleet Space nano satellites into LEO in 2023¹⁰.

Southern Launch’s business model appears to be offering a point of difference, and that is polar Earth orbit launch capability.

Conclusion **It is not essential that Southern Launch must have the Whalers Way site for it to progress with its business model, for there are other less environmentally and ecologically sensitive sites that it can use.**

The EIS is therefore not correct in stating that “not proceeding with the project would result in the forecasted direct and indirect economic and social benefits ... to not be realised.”¹¹ There is another option.

Site Selection

(a) Southern Launch has stated that a number of sites were initially examined before finally settling on Whalers Way, which, as we are advised, contains favourable geographical attributes for rocket launching. But this site also contains a number of sensitive natural attributes, and although the EIS has

⁸ EIS Executive Summary, pg. xxviii

⁹ See <https://fleetspace.com/about>

¹⁰ See <https://www.gspacetechnology.com/post/gilmour-space-to-launch-fleet-satellites-in-2023>

¹¹ EIS Executive Summary, pg. xxviii

described some, it is considered that **insufficient weight** has been applied to particular criteria at the Whalers Way property.

- (b) Selecting Whalers Way without a deep understanding of the ecological and environmental processes at the locality, and without consultation prior to site selection with at least some of the peak organisations (e.g. Birds SA, Zoos SA, Nature Conservation Society), which have knowledge of ecosystem function, discredits the proponent's ultimate objectives and merely invites opposition.

Of course, the EIS contains Appendix P (Terrestrial Ecological Assessment), Appendix S (Marine Ecological Assessment), and Appendix Z (Landscape Character and Probable Visual Effect Assessment), but it became apparent to me that each of these assessments' conclusions did not negate the possibility of use of the subject property for rocket launching. See later for further comment.

- (c) A key aspect of a particular site is identified in the EIS as its proximity to the coast. The decision matrix at Table 4.1 lists all the criteria, but it leaves out one very important issue - the **disposal of spent rockets** (see comments later).

It is contended that the selected site at Whalers Way contains a range of insurmountable problems. Stated at Section 4.1 in the EIS, the "fundamental requirement" compels the site to be located on the coastline. The methodology is supported at Table 4.1, and it is stated that the critical criteria is to "safeguard the public".

It is also stated that "*a high-level environmental assessment was developed to enable an initial assessment of environmental values to determine if site candidates could progress to further investigation being undertaken.*"¹²

The following queries have emerged from an examination of Section 4.

- There is inadequate reasoning why coastal sites are favoured.
- Australia already has a long-standing rocket launch area, the Woomera Prohibited Area, but there is scarcely any rationale about the use, or otherwise, of this facility.
- If "*high-level environmental assessment*" is the backbone of site selection, why would West Cape How National Park and Lincoln National Park of all places - remember, these are **National Parks** - be considered? It is a gross misunderstanding about the values placed on National Parks, and it signals poorly on the value judgements relating to site selection. Why even contemplate a National Park? Thus, the point I am making is a question about how much or how little value was afforded to the locality and the proposed site at Whalers Way, where there are a range of sensitive ecological and natural amenity values.

- (d) Another criterion is "Weather", and as has been witnessed recently during the launch of the first of the "test campaign" rockets, Whalers Way is a windy site and launch was postponed on a number of occasions. Just around the corner to the west of Jussieu Peninsula lies Cathedral Rocks wind farm. One wonders if sufficient weighting was assigned to the "Weather" criteria at this site, and more particularly to the wind factor. No mention is made at section 4.8 in the EIS of this matter.

¹² EIS pg 143

The collateral damage is this - by delaying launches because of windy conditions, merely ensures extended closure of the subject lease area, and dooms public visitations to Whalers Way (see discussion later). The resulting impacts of this scenario do not appear to have been considered in the Economic Analysis at Appendix N.

Does the proposal satisfy the planning zone and attributed land use?

The State Planning Commission Guidelines (Appendix D in the EIS) for the preparation of the EIS lists the *Development Act 1993* as one of the documents the Minister must have regard to in making a decision.

Section 33 (1) of the Act requires assessment of a development “*against ... the provisions of the appropriate Development Plan*”. It is appropriate to set aside the phrase “*insofar as they are relevant to the particular development*” in Section 33 (1) because of the reference in part 2 of the Guidelines to “*a change in land use to accommodate an aerospace facility*”.

It is therefore relevant to know what the existing land use is, and under what zoning it is subject to.

The subject land is in the **Coastal Conservation Zone** in the **DC Lower Eyre Peninsula Development Plan (DCLEP DevPlan)**.

Section 7 of the **Landscape Character and Probable Visual Assessment (Appendix Z)** reviews relevant aspects of the zone, to which I now refer to the Objectives, Desired Character, and Principles of Development Control, paraphrased in italics below.

The proposal is not able to ;

- *enhance and conserve the natural features of the coast, including visual amenity, landforms and fauna*
- *contribute to the desired character of the zone*
- satisfy the Desired Character, which includes
 - a. *development that is subservient to the conservation of the coastal environment in order to ensure that the fragile coastal environment is protected and biodiversity maintained*
 - b. *development borrows from, and complements the natural landscape in form and scale ... to ensure that the natural elements of the site/locality remain dominant to any introduced elements, and the scenic quality of the coast is protected*
- satisfy Principles which include
 - a. *Development should not be undertaken unless it is consistent with the desired character for the zone.*
 - b. *Development should be designed and sited to be compatible with conservation and enhancement of the coastal environment and scenic beauty of the zone.*
 - c. *Development should ... minimise impacts on the natural surrounding environment*

The proposal consists of the following built structures as listed in the Guidelines;

- a. *launch pads (up to 6)*

- b. *assembly buildings (permanent and temporary)*
- c. *range control facilities*
- d. *diesel and /or hydrogen fuel cell powered generators*
- e. *helicopter pad or pads*
- f. *solar arrays*
- g. *water storage and treatment systems*
- h. *lightning rods*
- i. *anemometer towers*
- j. *engine test stands*
- k. *blast walls*
- l. *bunding for blast wave deflection*
- m. *access tracks*
- n. *storage of liquid, hybrid and solid propellants*
- o. *installation of fibre optic and satellite communication systems*
- p. *installation of high voltage power lines*
- q. *temporary infrastructure including, but not limited to:*
 - o concrete batching plant*
 - o site and construction offices and facilities*
 - o laydown areas*
 - o access tracks*

None of these components could remotely be considered to “enhance and conserve the natural features of the coast, including visual amenity, landforms and fauna” nor “contribute to the desired character of the zone”.

The proposal ;

- is inconsistent with the Principles of the Coastal Conservation Zone
- is not compatible with conservation and enhancement of the coastal environment and scenic beauty of the zone, and
- would not minimise impacts on the natural surrounding environment

The Desired Character of the Coastal Conservation Zone in **DCLEP DevPlan** is described thus;

The role of this zone is to ensure the conservation of coastal features and scenic quality, enable appropriate public access and ensure that development is not subject to coastal hazards. Development within the zone should be subservient to the conservation of the coastal environment in order to ensure that the fragile coastal environment is protected and biodiversity maintained.

The proposed rocket launch facility would not be “subservient to the conservation of the coastal environment”. The long list of built structures noted above, and the dominant insertion into the landscape of

rockets up to 30 metres high together with the attributed launch noise, would be the opposite of what is intended and required within the zone.

Part 2.3 in the EIS describes that the facility will ultimately have up to 42 launches annually (*“36 orbital launches and six sounding rocket launches per year”*). This is equivalent to one launch every 8 days or so. It might be possible that there would be more than one launch on a single day, but we do not know this.

Such intensity of use and industrialisation of the zone would result in domination by the launch facility.

In a letter dated 25 May 2021 from District Council of Lower Eyre Peninsula to the State Planning Commission in relation to the issue of Development Approval for *“change of land use”* to accommodate Part 1 of the proposal, Council expressed several concerns, including that *“the future development application can adequately consider all relevant planning considerations including but not limited to ...*

- *the key environmental protection outcomes sought by the Conservation Zone*
- *noise and vibration impacts on nearby sensitive receivers*
- *traffic and infrastructure impacts associated with a significant increase in volume of heavy vehicles utilising roads designed for less frequent use; and*
- *vibration impacts on nearby State and Federal Heritage Listed items, including shipwrecks.”*

These are the key matters that DC Lower Eyre Peninsula expected of the EIS.

It is contended that the EIS has not adequately addressed all these matters.

Conclusion **It is imperative that the values attributed to this area of the Coastal Conservation Zone be maintained, if not enhanced, and for this reason the proposal is entirely inconsistent with the Development Act 1993 and DC Lower Eyre Peninsula Development Plan.**

Valuing the Coast of Whalers Way - What does the EIS say?

Appendix Z (Landscape Character and Probable Visual Assessment) (LCPVA) of the EIS states the following;

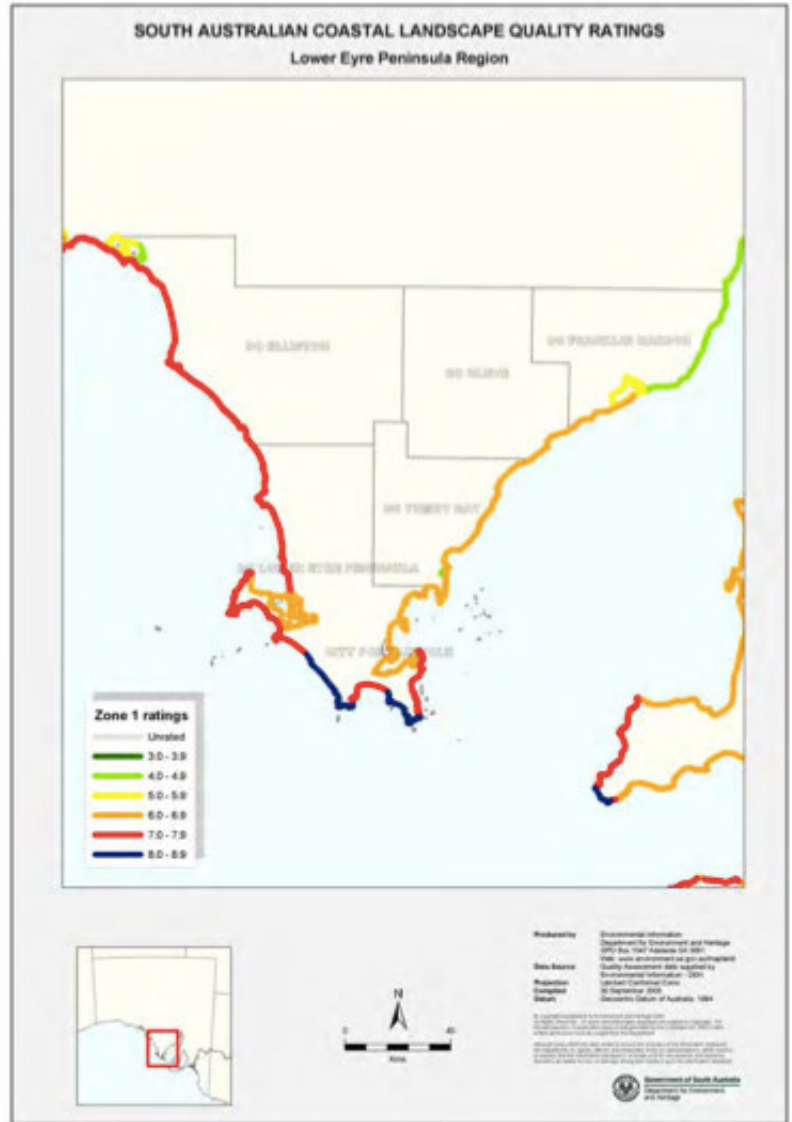
“In the case of the Project, the existing landscape quality has a moderate to high scenic value due to the coastal location and cliffs. Consequently, development of the proposed sites within this scenic landscape character may potentially impact on the visual amenity of the area.” (pg. 19)

The Coastal Viewscapes map at Fig. 17 (pg. 21) in the LCPVA and shown below, reveals that of all the areas in the state, the bottom of Eyre Peninsula (which also includes the WWOLC), and a very small part of the coast at the tip of Yorke Peninsula, achieve the highest ratings in South Australia - not just “moderate” but highest ratings. It is the reason why the travelling public treasures such viewscapes.

There are two elements of significant concern.

(1) The LCPVA states that “the degree of visual effect on the existing landscape ... will be minimised”. But this assessment is only of the impact from the proposed built structures and the rockets themselves, and misses the critical point of public accessibility entirely. Of course, it is acknowledged that Whalers Way is on private land, but I wish to reiterate that we are only ever custodians of the land. The public has been privileged with paid access to Whalers Way for many decades, and there will be a high possibility that this will be denied in the future.

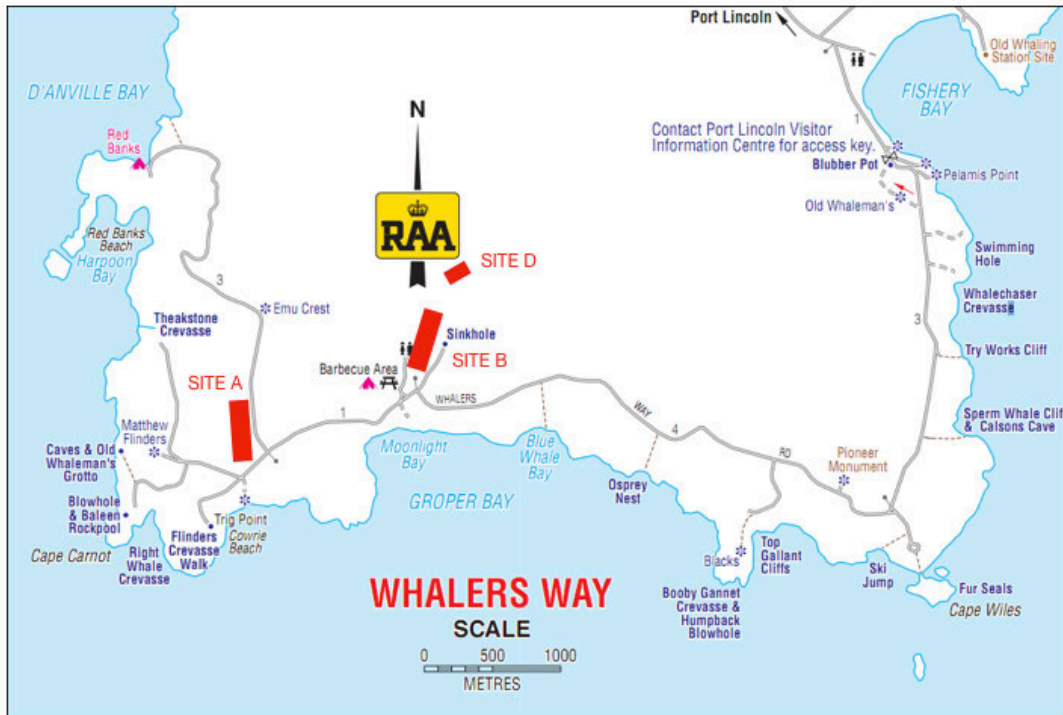
(2) The proposal will break this connection between humans and nature irrevocably. People will generally be excluded from the most highly rated coastal views available in South Australia. Why? Because with up to 42 launches annually, and with exclusion periods both sides of the launches, there will inevitably be no time for tourist visits.



Source : Lothian A (2005), “Coastal Viewscapes of South Australia - Report for the Coast Protection Branch, South Australian Department for Environment and Heritage”

On the Whalers Way tourist drive map below, “Site A - launch facility”, “Site B - launch facility”, and “Site D - infrastructure” indicated in the Site Plan at Figure A in the EIS, have been overlaid to provide visual context about the impact of the exclusion of visitors.

All the points of interest will be denied to the public in general when expected peak launch occurs.



Source : RAA South Australia

Overview of Other Key Effects

1. **Economic analysis**

Section 13 and Appendix N in the EIS - "Potential Economic Impact of Southern Launch's Proposed Civilian Launch Operations" - has not complied with Guideline 5.3, as no assessment has been conducted on the effects on tourism.

The economic benefit analysis for the EIS has excluded the DIS-benefit of a scenario about the possible decline in Whalers Way coastal tourism as a result of public exclusion from entry. No modelling or analysis has been included in the economic assessment. No social cost has been assessed, as is required of the EIS.

It is further noted that the Economic Assessment was dated October 2019, just two months following the declaration of "major project" status.

In a further observation, if an early economic assessment could be done for WWOLC then why could not the environmental, ecological, and social assessments be undertaken to inform the proponent of risks attendant with the subject property before taking the next steps? This is not counter-intuitive.

2. **A Heritage Agreement** that commenced in Oct. 1987, lies within the "leased" area of the project site, and will require revision or termination to allow the rocket launch project to proceed. Therefore, a part of the land in the original Heritage Agreement will mean that conservation values will be subverted by the "promises" of the space industrial complex.

3. **The Caveat and Lease**

Revealed at Appendix K, a Caveat agreement was first entered into between Southern Launch and the owner of the subject property (Theakstone Property Pty Ltd). An agreement was entered into by both parties on 25 November 2019 and the Caveat signed on 26 November 2019. The Caveat was registered at the Land Titles Registration Office on 31 March 2021.

The Caveat instrument was to produce a lease in favour of Southern Launch and denoted "Orbital Launch Complex" on the plan at Appendix K. The broad lease terms are;

- Rent of \$26,501.28 per annum payable to the lessor
- Term expiry 21 January 2026
- Two rights of renewal for 10 years each

The lease agreement was made on 3 March 2021. Significantly, the lease includes;

- "payment of a launch fee" (as per sec. 2.3 in the lease agreement) - \$10,000 for a "commercial launch" and \$5,000 for a "non-commercial launch"¹³ indexed at "3% (pa) or proportionally to any change in the CPI"

¹³ EIS Appendix K, Schedule 2

- licence terms (section 7.2 in Attachment 1 of the lease) whereby “Tourism Use” is all but nullified; the lessor must give “reasonable prior written notice to the lessee”, virtually eliminating the past practice of paid key access
- other restrictive access terms (at section 7.2) that will ensure that the public will not have access to Whalers Way
- restoration of the leased area with removal of structures “sited on above the leased area”, but with concrete launch pads excluded.

There is an inconsistency between the leased area shown in the Caveat plan at Appendix K, and the Site Plan at Figure A in the EIS.

What the Caveat/Lease arrangement reveals is that the 23.76 ha of land that is proposed to be cleared can never be returned to its natural state. The “restoration” clause in the lease is just a token. Indeed, there is nothing in the lease about any restorative revegetation or ecological restitution.

4. Native vegetation clearance and impacts

The “Native Vegetation Clearance” report at Appendix Q lists a range of plant species as either “endangered” or “vulnerable” under the federal EPBC Act.

Appendix P “Terrestrial Ecological Assessment” Table 17 is disturbing, as the Southern Emu-wren (EPBC listed as endangered) will be imperilled by the WWOLC native vegetation clearance. The tiny population of 18 individuals recorded at Whalers Way will be “tenuous to the impacts” and the WWOLC project “is likely to lead to a long-term decrease in the size of an important population”.

Table 19 states at part 3.2 - *“It is expected there will be direct impacts to State listed fauna species through clearance of 23.76 hectares suitable habitat and indirect impacts from noise during operations of rocket launches”.*

These few examples reveal the high risk to native species as presented in Appendix P. Mitigation should not be the solution at the subject property, as overall, it is clear that it is not the right place for the rocket launch facility.

Even the **Significant Environmental Benefit** offset of \$965, 407.77 would not be an appropriate response as all it would do is allow a price to be placed on the development to proceed at the expense of environmental and ecological systems that are already under stress from other influences such as climate change and human pressures.

5. Waste

Once rockets have ejected their payloads, they will fall into the ocean where they will fragment and become another form of waste. The EIS states (section 5.1.2.2) that rocket debris *“would not result in negative impacts on ocean environment”* and *“there may be batteries of similar volume to several of car batteries”*. It is also stated that the batteries would have a *“minor localised impact that would dissipate rapidly”*. (5.2.2.3) These statements are rejected because they do not convey the same message that would apply to ordinary

citizens.

It is apparent that spent rockets will be crashed into international waters, where they will become ocean waste. Lithium batteries will become ocean waste. The rockets also contain a broad range of materials including plastics. These will all become micro-wastes, the very problem that has infested the ocean environment and marine life to great damage.

Southern Launch is seeking a social licence to pollute the oceans, which are already extremely contaminated with plastics. Micro plastics are the scourge of the planet.

Australia is a signatory (5 Oct. 1994) to the **United Nations Convention on the Law of the Sea**, and indeed Australia has ratified all 5 space treaties. The matter of spent rockets has not been addressed. The EIS does not contain any information on the possibility of rocket retrieval.

And the EIS has not tabulated the weight of dumped rockets and the related onboard equipment into the ocean.

Here is an example of the problem - if an expected 42 rockets annually are launched, that means there will be about 42 large batteries dumped into the marine environment together with two or three thousands of tonnes of rockets¹⁴.

Neither the EIS or Southern Launch address the possibility of rocket retrieval, whether on a land-based zone or by floatable systems. One would think that given all the high technology available today, and the high-tech nature of space ventures and satellites, that a system of rocket retrieval would have been devised.

Why is the “least cost” option always the first thought in business operational planning? Why should the environment continue to receive discarded detritus from one-off products?

And what happens to all those satellites in space, purportedly 6,200 in the 10-year period 2017-2026, in addition to all the others, when their life comes to an end? More junk? The EIS has not addressed the matter of space junk and its retrieval.

Humanity must do much better.

6. **Enterprise failure**

As unpleasant as failure of the enterprise would be, the fact is the lease taken over the property is initially for just 5 years and ends in January 2026. Global situations can change remarkably quickly and unexpectedly.

What happens if the business fails? Where is the risk assessment? What happens if there is a catastrophic fire at the site, similar to what happened on Kangaroo Island in January 2020, and wipes out the whole facility?

There has been partial reference in the Lease Agreement to site rehabilitation, but none that I could find in the EIS.

¹⁴ See EIS 2.3.1.1 for figures

And what about the cleared land? How would that be recovered?
Is there a bond that should be established to cover such eventualities?

7. **An Unknown**

A critical aspect that I have not yet found in the EIS is whether defence satellites would be launched from WWOLC. Southern Launch's representatives hail from the defence arena, and DefenceSA. In May 2020, a federal government announcement was made on the South Australian Space Industry Centre website about funding to DEWC Systems *"to develop a sovereign, space-based tactical sensor system which, when successful will enhance ADF's (Australian Defence Force) space capability."*¹⁵

The funding is for *"Phase Two of the Miniaturised Orbital Electronic Sensor System (MOESS) to provide the ADF with a unique space-based EW (electronic warfare) capability that will ensure Australia maintains the technological superiority in our region"*.

On the DefenceSA website¹⁶, Southern Launch has a page devoted to its credentials. Therefore, is Southern Launch involved or likely to be involved in defence work?

If so, consider the map at Figure 2.1 in the EIS.

The polar orbit (LEO - Low Earth Orbit) that is presented on the global map appears to be what Southern Launch proposes for its commercial payloads.

It just so happens that the 1st and 2nd polar orbits pass over China.

I believe this is a very important issue, or should be, for the people of Port Lincoln, and indeed South Australia. With all the posturing and bad words between China and Australia in the past year or so, and the positioning of China to becoming a dominant nation, it could ultimately mean that Southern Launch's facility becomes a prime target. Imagine what that means. I hope I'm not being too dramatic, but I think that if Whalers Way becomes a proxy defence facility, then the people of Port Lincoln should know about it and understand the additional risks that will be brought into the community.

Furthermore, as described at Section 2.2 in the EIS, the Whalers Way launch facility "would be made available to third-party rocket manufacturers who would be responsible for securing their own payloads." Which country would these "manufacturers" come from? What would the payloads (i.e. satellite type) be?

Whilst there seems to be coyness about any question associated with defence and surveillance satellites, transparency is what is required of Southern Launch and its government backers.

This is what is missing in the EIS.

¹⁵ See <https://sasic.sa.gov.au/events-news-media/media/sa-based-company-to-enhance-adfs-space-capability/>

¹⁶ See <https://defencesa.com/industry/industry-directory/southern-launch/>

8. **Ethics**

Finally we come to ethics. I have already mentioned about the problems with space junk, and disposal of rockets into the ocean. These are very important ethical issues, and are but two examples of a number in the EIS to which an ethical element should be attached.

In practical terms, is it ethical to clear nearly 24 ha of native vegetation and destroy or impact the habitat of endangered species? Is there always an environmental price to pay?

And is it ethical to supplant one ecosystem with another in a different locality as is expressed in the Significant Environmental Benefit arrangement?

Now consider the *Environment Protection Act 1993* which contains the following definitions -

environmental nuisance means—

- (a) any adverse effect on an amenity value of an area that—
 - (i) is caused by pollution; and
 - (ii) unreasonably interferes with or is likely to interfere unreasonably with the enjoyment of the area by persons occupying a place within, or lawfully resorting to, the area
- (b) any unsightly or offensive condition caused by pollution

5—Environmental harm

- (1) For the purposes of this Act, environmental harm is any harm, or potential harm, to the environment (of whatever degree or duration) and includes—
 - (a) an environmental nuisance
- (2) For the purposes of this Act, *potential harm* includes risk of harm and future harm.
- (3) For the purposes of this Act, the following provisions are to be applied in determining whether environmental harm is *material environmental harm* or *serious environmental harm*:
 - (a) environmental harm is to be treated as material environmental harm if—
 - (i) it consists of an environmental nuisance of a high impact or on a wide scale; or
 - (ii) it involves actual or potential harm to the health or safety of human beings that is not trivial, or other actual or potential environmental harm (not being merely an environmental nuisance) that is not trivial

In my view, the rocket launch proposal is at risk of causing “environmental nuisance” and “environmental harm”, a situation that has not been adequately addressed in the EIS. In essence, the ethical issue relating to environmental and ecological harm is directly related to the law.

Some people may feel aggrieved at the loss of access or amenity, in part or in full, to the Whalers Way coastline. Others such as nearby property owners might take exception to the imposition into their locality of an industry to which they have diminished influence to prevent because of support from their own government. This becomes not so much an ethical argument but one of fairness and justice. After all, elected representatives are there to serve all the people, not just business.

The matter of community harmony is important. It is almost impossible to please all people all of the time, but the key factor is to be seen to be doing the right thing by all. And the right thing for our environment and the ecosystems within it.

By choosing the opposite is to dismiss ethics.

Conclusion

My submission has covered a range of very important aspects about WWOLC. Just like many other members of the public, I am not opposed to the space industry nor to the aspirations of Southern Launch to be a profitable participant in it. It is apparent from the establishment of the state government's "Southern Launch Taskforce", the business has substantial ties to government instrumentalities.

Whilst Southern Launch's search for a suitable launch site has led it to Whalers Way, its decision does not make it the right one. There are many factors that must be considered to progress Southern Launch's aspirations, but my appeal is that it should not be at Whalers Way. There are far too many planning, environmental, ecological, social, and ethical risks that would need to be overcome. The integrity of the planning system and the Coastal Conservation Zone must be upheld.

It would be far better if Southern Launch had a reset and examined a more benign location than the one at Whalers Way.

----- o o o -----

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From:
Sent: Wednesday, 15 September 2021 8:48 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development. Australia needs to rejoin the space industry.

For safety reasons orbital launch sites are built in isolated coastal areas. But not too far from major centers as that would make the use and maintenance of the launch site impractical

Regards,

①

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	741 Fishery Bay Road, Sleaford 5607 SA
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	<input type="checkbox"/> A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

As a registered whale spotter with the SA whale Centre for the past few years and having observed and recorded whale activity in Sleaford Bay for the past 30 years I have real concerns for our precious whales. Sleaford Bay is now known as an emerging nursery and in turn this makes Sleaford Bay and its surroundings areas including the coast of Whalers Way extremely important. Over the past few years it has become evident that the whales are feeling safe and secure back in these waters and their numbers are increasing and Mothers and calves are staying longer. This year has been a particularly good year

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

P:TO

②

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

as we have had a Mother and Calf in Sleatford Bay since the 22nd July and at the present is still here. Also the most exciting news is that we have a returning Mother who was here in 2018 with a calf and has now been in the Bay for 15 straight days with her new calf. Being able to document this is proof that Sleatford Bay is important to the Southern Right Whales. Over the past few days there has also been at least two Humpback whales in Sleatford Bay. On the Friday 10th September when the first test rocket was due to launch I stayed in Sleatford Bay during the launch window from 6am - 6pm. Through out this whole day I watched two Mother Southern Right Whales and their two calves as well as two Humpback Whales.

Souther Launch have stated in the EIS that a whale on the surface at the time of launch may be subjected to temporary hearing loss, but this can be avoided if the whale submerges for approx 2 minutes. This is a huge concern as it is obvious that a whale is not going to know to submerge for 2 minutes to avoid damage to its hearing. Temporary hearing loss will impact on navigational capacity of the whale, as well as a lack of predatory senses and much more. At this particular point in the whale season the whales are on the move and they could be present at anytime anywhere. It is too hard to predict.

3

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

While the Mother and calf Southern Right
Whale that has been in Steadford Bay
since the 22nd July actually left
after 12 days in the Bay. A day
later I was able to locate her
and her calf around the corner in
Avalon Bay which is in the Collin Bay
National Park. A few days later she
and her calf were back in Steadford
Bay and have been here to this day.
To get to Avalon Bay she had to
travel along the Whalers Way coast
right past where the Rackets are
going to be launched and then back
again to Steadford Bay. Whales don't
know exclusion zones and unknowing
to them they will be putting themselves
at risk. A whale can be very
affected by noise and in turn will
submerge and disappear and remember. We need
to protect these local waters as they
need them and we don't want to
deter them in anyway. We just can not
afford the risk. There are not many
areas left for our precious whales
especially the Southern Right whale who
visit our waters between approx July -
October to calve wean their young and
to mate again. We get one planet, we
don't get a second chance, they can't
speak for themselves so it's up to us
to speak up for them. As humans we
don't own the planet we share it with
our Natural World and it's our responsibility
to continue to protect was very little
is left. If required I have plenty of photographic
evidence of Southern Right whales and Humpback whales
in Steadford Bay.

④

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

Marianne and I have a property at 741 Fishery Bay Rd Lot 259 Sleaford. It is approximately 80 Hectares. We run cattle on this property. It has approx. 650metre road frontage. Runs to the east approx. 1200m. Going east is rising ground, at about halfway^{we} can see the current test ROCKET and some other facilities. We are 7.5 km away. Our concerns are noise levels, how our cattle will react. Remembering the current Rocket is only 10.5 metres. "What is a 30 metre going to do. The day before the propose Rocket launch on 10/9/21 air traffic increased a Helicopter to and from the launch site. Will this be ongoing with launches. Cattle were scattering in paddocks.

Native Vegetation: Clearance of vegetation for a new service road doesn't state how much is to be cleared. This area to be clear I believe has never been cleared or had stock on it. Also how much vegetation is to be cleared for fire breaks etc.

Water: Southern Launch state they are going to put in a Dam with a liner. More Vegetation clearance. Uley Basin is north of the proposed development. S.A. Water are looking to build a desal Plant because Uley bore are very low. Some local farm Wells are now low or none productive.

Fire: lower E.P. is in a High Fire Risk Area. Between November through to Mid April. Will they launch on high fire ban days. "Farmers stop Harvesting". They have consulted with the Country Fire Service. Seem to be a secret on what they will do. Apparently to do with Security. Will the C.F.S. wait at the launch site for a rocket to go up while else where on the E.P. is Burning. Remember they are mostly volunteers.

5

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

Fishery Bay Road Sleaford: We are highly concerned about
in crease traffic on the road. We have already considerable
increase day & night including heavy vehicals. The road is already
under pressure from local traffic tourist beach goer & school
bus Run. Currently under the District Council of Lower Eyre
& Pennisular who struggle to maintain the road as it is. We
have the road graded once a year.

We are highly concerned how all this is going to affect
our familys future on out little piece of land.

We would like to trust what Southern Launch are
telling us but we lack confidence in the current ^{information} that we
~~have~~ have read & tried to understand in the E.I.S.
leave us very confused.

Thankyou for your time

15-9-21

15-9-21

From:
Sent: Wednesday, 15 September 2021 8:57 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

From:
Sent: Wednesday, 15 September 2021 7:35 PM
To: DIT:SPC Reps
Subject: Save whalers way

I would like to formally put forth my submission to deny the southern launch Orbital launch complex and any further launches happening in whalers way.

As a port Lincoln local and multiples times a week regular to right point and fisheries bay I am shocked, gutted and speechless at the decision to accept and move forward with such dangerous and destructive environmental works in a place many of us call our second home.

Fisheries bay and the surrounding areas have been a daily escape for myself my family and many friends throughout my entire childhood. I am truly at a loss for words as to how this launch could be so easily snuck under the radar of the greater community and allow to pass.

Whalers way, Fisheries bay and the surrounding areas are the literal gem of the local port Lincoln area for locals and tourists alike. This Southern launch is going to destroy that for every living organism that resides there from people to local flora and fauna. I would like to voice my concerns that this should be stopped immediately, let alone given more time for the voices of the people to be heard not just for ourselves but for those lives who don't get to speak.

From:
Sent: Wednesday, 15 September 2021 9:19 PM
To: DIT:SPC Reps
Subject: Submission for Response to Whalers Bay Launch Complex Proposal

Dear Minister,

I'm writing to raise objections to the proposed Whalers Way Orbital Launch Complex. The proposed site would destroy prime habitat for Southern Emu-Wren, which is listed as endangered according to the federal Department of Agriculture, Water and the Environment. The construction of the facilities and infrastructure would result in the destruction of the shrubs, coastal heath and tea-tree vegetation that constitutes their habitat. Preserving all habitat in the Whalers Bay conservation park is the most responsible way of protecting this endangered species, not to mention cheapest since it side steps the need to revegetate a landscape and long term monitoring of the site.

I'm also concerned that the EIS lacks details concerning bush fire management plans. The proposed area is at high risk of bushfire and there is precedent for fire representing a threat to the remnant population of Southern Emu-wren. In 2005 fire destroyed habitat which resulted in a whole population being destroyed as well. Given the combustive nature of rocket propellant the launch complex represents a clear danger to the surrounding conservation park. No launch system to date has a 100% success rate, failures do happen and that carries a high risk of spreading burning propellant over a wide area. Such a circumstance would trigger a bushfire so it's very disturbing that any details on contingencies have been excluded on the grounds of "security reasons". By excluding such details an informed decision can't be made concerning the impact of launch failures.

There is also an issue concerning the lack of information concerning the impact of the noise from launches that would affect wildlife.

Launches are loud, often reaching volumes over 180 decibels. At such high volumes structures need to be designed to withstand the force they impart to them so they aren't destroyed and sound suppression systems are needed to protect personnel. It stands to reason that wildlife would also be adversely affected, there is a high risk of animals going deaf and suffering injury or death from the force of the vibrations.

The EIS has been published without sufficient information that details the impact of these destructive phenomena. In an email from the Nature Conservation Society of South Australia it was mentioned that there were three test launches planned to provide this information but are yet to take place. This lack of sound and vibration impact assessment and withholding fire response information means that a complete and informed decision can't be made. This lack of impact assessment for two of the most destructive elements of a rocket launch smacks of Plan SA rushing approval and hiding the true impact that the proposed development will have on the Whalers Bay and it's wildlife.

Yours Sincerely,

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	[Redacted]
Contact number:	[Redacted]
Email:	[Redacted]
Postal Address:	[Redacted]
Affected property (if different from postal address)	[Redacted]
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

- high bushfire risk from launch - there is alot of bushland around (extending coast to coast!) that probably hasn't been managed/burnt for a long time (or ever!) - residences nearby.

- what an eyesore to a coastal gem that is famous for its rugged wilderness (and an attraction for the millions of \$ tourists bring in)

- this coast is home to significant marine mammal species + populations (sea lion + whales) that are endangered + under threat - and are also an attraction to tourists - the noise + disturbance to these populations will be significant!

From:
Sent: Wednesday, 15 September 2021 9:34 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

Submission on Application
Development Act 1993
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Postal Address:	
Affected property (if different from postal address)	
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My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other: <input checked="" type="checkbox"/>	Representative of Conservation Focussed NGO

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The aspects of the proposal I wish to make comment on are (add pages as required):

- 1 The impact of the proposed development on bird species listed as **Endangered**, namely the Eyre Peninsula Southern Emu-wren (*Stipiturus malachurus parimeda*), the subspecies of the White-bellied Whipbird (*Psophodes leucogaster leucogaster*), the White-bellied Sea Eagle (*Haliaeetus leucogaster*) and the Eastern Osprey (*Pandion cristatus*).
- 2 The data that are needed to determine the impact of the development on listed bird species.
- 3 The selection of the launch pad sites.
- 4 Offsetting requirements for the flora and fauna that are negatively impacted by this proposed development.
- 5 The fire prevention and response actions proposed for this development.

1 Impact on Birds Listed as Endangered

The Southern Launch project at Whaler's Way will have a significant adverse impact on two threatened bird sub-species, the Eyre Peninsula Southern Emu-wren, listed as **Endangered** by National Parks & Wildlife SA and the Western Whipbird (eastern), also known as the White-bellied Whipbird, listed as **Endangered** by National Parks & Wildlife SA.



Eyre Peninsula Southern Emu-wren (male) / *Stipiturus malachurus parimeda*
Kellidie Bay Conservation Park, South Australia 25 August 2013 / Dion Thompson

The development of the site is an immediate threat to the survival of these two highly localised birds. Both species occupy highly fragmented habitat and are very poor dispersers. They are therefore both highly susceptible to fire, something that was recently demonstrated by the near extinction of the Mallee Emu-wren in SA & Victoria, and the loss of half of the population of Western Whipbird on Kangaroo Island resulting from recent fires.

Both bird species are highly susceptible to predation by cats and foxes. Predator proof fencing is mentioned as being in the planning stage in the documentation. Actions to address introduced predators should be specified in the documentation and a firm commitment to predator proof fencing and its implementation should be a condition of project approval.

The synergistic impact of wild-fire and subsequent vulnerability to predation has been shown on Kangaroo Island to have a catastrophic impact on many smaller birds and other animals.

The Eyre Peninsula Southern Emu-wren, *Stipiturus malachurus parimeda*, only occurs in South Australia where it is confined to the extreme south of the Eyre Peninsula in an area of 50–75 sq km. Data from the Federal Department of Agriculture, Water and the Environment advises that the Eyre Peninsula Southern Emu-wren is particularly threatened, with an estimate of less than 1000 individuals remaining.

http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=26006

This translates to an estimated 350 breeding pairs maximum remaining, and Whaler's Way is one of "five populations that are considered to be important for the long-term survival and recovery of the Southern Emu-wren (Eyre Peninsula)."



Eyre Peninsula Southern Emu-wren (male) / *Stipiturus malachurus parimeda*
Kellidie Bay Conservation Park, South Australia 25 August 2013 / Dion Thompson



White-bellied Whipbird / *Psophodes leucogaster leucogaster*
Port Lincoln, South Australia / 15 September 2013 / Dion Thompson

The project area lies within one of three sub-regions identified in SA as retaining significant breeding habitat for the Eastern Osprey and the White-bellied Sea Eagle. Expert opinion on raptor behaviour, in relation to the Southern Launch development, is as follows:
“in recognition of the documented population declines for both these species (the Osprey and White-bellied Sea Eagle), the prospect of industrial development being permitted over yet another stretch of critical habitat must be regarded as grossly irresponsible”, and “the proposed development and increased activity at Whalers Way, which would include the unknown impacts of extreme noise events, can only serve to exacerbate the habitat degradation processes already affecting the several threatened species which occur there in isolated/remnant populations.”

Overall, Birds SA is concerned that the project represents further encroachment on our natural coastal areas by industrial development and increased human activity. This is a direct threat to the Eyre Peninsula Southern Emu-wren and White-bellied Whipbird. Increased activity in the area may also reduce the breeding habitat available to disturbance sensitive species including the **Endangered** large raptors, the Eastern Osprey and the White-bellied Sea Eagle.

2 Data Required to Determine Impact on Listed Bird Species

The bird survey data provided by Southern Launch in its supporting literature are wholly inadequate and offer no basis for assessing the likely impacts of the operations or any potential secondary impacts (e.g., increased fires or predation by feral animals) on either sub-species. The bird survey data provide no recent measures of the total Eyre Peninsula Southern Emu-wren or Whipbird populations or population trends on Eyre Peninsula, a critical omission. Such data should be acquired before construction of any launch facilities begins to provide a sensible baseline upon which to monitor the impact of the facility.

3 Selection of Launch Pad Sites

The current location for launch site A is the worst possible place on the entire site for impact on the Eyre Peninsula Southern Emu-wren.

Historic survey records and 2020 survey records show a concentration of the Emu-wrens exactly where Southern Launch are proposing to clear for Launch Site A, (shown as Area A in Figure 1). If this launch pad proceeds at this site, it will immediately destroy the majority of the nesting, feeding and roosting habitat for the Eyre Peninsula Southern Emu-wren at Whalers Way.

It is imperative that launch site locations are proven to be well away from nesting habitat of both the Eyre Peninsula Southern Emu-wren and the White-bellied Whipbird.

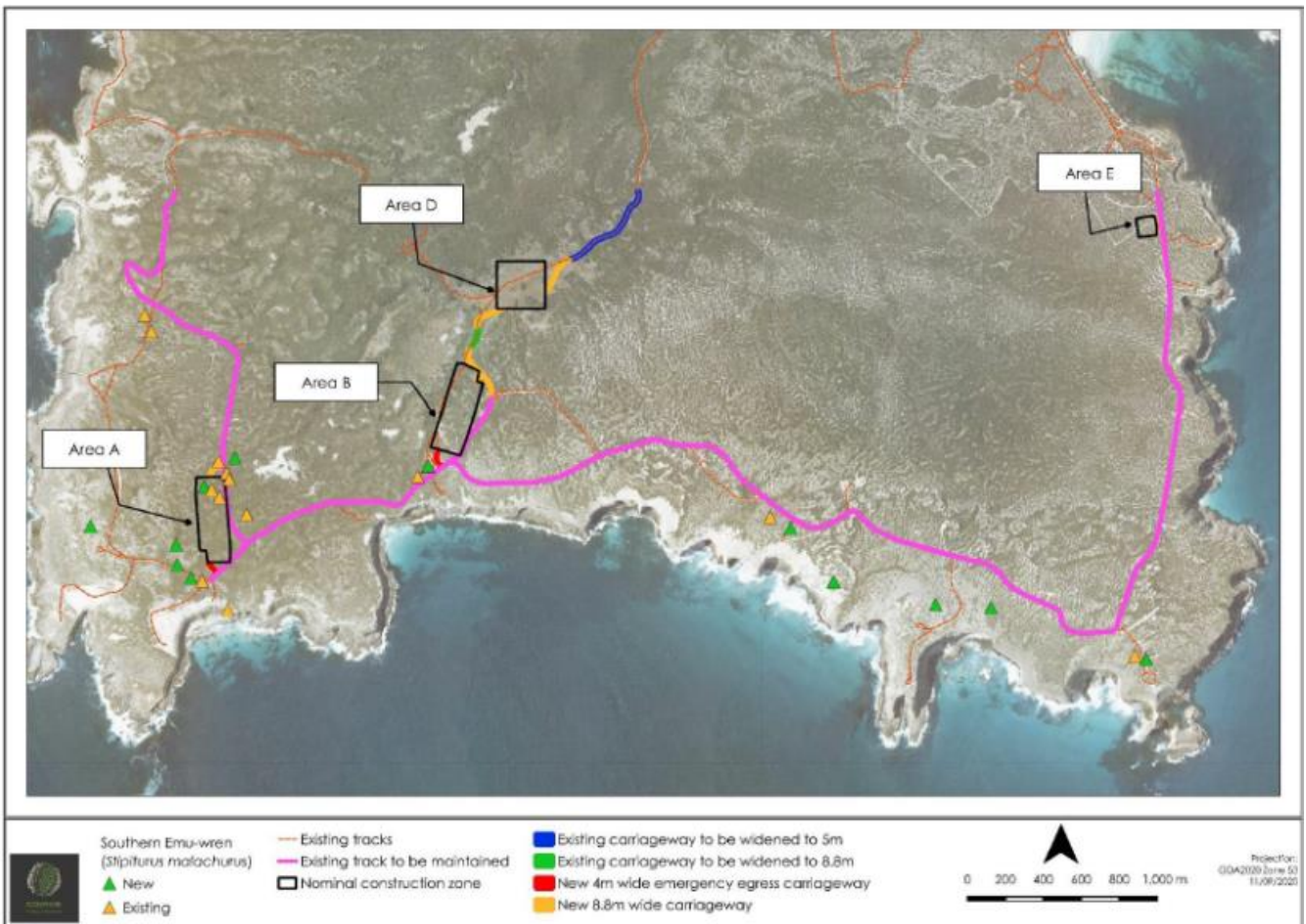


Figure 1 – New (2020) and existing survey records for Eyre Peninsula Southern Emu-wren

4 Offsetting Requirements

The EPBC Referral for this project highlighted the serious adverse impact of this project on the Eyre Peninsula Southern Emu-wren and the White-bellied Whiplbird.

Even with Site A moved to a less catastrophic location, meaningful and focused offsets are essential.

As the Eyre Peninsula Southern Emu-wren is so rare and the potential consequences of a major regional fire event likely to be terminal for the species, a fully funded captive breeding program should be immediately established (similar to that for the Mallee Emu-wren at Monarto Safari Park, SA).

Furthermore, all offset obligations from this project must be targeted at establishing equivalent habitat which demonstrably benefits the Eyre Peninsula Southern Emu-wren and White-bellied Whiplbird populations on the southern Eyre Peninsula ahead of any clearance of Whalers Way habitat.

The offset strategies and commitments need to be provided in the EIS documentation as well as details of how offset benefits will be demonstrated and measured.

The calculation of area impacted, upon which the offset obligation is calculated, requires review. It appears that significant areas for the construction of fire breaks and road widening have been omitted from the calculation.

5 Fire Prevention and Response

The Commonwealth Department of Agriculture Water and the Environment website highlights the catastrophic impact on the Eyre Peninsula Southern Emu-wren of a major fire at Whalers Way: *“there is little or no chance that an area affected by fire will be recolonised, due to the fragmented nature of the habitat and the subsequent inability of the birds to disperse effectively.”*

Whilst the fire risk is acknowledged in the Southern Launch supporting documents, there is no detailed information provided as to how they will address this risk. Presumably launches will not occur during days of high fire risk. However, there is no information on what weather and vegetation conditions would lead to the suspension of operations due to fire risk – clearly a major omission.

There is also insufficient detail on fire prevention measures or the range of resources that will be available to respond immediately to a fire event.

This is another major omission considering that fire is such an obvious risk at this location. It suggests that Southern Launch is, for some reason, unwilling to provide details in the supporting documents.

As we have seen in the tragic fires of Kangaroo Island 2020, Yorketown 2019 and Wangary 2005, once a fire gets hold in these remote and windy coastal areas of South Australia, with very small and thinly-spread local fire services, it can soon get out of control and destroy a huge area.

The **Kangaroo Island fire of Jan 2020** was responsible for the loss of two lives and burnt 211,474 hectares, destroyed 87 dwellings, 332 outbuildings, 322 vehicles, and killed more than 59,000 stock animals.

The **Yorketown fire of Nov 2019** destroyed 5,000 hectares, 8 dwellings, 11 sheds, \$600k of machinery and came within 100m of the township of Edithburgh.

The **Wangary fire of 2005** on southern Eyre Peninsula burnt 77,900 hectares, nine lives were lost with injuries to 115 other persons, 93 houses and 316 sheds were destroyed or significantly damaged and there were 47,000 stock losses.

If similar fires to these occur on the Eyre Peninsula as the result of a mishap at the Southern Launch Complex, it is entirely possible that similar devastating consequences would ensue. It follows that the Eyre Peninsula Southern Emu-wren could be rendered extinct. Also impacted would be the 15 other threatened bird species known to inhabit Whalers Way (listed in Section 9.0 of the EIS).

The Emergency Management Plan has been redacted from the EIS document. The statement that a CFS crew will be on hand during the initial launches from the site does little to increase confidence that all steps have been taken to both minimise fire risk and to respond to fire.

It is imperative that Southern Launch sets out a thorough program that shows how it will minimise the risk of fire from its operations at Whaler’s Way and how it will respond to a fire event. This program should be detailed in a separate Appendix in the EIS documentation and be available for public scrutiny. As a minimum it should contain:

- Detailed descriptions of all the situations that could potentially lead to a fire breaking out.
- Details of the actions that will be taken to minimise the risks of such fires breaking out (not just a reference to a mandated standard).

- Details of all fire hazard monitoring to be carried out at the site as well as fire response training and procedures.
- Details of the equipment and human resources that will be available should a fire break out.
- The timeframes within which these resources can be brought to bear.
- The conditions under which operations are suspended because of fire risk for both the construction and operational phases of the facility.

Bearing in mind the foregoing, the fact that rocket test launch activities have already commenced at Whalers Way indicates a serious flaw in the approval process for this project.

Scan and email to spreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
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Assessment Level: Environmental Impact Statement
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Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input type="radio"/>
Other:	

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The aspects of the proposal I wish to make comment on are (add pages as required):

Dear Minister, Vickie Chapman, It disheartens me as a local, born and bred in Port Lincoln that this
Southern Launch proposal is A, being considered as a 'viable' project for tourism and industry in one
of the most pristine coastal areas of the Eyre Peninsula. It is purely a chance of grabbing more
money opportunities for big companies(including overseas investment which raises concern
considering the lies and problems that 'Rocket Lab have created in Maiha in New Zealand. There is
obvious dangers to the local wildlife and coastal area which will be eroded and degraded to god knows
what degree. Also what about the huge amount of land north of Port lincoln that could be a viable
option for rocket launches, and when the southern launch says that this land is not as suitable as
Whalers way, WHY ARE WE CATERING TO THEIR NEEDS, over the people that live, work and
love this area!
Please Please Please do not allow this to go ahead

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application

Development Act 1993

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Name:	
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	A private citizen

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

- Bushfire Risk
- Native vegetation clearance
- Bushfire defendable space, Asset Protection Zones, Bushfire Buffer Zones, Strategic Risk Management Zones
- Prescription burning
- Wildlife traps from dangerous fencing and surface water on covered water bodies.

Scan and email to spcreps@sa.gov.au

Thank you for providing the opportunity to provide a submission on this proposal and EIS.

The planning process appears to treat people wishing to contribute with contempt. In future, please provide a word template not just a PDF template.

Fire Management

Basic information relating to fire risks, fire planning and fire risk management are not sufficient. The information provided is not sufficient to convey any sense that fire risk has been thought through. It is also unacceptable that full details of fire management and response planning are not provided.

From the outset, the concept of placing a multiple launch pad facility to launch around 42 combustion rockets per year, with workshops, accommodation viewing power and water infrastructure spread across a key remnant native vegetation site on lower Eyre Peninsula appears to have been made without any concept of fire risk and related environmental impacts.

This is a bad idea. It is not safe and will never be safe



Missing:

- Detail
- Basic situational awareness of placing combustion rocket launch facilities in the fuel of native vegetation
- Adequate resourcing
- Asset Protection and bushfire buffer clearance detail
- Response plans regarding bulldozers, and containment lines when fires are started
- Regard for access to bushfires started within native vegetation
- Discussion of the risks during the fire danger season November to mid May.
- Who pays when it goes wrong
- Awareness of the potential inability to fully extinguish fires before conditions deteriorate to extreme and catastrophic conditions more than a week after fires are contained.

Similar examples of shockingly bad planning decisions include developments on Kangaroo Island built amongst native vegetation with the Planning decision makers/CFS Planning Advisory Unit either unwilling or unable to make determinations to prevent unsafe developments. These include the Kangaroo Island Wilderness Retreat, the Kangaroo Island Southern Ocean Lodge and the former proposal for the Australian Walking Company to place accommodation amidst coastal native vegetation with access only available through mallee areas.

When submissions were made relating to the inadequate safety of the Australian Walking Group

proposal to build new accommodation facilities at two remote coastline locations on Kangaroo Island, there were summary statements made that:

The proposals in bushfire risk locations that could only be assessed as extreme with poor communications, access and with no possibility for staff or occupants to reach safer places, could not be made safe even with a dramatic increase in fire asset zones, buffer zones and access roads.

In underpinning that argument, it was identified that previous developments were established boasting limited clearance, but then additional bushfire asset protection zones were eventually identified in order to protect these facilities. (See figures 1 and 2 below).

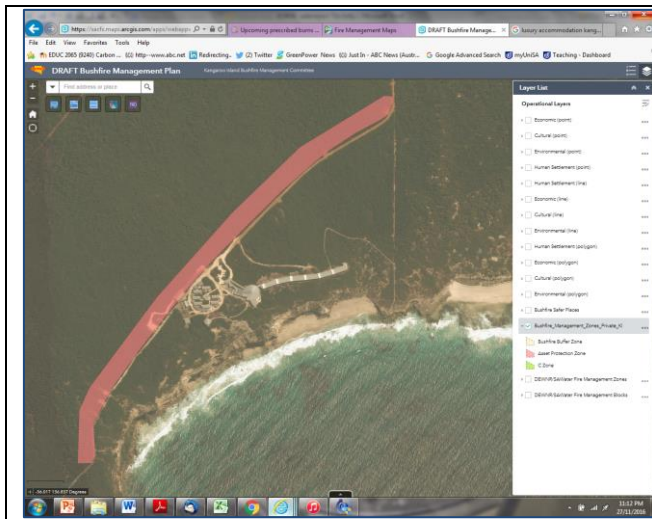


Figure 1: Southern Ocea Lodge – Now Burnt

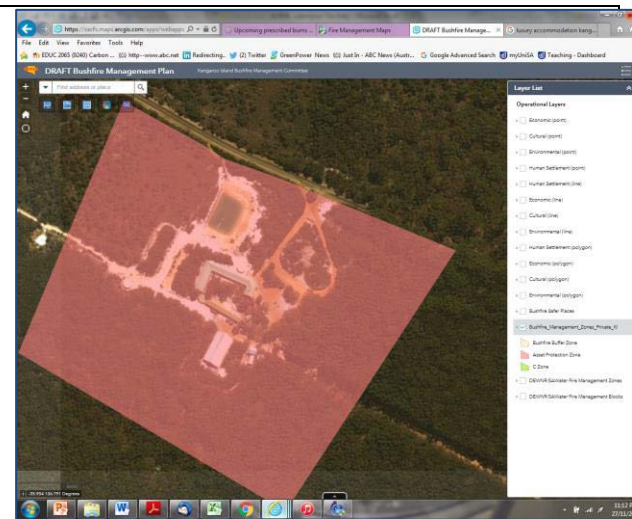


Figure 2: KI Wilderness Retreat – Now burnt

Will that be the case here?

In fact there were many more sites in a similar at risk situation where they **were never safe and could not be made safe on extreme and catastrophic conditions**, including the Flinders Chase facilities and Visitors Centre built within the park. Large asset protection zones and bushfire buffer zones were added around the Flinders Chase infrastructure, yet even if these were fully maintained, (and they weren't), the sites were not safe and would never be safe without level siting large areas that would destroy the area.

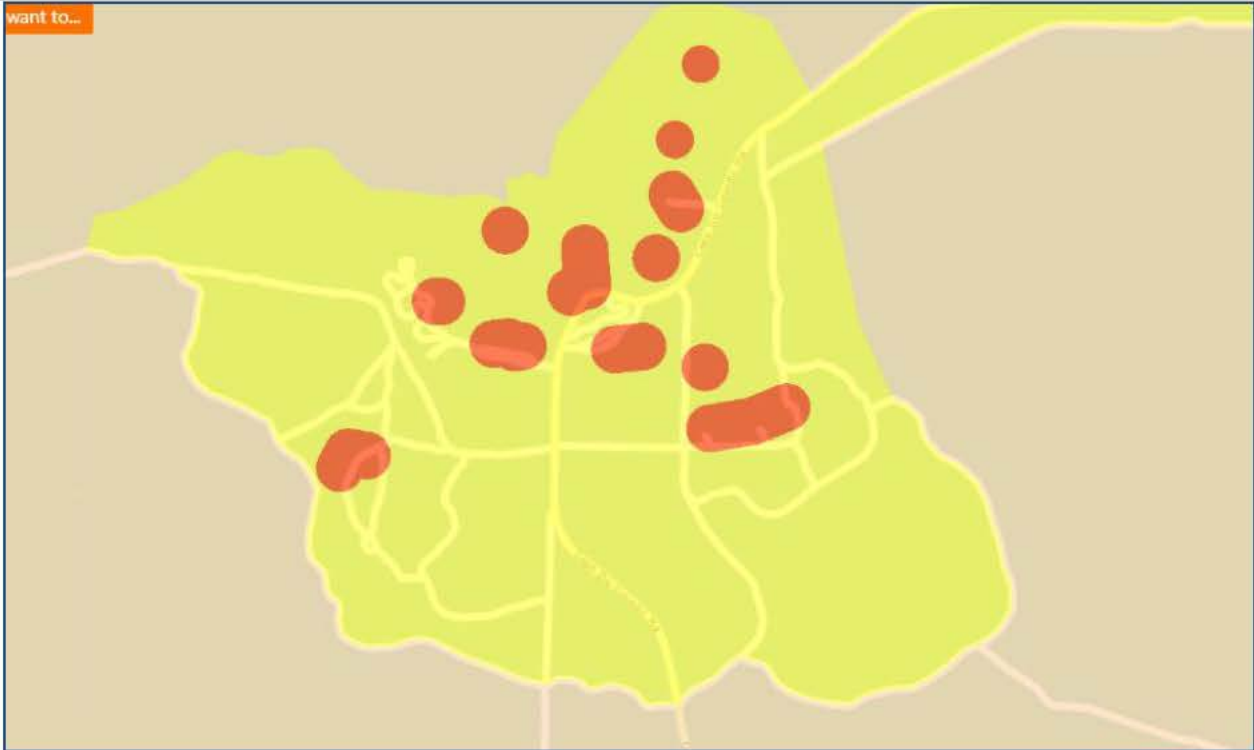


Figure 3: Flinders Chase Visitors Centre and Rocky River accommodation Asset and Buffer zones – Most of these assets were burnt to the ground in December 2019

The infrastructure at these sites built either in mallee or in coastal vegetation surrounded by mallee all have one thing in common, in that **they were all either razed to the ground or significantly damaged by bushfire in late 2019**. Why? Because as identified:

...bushfire risk locations that could only be assessed as extreme with poor communications, access and with no possibility for staff or occupants to reach safer places, could not be made safe even with a dramatic increase in fire asset zones, buffer zones and access roads.

The Whalers Way proposal may have better radio and phone communications but is just as bad, if not worse in with regard to safety because it will involve major fire ignition sources. These will come from construction, site occupation, assembly work at the launch pads, power generation and vehicle movements plus let's not forget, around 42 combustion rockets being launched each year, from sites located within Southern Eyre Peninsula native vegetation.

What could possibly go wrong? - A scenario – 2024 during late spring, summer or early autumn

A fire is started within native vegetation from either a launch or welding and grinding work at one of the sites. The fire gets away quickly and a moderately large area is burnt requiring containment lines to be established through the vegetation, water bombing aircraft and support from local CFS crews called in because the Southern launch response is not sufficient. There is difficulty in accessing and blacking out the whole fire ground due to the rocky terrain

All is looking good, noting that there are a few hot spots that were being monitored, but around a week later, very hot conditions develop and persist followed by a catastrophic fire danger day with strong northerly winds.

There is a rekindle creating a shower of embers which reach unburnt ground and this rekindled fire burns first to the South and then as far east as it can go to the sea, fanned by a strong westerly change. However, before crews can secure the northern flank which is now several kilometres long, the wind further changes to a very strong southerly, like it did with the

Keyenton Fire in the Adelaide Hills in 2014, taking the fire as far north in a few hours as it had taken most of the day to burn southward and westward. This change takes the fire in an unusual but very plausible northerly direction from the longer flank that was created when the fire was pushed from the west. It quickly burns through the native vegetation into the farmland to the north, and then into more native vegetation further north again. Fire crews can do little as it is unsafe for incoming units coming from the north. Visibility is poor and the ash and debris is carried northwards and over Port Lincoln. There is significant harm caused to, livestock and property and environmental assets and the ecosystem before the fire is contained when conditions ease again overnight.

The wounds of recent fire history across lower Eyre Peninsula from fires such as Wangary 2005, Tulka 2001, Tulka 2012 and Port Lincoln 2019 are re-opened. As calls for an enquiry grow louder, people are asking why a combustion rocket program was approved in native vegetation in Lower Eyre Peninsula, given the fire history of the region and full knowledge that with climate change, the fire season can now span 7 months of the year where at any time during that period, extreme and catastrophic conditions can occur.

All operations at the Whalers Way complex are suspended whilst the company undertakes a review. The social license to operate has already been withdrawn.

RE Page 10 Preliminary discussions have been held with the Deputy Chief Commissioner South Australian Police and Country Fire Services

Preliminary discussions are not sufficient for seeking approval or disclosing an Environmental Impact Statement.

Questions

- Has the CFS Development Assessment Service provided a formal response to this proposal?
- If so, why is this not provided?
- If not, why not?
- Does the CFS Development Assessment Service even have authority to say **no**, if it considers that this is not a good idea and a combustion rocket launching facility should not go ahead in this location?
- Or is it that the CFS Development Assessment Service just provide non-decision advice so that CFS input will always be supporting major developments no matter how inappropriate they are?

Fire and Vegetation Clearance

Even at the defined vegetation clearance of 37 Hectares, such clearance and industrialization in native vegetation is absurd.

However it is likely that the areas of clearance will be much larger than those disclosed.

The Environmental impact statement has not described quantified Asset Protection Zones and Bushfire Buffer Zones around the structures. This is an unacceptable practice which appears to be common under South Australia's planning frameworks whereby the full clearance is not declared when seeking approval, yet further clearance is required as incidental to the development, once it is approved.

It is simply not plausible that facilities holding up to 40 staff and 20 visitors would be accommodated in structures without clearly defined and dimensioned bushfire asset protection zones and potential bushfire buffer zones.

It is highly plausible that there will be an intention for prescription burning in the area to mask the bad

planning and inadequate disclosure of clearance. This would be unacceptable as the burning of native vegetation is clearance under the Native Vegetation Regulations 2017.

Why has a vegetation clearance loading not been applied to the SEB calculation in this instance, given that the land should be protected by a heritage agreement? Does protection mean anything?

RECOMMENDATIONS

- 1. The EIS should clearly define and show spatial maps of all native vegetation clearance associated with these developments so that there is full disclosure of the vegetation impact**
- 2. Any and all bushfire asset protection zones and bushfire buffer zones should be spatially identified. If there are no Asset Protection Zones and Bushfire Buffer Zones, then the EIS should explain why.**
- 3. The EIS should rule future prescription burning in this area and adjoining areas for life & property (community safety) or define these areas now as part of the project native vegetation impact.**

RE: CONSERVATION Statements Pg. 52

Design buffers are not applied to "limit indirect impacts on vegetation", they are the area that causes vegetation clearance. Please don't fill EIS documents with meaningless green spin.

RE: A 5.0 metre vegetation clearance buffer has been applied to the Project Area footprint for fire safety purposes.

A 5 metre buffer or setback area is not sufficient to protect anything, or sufficient to protect native vegetation from fire ignitions from building or site activities. Sparks from angle grinders can fly 15 metres. Typically, according to the South Australian *Fire Management Zone Standard and Guidance for Use 2020*, the defendable space around an occupied structure is 20 metres without any approval required, and can be up to 100 metres. A bushfire buffer zone could be up to a kilometer in width.

If this EIS is simply stating 5 metre clearances and then extend this to 20 metres as clearance incidental to an approved development, or seek even wider clearances then that approach would be deceptive to those assessing the project.

It is noted that the computer interpretations of facilities show clearance of much greater than 5 metres.

5 metres does nothing more than reduce the amount of heat exposure of the fence.

RE: All roads have a 3.0 metre buffer applied to each side of the road; however, this may increase to 6.0 metres on one side of the road.

The EIS should have properly defined where the clearance will be 3 metres and where it will be 6 metres. In addition, turning for 19 metre trucks should have been clearly and spatially defined for all relevant sites within the complex.

RECOMMENDATIONS

- 4. The EIS should spatially show all roadway clearance and the clearance required for trucks to maneuver and turn.**
- 5. Any and all bushfire asset, buffer and reduced fuel areas to be spatially defined and dimensioned.**

Fire safety management plan (Pg. 55)

This section of the EIS is described with meaningless assurance. Real information is required to

understand whether the site will be active within the window of plausible extreme and catastrophic conditions occurring. Such conditions can occur between November 1 and mid May. It is not just the conditions on the day, it is the conditions that may occur following a combustion rocket causing a bushfire fire ignition that may not be able to be fully extinguished before whether conditions deteriorate towards higher fire risk.

The fire safety management plan should have been provided in full. There is no reason to withhold the defining of bushfire zones, the forward plans to bring in heavy earthmoving equipment for dozer lines in seeking to contain fires and when during the year it is planned to launch approximately 42 rockets.

Hazards

RE: Hazards (Pg. 552)

- **Maintenance of the natural environment and systems by limiting development in areas susceptible to natural hazard risk. -**
- **Development located away from areas that are vulnerable to, and cannot be adequately and effectively protected from, the risk of natural hazards. -**
- **Development located and designed to minimise the risks to safety and property from flooding.**
- **Development located to minimise the threat and impact of bushfires on life and property.**

The location of this development has significantly increased the risks to the natural environment, and the people using or visiting the site. People inside and outside of the area on lower Eyre Peninsula, cannot be adequately protected from the fire risks because of the location in native vegetation.

The development choice of location has maximized the potential impacts on life, property and environmental assets.

FIRE RISK

RE: 7.4.5.5 Increased Fire Risk

The increased risk of bushfire from this development program is not properly described. The response is superficial. It does not address the increased risk of weeds when bushfires are caused by site or launch activities, nor does it acknowledge that when a bushfire occurs because of this program on a long unburnt landscape that there will be an even greater risk of new weeds becoming established and phytophthora being locally spread.

The actions described to mitigate fire risk and therefore bushfire risk are largely futile.

The EIS notes that “The Project may increase the risk of fire due to hot works during construction activities and the chance of sparks occurring off the rocket launches during times of hot and dry conditions”. The statement is a blatant understatement as launching combustion rockets during hot and dry conditions will always increase the risk of fire towards an inevitable bushfire.

Any serious attempt to minimise bushfire risk would be to avoid any launches between November 1 and mid May.

Re: Firebreaks incorporated along fences to protect and mitigate one (1) of the primary threats to species present (Pg. 295).

The firebreaks along the fence line may prevent the fence line from burning but in any conditions rated above severe, 5 metre fence lines will not work to prevent the spread of fire. It is deceptive to suggest otherwise.

It will not reduce the threats to species present.

RE: All buildings and facilities are sited within the Project Footprint to achieve suitable clearance from vegetation for fire mitigation purposes. The siting of all buildings and facilities within the Project Footprint achieves the minimum fire clearance requirements under the National Construction Code (Pg. 295).

This is a meaningless commitment as it does not define exact clearance that will be undertaken and under what exact clause of the NCC series of documents. It is assumed that this means the Building Code of Australia

It seems to ignore the South Australian Ministers Development Code for undertaking Development in fire prone areas, which allows 20 metres clearance without approval., or that Bushfire Management Committees could increase zoning up to 100 metres for an Asset Protection Zone or up to a kilometer for a Bushfire Buffer Zone.

In some places there is mention of a buffer up to 23 metres in addition to graveled and irrigated areas. However there is no reasonable or sufficient spatial layer of disclosure that clearly shows all areas of vegetation clearance that will be applied around roads buildings infrastructure and fence lines. This spatial layer and appropriate disclosure of the total area of clearances required. Project Footprint to achieve suitable clearance from vegetation must be disclosed for this EIS to have any integrity.

RECOMMENDATION

6. The total areas of clearance be spatially disclosed in tables and spatial plans and maps for (separately and aggregated) and cover the areas of:

- new buildings and infrastructure.
- new and widened roadways
- roadside clearance buffers and reduced fuel zones
- defensible spaces around buildings
- any defined bushfire Asset Protection Zones that are likely to be required over the life of the project
- any defined Bushfire Buffer Zones or Strategic Risk Management Zones that are likely to be required over the life of the project
- any areas where fuel hazard reduction burning is likely to be proposed in unzoned areas near to the sites as a result of this development program (these are the non-ecological and non-environmental burns)
- all graveled areas not defined as buildings and infrastructure
- irrigated lawns and gardens that are not captured as a part of any of the areas described above
- clearance around fence lines
- any areas of clearance not captured above

When assessing the environmental impact of developments, the issue is not about achieving minimum fire clearance requirements, it is about what is the impact of the clearance that will be undertaken. This has not been described in text or spatially defined for all buildings and facilities of this project.

RECOMMENDATION

7. The EIS to define fully and spatially the clearance around all buildings and facilities including defensible space, bushfire asset protection zones and bushfire buffer zones as described by the Bushfire Zoning Standard.

RE: 7.4.5.5 Bush fire risks will be mitigated through the installation of firefighting equipment at every launch event. Initial firefighting capabilities during rocket launch attempts will be augmented by local Country Fire Service (CFS) crews. Sufficient water will be located onsite to successfully control and contain any unexpected fire. There will also be a fire truck on site during launches (pg. 294).

The matter of **combustion rockets as mobile devices** appears not to have been acknowledged. They can go in all directions, fail anywhere within their potential range and start fires away from where the firefighting capabilities are located. A fire truck located at the launch site does not mitigate the bushfire risks of explosive rockets and hot debris landing some distance away from the launch site.

Because the land is largely uncleared, the fire units cannot just drive from where they are to the fire that has been started. Even on days of moderate fire risk, fires will establish and build to an uncontrollable state before crews can access and try to extinguish. Even if the crews could access the expanding fires in native vegetation, one truck or even three appliances would not be sufficient and crews would be put in an unsafe situation. In reality, the direct attack method is unlikely and it is far more likely that new containment lines would be bulldozed through the vegetation to allow back burning to occur, or the fire would be allowed to burn out to existing roadways where there is an opportunity for back burns to be lit with lower risk. This is how fires are tackled in inaccessible native vegetation locations.

RE Assembly Building, Fuel Pad and Oxidiser pad will have firefighting services as per legislative requirements (pg.295).

This is another information-less statement. It should not be up to the community, stakeholders or project assessors to have to dig around in documents. This EIS should define what firefighting services will be fitted and then describe the legislative requirement that it complies with, and why this is adequate.

RE Adequate water supply for firefighting will be available at each site including water stored in 25,000 litre tanks at initial stages and then significant water supply through the dam and detention basins once established (Pg. 295)

A 5,500 gallon tank is really not that big, it won't fill up many fire trucks when things go wrong. To say this is adequate is optimistic at best. Water supply through the dam and detention basins may not be near the fire and access to this water is not assured, particularly if separated by fire.

RE: CFS regional Bushfire Management Plan – Eyre Peninsula and West Coast – outlines potential risk, mitigation strategies and critical areas, along with responsibilities for the Region. There is no critical infrastructure as a result of this activity (Pg. 576).

This is a meaningless statement. It does not clarify whether asset protection zones and bushfire buffer zones will be established around the buildings and infrastructure. It is not just critical infrastructure that causes such zones to be created and clearance undertaken.

It also does not rule out that the next update of the Regional Bushfire Plan will establish such zones for this development program.

NON FIRE MATTERS

Weed management and Phytophthora

Weeds will increasingly enter the site due to the clearance of roadsides, maintenance of road buffer areas and aggressive response after fire. That is how weeds move in and replace native vegetation understory with scrappy weedy understory and weed laden roadsides.

The Environmental impact assessment has not properly acknowledged these risks.

The use of earthmoving equipment that is not properly cleaned is a constant problem in the landscape, bringing in new weeds and diseases to areas like phytophthora and caltrop just to name two. This proposal invites that risk.

Promises or regular weed maintenance are no assurance of effectiveness whatsoever. Continuing with caltrop as an example, typical programs include engaging contractors to spray with herbicide but this takes place after plants have matured and set thousands of seeds. The herbicide kills the adult plant when it is too late and creates the perfect bare ground for the thousands of seeds to germinate and grow across the following spring and summer period. The weed control actually makes the situation worse if it is not plant specific and managed to the actual seasonal conditions.

RECOMMENDATIONS

8. **The EIS must properly address weed management given that is clearing land and opening up access to new pathways of weed and disease spread**
9. **The weed incursion across new and widened access roadsides and built infrastructure sites should be monitored and reported each year in relation to this project so that the expansion of weeds and displacement of native vegetation is documented as it occurs.**

7.4.5.3 Effects of Dam and Detention Basins (Pg. 294)

It is appropriate that dams and detention basins are lined and covered. This is not however assurance of good design that prevents fauna entrapments.

The use of barbed wire and razor wire on fencing is a danger to fauna.

Pooling of water above floating covers still attracts wildlife and fauna drownings and entrapments are caused where inclined surfaces are slippery

RECOMMENDATIONS

10. **Avoid the use of barbed wire and razor wire. If people wish to break in, they will anyway. Video surveillance can track trespassers and vehicles in the area and has replaced the need for wildlife killing fences**
11. **Ensure all floating covers are fitted with rough surface materials and additional escape ladders.**

5.2.13 Utilities (Pg. 202) - IRRIGATION

The proposal to introduce grassed and vegetation areas at this site is acceptable wherever these are not locally endemic. It is impossible to comprehend why the EIS has not ruled out introduced grasses from the start.

RECOMMENDATION

12. **All introduced plants should be banned from the site.**



**Whalers Way Orbital Launch Complex by Southern Launch
Environmental Impact Statement (EIS)
Public Consultation Response
15th September 2021**

AIASA Industry Background

AIASA represents 22 Licence Holders in the Western Zone Abalone Fishery (area between Cowell and the WA boarder) in South Australia. Our organization is proactive, credible and leaders in research, development and sustainability of the abalone species native to the area working with Government and NGO's.

Our industry is recognised and valued by local communities located throughout rural SA. The SA Abalone Industry is a well-managed quota fishery within the SA economy. In 2019/20, the estimated total contribution of the South Australian Abalone Fishery (including indirect effects) on the South Australian economy was \$105 million in output, 397 FTE jobs, \$27 million in household income and \$54 million contributed to GSP (Econsearch, Economic & Social Indicators for the SA Abalone Fishery 2019/2020).

The Abalone harvested from the WZAF are highly regarded worldwide due to the unpolluted, clean and pristine waters from which they are sourced. Our industry operates throughout the year and is reliant on suitable weather conditions to work. Our specialised divers prioritise the rotational harvesting of Blacklip Jan-April, and for Greenlip April-July, working between 6am and 6pm and spending up to 8 hrs on the sea floor. Each abalone is hand selected from South Australia's coastal shallows reefs (18m) where they inhabit.

Abalone are a sessile, low trophic species that are slow-growing (taking 6-7 years to grow from larvae to maturity). A critical time is during reproduction (ie spawning) which occurs in Greenlip and Blacklip from late spring to early summer (FRDC Stobart et al 2013, 2017).

AIASA must ensure that risks to the fishery are minimised by any development and that access to commercial fishing is not disrupted or restricted.

AIASA's Concerns and Questions

NOISE AND VIBRATION

Intense sound (and exposure) may impact the cellular structure of marine invertebrates (abalone) and there is mixed evidence on the sound impacts on plankton and larvae (Kent et al 2016).

- The EIS (pg 52) states *"Noise and vibration impacts are unlikely to result in impacts on marine fauna" based on "noise is reflected off the water surface"*.

Q) What evidence is there to suggest that noise and vibrations from this development will not have an impact on the marine fauna?

Q) Will 'noise/vibration' sensors be placed in the marine environment to measure any potential impact and will this information be made public?

MARINE POLLUTION

Sessile abalone, harvested from the WZAF are highly regarded worldwide due to the unpolluted, clean and pristine waters from which they are sourced.

- The EIS (pg Xlii) states *"The marine environment is most at risk to occur from launch failure and impact of debris on the ocean floor. Debris will settle in the benthic environment"*
- The EIS (pg 619) states *"Spent vehicles will strike the ocean and debris will remain in the marine environment"*
- The EIS (pg 367) states *"Lithium batteries, in sufficient quantities could cause alkaline conditions with localised, short-term toxic effects"*.
- The EIS (pg 367) states *"Sessile organisms may be impacted by larger items of debris of accumulations of fragments settling on the sea floor"*.
- The EIS (pg 366) states *'Particles would be created that are small enough for pelagic and benthic fauna to digest, potentially impacting individuals but with negligible impact at population level'*

The long term accumulation of spent (discarded) launch vehicles and pollutant particles entering the sea which are able to be ingested and accumulate in benthic individuals is a concern to the Industry.

Q) Precisely, what is the debris payloads expected to fall for both orbital and sub orbital launches within the first 5kms of the coastline (our Industry's area of operation)?

Q) In the event of a failed launch, what is the expected distance & payload that would fall/settle to the coastline?

Q) What "payload recovery activities" are planned for the recovery of spent launch vehicles and/or failed launches from the marine environment along the coastline (eg shoreline or where depths allow dive recovery)?

Marine pollution is a growing issue; contamination is easily hidden beneath the water's surface. Solutions for marine pollution include prevention and clean up. It is imperative that (short and long term) debris, spills and pollutants resulting from this proposed development are collected and cleaned (where possible) from the marine (benthic) environment and pollution accumulation is monitored.

AIASA notes, the EIS (pg XiVii) *"...that stormwater and wastewater runoff potentially provides one of the greatest source of potential pollution to the marine environment"*. The management actions by Southern Launch state *"no site generated surface runoff/wastewater will leave the site"*. This requirement must be maintained and monitored.

RESTRICTED ACCESS TO COMMERCIAL FISHING GROUNDS

- Our Industry launches vessels from Fishery Bay Beach on average 20-30 days/year to harvest abalone within surrounding areas (PIRSA CDR records)
- The Fishery Bay area produces at least 2.2 tonnes annually (6.6 tonne whole weight) of high quality Greenlip and Blacklip abalone harvested by our Industry (SARDI et al 2019), with an approximate value of \$500,000.

The EIS (pg 1) states *“Exclusion Zones will be enforced for the minimum amount of time possible to ensure the least disruption to commercial fishing notified by NOTMAR (Notice to Mariners)”*. The communication / prior notification procedures is not clearly defined in this EIS and must be clarified.

- Q) What frequency of notice can be expected (for exclusion) prior to a launch? (eg mins, hrs, days, weeks)
- Q) What exclusion timeframe can be expected during a launch (referencing *“minimum amount of time”*)? (eg mins, hrs, days, weeks)
- Q) What will be the process of communication/notice between impacted 3rd parties (eg. Abalone Industry)?

The EIS (pg 257) states a *“Safety Zone”* (defined as ‘exclusion during a launch’) and *“Exclusion Zone”* (NOTMAR defined time). Q) Are Safety Zones and Exclusion Zones the same? Are there differences in the area and exclusion timeframe/frequency?

For more than 50 years, our Industry has used a ‘rotational’ method of sustainably harvesting abalone, which is where divers fish successive reefs in each year thereby allowing reefs to recover. Access to these areas are also highly weather dependent. We are seriously concerned that the *“reasonable balance”* between this development and reduced access to this valuable abalone growing area for commercial fishers may be significantly disrupted and cause disorder to the sustainable rotation harvest equilibrium. Restricting the available area to fish will impact on the ability to rotate between reefs and therefore may have implications for the long term sustainability of the fishery.

The EIS (pg XXXIV) states *“The number of launches based on the initial phase of the development is anticipated to commence with approximately six launches in the first year of operations, increasing to a maximum of 36 orbital launches per year in year five of operations. It is envisaged that there would typically be one or two sounding rocket launches undertaken at Whalers Way per year with a maximum of potentially six per annum, resulting in an estimated 42 launches per year”*

The EIS (pg 578, 4.9) states *‘Consider and quantify the impacts of the development on commercial fishing areas during operations i.e., safety of commercial fishermen from falling debris and the need for temporary exclusion zones’*, resulting in the noted consequence *‘Disruption to off-range third-party activities (e.g., commercial fishing, primary production, recreational pursuits)’*.

There is a lack of information and consideration in the EIS regarding the full impact of the development activities (ie. restricted access via exclusions zones for 42 launches/year, in addition to the times when launches may fail/postponed) on the Abalone Industry, and whether cumulative impacts could be relevant.

- Q) How has the impact of the disruption by this development been considered *and quantified* with respect to the Abalone Industry?
- Q) What is the capacity of Southern Launch to mediate business operations that may be impacted greater than expected?

Our Industry is a significant user of the coastal waters adjacent to this operation and logically we should be considered an important stakeholders in these applications and updated on developments. PlanSA guidelines state as part of the development process, applicants provide *'An outline of any preliminary consultations already undertaken with councils, government agencies, community groups and the general public, together with an indication of their initial attitudes towards the proposal'*. Whilst AIASA recognises it has met with Southern Launch, Q) Is there a publically available 'consultation record' to demonstrate this and/or the outcomes of the 'consultation process'?

AIASA are responsible industry leaders who actively work to ensure local abalone stocks are environmentally sustainable and financially viable. It is crucial that the impact of this activity on the marine environment is determined. Not just the visually obvious animals (eg. seals, whales, birds), but micro and macro flora/fauna under the surface of the water. We acknowledge Southern Launch's development and appreciate the opportunity to make comment on the EIS, however must ensure the Industry will not be negatively affected in the short and long term.

We request being included and informed on any future developments regarding this development.

Kind Regards

The points I would like to make in regards to the Southern Launch application are:

1. We had two SA government funded meetings at 80+ people each, to inform the local Port Lincoln public of the Plans and the State government consultation.
Where they failed to inform anyone, of the current, extremely short Federal consultation. Nor did the Federal Government itself
(what's the point of consultation if the very people it affects most, are unaware and uninformed.) This consultation period was advertised as closing on the 9th of September, but in reality closed at 11 pm on the 8th of September in South Australia.
2. Dozens of Facebook posts and hundreds of comments have been removed from local social media sites daily, from a diverse range of people, on a diverse range of topics related to this, censorship has been rife, to the extent Southern Launch gagged their own employees from trying to answer questions (I'm happy to supply dozens of pictures of deleted messages and posts) from our largest group Rant and Rave, also Port Lincoln Times, ABC, Southern Launch.
3. They employed the mayor, who never introduced himself at the meeting as such, and the head of the development board to help give themselves social licence.
4. You don't have to be a rocket scientist, to know that this would have to be one of the least suitable locations for this type of development. It would appear Southern Launch have chosen to take the cheapest option, the most photogenic option for their prospectus, and the nicest place to live, while simultaneously trashing one of the very reasons we live here.
5. This is an iconic tourist attraction, a declared Sanctuary, and Heritage listed since 1978, with an agreement that the SA taxpayer, pay the rates and taxes in return for ongoing public access. these are the types of places people choose to spread the ashes of their loved ones, safe in the knowledge that it's been set aside for the people, by the people in perpetuity. Indeed, in this case, that's exactly what's happened, only for those people to now find out they cannot pay their respects on those special days.
6. It's also in the coastal protection zone, containing many rare, endangered and threatened species where they plan to bulldoze over 15 football ovals worth of fragile clifftop vegetation.
7. It would have to be one of the windiest places on the Peninsula, right on the point, subject to multi directional winds, as evidenced by multiple missed launch opportunities, even though they are desperate to launch one before the consultation ends . Ironically.
8. Even though Sea Eagles and Osprey were spotted during every Flora and Fauna survey , and they conclude "that at least one pair with an established territory may be impacted by the project." They assert further in the document " no pair with an established territory is currently known from the project area"
9. Their bird expert, and I quote , "Dr Zeta Bull is NOT a qualified coastal raptor expert" relied on statistics from birddata, which in turn relies on citizens to upload data, she declared it insufficient, So they relied on their local bird enthusiast, Mike Damp, the CEO's own father, (it's all good, Daddy said we could), who assures us the numerous nests adjacent the site have been abandoned for 5 years. Southern Launch also shared, they often come back to abandoned nests and one on a nearby Island is possibly 200 years old .
10. They went on to blame the " current disturbances to the RECENTLY ESTABLISHED White Bellied Sea Eagle nest site" at Whalers Way on local birdwatchers (Mike Damp perhaps?) and drones. Quote "any disturbance during their nesting period PARTICULARLY OVERHEAD may cause the Eagles to abandon their nest " and, "line of sight disturbance or disturbance FROM ABOVE nest level" can cause the Eagles to " leave the nest exposed "
11. They then went on to allege, that by closing the site to the public , "will reduce the current level of human disturbance " and " it is anticipated that the eastern Osprey may have the opportunity to use the coastline more actively " Completely neglecting to mention the impact of a dozen trucks a day, multiple machines, over 50 light vehicles, helicopters (which fly overhead) and the Launch facility, which
"will generate noise levels equivalent to a small warehouse more than % 99.9 of the time"

Contradicted elsewhere by

“operational noise from the project are considered to be: warehouse level noise, when the complex is IDLE for approximately %30 of the time”

12. And did I mention Rockets, up to 42 a year, some weighing 120 tons, and guess what, they fly OVERHEAD of these Threatened species which are on the decline.
13. A local contractor who built a quarry, (with four truck movements a day) was required by the local council to contribute to the Fishery Bay road. There is no such requirement for Southern Launch due to the government’s Major Project status, which allows them to ignore the rules the rest of us are subject to, they state “ some additional maintenance, such as more frequent grading will likely be required on Fishery Bay road to cater for the additional proposed traffic volumes “ I guess the rate payers will be picking up the tab.
14. As a freehold coastal land owner, I cannot build a toilet sized building on the coast, but they plan for 10 metre high buildings, 23 metre high water tanks, 40 metre high lightening tower, 30 metre high launch gantries and 20 metre tall flare stacks. And I quote, (because you couldn’t make this rubbish up)
15. “While the visible structures will alter the visual landscape when visible, it is not expected that the impact would severely or substantially degrade the visual quality of the landscape “
16. The emergency management plan, which they haven’t made public, appears to rely on the Volunteers and the taxpayer funded CFS, Police and Ambulance, of which numerous trips have already been made. What cost recovery is being made for the SA taxpayers for these services. Where does that leave us in the event of a fire, or in need of emergency services elsewhere. Keeping in mind this is not a purpose built facility in the desert, like Woomera(which we already fund for that purpose), with no vegetation, fences, 24/7 guards , security and thousands of kilometres of land to retrieve the rockets.
17. This is in an isolated and inaccessible area, surrounded by flammable vegetation (with the highest flammability rating that the CFS issue) which stretches all the way to Tulka, Port Lincoln and Coffin Bay. With a plan to dump the rockets at sea, to (hopefully) retrieve later.
18. The greenhouse gas emissions from this project (almost %2 of South Australia’s total) “are considered a relatively small proportion,” so they haven’t taken them into account , really, in this day and age, they have no corporate responsibility? They even used the drug dealers defence “the demand for the launches will most likely be met by launches at other locations” (if we don’t sell it, someone else will)
19. Every time there is proposed launch, they have their Embraer Phenom 300 doing laps out to sea there, I’m not sure if this has equipment on board or is just full of VIPs wanting a photo opportunity. It could be avoided if it was located at Woomera or Koonibba by viewing from the ground. Are the Carbon emissions for this included? None of them are. Is the SA government paying for this too ? Under (informing/not informing the public)who would know?
20. The site lies adjacent Port Lincoln’s most popular beach and surf spot, our equivalent to Bondi, with over two hundred vehicles on this beach a regular occurrence, they have failed to inform the public this will be CLOSED on the launch and attempted launching of larger rockets. So far, we have had many failed starts, if this was a large rocket our favourite beach could be closed for weeks, especially in Summer when launch conditions are the most favourable. In fact with rough winter storms and howling gales taken into the downtime, the remaining 42 launch windows of 5 to 8 weeks, could result in our most visited beach on the Eyre Peninsula being closed all summer. Tourists are regular visitors and often stop on the road for the resident koalas crossing, creating a further potential hazard with the anticipated large vehicle’s especially in sea fog season.
21. The secluded waterhole directly below the site (the one on their Facebook page and prospectus) has a resident seal population interspersed with Sea-lions, the area is also

renowned for whales calving, who obviously use sound to communicate and have excellent hearing, until a rocket takes off.

22. To accept this project, you would have to be bought, wilfully blind, or brain dead.

Name:
Contact Number:
Email:
Postal Address:
Address:
Interest: Occupier of a local property

Applicant: Southern Launch
Development Number: 932/P007/19
Assessment level: Whalers Way Orbital Launch Complex Environmental Impact Statement

Dear Minister for Planning, State Planning Commission and other relevant authorities. I'm Dr Isaac Taylor, a resident of the Lower Eyre Peninsula and an inhabitant of the "nearest sensitive receptor (NSR)" referenced multiple times in Southern Launches EIS. I state my utmost opposition to this project, for the following reasons:

Southern Launch's business model of 48 hour turn arounds for international start up rocket manufacturing companies to launch untried and experimental vehicles poses countless threats to the precious, fragile and untouched environment that is Whalers Way and the Lower Eyre Peninsula. I'm aware the Australian Space Agency requires information on each launch, including fuel specifics, as well as evidence that the environmental impact of the launch has been addressed by the launch facility's environmental plan. By passing this Environmental Impact Statement, would it then allow Southern Launch to reference this document and claim each launch's impact has been addressed? There are numerous oversights in this EIS, related to the lack of data available for many of these new orbital rockets. To claim this EIS covers even a small percentage of all environmental possibilities is an untruth. It would be more accurate to label the launch complex as an experimental facility. To permit an experimental rocket launching facility in a pristine, heritage listed and conservation zoned ecosystem of threatened species, with potential for serious contaminations to vital water sources and soil ecology, so close to human residences and with unknown implications on climate both locally and globally, would be an unmitigated disaster.

In Southern Launch's Air Quality Assessment there are two concerning data pitfalls highlighted. Firstly, that "orbital launch facilities are located in fairly remote locations without nearby receptors." Secondly, "details regarding all potential rockets and fuels are not available at this stage" (pg 10, Appendix W). How can we then assume this document will then provide information reliable enough to prove the safety of any future launch at this location?

Even if we do take their limited data, there are even flaws within their modelling and analysis of the impact of the fallout. Notably, they focus on the fallout of CO, NO₂, HCL and PM_{2.5} and the fact that their modelling suggests "non-toxic" levels at the NSR. However, in this assessment they state the critical wind for the nearest sensitive receptor is from the southwest, and that the prevailing wind direction is from the southeast, making the conclusion that there are no unfavourable wind conditions for the NSR. Their own wind modelling data indicates that South Westerly is the second most predominant direction, so I

would question their claim based on that data alone. Furthermore, wind data for Port Lincoln from Weatherspark.com (see URL in references) for annual wind clearly indicates that South Westerly winds are the predominant wind. Southern Launch must acknowledge this pitfall in their modelling, and if South Westerly directions change the “toxic” boundaries to cover the NSR, then surely this must be addressed further.

A further flaw in their modelling is in their measurement of the Ground Level Concentrations (GLC). The South Australian Air Quality Environmental Protection Policy states in section 3.6 that the data should include the top 100 GLCs. Southern Launch has decided to only include the top 30 readings. Why are there two sampling and data presentation mistakes in this assessment?

If the data they present is indeed inaccurate, then the NSR is exposed to toxic levels of NO₂, Hydrochloric Acid, and PM_{2.5}, potentially on a weekly basis. NO₂ and PM_{2.5} are widely recognised as significant respiratory toxins. PM_{2.5} is the current subject of legal action against the American EPA who have rejected the latest evidence to have stricter regulations on safe levels. It's heavily associated with mortality from respiratory causes. The levels detailed in their modelling in the Air Quality Appendix reveal how significant this fallout will be. Never before has it existed in measurable quantities at the NSR. Now this development will cause levels equivalent to the CBD of a developed city, radically shifting the toxicity of our very air.

Let us assume they have accurate data however, and accurate modelling. Do Southern Launch acknowledge any of the actual impacts of this fallout in their so-called Environmental Impact Statement? Whilst the fallout may be at non-toxic levels 3.5 kilometres away at the NSR, the modelling indicates incredibly high ground level concentrations radiating out from the launch site. If we accept Southern Launch's fully functional model of 42 launches annually, the quantity of this in the local environment becomes significant. Southern Launch themselves estimate 2.5 tonnes of soot will be created per year. The emissions from any given fuel will include “ HCl, H₂O, CO₂, CO, NO_x, AL₂O₃.” Given that on average 85% of a rocket's weight is in the propellant, and rockets upwards of 100 tonnes are planned for launch, that is a significant amount of emission planned annually. Nitrous Oxides, Hydrochloric Acid and soot are all associated with acidification of environments, including the potential for acid rain (US Environmental Protection Agency). Southern Launch acknowledges that emissions will enter the surrounding environment, as seen in the diagram on pg 6 of Appendix V - Ground Cloud Schematic. In fact, they even go so far as to state “dissolved HCl and an unknown proportion of the soot (carbon black) produced are expected to migrate with the ground cloud and fall/rain out at some distance from the launch site” (pg 16, Appendix U). They even acknowledge “The prime concern is acidification of soil from HCl generated from solid fuel rockets” confirming they are aware of this likely occurrence. There is absolutely NO detail about the implication of acidification of the entire Whalers Way site's soil. No mention of how that might affect the environment. No suggestion of ways to prevent it, or even remedy it once they realise it is occurring. “Ongoing soil sampling MAY be appropriate” is the only suggested solution. (pg 18, Appendix U). Each and every launch will contribute to this process of acidification. If this is the Environmental Plan associated with the facility, then claiming each and every rocket launch has had its impact assessed makes a mockery of the process.

The potential for chemical contamination of the shallow limestone aquifers present beneath Whalers Way has to be addressed. With over 30% of the deluge water for each launch expected to be lost to the surrounding terrain (pg 10, Appendix U), that's up to 45,000 litres of contaminated water potentially entering the water supply of the Lower Eyre Peninsula. Specifically, I would like to draw attention to a single further rocket fuel contaminate - ammonium perchlorate. It's a common component of solid rocket fuel, one Southern Launch's rent-a-pad clients will regularly use. Once more however, they have neglected to discuss its role as a potential toxin. Once it is in an ecosystem, it is pervasive. Studies have now identified concerning levels of this chemical in bottled water, and even in cows milk (Pearson, H 2005). According to the US EPA, perchlorate is "detected in water supplies in close proximity to sites where solid rocket fuel is used" (US EPA 2021). Increasingly concerning evidence indicates an association with thyroid disease, and potential for stunted foetal development (Nizinski, et al 2020). Overwhelmingly, more research is required before the assumption of safety can be made. The rocket industry's role in perchlorate contamination is under significant criticism in the US, with pressure on the EPA to enforce stricter regulations. Southern Launch however, did not include perchlorate in its list of chemicals of environmental concern. How can we in South Australia, who are so blessed to have such clean and uncontaminated landscapes and environments, allow a private company to so unashamedly destroy this. It's clear that Southern Launch are neglecting to perform more substantial analysis and discussion of the toxic implications of regular combustion of rocket propellants at the whalers way site. This is utterly unacceptable.

I would like to direct the state planning commission, the South Australian Space Agency and the State Planning minister's attention towards the scientific community's growing concern for the impact of atmospheric rocket launch emissions on global and local climate change, and the current absence of any regulation on this matter. I would have hoped Southern Launch were aware of this, considering they aim to contribute significantly to this issue. However, it is not mentioned one single time in their Environmental Impact Statement, so I will direct their attention to this issue as well.

Southern Launch's rent-a-pad business model will provide the potential for weekly rocket launches. In their own words, they aim to capture part of the forecasted 1000 annual launches. They want to be the launch pad for the coming boom in regular rocket flights. To put that in perspective, 2020 saw the most launches since 1990 in a calendar year - 114.

Rockets are the only direct anthropogenic emission sources into the upper atmosphere (Ch Voigt et al, 2013). The emission profile from rocket flights include aluminium oxide, chlorine and black carbon (Ross, Vedda, 2018). By doing so, rocket emissions have three direct effects on the earth's atmosphere. Firstly, it directly increases the radiation based global warming effect. At 1000 launches annually, it is expected to be equivalent to the impact of the aviation industry (Ross, Mills, Toohey 2010). Additionally though, they cause direct ozone depletion and they are linked with increased formation of mesospheric clouds. Southern Launch have failed to acknowledge any of these factors in their proposal for their facility.

Ozone Depleting Substances were famously and successfully regulated in the Montreal Protocol of 1987, focussing on UV's impact on skin cancers, vision, immune deficiency, food chains and ecosystems around the world. Total ozone depletion has been estimated

between 3-6%. Despite the rising concern about rocket launch bases ozone depletion, Southern Launch does not even mention the Montreal Protocol. The current loss of ozone as a result of aluminium, black carbon and chlorine injection into the upper atmosphere is approximated to 0.1% (Ross, Vedda, 2018). A ten-fold increase in annual rocket flights, as desired by Southern Launch, quickly escalates this impact to a significant number. Furthermore, the southern hemisphere is particularly vulnerable to ozone depletion, with the largest ozone holes all being recorded in this area of the world. Local ozone loss has been observed as a result of rocket exhaust fumes (Voight, et al 2013). Currently, almost 100% of the global rocket launches are located in the Northern Hemisphere. With Southern Launch aiming to bring regular orbital launches to the Eyre Peninsula, the potential for catastrophic ozone depletion has to be acknowledged.

Southern Launch CEO Lloyd Damp recently referred to the rocket exhaust as “harmless water vapour.” He failed to provide any insight into the potential climate altering implications of this water vapour. Several studies have revealed changes in the mesospheric water vapour concentrations above rocket launch sites, and subsequent mesospheric cloud formation (Voight, et al 2013). As expected, the implications of these clouds on local, and global, climate is difficult to forecast or interpret. But to dismiss it completely is negligent.

Southern Launch must play a role in the regulation of the space industry’s global climate impact, if they are to profit from facilitating its progress. Ross and Vedda highlight that these global implications of rocket launches have, to date, escaped any significant environmental regulation or policy. The fledgling Australian Space Agency has followed the global narrative, and has not yet committed to any regulations. Largely, this is due to the global launch events being as low as they currently are, and as such their impact assumed to be negligible. However, the push for expansion into “new-space” as Mr Damp so often refers to, WILL result in a tenfold increase in the number of launches. As the climate crisis continues to worsen, it is more important than ever before to ensure that appropriate regulations are placed on industries before they’ve caused the damage, and not afterwards.

The Greenhouse Gas assessment developed by Southern Launch fails to mention that rockets impact our atmosphere unlike any other industry on the planet. Likely, this is due to the very limited research around this space. If South Australia wants to lead the country in the “space race,” then it must first commit to scientific research regarding the impact of launch emission. Otherwise we risk grossly underestimating our impact on the climate. We must not let a private company potentially undermine our status as a world leader in environmentally sustainable industry, especially if it’s due to acting before having all the required data. Southern Launch must address the likelihood that its Whalers Way Orbital Launch complex will result in the deposition of black carbon and aluminium oxide into the upper atmosphere, and the climatic implications of this.

Ultimately, it is clear that Southern Launch has neglected to perform the analysis required of them. They have ignored the very real and damaging impact of rocket propellant emissions on local and global climates. I urge the South Australian government not to be caught up in the excitement of a space race, and in doing so allow a toxic and polluting industry to be developed on a pristine and fragile ecosystem. I urge you to ensure that if Southern Launch so desperately want to profit at the expense of our state, then they must fulfill the required

research, and they must be held accountable for the damage it will undoubtedly cause to Whalers Way.

Finally, I would like to draw the attention of the State Planning Minister to the overwhelming community opposition to this development. "Save Whalers Way" @ Change.Org currently has 2255 signatures petitioning you, the State Planning Minister, to NOT authorise the Orbital Launch Complex. Please find a link below. This number will continue to grow as the general public continues to become aware. Whalers Way is not the right place for a rocket launching facility.

Yours sincerely

Petition: <https://chnng.it/7WjS55XHBP>

For further reading, please see the following references:

Nizinski, et al, 2021. "Perchlorate - properties, toxicity and human health effects: an updated review" *Reviews on Environmental Health*, vol. 36, no.2, 2021, pp 199-22

<https://doi.org/10.1515/reveh-2020-000>

Pearson, H. Perchlorate found in breast milk. *Nature* (2005).

<https://doi.org/10.1038/news050221-1>

Ross, M., & Vedda, J. (2018). THE POLICY AND SCIENCE OF ROCKET EMISSIONS. *The Aerospace Corporation*. Published

<http://aerospace.wpengine.netdna-cdn.com/wp-content/uploads/2018/04/RocketEmissions.pdf>

Ross, M, Mills, M, Toohey, D, (2010) Potential climate impact of black carbon emitted by rockets. *Geophysical Research Letters* <https://doi.org/10.1029/2010GL044548>

US Environmental Protection Agency - Health and Environment Affects of Particulate Matter. Updated May 26, 2021. Accessed September 15 2021
<https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>

US Environmental Protection Agency - Perchlorate in drinking water. Updated January 27, 2021. Accessed September 15 2021
<https://www.epa.gov/sdwa/perchlorate-drinking-water-frequent-questions#how-gets-drinking>

Voight. CH, Schumann. U, Graf. K, (2013) Impact of rocket exhaust fumes on atmospheric composition and climate - an overview. *Progress in Propulsion Physics*
<https://doi.org/10.1051/eucass/201304657>.

Weatherspark.com. Port Lincoln average weather. Accessed September 15 2021.
(<https://weatherspark.com/y/143369/Average-Weather-in-Port-Lincoln-Australia-Year-Round#Sections-WindDirection>)

From:
Sent: Wednesday, 15 September 2021 10:39 PM
To: DIT:SPC Reps
Subject: Submission for Southern Launch Development Number 932/P007/19, Whalers Way
Orbital Launch Complex Environmental Impact Statement
Attachments: EIS SUBMISSION.docx

To the Minister for Planning,

I have attached my submission for Southern Launch Development Number 932/P007/19, Whalers Way
Orbital Launch Complex Environmental Impact Statement

Thank you

Name:

Contact number:

Email:

Postal Address:

Interest: Local resident

Applicant: Southern Launch Development Number 932/P007/19

Assessment Level: Whalers Way Orbital Launch Complex Environmental Impact Statement

Sent with [ProtonMail](#) Secure Email.

Name: Gabrielle Coard

Contact number: 0477498965

Email: gabrielle1307@protonmail.com

Postal Address: 40 Roberts St, Birkenhead, South Australia 5015

Interest: Local resident

Applicant: Southern Launch Development Number 932/P007/19

Assessment Level: Whalers Way Orbital Launch Complex Environmental Impact Statement

Introduction

Whalers Way is the proposed location for Southern Launch's rocket launching facility and I believe, after careful consideration and further reading, that this is wrong location for a plethora of reasons. My name is Gabrielle Coard, and I am a Medical Doctor that works in Adelaide and in Port Lincoln. When residing in Port Lincoln I live at the closest human residence to Whalers Way with my partner. This proposal is experimental and will have lasting effects to the local environment, which needs to remain under heritage protection and coastal conservation. We need to conduct this kind of experiment in an area that is less environmentally fragile, and further away from human residences.

Whalers Way is currently under the South Australian Heritage Act, 1978. The South Australian Heritage Act was established in 1978 to prevent the over clearance of native vegetation and to protect native fauna in the agricultural regions of the state. Currently 1% of the state is protected under the Heritage Agreement (98.3 million hectares in SA according to the Bureau of Statistics and 1 million hectares under Heritage Agreement according to the Native Vegetation Council.) For decades there has been financial incentives for landowners to register their land under the Heritage Agreement. "Heritage Agreements last in perpetuity" and will pass on even if the property is sold to a new owner (page 2, Heritage Agreements FAQs, 2017, Department of Environment, Water and Natural Resources). "The Memorandum of Agreement states that *the landholder shall not, without the written consent of the Minister, undertake or permit within the Heritage Agreement area the clearance of native vegetation; the planting of vegetation whether native or exotic; the construction of a building or other structure; the grazing of stock or any other activity that, in the opinion of the Minister, is likely to damage, injure or endanger the native vegetation or native fauna within the Heritage Agreement area*" (page 4, Heritage Agreements FAQs, 2017, Department of Environment, Water and Natural Resources). The Heritage Agreement is an incredibly important Act that was established in a time where it was evident that we needed to protect what little we had left of our native vegetation and animals indefinitely. As the Minister for Planning, it would be an absolute injustice to overturn the Heritage Agreement on this piece of land as Southern Launch's facility WILL 'damage, injure and endanger the native vegetation and fauna within this area' as I will clearly explain to you. It is unfair that a private company, that is predicted to be worth over \$53 million dollars once fully functioning, can overturn this agreement for a mere \$965,407.76 to clear 23.7 hectares of land and create lasting effects in the surrounding environment when there ARE other suitable areas along the southern coast of Australia that AREN'T under the Heritage Act or part of coastal conservation and do not launch over a marine sanctuary. There is approximately 98.3 million hectares in South Australia, with only 1 million hectares protected by heritage agreement. That's 1% of all of South Australia – we need to protect what is left of that 1%.

Furthermore, Whalers Way is also listed under Coastal Conservation Zone of the Lower Eyre Peninsula Council Development Plan – Consolidated 12 July 2018 (p. 17, EIS). The Lower Eyre Peninsula Council consolidated this protection policy "to enhance and conserve the

natural features of the coast, including visual amenity, landforms, fauna and flora”. It also states that there should be “low-intensity recreational uses located where environmental impacts on the coast would be minimal” and that development must “contribute to the desired character of the zone” (p. 119, Lower Eyre Peninsula Council Development Plan, 2018). Additionally, “the coast should be protected from development that would adversely affect the marine and onshore coastal environment, whether by pollution, erosion, damage or depletion of physical or biological resources, interference with natural coastal processes or any other means” (p. 24, Lower Eyre Peninsula Council Development Plan, 2018). Southern Launch’s facility cannot co-exist within the coastal conservation zone, as I will explain.

Water and Contamination

Southern Launch’s facility will have a huge impact on local water harvesting and usage as well as contributing greatly to water and environmental chemical contamination of the local and surrounding environment, not complying with the Coastal Conservation Zone of the listed land and putting local human residences at risk.

Southern Launch will be constructing a dam that is to hold 17-30 mega litres of water – (that’s 17-30 million litres). They plan to harvest this from “run off from the surrounding undeveloped land” (p.4, p.18, Appendix V, EIS). When questioned if they would wait for the run off to build up prior to launching or if they would have to source the water from elsewhere initially, Andrew Curran, the General Manager of Infrastructure, stated that they would be trucking it in from Port Lincoln’s Water Supply. It is very unclear where they plan to harvest this much water – they have used rainfall data that is over 30 years old, that suggests that annual rainfall is 598mm. (p. 11, Appendix U). Table C in Appendix U suggests that they will be able to harvest 7185KL from the launch site annually, which will not be enough to fill the dam (p.18, Appendix V).

Each rocket will require between 50,000-70,000L of water per launch. However, Andrew Curran stated at the general town meeting that it would actually take more like 150,000L of water per launch. This water will be used as deluge water to “be released at high flow into the rocket exhausts from a 70KL overhead tank to adsorb sound, heat and energy, which might otherwise damage the rocket and launching facility” (p. 6, Appendix V, EIS). Southern Launch have advised “the key chemicals of environmental concern identified in the literature review were HCl (which form hydrochloric acid when dissolved in water), carbon black (which may contain a traces of PAHs) and aluminium oxide (Al₂O₃).” (p. 23, Appendix V, EIS). They have provided a diagram to show how these harmful chemicals will be released into the surrounding atmosphere. When the rocket is launched, the "heated ground cloud" of atomised and/vaporised water deluge will mix with the atmosphere, here the chemical contaminants will "mix with the water and fall/rain out at some distance from the launch site" (p. 6, Appendix V, EIS).

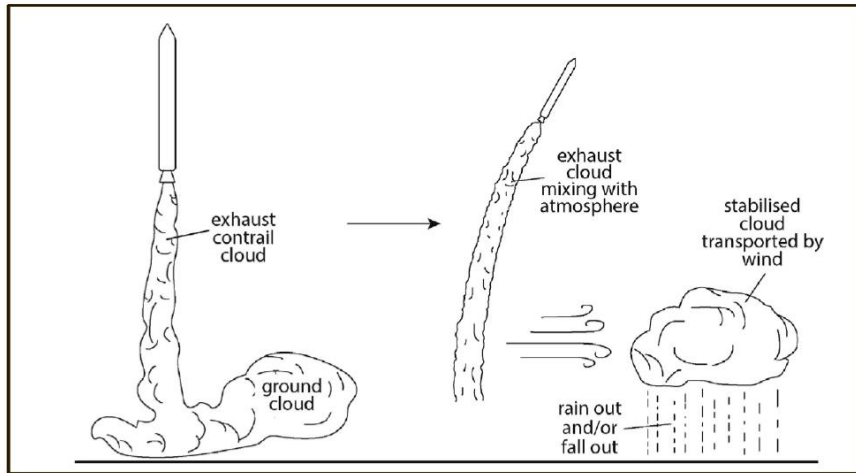


Figure 4 – Ground Cloud Schematic

IMAGE: page 6, appendix V, design stage water environmental management plan, Southern Launch EIS

This is not akin to the basis of the Heritage Act or the Coastal Conservation Zone policy as this is direct pollution of harmful propellant gases into a fragile ecosystem. They predict 30% of the released contaminants per launch will become the "ground cloud". 30% of contaminants per launch being released into the local environment is significant and will be devastating. The other 70% of released contaminants will be trapped in the deluge water that will then get recycled for the next launch – over time this will increase the concentration of these contaminants, further polluting the atmosphere (p. 6, p. 18, Appendix V, EIS). They even state “some chemicals present in the rocket exhaust may be transferred to the deluge water, potentially causing contamination of water collected in the launch site stormwater detention basin.” (page 6, appendix V, Southern Launch, EIS) – they’ve also stated that 1.3ML of extra water from this stormwater basin will have to be disposed of and they have suggested this water will be used for “irrigation of landscaped areas within the site”, further contaminating the environment (p. 11 Appendix U). They have predicted in their EIS that there will be 8112kilolitres of water evaporation along with over 7700kilolitres of run off from contaminated water storage sites in their facility (p. 18, Appendix V, EIS). The risk of contamination and leeching of these chemicals into the natural environment is undeniably significant and this risk should not occur on such a fragile piece of coastal land that is meant to be protected under the Heritage Act and Coastal Conservation Zone.

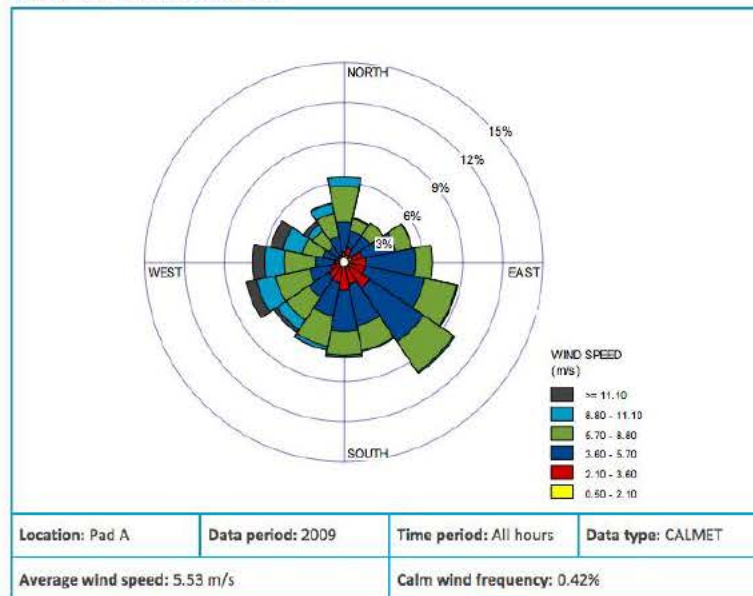
Data presented by Southern Launch states that 12 launches has been recorded to produce 2.5 tonnes of soot! Southern Launch have stated that “depending on how much of the soot stays within the launch site, a process of soot removal collection, storage, classification and appropriate disposal may be required, so that it does not accumulate in the ponds” (p. 24, Appendix V, EIS). Again, this is not akin to conservation of the environment.

Southern Launch have stated that “installation of groundwater monitoring wells and groundwater monitoring is not recommended at this stage since risks to groundwater are considered to be low subject to implementation of surface water management measures which will mitigate the risk of waterborne contaminants migrating from the launch site(s)” even though they have stated 30% of contaminants will directly pollute the surrounding atmosphere and over 8112kilolitres of contaminated water will evaporate (page 25, appendix V, Southern Launch EIS).

Southern Launch also admit that they have not been able to estimate the potential of contaminants into the water from fuels, lubricants, cleaners, fire fighting foams handled in a launch (page 25, appendix V, Southern Launch EIS).

I am greatly concerned about the local residences, which are within 3-5km of the launch site, that rely purely on rainwater for consumption. Southern Launch have stated that “on an annual basis the prevailing wind direction is from the southeast. The critical wind direction for exposure of the nearest sensitive receptors is from the southwest.” (Appendix W, Appendix A, pg 3 of 6). They then go on to state “the nearest sensitive receptors are not located downwind in any prevailing wind direction” (p. 8, Appendix W, EIS). However, this is WRONG, as even from the graph they have provided for annual wind direction, there is clear evidence that the second most prevailing wind direction comes from the South West, including the strongest winds of the year – which is directly towards the sensitive receivers. They then use this false modelling to show the fall out of the chemicals over the surrounding land, including the sensitive receivers. So not only is this data incredibly misleading, it is actually false in the prediction of environmental impact on the surrounding environment and nearby human residences – the sensitive receivers. According to the EPP (Environmental Protection Policy), ground level concentration of Hydrochloric Acid is considered toxic if $>270\mu\text{g}/\text{m}^3$ (p.12, Appendix W, EIS). On their map, greater than toxic concentrations of hydrochloric acid at ground level falls within 200m of the closest human residents. This is in the favourable winds of South-East. Given this is a modest and favourable data presentation for this contaminant, it is very possibly that actually, toxic levels of ground contamination of Hydrochloric Acid will extend over the nearest human residences, who, might I add, use rainwater for consumption and also grow their own food. Even so, with levels of $135\mu\text{g}/\text{m}^3$ predicted to fall on these residences, over time, will have a significant impact on health if consumed daily. This is NOT safe and as a medical doctor whom resides at the nearest human residence, I am extremely concerned for the health implications. Something this experimental should not be conducted so close to human residences!

Figure 10 Wind Rose Project Site 2009



Page 2, Appendix A of Appendix W, Air Quality Assessment

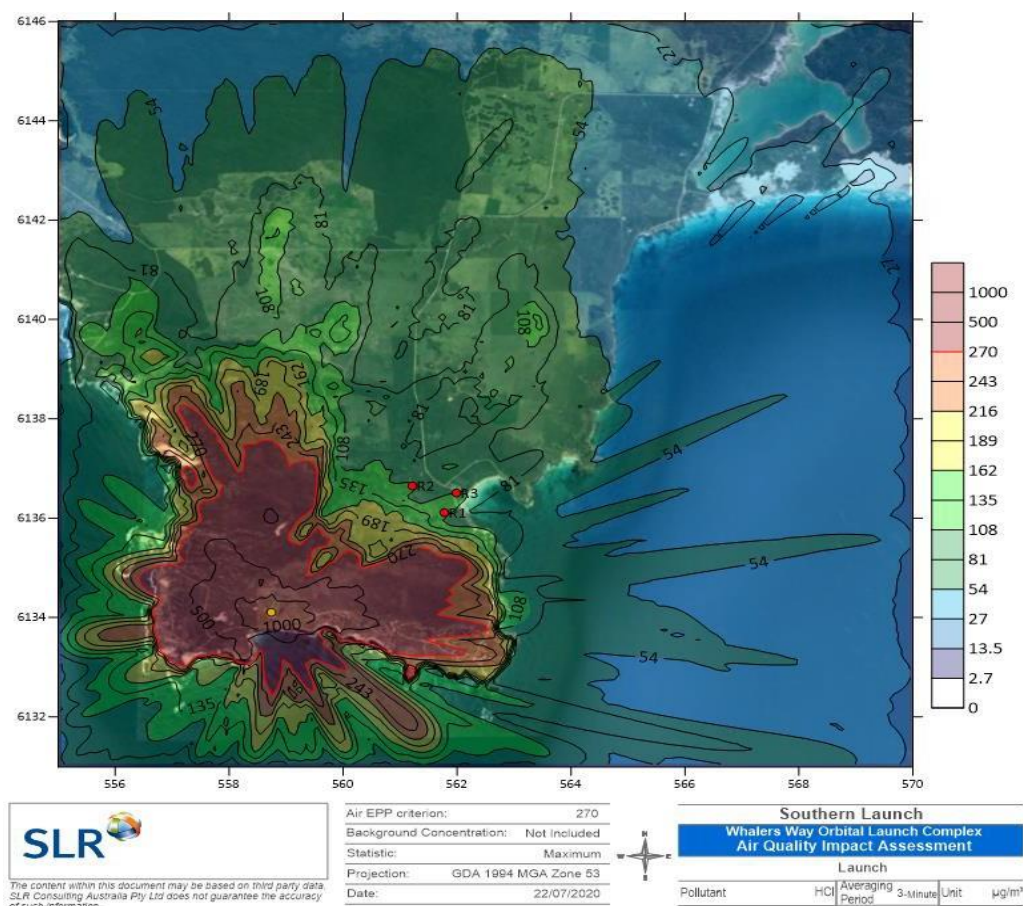


Figure 5, Results for Hydrochloric Acid for Launch Scenario, page 18, Appendix W

There has never been a rocket launching facility anywhere near this close to local residences in the world. If we are to go ahead with a rocket launching facility it needs to be a lot further away from sensitive receivers. This could have serious implications in the future. More extended from this, over time, will this contamination effect local farmers crops? Will it continue to build up in the natural environment and cause unknown effects to the local fauna and flora? We do not know.

This proposal is incredibly experimental and Southern Launch have even admitted that "although there is some published data relating to these emissions and other (lower level) contaminants present in rocket exhaust were identified in the literature, NO QUANTITATIVE information regarding the portioning of exhaust products between vapors and (aqueous) liquid phase was found in the literature, with exception of comments that most of the hydrochloric acid produced was expected to be absorbed into atomized water droplets suspended in the ground cloud. Most of the dissolved hydrochloric acid and an unknown proportion of the soot (carbon black) produced are expected to migrate with the ground cloud and fall/rain out at some distance from the launch site." (p.23, Appendix V, EIS). So even though they have done all of this misleading computational modelling, they really actually have no idea of what the chemical fall out will be.

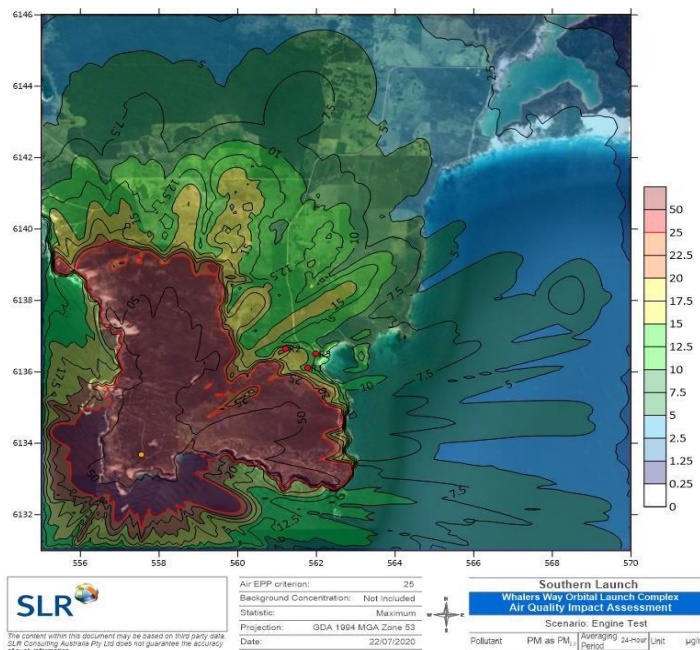
Importantly, what is prohibited in the Heritage Agreement is “deteriorating water quality, flow or quantity – this includes water in a dryland, groundwater, river, stream, lake, pond, marsh and wetland” (page 5, Heritage Agreements FAQs, 2017, Department of Environment, Water and Natural Resources). When this atomised cloud of chemical contaminants rains out on surrounding areas, it will eventually leech into the aquifers, which are incredibly shallow lying limestone aquifers, and then has the potential to contaminate Port Lincoln’s water supply.

This proposal is also a direct inconsistency with the details outlined in the Coastal Conservation Zone which states “development should be designed so that solid/fluid wastes and stormwater runoff is disposed of in a manner that will not cause pollution or other detrimental impacts on the marine and on-shore environment of coastal areas” (p. 25, Lower Eyre Peninsula Council Development Plan, 2018). Furthermore, it states that “hazardous materials should be stored and contained in a manner that minimises the risk to public health and safety and the potential for water, land or air contamination” – does that mean an open air deluge system / stormwater basin / ponds that will evaporate? (p.40, Lower Eyre Peninsula Council Development Plan, 2018)

If Southern Launch proceed and launch up to 46x a year, this will have a lasting and detrimental impact on land that is supposed to be protected under the Heritage Act and Coastal Conservation Zone – which accounts for only 1% of South Australian land and therefore, needs protection. We cannot let something that has this much of an environmental impact occur in an area such as this. There are plenty of other areas that have been suggested in the EIS that are not protected, do not have significant flora and fauna and are not as close to human residents or a towns limited water supply.

Air Quality

Of great concern to me, as a doctor, is particulate matter 2.5 – which is an environmental pollutant heavily associated with all cause mortality and environmental degradation. The American EPA is currently being sued for its refusal to update its air quality standards to reflect decades of research indicating PM2.5 is a critical environmental toxin. WHO guidelines indicate to reduce pollution related deaths particulate matter 2.5 needs to be below 25ug/m3 per 24 hour period (WHO Air quality guidelines, 2021). This is the lowest level at which all cause mortality increases. (EPA Victoria, 2021). At the launch site, PM2.5 after a launch will be 50ug/m3 – this is twice as high as the minimum level required to increase all cause mortality as well as twice as high above WHO guidelines. At the nearest sensitive receiver – it is 10-20ug/m3 and this is in the favourable, albeit not accurate, wind directions (as discussed above) (p.26, Appendix W, EIS). With regular launches, this will drastically change the air quality of an area that is currently at 0ug/m3 of PM2.5 and has the potential to inflict PM2.5 levels above toxic levels on both of the nearby human residences. Something this dangerous, with risk to human health needs to be conducted further away from human residences, especially to fall within safe parameters of WHO guidelines.



Results for PM2.5 for Engine Test Scenario, Figure 9, Page 26, Appendix W

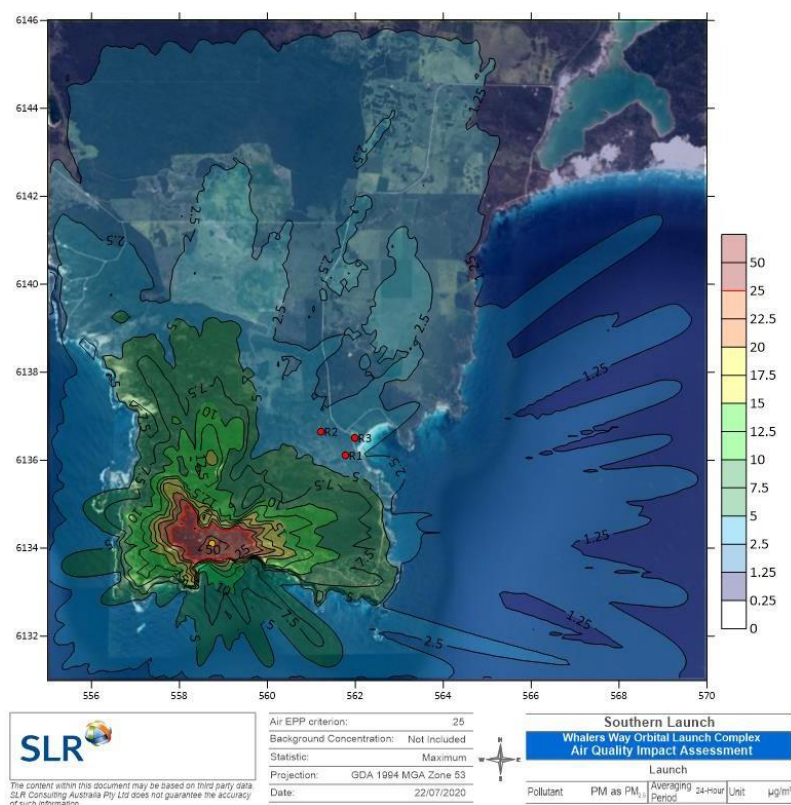


Figure 6, Results for PM2.5 for Launch Scenario, Page 19, Appendix W

Birdlife

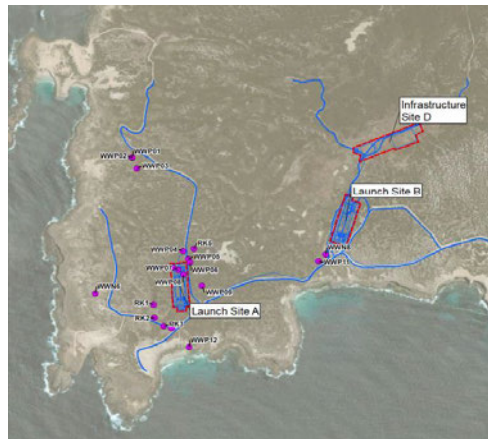
Whalers Way is home to over 28 bird species; with 6 threatened bird species identified on field studies and a further 10 threatened species known to occur in Whalers Way (page 50, EIS). Birds are at extreme risk of behaviour change and nest/habitat abandonment during breeding seasons, which occur for 4-6 months of the year. Whalers Way should remain under the Heritage Agreement to protect these endangered species. A rocket launch facility will have detrimental effects on these populations.

Birds suffer permanent hearing loss at 140dBA and temporary hearing loss and behavioural change at 93dBA (REFERENCE). Southern Launch state in Appendix O of their EIS that the rockets will cause a sound, lasting 1-2minutes, ranging from 135dBA at the launch site and 95dBA at the northern tip of Liguanea Island (a marine sanctuary home to the endangered Australian sea lion and many other animals including bird species). Contradicting, in appendix R, they state that “noise modelling is likely to range from 140 dB for the largest rockets (100 tonne), to 120dB for smaller rockets (50 tonne) (page 3, Appendix R, EIS). “Studies of terrestrial mammals have shown that noise levels of 120 dBA can damage mammals’ ears, and levels at 95 dBA can cause temporary loss of hearing acuity (Wyle, 2003)” (page 78, appendix P, EIS). They have confirmed “there may be temporary hearing loss or behavioural impacts on birds using sections of the mainland coastline near the launch sites.” (page 41, appendix S, EIS). This will extend over 8km from the launch site as “the maximum instantaneous sound pressure level (airborne) would be 90–95 dBA at the northern end of Liguanea Island. This is close to the threshold at which temporary hearing loss may occur for birds” on the island – let alone the birds on the mainland. (page 6, appendix S, EIS). Therefore, the potential to cause permanent hearing loss, as well as temporary hearing loss, in endangered birds in this area is significant.

Additionally, their mitigation measures include a “scare gun” (120 dB) that will be fired from dawn til launch times to "remove sensitive fauna from the immediate noise zone (page 5, Appendix R, EIS). So even their mitigation measure will cause temporary hearing loss to birds. This activity, let alone the activity of general construction and every day movements, in this sensitive area will cause change in behaviour. This will ultimately result in the abandonment of the area and eventual demise of the bird populations, some of which are endangered.

Southern Emu-Wren

The Southern Emu Wren is classified as ENDANGERED under the NPW Act and this specific sub-species on the Eyre Peninsula is on the brink of extinction. Southern Launch have provided a map showing where the known Southern Emu-Wren hotspots are, superimposed over their facility. It is obvious that both launch sites, especially Launch Site A, will either directly displace their habitat as well as pose a significant threat to normal behaviour. Considering the sound of a launch will reach 135dBA at the launch site, and that temporary hearing loss occurs at 95dBA, with permanent hearing loss occurring at 140dBA, launches this close to all of these hotspots will be devastating to the populations here, not only for the Southern Emu-Wren, but also to all of the other bird species. Furthermore, the noise from generators running regularly will also disrupt normal behaviour. To do this to an already endangered species will be devastating and will likely result in the subspecies extinction. If this occurs, then this will be a massive failure on the South Australian Government to protect the native fauna. Especially when there are other suitable sites that do not contain as many vulnerable species. It goes against the Coastal Conservation Zone specifications completely.



Clipped from Appendix P, Figure 6, Records for Southern Emu-Wren.

White-bellied Whipbird

The White-bellied Whipbird is another endangered bird that inhabits Whalers Way. It is a weak flier and is a species that requires its habitat to be protected. There are three clusters of these birds on the Eyre Peninsula, one being at D’Anville Bay in Whalers Way. We have no knowledge of the effect of noise and human activity on Whipbird populations and must endeavour to protect their habitat from destruction and noise pollution.

Eastern Osprey

Of notable importance, are the two Eastern Osprey nests located in Whalers Way. The Eastern Osprey is listed as endangered under the South Australian National Parks and Wildlife Act 1972 (p.6, Appendix R). Recent surveys undertaken in South Australia have revealed a decline in population for the Osprey, including in western South Australia (p.6, Appendix R). This population is considered "unstable" (p.6, Appendix R). Whalers Way has known Osprey territories that were still occupied during the most recent surveys (p.7, Appendix R). The Osprey is known to form long-term pair bonds and use the same nesting locations over long time periods (p.7, Appendix R).

Known threats to the Osprey include (p.7 and 16, Appendix R):

- Human Disturbance
- Habitat Degradation
- Vegetation clearance
- Fire
- Development

Southern Launch acknowledge that Osprey have "historically" been present in the immediate region (p.8, Appendix R). "Bird enthusiast Mike Damp claims the nests have not been active for about 5 years" (p.9, Appendix R) – please note that Mike Damp is the Southern Launch CEO's father. Southern Launch proposed sites range from 2 to 4 kilometres from the known nest sites at Whalers Way (p.9, Appendix R). The AECOM preliminary significant impact assessment considered that no significant residual impact to the Eastern Osprey was anticipated "based on anecdotal evidence that the nest was considered inactive" (p.15, Appendix R). However, one individual Osprey was recorded flying over the project site during vegetation assessment. Based on this, it was considered at least one pair with an established territory may be impacted by the project (p.15, Appendix R). Southern Launch believe by reducing human access to Whalers Way that it will encourage the Osprey to return. It is highly unlikely that having a rocket launch facility, at full functioning capacity, launching 36-42 times a year, would encourage the Osprey to return. The noise from the launches will reach Osprey nest site 1 at 98dB and nest site 2 at 105 dB, enough to cause temporary hearing loss and habitat disruption (page 17, Appendix R, EIS). This is all detailed in their Raptor report, which is prefaced with Southern Launch having been advised to obtain an assessment by a suitably qualified coastal raptor expert. In reply, they engaged Dr Zeta Bull, who confesses she is "not a qualified coastal raptor expert" (page 1, Appendix R, EIS). The fact that Southern Launch did not hire a qualified Raptor expert and used anecdotal evidence from the CEO's father in regards to the assessment of impact on an endangered species is laughable and unacceptable. It highlights their incompetence and disrespect for the native environment that clearly needs protecting from this company.

White-bellied Sea Eagle

The White-bellied Sea Eagle is listed as Endangered under the SA National Parks and Wildlife Act 1972 (p.17, Appendix R). Population of the White-bellied Sea Eagle is in decline in South Australia (p.18, Appendix R). Disturbance during critical phases of breeding are known to result in nest failures and displacement to sub-optimal habitats (p.18, Appendix R). Any disturbance during their nesting period, particularly overhead, may cause the Eagles to abandon their nest (p.19, Appendix R). The White-bellied Sea Eagles have regularly been reported in the Whalers Way region, and flying overhead, including a known nest site around 5 kilometres to the east of

the launch sites (p.19, Appendix R). On Kangaroo Island, it was recommended to avoid construction activities between May and December for 1 kilometre inland from a known WBSE nest, and develop an exclusion zone at other times with local wildlife specialists (p.21, Appendix R). To minimise impacts on nests and territories, construction should only occur from mid-January to May, outside of critical breeding times of mid-May to mid-September (p.21, Appendix R). However, Southern Launch have already commenced construction of a test pad during the month of September, significantly threatening this vulnerable species. Yet, despite all of this, along with the noise pollution of construction and launching, they have considered it "highly unlikely" that launch activities would cause disturbance to WBSE nests (p.21, Appendix R). How can that conclusion be made from the data presented?

Southern Launch state that "The location of the Project elements has been strategically selected to minimise disruption to the natural environment by proposing access routes that follow existing cleared vehicle tracks and siting project infrastructure in areas of lower native vegetation condition" (p. 558, EIS). However, you can see that this is not the case. As stated previously, "the Native Vegetation Council will only consider variations to the terms of a Heritage Agreement if the variations improve the land's conservation values or pose no threat to them" (page 3, Heritage Agreements FAQs, 2017, Department of Environment, Water and Natural Resources). Therefore, overturning the Heritage Agreement on this piece of land and allowing this activity would be the exact opposite of the intended nature of the agreement, as well as the ability to overturn it. It will result not only in direct habitat destruction, but also dangerous levels of noise pollution and the likely abandonment of habitat for local endangered birdlife. This is not compliant with the Coastal Conservation Zone as described above. We cannot allow this type of destruction, on a piece of land that has been protected, when there are many other suitable areas that do not pose such a risk. It is obvious from the data provided that a rocket launch facility and endangered bird species cannot co-exist.

Marine Life

Southern Launch's rocket launching facility will impact marine life in the surrounding waters of Whalers Way. They have advised in their that the potential marine impact zone (PMIZ) extends for 1000km from the launch site over the Southern Ocean within an arc between bearings 145 degrees and 265 degrees (p. 5, Appendix S, EIS). "The PMIZ overlaps the south-eastern corner of the Thorny Passage Marine Park, which includes a Habitat Protection Zone containing Liguanea Island" (p. 5, Appendix S, EIS). Over 70 different species of animals exist in the PMIZ (p. 33, Appendix S, EIS).

The Habitat Protection Zone that is within Southern Launch's PMIZ is under the Marine Parks Act 2007 and clearly states that they must "protect and conserve marine biological diversity and marine habitats", "influence activities and uses within and adjacent to the marine park to help mitigate threats to marine biodiversity and marine habitats" and "consider additional protections and/or temporary restrictions where necessary to protect a listed species of plant or animal, or threatened ecological community"(p.2, p.8, Thorny Passage Marine Park Management Plan 2012, Department of Environment, Water and Natural Resources)

Liguanea Island is 5-8kms south of the launch facility. Liguanea Island falls within the Habitat Protection Zone under the Marine Parks Act 2007 and is home to...

- A breeding colony of threatened Australian sea lions (the 5th largest breeding colony in the Spencer Gulf)
 - "The Australian sea lion (ASL) *Neophoca cinerea* is currently listed as Vulnerable under the South Australian National Parks and Wildlife Act 1972 (NPW Act 1972) and Endangered under the EPBC Act 1999"

- Estimated pup counts were 30 in 19901 (Gales et al. 1994), 43 in 2004 (Shaughnessy et al. 2005), 25 in 2015 (Goldsworthy et al. 2015) and 27 in 2019 (Goldsworthy 2020). (page 15, appendix S, Southern Launch EIS)
- A breeding colony of long-nosed fur seals
- A breeding colony of Short-tailed Shearwater (Mutton Bird)
- A breeding colony of Crested Tern (bird)

(p. 5, Appendix S, EIS)

Orbital rockets, after releasing the satellites, will fall back to earth at approx. 500km from the launch site. Suborbital rockets will fall back to earth within 3-8km from the launch site. Southern Launch has stated that “debris from failed launches with Polar and Sun-synchronous trajectories has the potential to impact Liguanea Island.” (p. 5, Appendix S, EIS).

“Within the Southern Ocean, including the waters of the Thorny Passage Marine Park surrounding Liguanea Island, there may be occasional debris strike impacts on individual animals on the sea surface but no impact at population level.” (p. 6, appendix S, Southern Launch EIS).

Southern Launch have identified that an “air burst, which results in the launch vehicle breaking up into a number of pieces and landing over a large area, would have an average frequency of Long-Nosed Fur Seals and Australian Sea Lion casualties of one every 3,375 and 194,470 launches, respectively, for small rockets” (p.5, appendix S, Southern Launch EIS). Although they state “an air burst over Liguanea Island would be a very rare event that could result in mortalities but there would be negligible impact at subpopulation level” this area is protected and these species are listed as endangered so there should be no risk posed to these populations at all (p.6, Appendix S, EIS).

More importantly, the impact of noise will likely cause more detrimental effect on these endangered and protected species. “The maximum instantaneous sound pressure level during a launch would be 125 dBA4 at the closest shoreline to either launch site, less than 95 and 100 dBA at Cape Wiles for launches from Site A and Site B, respectively, and about 95 dBA at the northern end of Liguanea Island (slightly higher for Site A launches)” (p. 41, Appendix S, EIS). “Noise from launches would temporarily alter the quiet setting of the natural environment for one to two minutes during launches. The maximum instantaneous sound pressure level (airborne) would be 90–95 dBA at the northern end of Liguanea Island. This is close to the threshold at which temporary hearing loss may occur for birds” on the island. (p.6, Appendix S, EIS). “Impacts on pinniped behaviour are the primary concern with regard to rocket launches. Marine mammal reactions to rocket launches are highly variable and may be attributable to the species, age, time of year, air temperature and potential habituation to noise. Seals may flush into the water when frightened, with pups being trampled or separated from their mothers in the process.” (p.6, Appendix S, EIS). Overtime, regular launches may change mating behaviours and could possibly result in habitat abandonment; it is impossible to know for certain. That risk should not be taken in an area such as this.

Southern right whales also frequent the area and are known to stay in Sleaford Bay and Fishery Bay, and regularly within 1-3km of the launch site. Southern right whales are currently listed as an endangered and migratory species under the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act 1999. Southern Launch have stated “Southern Right Whales very close to shore during the launch may be exposed to sound levels approaching the threshold for temporary hearing loss, but could avoid the noise by submerging for less than two minutes.” (p.6, Appendix S, EIS). Frequent launches will undoubtedly alter whale migration pathways, especially as the majority of these whales are calving mothers. This would also impact local tourism in the area, as whale watching is a known attraction.

Rocket debris will also impact the marine environment. “The breakup of rocket debris during re-entry or on impact with the sea surface would create particles small enough to be ingested

by most biota, but will likely sink fast enough to avoid air-breathing fauna.” (p. 41, Appendix S, EIS). We already have an issue with micro-plastics in fish from a similar cause. In failed launches, rocket fuel that is not burnt up, will spill into the ocean, which accounts for 90% of the rocket weight – i.e. 42 000 kg of fuel for a 58 tonne rocket (p.7, Appendix V, EIS).

“Sessile organisms may be impacted by larger items of debris or accumulations of fragments settling on the seafloor, but the descent of such debris is expected to be slow enough for mobile fauna to avoid (NIWA 2017). Fragile biota may be damaged or destroyed, and feeding or respiration may be inhibited.” (p.41, Appendix S, EIS). “All component materials are inert and harmless to the marine environment except lithium (within batteries) and copper (within electrical wiring)” (p.40, Appendix S, EIS). “Copper fragments would sink to the seafloor where their slow dissolution may have long-term local effects on sediment infauna” (p. 40, Appendix S, EIS).

I would argue that this proposal is not inline with the Habitat Protection Zone guidelines, as this is NOT ensuring “effective conservation of protected species and ecological communities”. As stated before, there are other suitable areas for launching outlined in the EIS that do not launch over Habitat Protection Zones, nor pose risk to populations of endangered marine life, including the Australian Sea Lion and the Southern Right Whale.

Tourism

Southern Launch stated in their EIS that this launch facility will “support the economic objectives for the region by providing no negative impact on existing industry and primary production in the locality and region” (p. 547, EIS). However, Whalers Way is a huge tourist attraction which would be lost if Southern Launch were to build their facility here. Whalers Way is in the top 10 of must see attractions on Tripadvisor and is a well-loved area by locals. Whalers Way saw record numbers of tourists passing through its gates last summer. Port Lincoln is renowned for eco-tourism and the natural wilderness it provides visitors. It would be such a shame to lose such a great feature of the coastline to an industrial complex. A rocket launch facility would completely change the face of Whalers Way and would not allow for the freedom of exploration that is available now. Being able to camp, hike, fish, surf, swim all through the area will end and you will only be allowed to visit on guided tours by Southern Launch. I believe this will hinder tourism in the area, especially for such a beautiful coastline. Surely it would make sense to have both – keep Whalers Way as a privately owned tourist park and then have a rocket launching facility elsewhere in the State that would also attract tourism. The tourism industry in South Australia is booming and it only takes a quick Google search to see how famous and popular Whalers Way is to show that it should remain as a tourist park. Additionally, we need to promote tourism that encourages a healthy lifestyle, such as hiking/exploring, bird watching and camping, rather than taking that away so that people can sit and watch a rocket take off.

Southern Launch have stated that “by the time the facility is complete and in full operation, the estimated average employment impact of Southern Launch’s operation assessed over the full ten-year analysis period would be to increase employment by 76.2 full time equivalent (‘FTE’) positions. It is also predicted the facility would result in an impact on Gross State Product (‘GSP’) of \$53.4 million in 2018/19 values across the decade, assuming consumption impacts from workers at Southern Launch and its supply chain are included in the analysis.” (page 27, EIS). Considering that tourism in South Australia is worth \$4.4 billion dollars, and will continue to grow, we aren’t in desperate need of tourist hot spots, we should be protecting the ones we already have and then trying to create additional ones. If the space industry does grow as is predicted, then we should really be investing in an area that allows for expansion. How about a town that is dedicated to space technology? This can be in an area that needs economic/tourist boosts and is also less environmentally fragile. There are multiple sites suggested, “further to the west, areas extending across the Nullarbor Plain from a location around 150 kilometres west of Ceduna to a location around 150 kilometres east of

Albany were considered to be too remote on the basis that they were a considerable distance from large population centres and had very limited infrastructure and airport access” (p.147, EIS). These areas would benefit from increased tourism and do actually have airport access.

Bushfire risk

Bushfire risk in this area is a significant issue that needs to be addressed. It is unacceptable that the bushfire risk management plan has been redacted from the EIS and not available for public consultation.

As part of the Coastal Conservation Zone, the area is also part of a Bushfire Protection Area that must comply with the ‘Ministers Code: Undertaking development in Bushfire Protection Areas’. It states that “buildings and structures should be located away from areas that pose unacceptable bushfire risk as a result of one or more of the following

- a) vegetation cover comprising trees and/or shrubs
- b) poor access
- c) rugged terrain
- d) inability to provide an adequate building protection zone
- e) inability to provide an adequate supply of water for fire fighting purposes

(p.38, Lower Eyre Peninsula Council Development Plan, 2018)

It also states that “Where land division does occur it should be designed to: (d) ensure provision of a fire hazard separation zone isolating residential allotments from areas that pose an unacceptable bushfire risk by containing the allotments within a perimeter road or through other means that achieve an adequate separation.” (p. 39, Lower Eyre Peninsula Council Development Plan, 2018).

There is only one road into Whalers Way – ‘poor access’. The terrain is rugged. And having a look at CFS Maps there is no adequate supply of water in the area. Furthermore, two of the residential properties that share a boundary with Whalers Way do not have a ‘fire hazard separation zone’ between them.

To have a facility in an area that is classified as “HIGH- BUSHFIRE RISK” which has unburnt native scrub in an isolated and hard to access area with one road into the area is unsafe and nonsensical (Bushfire Protection Area Map LEP/20, Lower Eyre Peninsula Council Development Plan, 2018). Additionally, with two residential facilities bordering onto that property and the fact that Southern Launch’s fire management plan has not been made available for public access is scary and unacceptable. The home owners have not been contacted by Southern Launch to discuss fire safety management plans, or to even discuss what the residences should do or how they would be notified in the case of a fire. The area is under strict fire ban from November through to April – why does this not apply to the rocket launch facility? RocketLab, another private rocket launch facility in NZ regularly has spot fires in the surrounding grasslands with their launches – why would this not be the case in the dense surrounding mallee scrub. Furthermore, a rocket launching facility in Alaska, Alaska Aerospace Corporation, had to terminate a launch after the first phase, which resulted in the crash of a rocket back down to Earth and a resultant fire (2020, Alaska Public Media).

Southern Launch state “the main consequential risk in an ignition point failure is the resulting potential for fire. Fire risks will be mitigated through the installation of Southern Launch firefighting equipment at every launch event, along with the water deluge system. Initial firefighting capabilities during rocket launches will be augmented by local Country Fire

Service (CFS) crews” (page 49, EIS). Should such a burden and responsibility be placed on a volunteer fire fighting service?

For an activity that is such a high fire risk, in an area that is already deemed as a high fire risk, which has a strict fire ban for 6 months of the year, that is under Heritage Agreement for native vegetation protection, has endangered species on the brink of extinction, has human residences 3km from the facility with dense scrub connecting the two, one access road and a bushfire management plan that has not been allowed for public consultation, we cannot risk the chance of a fire which would take innocent lives/properties/animals/wilderness. That would be truly devastating.

Indigenous

I would like to draw your attention to the Naou and Barnkala people, the local indigenous communities in Port Lincoln, whom are opposed to this site for the rocket launch facility. The Indigenous Assessment performed by Southern Launch is questionable in authenticity. Barnkala Elder, Lizzy Richards opposes the launch and has stated that she has “been crying for the last couple of days over this,” (Leckie, Hamilton, 2021). Furthermore, Southern Launch had an Indigenous member from Koonibba (over 400km from Whalers Way) bless the launch pad, which is not only culturally insensitive, but also incredibly deceiving to the community of Port Lincoln.

Conclusion

In conclusion, for all of the reasons listed above, this is clearly the wrong site for such a proposal. We need to advocate for public safety and the environment that has been protected by those before us. There are more suitable locations that pose less of a threat in all regards. I plead that you make the right decision and encourage Southern Launch to find a more suitable location that doesn’t take away from the pristine and wild Whalers Way, and still provides Australia with space technology.

References

Alaska Public Media, 2020, Kodiak rocket launch ends in fiery explosion,
<https://www.alaskapublic.org/2020/09/12/kodiak-rocket-launch-ends-in-fiery-explosion/>,
accessed 10 September 2021

Australian Bureau of Statistics, Agricultural State Profile, South Australia,
<https://www.abs.gov.au/ausstats/abs%40.nsf/Latestproducts/FF8D03E1A74D8D6ACA2574D4001DA912%3Fopendocument>, accessed September 12 2021

Department for Environment and Water, Heritage Agreements, 2020,
<https://www.environment.sa.gov.au/topics/native-vegetation/protecting-enhancing/heritage-agreements>, accessed 8 September

Department of Environment, Water and Natural Resources, Thorny Passage Marine Park Management Plan, 2012,
https://www.environment.sa.gov.au/files/sharedassets/marine_parks/final_management_plans/mp-gen-5thornypassage-managementplan.pdf, accessed 8 September 2021

Development Plan, Lower Eyre Peninsula Council, 2018, https://www.lowereyrepensula.sa.gov.au/_data/assets/pdf_file/0023/404249/Lower_Eyre_Peninsula_Council_Development_Plan.pdf, accessed September 9 2021

Environmental Protection Agency Victoria, Aug 9 2021, PM2.5 Particles in the air, <https://www.epa.vic.gov.au/for-community/environmental-information/air-quality/pm25-particles-in-the-air>, accessed September 11 2021

Leckie, Hamilton, 2021, Protesters and security guards clash ahead of failed rocket launch at Whalers Way, ABC, accessed 11/9/21, <https://www.abc.net.au/news/2021-09-10/police-called-over-protesters-at-whalers-way-rocket-launch/100446940>

WHO Air Quality Guidelines, 2021, https://www.c40knowledgehub.org/s/article/WHO-Air-Quality-Guidelines?language=en_US#:~:text=By%20reducing%20air%20pollution%20levels,than%2003%20times%20a%20year., accessed September 11 2021

Subject: FW: Private Submission Regarding Whalers Way Orbital Launch Complex EIS
Attachments: Comments on Whaler's Way, Southern Launch Project 130921.docx

Sent: Wednesday, 15 September 2021 10:58 PM

To: DIT:SPC Reps <scapreps@sa.gov.au>

Subject: Private Submission Regarding Whalers Way Orbital Launch Complex EIS

Please find attached, my submission regarding Whaler's Way Orbital Launch EIS, for consideration in assessment of the project. I believe the project can deliver a nett environmental benefit and should be approved, provided there are no visual impediments to views from the many parts of the district where beyond the site boundary. This point is immensely important and suggestions as to how it can be achieved cost-effectively are included in this submission. Within the site boundary, impediment to the natural views should be minimal and tasteful, achievable by using an earthy pallet and natural materials and by minimising erosion and permanent structures. Instead of an up front payment, the proponent should be required to maintain high conservation standards which they already wish to do. Most importantly, Government owns the coastal reserve surrounding the site and must responsibly lead in the planning for and management of the land and public access to it.

Kind regards

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	Geoff Rayson
Contact number:	0427 830 180
Email:	GRRayson@outlook.com
Postal Address:	Po Box 2790, Port Lincoln
Affected property (if different from postal address)	N/A. Port Lincoln Region.
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	Tow operator, conservationist, consultant, problemsolver

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

- Serious omission in EIS regarding visual impact and suggestions on how they may be remedied
- suggestions on how to minimise local impacts
- Recommendation regarding environmental net benefit instead of financial trade-off
- Plea for proper management of coastal reserves in general and specifically at Whaler's Way. A State Government Policy problem.
*Please See Attachment.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Comments by Geoff Rayson Regarding Whaler's Way Orbital Launch Project EIS. 15 Sept. 2021

One Rule for Everyone. I am dismayed at the double standards being applied to the Southern Launch Project by some community members and Government people in their expectations of Southern Launch and behaviour towards the project. The vandalism and sabotage by local residents should be strongly quashed by Government. A number of people have been publicly lying about alleged damage the project will cause and personally slandering the proponents. Meanwhile, graffiti on public property and cutting of fibre optic cables has not been punished.

I wish to draw attention to the idea of nett environmental benefit from this project. Yes, Southern Launch should have to follow the same rules as everyone, but there is room for discretion in the law regarding environmental trade off and funding to Government. This project will be incredibly valuable to the State. The Government requiring a large payment (to Government) up front, will reduce this start-up company's ability to deliver the environmental program it wishes to and which will develop the 'measuring stick' by which the project's environmental performance can be measured.

Provided that there is a requirement to achieve high standards of environmental and people management on the Whaler's Way and adjoining coastal reserve lands, including significant cat and fox control, I see no sense in requiring a cash payment up-front.

Environmental Credentials. The main player in the Southern Launch project is Dr Mike Damp, who with his wife, has been a life-long conservationist with a string of big environmental achievements and more underway. Few individuals have achieved so much in conservation. Dr Mike has ensured his Company, Southern Launch, has rock solid environmental ethics and has spent years researching the pros and cons of this project. His Company has probably done more scientific research on the local environment than anyone, especially on the cryptic species such as the Southern Emu Wren and the Western Whipbird. He has developed techniques to be able to monitor any change in the environment caused by the Southern Launch project. He knows the faunal assemblage and its relationships, almost certainly better than anybody. His credentials as a conservationist are unquestionable. He is a bona fide conservationist already demonstrating his love of and practical management skills in, conserving this land at Whaler's Way. He is committed to its ongoing care, all at a much higher standard than any other landholder on Eyre Peninsula. He also is committed to fox and cat control which probably comprise the largest pest animal problem on Eyre Peninsula. Southern Launch has voluntarily committed to this environmental benefit whilst almost every other coastal reserve on Eyre Peninsula is being decimated. I recommend that rather than requiring an up-front payment, the approval should require a long-term commitment to high grade environmental management.

The Whaler's Way site was firestick farmed for a century and has had foxes and cats for 150 years. By good luck, the landowner chose to stop grazing many years ago and instead, started charging for tourist access. Tourism earning is still believed to be less than \$80,000 per year, which is a tiny return on perhaps \$2,000,000 worth of land. The vegetation has largely recovered, but the severe road erosion, desertification of clifftop viewing sites and the loss of six human lives being caused by uncontrolled public access and naïve private management, should no longer be tolerated. They are in part due to the landholder not being able to earn sufficient income to be able to afford to do major road and people management works and partly because they aren't trained in modern, people management techniques.

This development is within the scope of what the land has been used for since farming finished. That being to earn an income from the land without farming, whilst enhancing environmental benefits of the land.

Once Southern Launch is operating, the worldwide demand for space launch tourism and the income received from providing it, could furnish the resources to properly cater for high class tourism and associated restorative conservation. Government needs to understand this point and ensure the proper management of the coastal reserve, in cooperation with the adjoining landholder, Theakstone Family Trust, ensuring that the land is properly managed in perpetuity, or leased to someone with the resources and knowhow to properly manage it. Government needs to lead in this planning and in facilitating the relationship which will ensure the State achieves a high standard of management of the Whaler's Way Coastal Reserve. Management that ensures visitors receive education regarding the environment and the space launch industry, whilst enjoying and protecting the magnificent scenery of Whaler's Way and the life of visitors. **I restate here; the State needs to lead this process** of protecting the coastal environment and the safety of visitors, and in enhancing the experience and education of visitors to Whaler's Way. Without Government leadership in the proper planning for and management of the coastal reserve of Whaler's Way, any extra tourism will only worsen the already poor quality public access facilities. I complement the Theakstone family in that their management is better than Government and Councils provide as there is no grazing on their land. The problem at Whaler's Way is not as bad as most coastal areas of Eyre Peninsula, where Government and Councils are providing poorly planned and maintained public access facilities and Government leases out the coastal reserves for grazing.

It never was appropriate to allow unsupervised access to Eyre Peninsula's coastal reserves and the serious degradation which has occurred to most of them now leaves no doubt of that fact. Hundreds of kilometres of haphazard or poorly designed tracks and roads, allowing burning of native coastal wood which is essential to protect the ground and put nutrients back into the delicate coastal soils, trampling of vegetation, rubbish dumping, off-road driving damage and weeds, are all signs of poor Government management.

Government needs to be proactive in ensuring that proper tourism management and supervision is provided at Whaler's Way. The State doesn't need to provide the supervision but it does need to plan and facilitate this management standard. Properly accredited tourist operators are willing to provide the supervision and education services.

Whilst I criticise the past deficiencies in management of Whaler's Way, I have much more concern with the management of native vegetation throughout Eyre Peninsula. The rigour applied to Southern Launch in their EIS standards whilst the State is so disgustingly poorly managing all other coastal reserves, is totally unacceptable. Some examples include:-

- The State Government leases almost every coastal reserve on Eyre Peninsula to farmers for grazing. These reserves are arguably the most valuable and most delicate and vulnerable habitats on Eyre Peninsula. Despite my contacting the Government people involved in administration of these reserves, there is no Government interest to protect them. Almost every one of these reserves would be home to Western Whipbird, Southern Emu Wren, Osprey, White Bellied Sea Eagle, Sea Lion, Fur Seal and many species of shore, wader and numerous other types of birds and animals. They also form the route of less understood

migrations of Swifts, Black Faced Cuckoo Shrikes and other species. Whaler's Way is only valued above many of these reserves because the Theakstone family chose not to graze it. Now prohibitive conditions are being placed on them and their lessee, to protect it, meanwhile there are no conditions applied to almost every other coastal reserve on Eyre Peninsula and no effort being made to rehabilitate them let alone stop the damage.

- In 1986 I warned the local Department of Agriculture, Weeds Officer, of a half hectare of Polygala that was naturalising from roadside dumping of garden waste and asked that he eradicate it before it became a problem weed. It is now the worst environmental weed on Eyre Peninsula, covering an area of approximately 700 square kilometres of mostly coastal vegetation and is now invading pasture lands
- I have spoken to successive responsible public officers and been a member of a public weeds committee. I have also written a Certificate IV Course in public land management and got TAFE to teach it. This course teaches how to manage large weed infestations but despite this effort, the method is not being used and there is a serious and fast escalating problem of weeds of environmental concern on Eyre Peninsula. It is evident by the spread of Dolichos, Gazania, Boxtorn, Rhamnus, Cotoneaster, Ash, numerous cacti species, olives, numerous pine species, non-indigenous Australian native species and many more, now affecting native vegetation and coastal reserves of Eyre Peninsula.
- Being concerned about the nursery industry bringing weedy plants and Phytophthora and other diseases into the State and selling them widely, I set up a Government taskforce to implement biosecurity protocols. When I left the State for some years, the responsible people dropped the ball, resulting in these local weed problems now accepted as inevitable by Government.
- Almost every coastal Council allows off road driving, has built poorly supervised camping areas and has built very poorly designed roads which result in serious erosion and destruction of the coastal landscape. Most allow driving on beaches where shore birds nest.
- No Eyre Peninsula Council or the Landscape Board has a meaningful pest plant or animal control program in place and effectively functioning. If they don't believe this is true, please invite me to prove it. Even better, I invite Government Ministers, Boards, senior policy makers and local managers, to come for a tour with me so I can show them the problems and the solutions.
- There is very little on-farm native vegetation across Eyre Peninsula that is not being grazed by livestock. In these areas there is almost zero new recruitment and their species diversity has almost reached monoculture of the dominant, mostly mallee, species. Even these remnant trees are quickly disappearing due to senescence. There is no Government move to protect it.

Protection of Key Species. Opponents of the Southern Launch project state that the project will destroy osprey, seal and sea lion habitat however, osprey nest within 10 metres of workboats in the oyster lease in the centre of Coffin Bay and on a barge adjacent a slipway with loud sand blasters, and heavy machinery within the busiest port on Eyre Peninsula, at Port Lincoln. Seals and sealions are a pest to the aquaculture industry and are certainly not afraid of the boats and machinery. Furthermore, this occurs largely under a low flight path near the airport and they aren't affected by the aeroplanes. There is no evidence that they were affected by the supersonic Concorde aircraft which could be heard and felt 15 metres underground in Kelly Hill Caves when they commercially flew 50 kilometres south

of Kangaroo Island. Its sonic boom didn't affect the sealions, fur seals or bird species. Why would these species be affected by Southern Launch? Noise of the launches will be intense and every effort should be applied to using electronic deterrents to encourage wildlife to move away before launches. A revegetation program to provide similar habitat for wildlife to inhabit away from the launch zone, would be appropriate. It doesn't need to be immediate or costly, just there and facilitated to revegetate. (I am happy to provide some guidance.)

Exemplar for Environmental Management Standards. I believe that Southern launch should be welcomed to Whaler's Way and their plans to increase the rigour of environmental management on site be embraced. The nett environmental benefit of the project can far outweigh the small detriment caused, if Southern Launch is encouraged to proceed with plans to enhance the environment of their lease. Southern Launch should be welcomed as an exemplar of how the natural environment can be managed and Government should lead by example with proper management of its coastal reserves. The State and Federal Governments will be major beneficiaries of this Southern Launch Project and must commit to quid pro quo contribution to its environmental and social success. The Gap development in Western Australia gives an idea of the public facilities that can be provided and the numbers of people who will travel to the area if decent facilities are provided. This would give a great boost to the local tourism industry which is suffering greatly from the effects of the Covid 19 epidemic.

Land Clearance and Bushfire Prevention. It is proposed to clear a large area of land for this project. It is therefore essential that the nett environmental benefit rule is applied and environmental management of the site is a suitable trade-off.

If further fire prevention clearance is called for as a result of this public consultation, full vegetation clearance must not be required. A far more environmentally appropriate and more efficient method of vegetation modification is recommended.

I am a professional Bushfire Prevention Officer with extensive experience and I developed the State Standard for Design, Construction and Maintenance of Fuelbreaks and Access Tracks in the late 1980s which was approved by the relevant Ministers of land holding and management Departments. This method involves slashing or preferably mulching (turning to mulch) the native vegetation above ground level such that it lies as chips on the ground surface, where it controls water and wind erosion, but won't propagate fire. Flail style mulchers bruise the stems whilst roots and soil biofilms remain in place, binding the surface and allowing access to emergency vehicles.

Following mulching, natural vegetation springs up from the roots and seeds and remains succulent for some years. The moisture content is high enough that it doesn't sustain or propagate fire and its existence prevents firebrands scudding across the ground surface. Mulching is repeated once enough 'thatch' (, dry and burnable material) has accumulated such that it could carry a fire. Depending on the local conditions, this occurs after about four or five years.

More frequent or lower mulching, or indeed, total native vegetation clearance, would encourage the establishment of annual weeds. They are much easier to ignite, fire establishment/escalation is much faster and fire travel is much faster, making it harder to keep to a small size at which an onsite fire truck can extinguish it.

Mulching modifies the vegetation but retains most of its biodiversity. This practice also stimulates wildflower blooms, providing nectar, pollen, fruits, seeds and preferred browsing by most herbivorous species. The effect is similar to the effect of a prescribed burn, which leaves bushfire prevention and environmental diversity benefits.

There are also other alternatives for bushfire management that I am happy to discuss with Government, planners and project managers

Any areas to be cleared should be first mulched then if soil removal is necessary, the soil lifted intact, to sites requiring rehabilitation and revegetation. This is particularly applicable to roadside drainage lines.

Visual Impact

It is strongly requested that the landscape **from off the property** and from regional tourist viewing sites, not be impacted by structures onsite. Please ensure that all structures are built low and inconspicuous and that retractable, multiple use towers of lowest possible visibility be used to minimise landscape impacts whilst in use, and kept retracted at other times. (We already have white windfarm towers nearby where matte black ones would have been much less intrusive in the landscape.) Concept sketches of the proposed visitor facility show a monstrous landmark, many metres higher than necessary. It must be made to fit into the landscape rather than imposing itself on the landscape. It must use natural materials and colours and not have strong lines. All impacts to the nearby skyline should be avoided or minimised.

The EIS Summary discussion does not discuss the vista towards the site from beyond the boundary. There is already an unacceptable scar, visible from over 40 kilometres away, where the Whaler's Way Road enters the property from Fishery Bay. There should be no other new development visible from the surrounding areas. As Whaler's Way is known worldwide and revered by locals, all structures should also be designed to minimise visibility from tourist sites (other than those required for space launch tourism).

Space Industry Benefits. There are other benefits to be gained from the Southern Launch project. Last year I had the pleasure of studying with people developing the technology of designing and building CubeSats which will be launched from Whaler's Way. The environmental monitoring, removal of space junk, weather forecasting, communications, internet of things and many more benefits from having these satellites will be of great benefit to humankind. The jobs and financial reward to South Australia and indeed, the Australian economy, make this an important new industry. Any required benefit to the environment will also contribute to this project making a substantial nett environmental and financial benefit to the State.

With the windfall the Southern Launch project provides to Government, there is room for Indigenous cultural tourism and training of local Indigenous people to participate in tourism and land management. Employment in these fields would be economically positive as the pride it develops in participants would assist in reducing local domestic violence and drug problems and relieve the strain it puts on our prison system. Such a valuable new industry could spawn many benefits to society as well as to the environment. Perhaps it might even convince the naysayers and vandals that the project is in fact beneficial.

Summary

The Southern Launch project should be approved and the scrutiny applied to this project should also be applied to the management of all natural environments. Government is right to demand high standards of environmental management by Southern Launch, but it must also lead by example with its own management of the environment. It is not acceptable that Government should require Southern Launch to apply higher standards at Whaler's Way than it is willing to accept of its own management of pest plants and animals, fire, erosion, wildlife, remnant vegetation, public access and tourism to coastal reserves. It is grossly unacceptable that government continue to lease coastal reserves for grazing.

Government must lead by example in management of the coastal reserve at Whaler's Way to stem the environmental decline and loss of human life.

Bushfire prevention and broad scale, site clearance, wherever essential, should be established by vegetation modification, not vegetation clearance, ensuring minimal habitat destruction and visual impact and maximum bushfire protection.

Government should embrace the energy, knowledge and ethics of the Southern Launch Board, and the foresight of the landholders who set aside Whaler's Way as a sanctuary. Government should include them in the planning, infrastructure upgrade and management of space, wildlife and scenic tourism at Whaler's Way.

SPECIFIC COMMENTS

Following are some comments relevant to specific sections of the EIS.

5.2.3. **Building heights** appear to be excessive. It is recommended that buildings be made to fit into the landscape, not impose themselves on the landscape. Buildings mostly don't need to be as high as stated and they can be located lower in the landscape. Towers can all be made retractable and tank stands can be replaced by portable pumps.

5.2.6. **Water Deluge System** It is possible to install a pumped deluge system rather than tank stands that will be visible from a long distance? Dual portable pumps (dual for redundancy/backup) are probably a slightly more costly option, of comparable reliability and much more visually amenable.

5.2.12. **Flare Stack and Cold Box.** Why is it not possible to recycle spilled and surplus fuels, rather than burning them off, on site? If burning is unavoidable, build retractable stacks.

5.6.2.2. **Clearing and Grubbing.** A blade plough would be better for stump removal in sandy areas however if a rubble raiser/mulcher is used onsite, depending on the type, it too should be able to be set below surface level to remove stumps.

Stockpile areas would be better protected by rolling in mulch and carefully managing runoff. All revegetation and gardens onsite, should be in situ native vegetation or on disturbed sites, locally endemic species, collected onsite.

Stockpiling should be kept to a minimum as this will sterilise the soil after a short period. It is preferable to strip it intact, in correct soil layer orientation, using a specially built stripping plate on a

frontend loader instead of a bucket, and deposit it intact to revegetate nearby, disturbed sites. This can be cheaper than traditional revegetation.

Access Tracks and Haul Roads. Lessons should be learned from current road erosion, to ensure the minimum possible interception of local drainage, which is the cause of most erosion. It is better to train drivers and plant operators to stay off vegetation than to make berms or swales which will cause erosion. Drainage of roads and hard stand sites is essential to minimise costs and erosion damage. Anywhere that water cannot be prevented from following roads by using runoffs, it should be piped to suitable outfall areas, (using waste HDPE pipes from the fishing industry, a cheap and effective alternative).

Materials. There are heavy 'rubble raising' machines available on Eyre Peninsula that can easily win limestone from onsite or outcrops in local farmers' paddocks as is done by local Councils, leading to a win/win benefit. As the site has strongly alkaline soils, limestone road base will not change the pH within local environments and it provides an excellent road surface.

5.2.14 and 5.2.15. Towers. Please make towers suitable for multiple uses to minimise landscape impact. Please also make materials the least size and visibility possible. All must be telescopic and retracted when not in active use. This will make handling of rockets much safer and easier.

5.2.18. Fuel Burn-off. Waste fuel should be recycled rather than burnt off or evaporated and if burn-off towers are unavoidable, then they should be retracted when not in use.

5.3.1. Dams. It is envisaged that the dams will be located in depressions. If not, their banks will be visible from a long distance, and compromise the landscape. Please make the dam locations and as many other structures as possible, invisible from locations beyond the property and of minimal impact on the property.

5.3.3 Pump Station. An above-ground pipeline will greatly reduce the ability to maintain proper erosion and drainage control. It will also impede fire fighting capabilities and animal movement, be visible from long distances and will be seriously damaged by fire unless it has a wide firebreak. It is strongly preferred that pipes be buried under roads. This is likely to be a much cheaper option than an above ground pipe and having to make it bushfire proof.

Maintenance Shed. Please ensure that this large, high shed is not visible from off the property and visitor areas. This steep site will require a 2 vertical :1 horizontal batter which is not appropriate. This also does not allow for overland or cut slope drainage. It will also require a large amount of fill to be removed and relocated. It is better to find a more suitable site.

5.3.5 Graders and dozers should not normally be used for large volumes of soil removal in road construction on this site as minimal soil should be moved and it should be reused in its proper horizontal orientation and therefore be removed intact to rehabilitation (erosion repair and revegetation) sites. Rubble raisers can relocate deeper spoil from roads, over short distances, cheaper than graders, trucks and dozers.

5.6.3 De-Watering. The site of all water and other in-ground storages and any potential de-watering sites, should be pre-drilled to ensure that they are not close above the clay layer. This layer indicates the bottom of the freshwater aquifer which flows along the bottom of the lime sand/stone which blew

over and buried the clay soiled landscape. If it is necessary to intercept this aquifer, extra drilling will be required to ensure that the site it is not in a buried creek line, as when de-watering ceases, structures will float out of the ground due to make-up of the aquifer.

5.6.3 Environment. Another section is required here to ensure that visual amenity beyond the site is not compromised and that the view from tourist areas on the site is left amenable.

Page 416 Impact of Launch Failures. Bushfires. Southern Launch should not rely on Country Fire Service Volunteers for fire prevention. It is recommended that Southern Launch supply their own fire trucks and trained crews. Adequate water supply and a large capacity, four wheel drive (probably a retired CFS truck), and a light, rapid response unit (also probably a retired CFS vehicle), along with six crew would be sufficient for all bushfire season launches. No launch should be conducted on high fire danger days if there is any reasonable chance of a launch starting a bushfire. The deluge system must be thoroughly tested before relying on its fire prevention efficacy.

9.2 Noise The noise that wildlife will be required to endure should be very carefully assessed and compared with findings from other launch sites around the world, to ensure that wildlife hearing and behaviour will be safe. Special assessment should be required to ensure no permanent damage is or is likely to be caused. Provision of a suitable trade-off area should be required if wildlife health cannot be protected around launch sites

15.4.3.2 Geometric Requirements. The natural earth under most roads in Whaler's Way is poorly consolidated, bioclastic aeolian calcarenite (shelly drift sand). It is highly erodible with even low speed water runoff. In some areas it has been cut and eroded quite deep, which makes it difficult to drain runoff into bushland where the vegetation will control its runoff speed and resultant erosion will be minor. As most roads intercept overland flow and as roads are incised, they become the preferred path to convey intercepted water downslope. As filling the deeply cut profile of most roads is impractical, it is recommended that where it is not practical or environmentally responsible to dig the frequent runoffs required to prevent erosion, a drainage pipe be buried below the road. The tuna and kingfish industries have large amounts of large diameter HDPE pipe in 60 metre lengths, used as fish farm rings, available for recycling. It is cheap and easy to install in a road and with the aid of reinforced backfill or a limestone rubble topping on the roads, will achieve a permanent solution to the erosion and drainage problem. Some of this water could augment storage dams or natural aquifers.

16. NOTE WELL Visual and Amenity Impacts. This section of the EIS is seriously deficient as there is minuscule discussion of the visual impact from surrounding vantage points, beyond the Whaler's Way property boundary. What is there is dismissive of the impact, despite that multiple objects will visibly intrude in these very high value landscapes. Section 8, Conclusion of Appendix Z, is flawed in dismissing the importance of infrastructure visible from a distance beyond the Whaler's Way property. Amongst the largest disruptions to the wonderful vista from Wanna Cliffs or Winer's Hill for example, is the entrance road inside Whaler's Way. Towers, tanks and buildings in this vicinity will exacerbate this visual impingement.

The landscape is an important part of the environment and we already have a wind farm interrupting the best local view. The value of a view can be immense.

The experience of the view towards Whaler's Way from places like the Stamford Hill, Winters Hill and Wanna Cliffs Lookouts and many places between, is **truly memorable and restorative**. It is **the** regional view that sets the mood for the experience of the places within the vista. Of itself, it is much photographed but it is small in the lens. It however is **the lure that makes people want to visit** the locality and makes all other places within the vista, the most photographed and most talked about of visitor's annual holiday or local's weekend. This is restorative and important to the health of the population, and one of the iconic views which make Port Lincoln and Lower Eyre Peninsula popular. It is a major reason why people feel confident to recommend a Port Lincoln holiday to friends.

Provided the onsite infrastructure is rigorously designed to prevent visual impact beyond and minimise visual impact from and on the property and especially from the most popular scenic tourist viewing areas, these minor local visual impacts are likely to be of little concern. People visiting the site will know it is a rocket launch area and be interested to see the infrastructure, provided that it is tasteful and not intrusive. Many extra visitors will come with the purpose of seeing the rocket launch site.

The most important visual impact of this project will be that seen from a long distance. There was a mistake made in location of the Cathedral Rocks Wind Farm, which should have been painted matte black and located about five kilometres further north-west on SA Water land. This would have greatly reduced its visibility from important tourist sites. The value of long distance, natural scenery is immense. The Landscape Character Assessment lists views of the Whaler's Way area as being in the highest classes of view anywhere, including throughout on Lower Eyre Peninsula. Any infrastructure visible from these locations will negatively influence these scores. More importantly, they will reduce the stunningly memorable wildness of these views. Likewise, the view from the Whaler's Way entrance road as one descends towards Fishery Bay and the Whaler's Way Entrance Gate, is one of the most memorable and restorative views anywhere on Eyre Peninsula, or indeed, South Australia. Nothing should be allowed to diminish these views. Section 7.4 of Appendix Z dismisses the importance of site development from distant views due to their distance however it is the sheer scale of these views and the lack of disruptive development that makes them so immensely valuable. **The EIS seriously understates the importance of protecting these views.** As there are cost-effective alternatives for each of these impacts, these **obtrusive development items should not be approved**, except for the temporary raising of light, anemometer and lightning towers and burn-off stacks if they are unavoidable.

The entrance road to Whaler's Way, above Fishery Bay is a severe sandy scar against the natural vegetation background, visible in the landscape from Winter's Hill, Sleaford Bay, Wanna Lookout, Sleaford Mere, Mikkira and many other sites. Adding permanently visible buildings, towers and tank stands to this landscape should not be allowed. **This must be addressed by the EIS** and made available for comment. There should be no problem with temporary structures being raised for the duration of each launch, say, up to one week maximum, but only ever while necessary.

If possible, the Whaler's Way entrance road should be re-routed and revegetated to remove this scar from the landscape.

It would appear that the tank stands are the most likely visual problems in the Southern Launch development and a dual (for redundancy), pump based deluge system would have no visual impact and equivalent reliability. They could be portable and able to service every launch site, probably

proving more cost effective than building multiple permanent tanks which will rust in this environment.

Lightning rods could easily be telescopically raised, temporarily, instead of permanently. The anemometer should be on one of these lighting rods instead of a separate tower. This specific, multi-purpose tower may need to be left erect for perhaps up to a year to run a year long data gathering study. Pairing the data with data from the Cathedral Rocks Wind Farm, would then make further on-site recording unnecessary. Thereafter it would only need to be raised when a rocket is being readied for firing.

Light towers should not be required if the lights were fitted on the lightning rod towers. These lights should be fully shielded from surrounding view, (other than mandatory, red, navigation warning lights and they are only required whilst the lightning rods are extended). Lighting should be of a colour that is not seen by most wildlife and still should not be visible from outside the work zone. Extra light will attract insects that will attract birds, precisely at the time Southern Launch proposes to try to displace them ready for blast-off.

Flare Stacks should not be required if waste fuel was recycled instead of being burnt off. If it is not possible to recycle, then there is no reason why they cannot be erected as required and retracted when not in use.

A carbon trade-off should be required to fix the equivalent amount of greenhouse gasses produced by the Southern Launch business and rockets launched from it.

Stormwater Management Plan

The stormwater management plan speaks of swales for road runoff management. To minimise the visual impact, the route of these should first be mulched and the soil removed for use in rehabilitation of disturbed areas. They should be constructed with an excavator to minimise their overall size and to ensure berms aren't constructed, burying vegetation and greatly widening the area of visual impact.

Water catchments should not use swales or berms to divert water as both will cause erosion and greatly increase environmental and visual disturbance. It is recommended that instead of berms or swales, rolls of heavy HDPE normally used for covering buried electrical cables, be rolled out and buried on edge in a rock cutting chainsaw or mini (walk behind) chain digger trench, then backfilled with reinforced earth (very weak lime cement mixed in natural soil) to prevent erosion along the front face. It will probably need only to protrude about 30 centimetres above the ground surface and thus have low visibility. The undisturbed vegetation along its route, will reduce runoff speed and therefore reduce erosion potential. Laying it to a surveyed, very low grade, will reduce runoff speed and reduce erosion. The sinuous path will be less visually obtrusive than a straight line. As this material is hard for insects and small animals, at the end of rolls, a gap should be left such that the uphill sheet runs past (overlaps) the start of the downhill sheet and is separated by perhaps 30 centimetres from it. This way, any animals or insects following the sheet and wanting to cross, will find the gap but water will not run uphill through it. This will prove cheaper and easier to maintain than berms or swales.

Revegetation Hint.

Rabbits occur throughout the lease site, mostly in low numbers. Rabbits depend on being able to find free water or (far less desirably) metabolise it from the food they eat. New revegetation will provide succulent forage and encourage breeding. It is recommended that all fences around facilities, also have a buried, external, wire netting apron of approximately 400mm and at least 300mm vertically with maximum 40 mm mesh hole size. Gates should also have this protection and a wide concrete plinth across the roadway will allow the horizontal skirt or a space bar to seal. This will prevent the rabbits being able to find water from dew or rain on structures and concrete pads which would allow them to multiply and decimate nearby vegetation. Any revegetation area, will need to have rabbit control performed first or be fenced as one rabbit per hectare will make it unlikely that desirable species such as Casuarina species, will survive.

Water and Wildlife

It is strongly recommended that no new source of surface water be allowed to be available on site, including surfaces that will attract dew and mist, such as metal poles and steel cladding. Wildlife capable of moving to drink this water will dominate other species that cannot, leading to a very significant impact on the natural wildlife balance and on native vegetation. Cats and foxes will also utilise this water and greatly impact nearby prey species. As it is difficult to exclude foxes and cats from sites of built infrastructure, where rain, sea mist and dew will commonly accumulate, it is recommended that an ongoing fox and cat control program be maintained, using trapping and selective bait laying.

From:
Sent: Thursday, 16 September 2021 6:50 AM
To: DIT:SPC Reps
Subject: 932/P007/19

Submission on Application
 Development Act 1993
 Section 46B - Environmental Impact Statement - Major Development

Applicant: SouthernLaunch Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	100 BOUNDARY RD. BOSTON SEC 7
You may be contacted by your nominated method of contact for further clarification or notification of a decision	
My interests are (tick or circle)	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/> Shareholder Southern Launch
	A private citizen <input type="checkbox"/>
Other:	

** Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required)

Southern Launch has gone to great lengths to test the effects of launching a rocket. Once these results have been collected, then effects on the environment will be known. As this has never been done before, these tests are vital. The tests will include land & sea creatures, birds. Professionals have been working in the field at Whalers Way & will continue to study the wildlife. This too has never been undertaken before. Southern Launch envisages that the Whalers Way complex will be returned to its original pristine state as it rehabilitates that it shall a lot of work to be done with good care.

Scale and email to spc@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

love & they need to be dealt with before any
by the threatened species can be re-introduced.
Having been involved in wildlife conservation
projects all our lives, (We are great bird lovers)
and our ultimate aim is to see Whales, Bay
become a true nature reserve/protected area
of significance.

Southern Launch will bring many much
needed jobs to the Port Kemble area and will
inspire the school children throughout South
Australia - as has already happened here.

Australia needs a sovereign spaceport &
it is envisaged that this can be provided
by Southern Launch at Whyalla Bay while
at the same time - the environment will
be protected & returned to its natural former
glory.

Thank you.

State Planning Commission
Via email spcreps@sa.gov.au

Re: Development Number – 932/P007/19-Whalers Way Orbital Launch Complex Proposal

The Environmental Defenders Office (EDO) is the largest environmental legal centre in the Australia-Pacific, dedicated to protecting our climate, communities and shared environment by providing access to justice, running ground-breaking litigation and leading law reform advocacy. The EDO appreciates the opportunity to provide a submission on the proposed project.

In summary, the EDO has concerns that the project could cause major environmental problems including long-term and irreparable impacts on land and sea environments and therefore it should not be approved. The potential impacts include reduction in the number of vulnerable species as a result of removal of high grade native vegetation, vibration and noise, a higher incidence of bushfires and impacts on ocean biodiversity from falling debris. More broadly the tourism industry could be curtailed by this development given its proposed coastal location. The impacts could be significant particularly if the proposed site remains unchanged. Before a final decision is made the proponent should provide to the planning authority a comprehensive and independent assessment of other possible locations.

Whalers Way is an area of high conservation values. In particular, it contains habitat for threatened Commonwealth and State listed species. The proponent acknowledges in their documentation that direct and indirect impacts on these species are expected. For example, it is proposed that 23.76 hectares of good quality native vegetation be cleared which will result in further destruction of critical habitat for a number of fauna species. One species which will be impacted is the vulnerable Southern Emu-Wren (Eyre Peninsula subspecies). There are 11 known populations but no survey has been undertaken for this subspecies in the last decade. Most records for this particular species are from Whalers Way and the area is prime habitat for this important population. Other vulnerable species potentially affected by the proposal include the Western Whipbird and the Eastern Osprey.

The project is, in our view, seriously at variance with the Objectives and Principles of Development Control (PDC) in the relevant Development Plan, in particular the majority of those in the Coastal Conservation Zone and should not be supported. The Zone Objectives refer to a zone with a fragile coastal environment and any development must be subservient to the conservation of the coastal environment. Development should borrow

from and complement the natural landscape. The types of development contemplated in PDC 1 are conservation work, interpretive signage and facility and nature based/eco tourist accommodation. The project clearly does not fall within any of these categories. Other PDCs focus on how development should proceed. For example, PDC 11(d) provides that development should avoid areas that may endanger or threaten important nesting or breeding areas or the movement /migration patterns of fauna.

The proponent has provided assessments of the environmental impacts which are contained in various appendices to the Environmental Impact Statement (EIS). These purport to accurately cover the impacts and that the proponent has sufficient mitigation strategies to deal with these. However, these assessments contain insufficient data together with misleading and inaccurate statements. In addition, we are aware that the Bushfire Management Plan was not made publicly available.

The EIS was released on the 5 August 2021 before the launch of the test rockets, an operation that was given planning approval two months before. The proponent was to use data collected from the tests for several purposes including to determine the impact of noise and vibration on local fauna. At this time the data is unavailable to be considered in the assessment of this project. Assessment should not proceed until the data from these tests is available. Furthermore, the proponent's assessment in relation to noise and vibration impacts is based on highway noise which is quite different from rocket launching noise. The assessment concludes that the noise generated will impact species several kilometres from the launch site and includes the Western Whipbird which is particularly sensitive to sudden loud noises. As a result, birds can be stressed and their breeding cycles disrupted. (Appendix O).

The assessment on vegetation states that clearance has been avoided as much as possible particularly for important biodiversity. However, as noted the site proposed is a very important habitat of the Southern Emu-Wren (Eyre Peninsula). There is a direct and significant threat to this species should the full project proceed. The project will increase the threats to the Southern Emu-Wren (Eyre Peninsula) as clearance of native vegetation will cause further fragmentation of critical habitat. The EDO submits that all critical habitat for this species should not be considered as a potential site as there is a low distribution and narrow band of habitat. The EIS contains no information about possible sites other than Whalers Way where environmental impacts are not as significant. In our view it is imperative that the proponent provides this analysis of alternative sites before any planning decision is made.

Please contact the writer by email at

with any queries.

Yours sincerely

From:
Sent: Thursday, 16 September 2021 9:01 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

From:
Sent: Thursday, 16 September 2021 9:12 AM
To: DIT:SPC Reps
Subject: Whalers way rocket

Please reconsider moving the rocket launching facility from Whalers Way to another location, like Woomera or somewhere inland.

Our coastline is too precious for the environmental damage and long term consequences of the launching of rockets.

We live in Port Lincoln for the quiet, clean beautiful beaches, coastline and bush areas and I am opposed to the rocket launching location.

It's just a bad idea in this spot.

My family uses Fishery Bay all summer as do most of the people in the district at some point. The environment is too precious and valuable to us all who choose to live here.

I'm sure the decision has already been made to continue with the launching's and it disappointing to know in my heart that the people who love this place have no say.

Sincerely

From:
Sent: Thursday, 16 September 2021 9:28 AM
To: DIT:SPC Reps
Subject: Whalers way

I have been lucky enuf to call the Eyre Peninsula home for the past 10 years, whalers way is one of the most beautiful places on the coast, it attracts tourists from all over world that enjoy the natural beauty of this magical place we call home. Below is a list of all the things wrong with the new launch site.

- security guards patrolling Right Point and harassing people at night
- inappropriate CCTV footage being taken of people at Fisheries Beach
- Fishery Bay Road being used by an industrial level of heavy traffic
- police, CFS and ambo resources being constantly diverted for a private company's use
- constant maritime and air exclusion zones at extremely late notice (four in the past week)
- the chemical fall out and what it will mean for Port Lincoln's clean, green image
- the extreme bushfire risk associated with misfires (as seen yesterday)
- the impact on the migratory routes of our whales

I am absolutely appalled by the government and local council by there choice to allow this to happen... You have lost my vote if this continues to operate and destroy our home

Sincerely

From:
Sent: Thursday, 16 September 2021 10:00 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

From:
Sent: Thursday, 16 September 2021 10:21 AM
To: DIT:SPC Reps
Subject: The significance of Australia's launch capability

Greetings,

I have been advised about this project by a professional colleague. I have been involved with space science applications in the past through CSIRO's research aircraft facility and within the universities, both USQ and UQ.

The ability of Australia to build and launch rockets has been part of our scientific and engineering heritage since the end of the second world war, with WRESAT launched into low Earth orbit in 1967. What Australia has lacked is the ability to finance our own space launch industry. The ability to provide up to date, sustainable and environmentally responsible vehicle assembly, test and launch services to international customers in South Australia gives access to orbits not currently accessible.

Australia's capability to support and benefit from the international space industry, notably the crucial part the nation plays in the deep space tracking network, is a valuable part of our national heritage, so this new facility is to the credit of South Australia.

I wish to see this project go ahead.

From:
Sent: Thursday, 16 September 2021 10:30 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Regards,

From:
Sent: Thursday, 16 September 2021 10:33 AM
To: DIT:SPC Reps
Subject: Submission re Whalers Way Development - Development Number 932/P007/19

Name:
Email:
Postal Address:
Affected Property: 871 ProperBay Road Tulka SA 5607
Our interests are as property owners & concerned citizens

The aspects of the proposal I wish to make comment on are:

1. The impact of rocket launching on the marine environment, particularly the effect of noise on the southern right whales & their young which migrate along this coast annually and are currently increasing in numbers. We note that at Victor Harbour work on the causeway has frightened whales away this season. Apart from the effect on these precious mammals which find refuge in our peaceful waters every year as they make their way south their absence would also represent a huge loss to Port Lincoln local as well as tourists who make their way each day to Fisheries and Sleaford to watch their activities with wonder.
2. The impact of increased traffic on Proper Bay Road and the Fisheries road. These roads are already very well used, in particular the Proper Bay Road, by tourists, local residents, surfers and cyclists accessing Lincoln National Park, Tulka, Sleaford, Fisheries and Whaler's Way, We are concerned that the increased use of these roads by vehicles, particularly industrial vehicles, travelling to and from the launch site represents a threat to wildlife in the area- including koalas, emus, kangaroos, snakes and sleepy lizards - which frequently cross the road. It will also pose a threat to the safety of children and pets in the Tulka area.
3. The increased bushfire risk. This is of huge concern to all of us who live at Tulka having already experienced the devastating effects of fire and each summer living on high alert. We are concerned too that the use of CFS, ambulance & police resources by a private company will increase the burden on these services.
4. Privacy concerns associated with the use of surveillance cameras in the Right Point area
5. The impact of chemical fallout on our pristine environment and the quality of the air we breathe.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

①

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	35 SHEOAK RD TULKA 5607
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Firstly, I would like to point out that public consultation happened on 24 August 2021 and submissions are due on 16 September 2021. This gives stakeholders a scant 22 days to read the E.I.S., evaluate the information and lodge a submission. Accordingly, I would respectfully request the submission date be postponed by some months, particularly as the E.I.S. is composed of some 3000 pages, and local concerns canvass a number of serious issues. One of the more serious issues here is the one of water. For a number of years, Port Lincoln has suffered a decline in water levels in the Uley Basin, its main supply. To combat this, it has been mixed with a quite saline reservoir from the Todd reservoir to make the Todd river potable. This has resulted in a decline in

Submission on Application
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quality. So, one may wonder, how can Southern Launch be permitted to draw up to 150,000 Litres per launch from the town supply when the town is already at critical low levels. Southern Launch has proposed up to 42 Launches per year, sourced from the town supply, at commercial rates. What do the commercial rates even matter, if we run out of water?

What Southern Launch proposes to do with launch water is to quell the blast. This will contaminate the water. The four main elements of rocket ~~fuel~~ exhaust are Solid Fuel, Hybrid, Liquid Hydrocarbon Fuel and Cryogenic Hydrogen Fuel. A chemical analysis will show this to be pretty nasty stuff. Don't forget we are talking about a Heritage Listed area here. The three main, but not exclusive, contaminants here are Hydrochloric acid, Unburnt hydrocarbons - including polycyclic aromatic hydrocarbons and Aluminium oxide. Hydrochloric acid is corrosive to the eyes, skin, and mucous membranes and can cause pulmonary oedema, a serious disease. These are not the only ailments. Hydrochloric acid can cause gastritis, chronic bronchitis, dermatitis and photosensitization, dental discoloration and erosion. Inhalation can cause hyperplasia of the nasal mucosa, larynx, trachea and lesions in the nasal cavity. Hyperplasia is an increase of cells, which may become cancerous. In rats, hydrochloric acid exposure can cause severe dyspnea (breathing difficulties), cyanosis due to a lack of oxygen in the blood, and altered estrus cycles affecting reproduction, decreased fetal weight and increased fetal mortality. One can suppose then that these diseases and ailments not be limited to just humans and rats, but to marsupials and other animal, bird, fish species. One may ask why ~~st~~ such toxic chemicals are allowed into a protected wilderness, Heritage Listed, Coastal Protection Zone. How can it be contained? We have all

Section 46 B - Environmental Impact Statement

Seen footage of the Space Shuttle blasting off. Sure, the rockets proposed to be launched at Whalers Way are a lot smaller than the space shuttle and are composed of a lot of carbon fibre. Carbon fibre is very light, so I am suggesting that a 30 metre, 100 tonne rocket blasting off from Whalers Way is going to deposit the exhaust of (slightly less than) 100 tonne of rocket fuel all over Whalers Way, Fishery Bay, precious farmland, Uley Basin, Lincoln National Park, Tulka and of course Port Lincoln where the prevailing westerly winds will blow. How will this affect our environment? Well, added to the list of diseases and ailments listed on page 2, one can only conclude that sustained, repeated blasting will degrade and contaminate the whole area. Don't forget, we are talking about 1.6% (yes, that is 1.6%) of South Australia's total greenhouse gas emissions.

Back to the water - Southern Launch has proposed that the residual blast water, the stuff that hasn't been blown all over the place in the blast, will be collected and pumped into a clay and polymer lined dam. Over time one may assume that as evaporation takes place the sludge becomes more toxic and concentrated. When asked at the forum on 24th August what happens to the contents of the dam Southern Launch repeatedly refused to answer. Basically, there are two options, leave it in the dam, or pump it out. If you leave it in the dam, obviously, the risk to the Uley Basin is massive. How can a clay and polymer lining expect to hold up over many years without the risk to Uley Basin, Port Lincoln's main water supply. In the absence of any response to these concerns by

Southern Launch, let us examine a few possibilities.

1. The sludge just sits there and becomes more toxic over time, any wildlife that comes into contact with it dies.
 2. The dam overflows in a sudden rain event, spilling toxic sludge down into the subterranean limestone cavities which connect through thousands of interconnecting cracks, caves and cavities with Uley Basin.
 3. The polymer is porous, and it leaks anyway.
 4. Chemical contamination breaks down the polymer.
 5. The polymer has a shelf life and is replaced, and in the process sludge finds its way into the groundwater anyway, as 100% containment is impossible.
 6. Sabotage, neglect, corruption, financial imperatives incompetence fail to address these issues.
 7. The sludge is pumped out, where does it go?
- Southern Launch pointedly refused to respond to any of these issues and was evasive.

Information on Hydrochloric acid and Hydrocarbons came from the United States Environmental Protection Agency.

Polymers - Australian Academy of Science

Reproduction - BMC

Diseases and ailments - Mayo Clinic

Rocket propellant - Wikipedia.

Water - SA Water

Prevailing Winds Bom

Greenhouse gas emissions - Southern Launch

From:
Sent: Thursday, 16 September 2021 10:52 AM
To: DIT:SPC Reps
Subject: Whalers Way Development

I am writing to you regarding the development at Whalers way - 932/P007/19.

I object to this development on the following grounds:

- security guards patrolling Right Point, a popular surfing and tourism spot
- inappropriate CCTV footage being taken of people at Fisheries Beach
- Fishery Bay Road being used by an industrial level of heavy traffic
- police, CFS and ambo resources being constantly diverted for a private company's use
- constant maritime and air exclusion zones at extremely late notice (four in the past week)
- the chemical fall out and what it will mean for Port Lincoln's clean, green image
- the extreme bushfire risk associated with misfires (as seen yesterday)
- the impact on the migratory routes of our whales (whale and calf currently at Sleaford)
- and the endangered species which call this area home

The areas surrounding Whalers Way are critical to our tourism industry and to our environment and should not be put at risk. The proposal is ill considered and not wanted by our community.

Why put at risk our clean green image when there are so many isolated places in SA that would welcome this development.

I urge you to reconsider this madness.

Yours sincerely,

From:
Sent: Thursday, 16 September 2021 11:18 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Regards

From:
Sent: Thursday, 16 September 2021 11:29 AM
To: DIT:SPC Reps
Subject: Re: Southern Launch Development

Hi,
I support the Whalers Way rocket launch development,

Regards,

16th September 2021

The Secretary
State Planning Commission
GPO Box 1815
SA 5001

Dear Secretary,

RE: EIS - Whalers Way Orbital Launch Complex - 932/P007/19

BirdLife Australia (BirdLife) welcomes the opportunity to comment on the Environmental Impact Statement (EIS) – Whalers Way Orbital Launch Complex (the Project), proposed for Eyre Peninsula, SA. Our submission includes input from the Threatened Mallee Bird Conservation Action Plan (CAP) Steering Committee. The CAP has been operational since 2015 and identifies key threats and priority actions for threatened mallee birds.

A separate submission has been made to the Commonwealth Department of Agriculture, Water and Environment in response to the EPBC Act Referral – 2021/9013.

The Project will have an unacceptable impact to State and EPBC Act listed fauna species, including the Southern Emu-wren (Eyre Peninsula) and Western Whipbird (eastern) and should not proceed in its current form. The location of the project area must be reconsidered by Southern launch (the proponent) and we note there are large areas of the Eyre Peninsula already cleared that could present an alternative project area.

BirdLife is particularly concerned that the Project will directly impact one of only five important populations of the Southern Emu-wren, as well as impacting Western Whipbird, whose population on the southern Peninsula represents approximately 80% of the total population.

BirdLife provides further detail and comments on specific sections of the EIS in the attached (below), in particular the Terrestrial Biodiversity Technical Report (AECOM 2021). For any further clarity on our submission, please contact Andrea Fullagar at andrea.fullagar@birdlife.org.au or Dr Rebecca Boulton at rebecca.boulton@birdlife.org.au

Yours sincerely



Attachment

The Project would clear 23.76 ha of native vegetation in four discreet locations (Launch Site A, Launch Site B, Infrastructure Site D and Range Control Site E). This would have a direct impact on State and EPBC Act listed fauna species at the site – more specifically this will have the largest impact on two state Endangered species, the Southern Emu-wren (Eyre Peninsula) (*Stipiturus malachurus parimeda*) and the Western Whipbird (eastern) (*Psophodes leucogaster leucogaster*).

The Southern emu-wren is endemic to the southern Eyre Peninsula, with the population at the project area considered one of only five important populations on the Peninsula. Results from the proponents' EIS surveys estimate that the site contains approximately 10% of the known population with occupied habitat within the project area marked for clearance. Launch Site A, directly impacts habitat with known records of Southern Emu-wren and Launch Site B is in close proximity to where the species is known to occur (F6, Terrestrial Biodiversity Technical Report – Appendix P, EIS). Given the importance of the site for this species, any vegetation clearance would likely have a significant negative impact reflected in Table 17 (page 92-94, Terrestrial Biodiversity Technical Report).

The findings of the EIS are that: "In consideration of the criteria, the *Project is likely to have a significant impact to the Southern Emu-wren (Eyre Peninsula)*."

While the Western Whipbird (eastern) is not endemic to the Eyre Peninsula, the population on the southern Peninsula is the most important area for this species with approximately 80% of the total population. The remaining birds inhabit the Yorke Peninsula as well as a small declining population in the Murray Mallee (<100 individuals). The Western Whipbird has not been recorded in Victoria since 1974. Given the decline of this species in other locations it is likely that the clearance of suitable habitat for the species will negatively impact the population on the Eyre Peninsula.

The findings of the EIS are that: "*In consideration of the criteria, the Project has the potential to have a significant impact to the Western Whipbird (eastern)*." (Table 17, Page 88-91, Terrestrial Biodiversity Technical Report (AECOM 2021)).

The proposed project area would intersect important habitat for the Southern Emu-wren and Western Whipbird and we question to what degree the impact to remnant native vegetation was avoided and minimised, since (for the proposed project area) **"the vegetation patches are large and have generally not been disturbed from previous clearance or edge effects"** (page 74, Att 2- Whalers Way Terrestrial Biodiversity Technical Report). There are large areas of the Eyre Peninsula already cleared that could present an alternative project area location.

The proposed removal of native vegetation would result in habitat loss and degradation and is likely to pose the greatest risk of adverse impacts for terrestrial biodiversity arising from the Project (page 71, Terrestrial Biodiversity Technical Report). However, it is unknown what impact the noise from the regular launching of rockets will have on Southern Emu-wrens and Western Whipbirds in the vicinity of the Project.



The impact of anthropogenic noise on birds is an increasing field of study, with known impacts including changes in singing behaviour, communication break-down, and avoidance of noisy areas. These studies tend to involve anthropogenic noise experienced by birds near roadsides, airports or in urban environments. The impact of loud (135dBA), short (1-2 minutes) and irregular (~3 weeks) noise is relatively untested. Although the response of Southern Emu-wrens and Western Whipbirds will be monitored as part of three test launches in late 2021, these surveys will be limited in their ability to measure anything but very short-term vocal responses. This is due in part to the highly cryptic nature of both species but also the changing detectability throughout the year and across the breeding season confounding any variation observed. It is more likely that any impact (negative or positive) from the proposed infrastructure, noise and local actions will be long-term, area avoidance, changed reproductive success and population growth. Testing the impact of such a proposal on local fauna is not only important for the Eyre Peninsula but has the potential to inform similar projects into the future.

BirdLife does not support the Project in its present form and urges the State Commission Assessment Panel to request (from the proponent) an alternative project location. We anticipate there are opportunities for the proponent and BirdLife to work together closely to identify an alternative location which adequately minimises impacts to Southern Emu-wren and Western Whipbird. In addition, detailed mapping and monitoring of species territories at the Eyre Peninsula is necessary for the proposed development to proceed in any manageable capacity. We encourage the proponent to draw on **BirdLife's expertise to design and implement a suitable species' monitoring design**. There are other key groups and experts that should be consulted to mitigate impacts on threatened species- one of which is the Threatened Mallee Bird Steering Committee. This group has been working on threatened mallee species, including emu-wrens and whipbirds, since 2015 and has considerable expertise within the team.

Southern Launch has agreed to support research into the effect of rocket launch activities on the local fauna, with funding for two Flinders University PhD students. However, this research is likely to be behaviourally focused and it is important that applied conservation techniques are also undertaken including species monitoring before construction and during operation of the proposed Orbital Launch Complex.

If the Project is to proceed (assuming a revision of the proposed project area occurs) there is a unique opportunity to investigate any impact it might have on the local fauna. In this case, we urge the proponent to consult with key experts, including members of the Threatened Mallee Bird CAP Steering Committee. The two species of interest are notoriously difficult to survey accurately with cryptic behaviour in thick vegetation, therefore all survey work will require experienced personnel. Basic ecological data does not exist for either species. Unfortunately, detailed data on reproductive success is unlikely to be easily obtained, and monitoring should focus on territory occupancy and distribution across the site, including:

- Detailed mapping of emu-wren territories before vegetation clearance (for the construction of launch pads 2021-2024) to gain some understanding of how many individuals occupy the area



- Detailed mapping of emu-wren territories after vegetation clearance to ascertain the displacement of individuals
- Annual monitoring of emu-wren territories for the operational life of the proposed action (2021 – 2050) within the project area to track any changes in the local population size – this should also include control areas not impacted by the Project
- Accurate monitoring methods for Western Whipbirds are currently unknown, with little basic data on even territory size. Using the area to obtain suitable monitoring techniques and other population level information would benefit not only the conservation of the subspecies but others such as the Kangaroo Island Western Whipbird (*Psophodes nigrogularis lashamri*)
 - Develop monitoring methodology, this might include acoustic or radio-tracking technology
 - Status of the Eyre Peninsula population to gain a better understanding of their overall importance in conserving the subspecies
 - Future feasibility of translocation of the subspecies (i.e., vanishing mallee population)

Both the Eastern Osprey (*Pandion haliaetus*, Migratory and Marine EPBC Act, Endangered NPW Act) and White-bellied Sea-Eagle (*Haliaeetus leucogaster*, Marine EPBC Act, Endangered NPW Act) occur in the vicinity of the Project. The Cape Wiles/Carnot complex lies within one of three sub-regions identified in South Australia as retaining significant breeding habitat for both species.

The Terrestrial Biodiversity Technical Report **states** “In summary, whilst there is potential for at least one pair (Osprey) to utilise the habitat near the site, the SA population is already in decline, the project location does not have a known nesting pair and the specific location is not key to the whole SA population.” (Page 96). This view is grossly incorrect. If a population is already declining ANY suitable habitat is key for its future recovery and stating, no impact when proposing infrastructure known to impact the species is irresponsible. Studies from around the world unequivocally link negative productivity outcomes for large raptors associated with human activity encroaching into breeding refuge habitat. In fact, disturbance from ill-informed tourism access/development and unconstrained coastal recreation are key reasons why both species deserted territories in close proximity to the project area. The prospect of industrial development being permitted over yet another stretch of critical habitat must be regarded as a negative impact, therefore we do not agree that “significant impacts to the species (White-bellied Sea-eagle) are unlikely” (page 65, Terrestrial Biodiversity Technical Report), even after “the implementation of key mitigation options for avoiding impacts...” (Coastal Raptor Assessment). This species is highly sensitive to any human activity within their territories.

It must be noted that **Southern Launch’s Conservation Policy Statement** is a positive step in the right direction towards a “holistic approach for innovative infrastructure development incorporating landscape management principles that promote biodiversity”. However, it is essential that key individuals, and groups are consulted



in the planning, preparation and development of any Construction and Operational Environmental Management Plans and Native Vegetation and Flora and Fauna Management Plans to ensure that impacts to Southern Emu-wren and Western Whipbird are adequately minimised and managed. Similarly, BirdLife wishes to be consulted in the first instance, to ensure that any biodiversity and native vegetation offset obligations leading from this Project (should it proceed) directly benefit Southern Emu-wren and Western Whipbird to ensure their conservation.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen ✓
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am writing today to call into question the suitability of Whalers Way as the site for Southern Launch's operations. This site may be privately owned land, but it is currently listed as conservation land and for good reason. It is home to numerous species, including the Australian Sea Lion (endangered), Long Nosed Fur Seals, Southern Right Whales, Osprey, Wedged Tailed Eagles, White Bellied Sea Eagles, Southern Emu Wrens (endangered), Western Whipbird, Koalas and many more marine and land animals. The site is very fragile and much of the scrub is slow growing and slow to recover, should anything go wrong, such as a bushfire in the area, which seems likely given the frequent delivery, storage and use of kerosene, liquid oxygen and chemicals that will be required. Fire risk is also increased due to the 8m high flare stacks, flame trenches and diesel generator that are proposed and also the firing of rockets. Port Lincoln is struggling to source enough water for its population and this project will require 50, 000 litres of water for each rocket fired. Southern Launch is planning to launch 36 rockets per year. That's 1,800,000 litres of water that Port Lincoln has to supply in addition to their limited water resources. The weather at Whalers Way is notoriously unreliable due to it being located on the bottom of the Eyre Peninsula (jutting out into the ocean and vulnerable to all kinds of weather fronts) and so the project's viability in this particular location is already compromised. Southern Launch's Environmental Impact Statement only references weather data from the year of 2009. Why have they chosen that particular year? Is it because all other years show weather patterns that would be unsuitable? This requires further scrutiny. The clearing of 23 hectares of habitat that has been proposed will immediately impact upon and fragment wildlife in this conservation area. The spent rockets that have been launched will end up in the ocean. This has been a popular tourist destination for some time and is close to the hearts of many Australians including locals and non-locals. Over a 10-year period this project by Southern Launch is expected to generate \$34.5 million. Projected tourism in the area over the same period was expected to generate \$500 million. This project proposes to turn this entire conservation area into an industrial complex. The EIS by Southern Launch suggests that this impact will be stupendous. I would like to see the consideration of other sites that are more environmentally suitable and less fragile.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

I would like to see an independent review of this proposed site and accurate data of it's likely environmental impact. I would like to see the cessation of all construction and rocket launch trials in this area, which seems to have gone ahead without public awareness, public consent or even legal consent. There are many thousands of people who are only now finding out about Southern Launch's plans for this site and are scrambling to call this project proposal to be reviewed and for alternatives to be considered. This seems to have been kept quiet somehow so the lack of noise is by no means reflecting the lack of public concern. Word is now getting out and a petition to Save Whalers Way is gaining momentum. Please place a pause on these operations until the public are able to have their say and a different, less fragile and ecologically valuable site could be considered by Southern Launch.

The proposal for a rocket launching complex at Whalers Way should be rejected on the following grounds:

- Risk to critical water supply – The Lower Eyre Peninsula sources its water from the Uley South Basin catchment area immediately to the North of this proposed site. Water supply is already threatened on the Eyre Peninsula and any risk to this critical source needs careful consideration. A desalination plant is proposed by SA Water but this will only supplement supply and the Uley South Basin will remain a critical water source into the future. Prevailing Southerly winds will carry fallout from launch emissions over the Uley South catchment area which is a highly fractured shallow limestone aquifer. Any surface pollutants will find their way into the supply water with the next rain event which is pumped to Port Lincoln and the Lower Eyre Peninsula all the way to Cowell on the East Coast and Ceduna on the West Coast.
- There is no water treatment plant to treat this water before supplying direct to customers – the only addition is chlorine for water disinfection – this will not remove rocket pollutants.
- SA Water has extremely tight environmental restrictions around activities on the catchment area and approving a commercial rocket launching complex upwind of this area is madness. Hydrochloric acid, a known carcinogen and other compounds including aluminium oxide, ammonium perchlorate associated with thyroid cancers and PM2.5 which is recognised as an environmental and human toxin are just a few of the expected pollutants. There are no measures in the EIS to limit launches to certain wind conditions/directions to protect this critical water supply from fallout residues.
- Completely inadequate stakeholder engagement and consultation with the local Aboriginal community around managing cultural heritage issues. The local Aboriginal community is publicly opposing this proposal and have started a petition in opposition.
- Environmental destruction – clearing 23 hectares of native vegetation home to multiple endangered species and air and residual pollutants including hydrochloric acid settling on the surrounding areas. Any winds from a Northerly direction during launching will carry pollutants over a colony of endangered Australian Sealions at Cape Wiles.
- Inadequate fire and emergency response detailed for the volume and scale of fuel combustion at each launch. This shows a complete lack of environmental regard by this proposal. One local CFS truck attending site per launch is totally inadequate considering a medium sized rocket weighing 58 tons will have approximately 42 tons of fuel aboard.

- Lack of adequate hydrocarbon spill response plans, both land and marine. What is the plan if there was a launch disaster resulting in up to 42 tons of fuel aboard a medium sized 58-ton rocket crashing into the sensitive marine environment or surrounding land and water catchment area? Will vessels carrying hydrocarbon spill response equipment adequate for a 42+ ton fuel spill be waiting in the vicinity every launch? A fuel spill in this sensitive marine environment poses a risk to the endangered Australian Sea Lion and other species including Southern Right Whale and compromises the pristine marine environment that Port Lincoln has built its premium commercial fishing and aquaculture name on.
- Management of deluge water is a serious concern and no detail has been provided in managing contamination. 150,000L of water is expected to be used for sound and heat suppression for medium sized launches. How will contaminated water that isn't vapourised be managed to ensure it doesn't lead to potential groundwater contamination? If this contaminated water is to be collected in the proposed onsite dam, what measures will be in place to ensure local wildlife aren't poisoned if trying to consume?
- Tourism impacts need to be considered – the Whalers Way site and Fishery Bay are 'must see' destinations for tourists visiting the Eyre Peninsula and has been gaining popularity with visitor numbers increasing significantly since covid. These numbers are forecast to continue to rise. Rezoning this coastal conservation area into an industrial zone with restricted future access will limit the natural wilderness appeal and tourism potential and is not sympathetic to the surrounding areas. Any argument that rockets will attract more tourists to the area should support a case for relocating the proposed site to an area that doesn't already have a significant tourist appeal. South Australia has numerous regional towns that could benefit from tourism and economic activity.
- Fishery Bay is the most popular family beach for Port Lincoln locals and tourists due to its close proximity and natural beauty. Any future impacts to accessing this area even for short periods would lead to a huge backlash from the local community. Increasing heavy vehicle traffic on this already fragile road will increase safety risks to locals and tourists. The proposal does not provide any scope to contribute financially to maintain this 12km unsealed road or the 20km bitumen Proper Bay Road from Port Lincoln. Road user safety including cyclists is a big concern, particularly on long sections of road that do not allow safe overtaking.
- A site that is already cleared with low biodiversity significance without marine and terrestrial environmental issues, or close proximity to one of South Australia's critical water supplies as significant as the Uley South Basin; or one that doesn't already have significant tourism appeal should be considered instead.

South Australia has many regional towns and sites without the above issues that may welcome a rocket launching complex (such as Woomera).

Please carefully consider these critical points that Southern Launch has failed to address in its Environmental Impact Submission and reject its proposal for a rocket launching complex at the Whalers Way site.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am writing to appose the rocket launching development due to the massive environmental concerns. This is an area of native vegetation so also a risk of bushfires.
The risk is to great for habitat loss and coastal erosion. Please put our coast first.

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SAS 5001
South Australia
Attorney General@sa.gov.au

16 September 2021

Development Number: 932/P007/19 – Whalers Way Orbital Launch Complex Proposal

Dear Minister Chapman,

I am writing to you as a citizen of Port Lincoln and in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Ltd and designated by the Minister as a major development.

I moved to Port Lincoln because of its unique clean waters and environment. I am very concerned about the proposal to build a rocket launch complex few kilometres from Port Lincoln's most popular surf and recreational beach 'Fisheries Bay'. Freedom of movement is already impacted in that area due to the proposed trial launch planned last week. Security guards patrol the ground and point flashlights at anyone nearing the entry to Whalers Way.

Whalers Way has been a popular tourist destination to enjoy unique indigenous vegetation and wildlife all along a rugged coastline very special to the local area.

I am concerned that if the development was to go ahead we will lose access to the area, be confronted with extensive loss of fauna and flora within a heritage listed conservation area and experience serious erosion in an already sensitive area.

I am very concerned about the increased bush fire risk. Port Lincoln has experienced severe bush fires in the past and my parents lost their home in the huge 2005 fire. The developer's bushfire litigations are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

I am also very concerned about the thousands of litres of water required to dampen the noise of the launches. As country people we are very concerned about our water reserves and while Port Lincoln is seriously thinking about a desalination plant to meet future demands I find it a disgrace to read that up to 130000 litres of water are required for each of the annually planned 35+ launches. We already aid the water shortages with rain water tanks in our gardens and we are talking 20000-50000 litres which are sufficient to provide a two person household with water for a year. I do not want to be faced by water shortage for our community because our reserves get depleted by a company which takes no responsibility for providing its own water. I understand the dams they are building are to contain waster water.

Port Lincoln is hugely popular with tourists. Tourists come to enjoy our pristine waters and world class seafood. As part of our income we provide tourist accommodation. I am very concerned about 'space tourism' as advocated by Southern Launch. I am personally not interested in 'space tourism' as the dirt road leading to Whalers Way doesn't support a lot of traffic and tourists with

the intention of watching rockets go off might not necessarily be interested in our beautiful countryside. I dread to see increased pollution, four-wheel driving in sensitive areas and disrespect for our environment.

The noise caused by the launch of rockets is another factor of concern to me. Wildlife will experience temporary loss of hearing and no amount of water can dampen this impact. As you might be aware Port Lincoln and thus Whalers Way is on the migratory route of the Southern right whales – hence the name ‘Whalers Way’. We do not want the whales to be scared away because of rockets going off a minimum of 35 times a year.

I am also very concerned about the rocket launch station being so close to Port Lincoln and it being the only one in Australia!

This will put Port Lincoln as a prime target on the map in case of international conflict and potential war. I lived in Europe during the Cold War and being in the target zone was frightening. I believe it is only a matter of time that the Australian military will take interest in the Whalers Way location, just like the American military is using the NZ launch pad for its interests.

Please spare us this threat and consider a location in area with no townships nearby, please.

I as a citizen of Port Lincoln do my extra bit every day to make this a better planet. We save water, maintain our gardens with native and drought tolerant vegetation, foster community, recycle our rubbish, and much more. I urge you to help us safeguard and preserve the natural habitat which is on our doorstep. It is unconscionable to allow a heritage listed sanctuary and threatened species habitat to be destroyed in favour of experimental and unprecedented industrial development.

I also wonder what is going to happen to the debris left behind in the ocean after rockets have been launched? Waters are quite rough out there and it will be extremely difficult to collect rubbish from the ocean.

Dear minister, I urge you to put the interests of the Port Lincoln people and our right to a preserved and protected natural landscape ahead of the commercial interest of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

I want to see Port Lincoln continue to shine as a unique destination for clean waters, clean beaches and an intact environment. Please help us maintain this.

Your sincerely,

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

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Affected property (if different from postal address)	
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Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Inovor Technologies is a commercial Space and Defence company based in Adelaide, South Australia.

We develop satellite technologies and are currently building several spacecraft for civilian and Defence customers. We also provide electronic warfare, simulation and modelling and space surveillance services to Defence.

Our submission relates to the proposal by Southern Launch to construct and operate an orbital space launch facility at Whalers Way, Sleaford, South Australia, to be known as the Whalers Way Orbital Launch Complex (WWOLC).

Like Southern Launch, Inovor Technologies believes accessibility to space for all Australians will advance and improve how we operate technology and communication for generations to come.

'Access to Space' from Australia is a strategic priority for both the Federal and South Australian governments: it is a National Civil Space Priority Area within the Australian Civil Space Strategy (2019-2028). It is also a strategic priority in the South Australian Space Sector Strategy.

It is well-known that the development of sovereign launch capabilities in Australia is a vital step on our journey to becoming a true spacefaring nation. Sovereign launch in Australia will enable us to capitalise on all the associated benefits of space exploration: economical, national security, research and development, etc.

South Australia and Southern Launch, with its sovereign launch proposal for WWOLC, stand ready to help launch Australia on the path to a full-spectrum, sovereign, sustainable space ecosystem.

Regarding the Environment Impact Statement, we note the following:

- Reduction of the WWOLC footprint as far as practicable to avoid clearing native vegetation with the size of the Project Area reduced in size from 70.58 ha to 23.73 ha from concept design – *page 4, Appendix Q.*
- Southern Launch are enthusiastic about incorporating the restoration and conservation of the Whalers Way area as a critical part of the project. Mitigating impacts is at the forefront of the company ethos – *page 4, Appendix Q.*
- Senior male members of the Nauo Aboriginal community were actively involved in a field survey as part of the Cultural Heritage Investigation – *page 6, Appendix Y.*
 - We note an objection to WWOLC was raised by Nauo elder Jody Miller in an ABC News article by Evelyn Leckie dated Friday 28 May 2021.
 - We note that, according to Appendix Y, no women accompanied the field team for cultural reasons at the request of senior Nauo men – *page 6, Appendix Y.*
- Southern Launch will implement management measures detailed in a Construction Environmental Management Plan (CEMP) and Operational Environmental Management Plan (OEMP) to avoid, minimise or mitigate impacts on terrestrial flora and fauna values – *page 117, Appendix P.*
- The extent of ground and structural vibration produced by the acoustic environment near the launch vehicle is expected to be limited to the buildings supporting the launch – *page 44, Appendix O.*
- The rockets proposed for the Southern Launch facility are relatively small, limiting the size of a sonic boom being created – *page 44, Appendix O.*
- The facility's design has already incorporated a water deluge system to reduce both near and far field noise impacts and blast walls/bunds to reflect acoustic energy away from the launch vehicle and sensitive areas. These are noted as two of the most effective noise suppressants when a rocket is in a launch position (Lubert, 2017) – *page 43, Appendix O.*
- Stakeholder engagement and administration actions have been recommended to ensure nearby residents are informed about launch activities – *page 46, Appendix O.*

- Noise monitoring was also recommended to confirm predicted noise levels and the effectiveness of onsite noise mitigation – *page 46, Appendix O*.
- The relatively small amount of Greenhouse Gas emissions generated will have a minor effect on global climate change – *page 26, Appendix X*
 - We wish to comment that space-derived data has a crucial role in helping humankind understand, monitor, and mitigate climate-related impacts on Earth.
- South Australia could expect to reap benefits from three sources from the direct operation of WWOLC: Capital works to establish the launch facility; the on-going operations of the launch facility; and the increased number of international and interstate visitor days associated with launches and preparatory works (e.g. staff from launch firms visiting SA) – *page 4, Appendix N*.
- The author of the Marine Ecological Assessment (J Diversity Pty Ltd) concluded that neither the construction nor operation of WWOLC were likely to have long-term negative consequences for local marine life including birdlife on Liguanea Island – *page 48, Appendix S*.
 - We also note that the author's conclusions are consistent with the findings of a risk assessment undertaken for comparable rocket launches in Aotearoa/New Zealand.

We also note that two public information sessions were hosted in the region to give the public an opportunity to ask questions about the WWOLC.

In considering the EIS, Inovor Technologies supports the proposal for WWOLC and anticipates that WWOLC will positively impact our company, South Australia, and the nation.

From:
Sent: Thursday, 16 September 2021 1:26 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

To Whom it may concern,

I support the Whalers Way rocket launch development.

Regards

From:
Sent: Thursday, 16 September 2021 1:31 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Thank you,

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From:
Sent: Thursday, 16 September 2021 1:33 PM
To: DIT:SPC Reps
Subject: Support for Southern Launch Development

I support the Whalers Way rocket launch development.

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Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Scan and email to spreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Applicant:	SouthernLaunch.Space Pty Ltd
Development Number:	932/P007/19
Nature of Development:	Whalers Way Orbital Launch Complex Proposal
Assessment Level:	Environmental Impact Statement
Subject Land:	Lot 101 Right Whale Road, Sleaford
Phone Number:	1800 752 664
Close Date:	16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	The Nature Conservation Society of SA (NCSSA), a community organisation dedicated to nature conservation

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

The Nature Conservation Society of SA (NCSSA) has been concerned about the proposed developed of a rocket launching facility in the nature conservation area of Whalers Way since becoming aware of it in September 2020.

The NCSSA visited the site in April 2021, hosted by the applicant, to better understand what was planned. Further details about the proposal are now available through the public exhibition of the Environmental Impact Statement (EIS).

On reviewing the EIS, the NCSSA believes this development application should be **refused** given the extent, nature and significance of expected environmental impacts. They are, on balance, **unacceptable**, even when taking into account the proposed "mitigation" strategies.

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The EIS repeatedly understates and misrepresents the likely environmental impacts of this proposed development as they relate to nature conservation, and it does not deal adequately with the critical risks identified in the *Guidelines for the preparation of an Environmental Impact Statement: Whalers Way Orbital Launch Complex* (the *Guidelines*).

An independent review of possible locations for this facility is required

The State Planning Commission should commission an **independent review of possible locations** for this launch complex. Siting this development in a more appropriate location would avoid many of the problematic environmental issues detailed in the EIS.

The NCSSA understands an independent review of possible locations was undertaken to support the assessment of the development application for the Kangaroo Island Timber Port.

The EIS states that ‘Whalers Way was identified as the preferred location of the launch complex through an extensive review of potential locations across Australia, undertaken by Southern Launch’.

The EIS then provides some details of this ‘extensive review’ and lists the key requirements of potential sites. Apparently, one of the criteria was the site being ‘assessed as not having an unreasonable impact on environmental values, including threatened species’ (page 142).

However, the resulting proposal from the applicant is for a facility that will sit right on top of an important population of the threatened Southern Emu-Wren (Eyre Peninsula), of which there are thought to be less than a total of 1000 individuals known from just a handful of sites on Eyre Peninsula, as well as negatively impacting on a range of other threatened species.



Southern Emu-Wren (Eyre Peninsula). Photo by Dion Thompson

This result may be explained, at least in part, by the applicant’s view that “whilst a basic understanding of environmental values can be gained from a high-level review of a site, a detailed understanding can only be gained from a more detailed ecological investigation, including on-site investigations” (page 143).

The NCSSA disputes this statement, since Whalers Way’s value as a nature conservation area is obvious even to the casual visitor (from the ‘welcome to the Wilderness Park’ signage). Its status at a formally protected Heritage Agreement, as well as its importance as habitat for threatened species recognised at both the state and national levels, can be gained from searching easily accessible, publicly available databases.

In the EIS, the applicant has ruled out large areas of the southern Australian coastline by stating that ‘it is important that the site is within commuting distance, defined as one (1) hour, from an appropriately sized service centre’ (page 144). Effectively, this rules out any ‘remote’ location, a decision which the NCSSA believes requires further review since current rocket launch facilities in SA operate successfully located in areas remote from human populations, including the Koonibba facility operated by this applicant.

The significance of the ‘occlusion’ of launch trajectories, a key reason many other potential sites were ruled out, including Portland in Victoria and Cape Jervis in SA, needs to be reviewed by suitably qualified, independent experts.

Even if only considering potential sites on the Eyre Peninsula, the argument presented in the EIS against ‘hypothetical site 1’, immediately north of Whalers Way, is unconvincing (Figure 1). It was ruled out due to occlusion caused by the nearby windfarm, which appears minor particularly when compared with the launch angles provided elsewhere in the EIS (Figure 2). The other stated reason was because Whalers Way would need to be cleared for launches, which is the case for the current site selection.

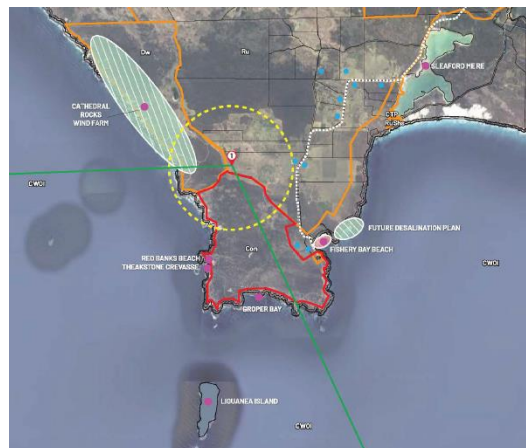


Figure 1. Hypothetical site 1, as mapped in the EIS (page 161), showing minor occlusion of launch trajectories due to Cathedral Rocks Windfarm

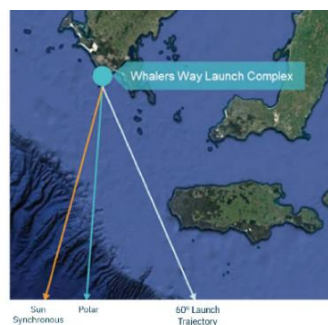


Figure 2. Launch angles as provided on page 44 of the EIS

These statements from the EIS underscore the need for independent review of alternatives:

‘The clearance of 23.76 hectares to enable the Project to proceed has been balanced with the need to undertake the Project, and the lack of suitable alternative sites on which the impacts would be less’, and

‘Proceeding with the Project in another location would result in the removal of the direct, indirect, and induced impacts of the proposal on this locality and would result in these impacts occurring elsewhere.’

This would only be the case if another, equally environmentally sensitive site, were selected. An **independent review** of the applicant’s site selection process, undertaken by suitably qualified individuals that can critique both the launch related issues such as occlusion as well as better identify and prioritise environmental values at potential sites, is therefore clearly required.

Impacts on protected native vegetation unacceptable

The NCSSA believes the impacts on native vegetation at the site, coupled with the precedent it would set for clearing land formally protected as a Heritage Agreement, render this development application unacceptable.

Whalers Way is formally protected as a Heritage Agreement under the *Native Vegetation Act 1991*. Heritage Agreements, held by over 1600 landowners in South Australia, represent a long-term commitment to protect a given area for nature conservation. Recently, the Marshall Government has invested in the revitalisation of the Heritage Agreement program¹.

Excising areas from a Heritage Agreement to allow for the construction of a major industrial facility therefore sets a dangerous planning precedent.

The areas to be excised from the Heritage Agreement to facilitate this development application are, in the majority, good quality native vegetation. This particularly the case for proposed Launch Site A, which is intact, coastal heath currently providing habitat for threatened species.

The EIS consistently misrepresents the impact of the application on the Heritage Agreement, for example by stating:

‘The site was largely covered with remnant vegetation, however previous recreational uses had resulted in some degraded areas of vegetation. The site was the subject of a Heritage Agreement; however, some areas of the site were specifically excluded from the agreement. (page 154)’

Whilst there are some areas of degradation within the Heritage Agreement, the sites selected for this development do not correspond with them, apart from the proposed Site D. The areas selected also do not correspond with the current exclusions, which the NCSSA agrees are not logical from a conservation perspective.

The NCSSA understands that ‘in principle’ agreement has been given to amend the Heritage Agreement to facilitate the development. The EIS is inadequate because it does not ‘identify any changes required to the Native Vegetation Heritage Agreement’ in any detail, as required by the *Guidelines*. It does not contain a map of the proposed amended Heritage Agreement, outlining the areas to be excised from protection to facilitate the development and the areas that will be ‘added’ to the Agreement.

¹ <https://www.environment.sa.gov.au/topics/native-vegetation/protecting-enhancing/heritage-agreements>

In any event, changing lines on a map to 'protect' areas currently not 'protected' is meaningless for nature conservation if the net effect is loss of native vegetation and habitat for threatened wildlife, which it will be if this development application is approved.

The EIS also understates the impact on the vegetation by misleadingly qualifying the indisputable impacts, as follows (qualifications emphasised):

'Clearance and project activities have the potential to result in a variety of impacts that may affect the condition of native vegetation on the site in both the short and long term. These impacts include direct loss of vegetation through clearance; degradation of vegetation condition through indirect impacts such as edge effects, habitat fragmentation, irrigation effects, and dispersal of pest plants; and fire risk.'

Native vegetation will be lost and degraded by this development through the processes identified.

The NCSSA believes that the native vegetation clearance required for the development has been underestimated, since the statement "the Project will require clearing 23.76 hectares of native vegetation for construction including launch pads, access tracks and associated laydown areas" does not seem to account for all clearance that will be required at the site, including for temporary construction zones and for adequate bushfire protection.

It is also misleading to state, as the EIS does, that:

'The Project Area has been refined during the design phase to reduce the amount of native vegetation to be cleared in areas of lower condition rating as far as practicable.'

Rather, it would seem the number of proposed launch pads has been reduced from the concept map issued in the *Guidelines* from 6 to 2 at this time. However, the applicant clearly intends to further develop the Launch Complex, which will result in further clearance in future.

The current siting will impact vegetation that is in high condition as the applicant has deemed is 'not practicable' to avoid these areas.

Impacts on threatened species unacceptable

As stated in the EIS in relation to the Southern Emu-Wren (Eyre Peninsula), 'the highest frequency and broadest geographical section for critical habitat is found in the south-western section of Whalers Way near the Launch Site A'. In other words, Launch Site A is proposed for the location where the most records for the Southern Emu-Wren (Eyre Peninsula) at Whalers Way have been made, meaning it represents prime habitat and a 'hotspot' for this important population.

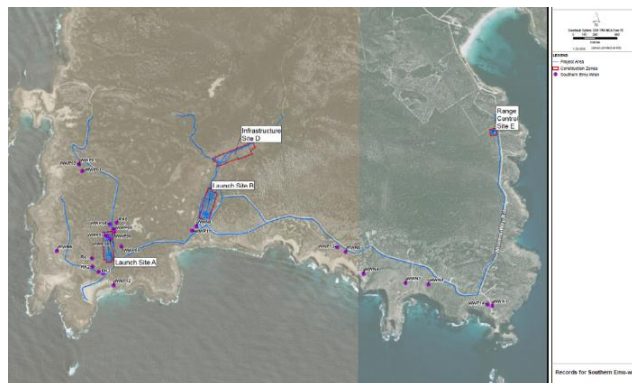


Figure 3. Figure 6 from Attachment P: Terrestrial Biodiversity Technical Report, showing Southern Emu-Wren records relative to the proposed Site A

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000



Figure 4. Close up of Figure 6 from Attachment P: Terrestrial Biodiversity Technical Report, showing Southern Emu-Wren records relative to the proposed Site A

This siting is in direct contravention of the recommendation from the proponent’s own consultant’s report as included in the EIS, which stated:

“In the first instance, it is recommended that avoidance of all critical habitat for Southern Emu-Wren is prioritised due to the low distribution and narrow band of habitat available”.

If the siting of Launch Pad A cannot be amended by the applicant, the development application should be **refused outright** since it will have an unacceptable impact on the threatened Southern Emu-Wren (Eyre Peninsula) population at Whalers Way. The combination of direct habitat clearance for the launch pad infrastructure with the likely high impact of launch noise on this shy and secretive species will render a large portion of Whalers Way completely uninhabitable for this bird.

The EIS comes close to briefly acknowledging this by stating (emphasis added):

“A total of 18 individuals were recorded within the Project Footprint during the targeted survey and it is estimated the overall population is under 100 individuals in the Whalers Way area from Cape Wiles to Cape Carnot making the Whalers Way Peninsula population tenuous to the impacts detailed in preceding sections”

The EIS does not quantify well the expected impact of launch noise on any of the threatened species at the site and particularly over-emphasises uncertainty regarding the likely impact of rocket noise on birds.

The EIS states that:

‘Rocket launch and testing events have the greatest potential to disturb and cause an adverse physiological or behavioural impact on the local wildlife. Noise levels above the measured ambient level at distances further than 5.0 kilometres from the launch are predicted. 140 dB(A) has been identified by AECOM as the permanent hearing damage threshold for wildlife. No wildlife is predicted to be exposed to these levels.’

Permanent hearing loss is only one issue for wildlife. Far more worrying is the prediction of launch noise causing disturbance to wildlife over several kilometres. As the EIS points out, high levels of noise disturbance will cause sudden nest abandonment leading to a loss of eggs or chicks through breakage, trampling, chilling, and predation. This means a large area of Whalers Way will become unsuitable for breeding, particularly as the number of launches increases to the planned 42 per year.

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For the Southern Emu-Wren, the EIS states:

‘The Southern Emu Wren (Eyre Peninsula) is sensitive to discrete, unpredictable disturbances such as sudden loud noises that can cause physiological effects, such as stress, avoidance and fright-flight responses. The Project is likely to reduce the area of occupancy for this species’.

However, the EIS understates the likely impact for another threatened bird at the site, the Western Whipbird, by stating that:

‘Noise may displace individual Western Whipbird (eastern) species in the area. These impacts are anticipated to be localised and of short duration therefore should not reduce the area of occupancy for an extended period in the local vicinity.’ (page 337).

There is no evidence presented to support that statement, and it contradicts the statement which immediately follows:

‘Although there is suitable habitat and known populations in nearby national parks the potential operational noise impacts has the potential to lead to a long-term decrease in the size of the population of a species.’ (page 338).

The EIS understates the impact of fragmentation that will result for the threatened species at the site from the development, by stating:

‘Vegetation clearance may result in fragmentation of habitat. The habitat in the local area is contiguous and provides ample connectivity across Whalers Way. Most species in Whalers Way are mobile and able to traverse the distance of cleared areas. Fragmentation is therefore considered limited and unlikely to be considered significant’.

Fragmentation of habitat is a major impact that will result if this development application is approved and is one of the key threats to the threatened bird species at the site.

The NCSSA notes that conservation status of the Southern Emu-Wren (Eyre Peninsula) and the Western Whipbird should be ‘endangered’ rather than ‘vulnerable’, a higher category of threat, according to the latest assessment in the Action Plan for Australian Birds 2020 (by Stephen Garnett and Barry Baker)².

The NCSSA is deeply concerned that this development application, if approved, would also impede the recovery of the endangered White-bellied Sea Eagle and Eastern Osprey, and negatively impact endangered Australian Sea Lions and Southern Right Whales in the near area.

The NCSSA does not agree with the statement in the EIS that:

‘The management of public access and recreational activity on the site arising from the Project will eliminate the historical dumping of waste left on the site for extended periods, which is a major cause of attracting pest fauna species. The Project should therefore have a positive effect in reducing the distribution of pest fauna species in the area’.

Whilst preventing further dumping of waste and removing dumped waste from Whalers Way is desirable, the extent to which this waste currently harbours pests is questionable. Setting

² <https://www.publish.csiro.au/book/7905/>

up facilities that include accommodation for staff, and the associated waste disposal issues, may in itself attract pests.

Mitigation strategies and 'offset' commitments inadequate

The NCSSA believes that the 'mitigation strategies' outlined in the EIS are inadequate. True mitigation for this development application would be to select a less environmentally sensitive site since there is no feasible way to 'replace' the important habitat for threatened species that will be destroyed and damaged.

No specific plans are presented regarding how the company will "offset" the impact of this proposal and the scant information available is inaccurate and unacceptable. For example, this EIS does not provide any detail as to how 'offsets' to the full range of State listed species that will be impacted, simply stating:

'Direct impacts to State listed species are to be offset through a biodiversity offset program developed in accordance with NVC.'

Inaccurately, the EIS states that "Most impacts are constrained to areas immediately surrounding the Project Footprint and their impact can be offset through appropriate mitigation and management strategies". This is clearly not the case since the impacts of noise and vibration on threatened species will impact animals several kilometres from the launch site.

The EIS documents a calculation of the Significant Environmental Benefit, which is required for clearance under the *Native Vegetation Act 1991*. The NCSSA disputes that the figure of \$965,047.76 is correct. The 'loading' which should be applied to this calculation, designed to increase the cost of clearing recognised conservation areas like Whalers Way, has been removed from the formula, as stated on page 296 of the EIS. The applicant has justified this due to the 'in principle' agreement to excise the areas identified by the applicant as needed for this development applicant, from the Heritage Agreement. This is deceptive, pre-emptive and unacceptable.

The Native Vegetation Data Report (Appendix Q) briefly mentions a predator proof fence to allow for the eradication of cats and foxes from Whalers Way, however, no firm commitment has been made or legal requirement to deliver on this plan has been established.

Fire risk unacceptable

The NCSSA believes that the risk of bushfire at this high-risk site has been inadequately addressed, and therefore the development application should not be approved.

Firstly, there does not seem to have been a step in the assessment process where the question "is this an appropriate development for a high bushfire risk site?" has been asked. It is therefore incumbent on the State Planning Commission to ask that question, and bear in mind the increasing risks and lengthening fire seasons expected with an increasingly changed climate regime. The legal responsibility for any escaped fire, and its impacts on life and property, should also be considered.

Secondly, it is unacceptable for the Bushfire Management Plan for the development to have been redacted prior to public consultation, especially given that the applicant intends to rely on volunteer fire fighting resources that would otherwise be available to the community.

The EIS seems to suggest that managing fire at the site is merely a matter of responding to any unplanned ignition, as indicated by the following paragraph:

5.9.2.5 Bushfire Management Plan

A specific Bushfire Management Plan has been drafted and is included within the Emergency Management Plan. This plan will outline what actions are to occur and what arrangements for seeking refuge, evacuation and relocation are available. It will also highlight potential issues to be considered when taking appropriate action in the event of a bushfire approaching the site.

However, this fails to recognise the full range of requirements relating to bushfire, including preventing ignition from launches as well as other activities that will take place at the site (like construction, grinding etc), it does not address that a failed launch or a launch that is only partially successful presents a serious fire risk and it omits the need for 'asset protection' that will be established if structures are permitted in this high-risk area.

The NCCSA is aware of other developments where limited asset protection was undertaken initially, and this was heralded as minimising vegetation clearance, but subsequently asset protection zones were established. Ultimately, these zones were inadequate in any event and the structures were burnt to the ground in 2019 (Figure 5).

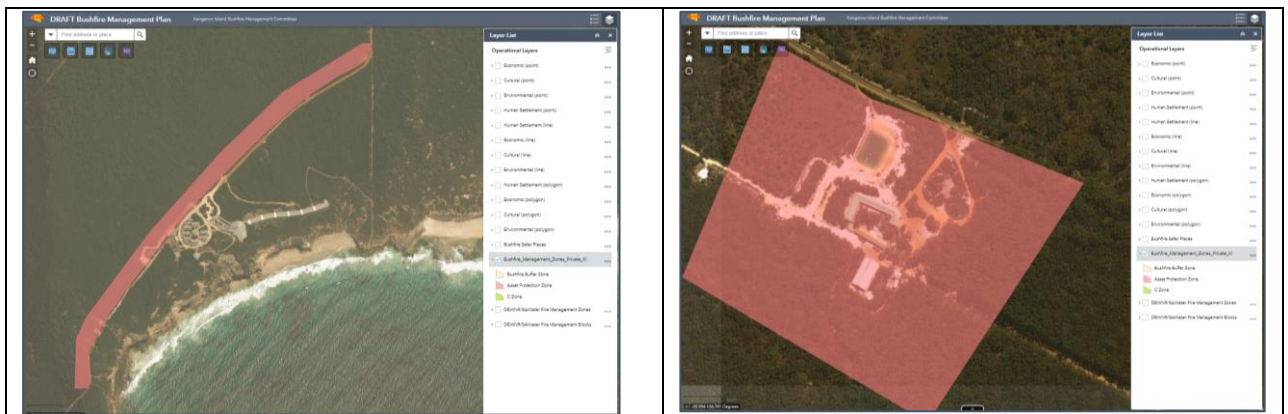


Figure 5. The Southern Ocean Lodge (left) and KI Wilderness Retreat (right), showing asset protection zones that were added post-approval. Both these structures were burnt in the 2019 fire.

The approach to asset protection outlined in the EIS is totally inadequate. A 5 metre buffer or setback area is not sufficient to protect any structure, nor is it sufficient to protect native vegetation from fire ignitions from building or site activities. Typically, according to the South Australian *Fire Management Zone Standard and Guidance for Use 2020*, the defensible space around an occupied structure is 20 metres without any approval required, and can be up to 100 metres.

The NCCSA therefore believes that clearance of native vegetation will be far greater once the true requirements for asset protection are identified.

The risk to wildlife from bushfire resulting from this development application has not been accurately identified, as required under 3.4 of the *Guidelines*. Bushfire is a critical risk, particularly to the threatened fauna at the site. A population of the Southern Emu-Wren (Eyre Peninsula) was completely wiped out by a fire in the Koppio Hills in 2005. The Western Whipbird is also thought to be fire sensitive, and much of its habitat in Lincoln National Park was burnt in 2015³.

It is also disingenuous to characterise clearance along fence lines as:

“Firebreaks incorporated along fences to protect and mitigate one of the primary threats to EPBC listed species present.” (page 297)

³ <https://www.abc.net.au/news/2015-10-06/lincoln-national-park-closed-to-new-visitors-as-fire-burns/6829868>

... since this clearance would be inadequate for bushfire control and simply represents greater habitat loss for these species from the development application.

Further expansion

There is a clear desire to expand this facility in future, should this initial development application be approved, as stated in the EIS:

'The precise nature and design of additional launch facilities is still under evaluation at this time, and subject to emerging technologies and market requirements. Any future facilities beyond those detailed in this EIS will be the subject to a further application and assessment process, subject to relevant regulatory requirements, at the time they are proposed in future.'

Therefore, if this development application is approved, it is highly likely that the applicant will seek to expand in future, which will increase and exacerbate the impact and threats to nature at this sensitive site.

Inconsistent with relevant planning policy

This development is clearly inconsistent with the relevant planning policy for this area, rather than 'substantially compliant', as the EIS states.

For example, the provisions of the Conservation Zone are:

"The conservation and enhancement of the natural environment and natural ecological processes for their historic, scientific, landscape, faunal habitat, biodiversity, carbon storage and cultural values and provision of opportunities for the public to experience these through low-impact recreational and tourism development."

This development will negatively impact on the natural environment and will prevent the low-impact visitation currently taking place.

It is also inconsistent with the Hazards (Bushfire - High Risk) Overlay, which seeks to:

'ensure development responds to the high level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property, facilitating access for emergency service vehicles and situating activities that increase the number of people living and working in the area away from areas of unacceptable bushfire risk.'

This development application would clearly increase the number of people working in an area of unacceptable bushfire risk.

It is also inconsistent with the State Significant Native Vegetation Overlay, which seeks to 'protect, retain, and restore significant areas of native vegetation', such as that found at Whalers Way.

More broadly, the *Planning, Development and Infrastructure Act 2016* aims to support the State's liveability and prosperity 'in ways that are ecologically sustainable...'. This proposal is not ecologically sustainable, as it will have unacceptable and permanent impacts on nature at Whalers Way.

Particularly, approval of this development would be inconsistent with the State Planning Policy for Biodiversity⁴, which seeks to:

'Minimise impacts of development on areas with recognised natural character and values, such as native vegetation and critical habitat so that critical life-supporting functions to our state can be maintained.'

The native vegetation of Whalers Way, which provides critical habitat for the Southern Emu-Wren and other threatened species, would be protected from the impact of this development by the selection of a more appropriate site.

'Test' launches from 'temporary' facility have not yet taken place

In June 2021, the State Planning Assessment Panel gave the applicant permission to construct a 'temporary' launch pad and fire up to three 'test' rockets.

In granting approval for the "tests", the SCAP was advised that 'the specific and limited purpose of the development is to inform the Environmental Impact Statement (and the validation of current modelling) under a major development process'.

However, the EIS has been released prior to the 'tests' taking place.

The applicant themselves identified that, without validation, computational modelling of the likely impacts on wildlife of launch noise suggests the development should be refused by stating in their application documentation for the 'temporary' facility:

Should the State Government apply the precautionary principle, a reliance on computational modelling to determine the impacts on local fauna without empirical validation may result in the proposed development being refused, or further empirical validation details being requested (which may ultimately require a test campaign) before a decision can be made and the proposal.

The NCSSA believes no further consideration of this major development application should be made until the 'tests' are concluded and the data made publicly available for independent review.

At the time of writing (Thursday 16 September 2021), two failed attempts of the first 'test' launch had occurred. The second, recorded at 2:18pm on Wednesday 15 September, concluded in a huge plume of smoke. This is further evidence of the danger of experimental, explosive technology in a fragile conservation area that is at high bushfire risk.

Summary

The NCSSA believes this development application should be refused because:

- The impacts on protected native vegetation will be unacceptable, and it will set a dangerous planning precedent for other Heritage Agreements holders in South Australia,
- The impacts on threatened species will be unacceptable, particularly for the Southern Emu-Wren and Western Whipbird, as well as a range of other threatened species at the site,

⁴ https://plan.sa.gov.au/data/assets/pdf_file/0005/552884/State_Planning_Policies_for_South_Australia_-_23_May_2019.pdf

- The mitigation strategies and 'offset' commitments put forward in the EIS are inadequate,
- The development presents an unacceptable bushfire risk,
- The high likelihood of further expansion will further damage the fragile environment and threatened species at Whalers Way, and
- It is inconsistent with relevant planning policy.

The NCSSA notes that 'test' launches from 'temporary' facility have not yet taken place, despite having been approved for the specific purpose of informing the EIS.

If consideration of the development application is to continue, the State Planning Commission should commission an **independent review of possible locations** for such a launch complex.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I strongly oppose the Orbital Launch Complex being built at Whalers Way, Eyre Peninsula, and wish to make comment on these aspects of the EIS:
Wildlife and Threatened Species:
The EIS mentions 16 threatened species but only names 6 of them. I don't think there has been a thorough enough study into the impact on wildlife and there has been no mention of proper engagement with local shorebird experts. The repercussions from air and noise pollution and also vast habitat and vegetation clearance will be enormous and has not been properly considered. Also, the impact on migratory birds - this has had minimal consideration, especially when some are endangered species that require all the protection that we can give them. There is also the impact on the marine animals and delicate eco-system. The endangered Australian Sea Lion and the Southern Right Whale inhabit those waters and there has been no adequate discussion as to what will happen if rockets carrying huge amounts of fuel crash into this area.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

From:
Sent: Thursday, 16 September 2021 2:46 PM
To: DIT:SPC Reps
Subject: Southern Launch development

I support the Whalers Way rocket launch development

Regards

Submission on Application

Development Act 1993

Section 46B – Environmental Impact Statement – Major Development

Applicant: Southern Launch Space Pty Ltd

Development Number: 932/P007/19

Nature of Development: Whalers Way Orbital Launch Complex Proposal

Assessment Level: Environmental Impact Statement

Subject Land: Lot 101 Right Whale Road, Sleaford

Phone number: 1800 752 664

Close date: 16 September 2021-09-16 name: Therese Pedler

Contact number:

Email:

Postal Address:

Affected Property: 3 Tulka Esplanade Tulka

My interests are: owner of local property, occupier of local property, a representative of an organisation affected by the proposal and a private citizen

The aspects of the proposal I wish to make comment on are:

BUSHFIRE

As a Community that has been severely impacted by bushfire since at least 2001, I have a deep concern regarding bushfire. Will Southern Launch (SL) operate on days of a Total Fire Ban, whether it is a Fire Danger Rating of Severe Extreme or Catastrophic and will they launch on days when the actual or predicted Fire Danger Index is over 50. The Voluntary Code of Practice that restricts farmers from reaping is initiated when the Fire Danger Index is proposed or actually reaches 20. May I suggest that this is a much safer indicator? Please provide details of all fire cover provided on site and on proposed launch days. Lloyd Damp SL CEO told us that all Emergency Services will be on standby for 12 hours at least on days of proposed launches. Does this mean that tax payer funded ES Staff and volunteers will be approximately an hour away from the Port Lincoln CBD should they be required? How can the taxpayer be expected to supply this to a private company? Shouldn't they be expected to pay for their own? We don't have enough SAPOL or SAAS resources now let alone increasing their response time by approximately an hour! Please release all the details of the Bushfire Preparation and Response plan. It

does not have to be included in the general EM Plan. The EM Plan is unavailable due to secrecy. Their Bushfire Plans should be made available to the Public they are putting at risk.

SCHOOL BUS

Have the Department for Education been fully advised of this Project and what is their opinion of the impact on the Fishery Bay School bus route? Has a risk assessment been done regarding the bus route being exposed to a significant increase in traffic, including heavy vehicles and vehicles carrying highly flammable and explosive contents, children in the bus and those waiting on the side of the road to be picked up or walking along the road to return home?

CHEMICALS

What chemicals are being used? How are they transported? How are they stored? What are the impacts of these chemicals on the environment and people? Can you please guarantee that none of these chemicals will land on our rooves and go into our rainwater tanks for us to drink? What do these chemicals do to our air quality? How will these chemicals affect the air we breathe? Please provide details of mitigation activities SL has undertaken to prevent guaranteed exposure to any of their chemicals.

RAPTORS

DEW suggested engaging a "coastal raptor expert". SL engaged Dr Zeta Bull, who states in the EIS she is NOT a "coastal raptor expert". Then the CEO's father, Mike Damp, is quoted as bird enthusiast. Please don't treat us with this level of contempt. We are not idiots. This is blatant secrecy, nepotism, white washing the facts, trying to pull the wool over our eyes, propaganda and showing total disregard for the local ENDANGERED AND THREATENED species. If SL can provide this level of nonsense regarding Raptors then what other nonsense is in their EIS?

EIS 8.4.6.7 states 28 threatened fauna species within the vicinity of the Project

EIS page 338 states:

"It is uncertain what impacts the noise and lights would have on the ongoing occupancy of this (Southern Emu Wren) species at Whalers Way" and "The Project (SL) is therefore likely to reduce the area of occupancy of this species (Southern Emu Wren)

APPENDIX S

Pages 4-6 states SL know their activities will cause temporary hearing loss to birds, including the NATIONALLY THREATENED SOUTHERN EMU WRENS AND WHIP BIRDS that are in the immediate area. This will make them more vulnerable to predators. How can this be allowed to happen? PLEASE DO NOT LET THIS HAPPEN. Also states "Seals and their pups being separated and possibly trampled." PLEASE DO NOT LET THIS HAPPEN. There is also a colony of endangered seal species in the immediate area. THIS IS

CONSCIOUS AND DELIBERATE AND INFORMED DESTRUCTION OF NATIONALLY THREATENED SPECIES.
THIS MUST BE STOPPED.

Page 46 – 4.4.3 states “Southern Right Whales could potentially be exposed to sound exposure levels up to 135dBA” and that “Whales would be able to respond to this hearing discomfort by submerging for the duration of the launch noise, which would be less than 2 minutes and considered not to be a significant disruption to their behaviour”

Are you prepared to approve an activity that will knowingly cause a whales hearing discomfort?

Are you prepared to approve an activity that is considered to not be a significant disruption to their behaviour? What about major disruption? What about minor disruption? Who determines what is acceptable – us humans or the whales? How will SL encourage the whales to submerge before they experience this “discomfort”? Sign posts in whale language? Follow the leader with a diver? What is the coincidental correlation between minimal whales at Victor Harbour and the re building of the cause way

TO EVEN CONTEMPLATE THIS IS APPALLING

APPENDIX Q

States risk assessment is level 4 – a high risk to biodiversity. FACT! PLEASE DO NOT ALLOW THIS RISK TO PROCEED

NEAR BY RESIDENTS

The 2 closest Progress Associations – Sleaford Bay (SBPA) and Tulka (TPA) were not consulted. When we asked Lloyd to attend a meeting in Tulka he did attend, with his father, Mike Damp, the “bird enthusiast” and an employee, Brenton Ellis, who continually muttered negatively and derogatorily about comments from those attending. When SAWater were considering a desalination plant in the area they engaged with both these PAs very well, over many years, frequently and consistently. The SL Community Engagement have witnessed in comparison, is abysmal, short notice, very limited, untrue, scarce, unprofessional, aggressive, accusatory, done with raised voices in a threatening manner, etc. Even today the notice aired on ABC was received at 11:07 for a 12noon-6:30pm window. THIS DOES NOT MEET THE MINIMUM REQUIREMENTS BY REGULATIONS OF 1 HOUR. It was only 7 minutes short but if they are willing to cut these corners and break these rules what other corners and rules are they breaking or willing to break – all for share holder profit.

APPENDIX P

Page 10-11 states 23.76ha of Native Vegetation clearance and \$915,078.45and “offset through State and or Commonwealth requirements.” Please explain.

AIR QUALITY ASSESSMENT DOCUMENT

States:

US EPA is being sued for rejecting science and using a cut off of 35

WHO recommends 10 would reduce mortalities by 15%

Adelaide is 6

Whalers Way is 0

SL engine test scenario shows levels of 20-50 over neighbouring homes and 10-15 over Fishery Bay beach – one of Port Lincolns premier beaches

THIS CAN NOT BE ALLOWED

WHALES

We have 2 whales and 2 calves in Proper Bay

We have at least 3 Southern Right whales and their 3 calves and 1 solo and 2 Humpback whales in Sleaford Bay documented daily by locals.

These whales have been present every day that SL has attempted to launch and this does not deter them

WHY NOT?

I am exasperated Minister about this whole process. I could go on and on but I am sure you get the idea.

I am not against satellites, rockets, advancement, technology etc

I am however against private companies making money at the expense of our irreplaceable environment.

PLEASE CONSIDER ALTERNATIVE SITES ON OFFER WITH LESS ENVIRONMENTAL IMPACTS

Thank You for the opportunity to have my concerns considered

Internal Note: email received 17/09/21 8:50am as follows:



Re_submission re
development number

Internal Note: email received 17/09/21 2:45pm as follows:



Re_submission re
development numbe

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	WHALER'S WAY!!!!!!
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I moved to Port Lincoln on the 27th May 2009, from overseas, the Mediterranean, France to be precise,
with my husband, John. John was born in 1965, in Tumby Bay hospital. His parents moved to Port Lincoln 3 years later, along with their children. My husband, John passed away in 2015, drowning from a
prawning accident. We have 2 children, a daughter Maisy, now 15, and a son, Liam, now 13. You are probably wondering where on Earth I am going with this, well, our children helped me to decide to remain in Port Lincoln after John's accident and remain in Port Lincoln and continue to make this town our home, as I'm originally from the UK, I thought that is where I'd return after John passed away. They (our children) were determined that we stay. You see, they had become used to living in this small, quiet, sleepy, quite transient, but still cosmopolitan little town. They had become used to the way of life too, sports, especially passionate about footy (AFL), fishing, the pristine beaches, the rugged coastline, the National Parks, the wildlife and the wild nature of the weather. You can't beat a good rainbow in the Spring time here. Least but not less the return of the whales and their calves in August September are beyond words to search for and see.
So I am absolutely APALLED that this Southern Launch has even got as far as it has got, a
Scale and email launchpad@sa.gov.au Southern Launch to the Minister for the Environment and Heritage 1815, Adelaide, SA 5000 Government as early as August 2019! And the population of Port Lincoln only get the choice to go

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

public consultation on the 24th August 2021... It's a disgrace! and an insult to the people of Port Lincoln to have their say on this stinking matter, let alone the owners of the land of the proposed site!!! THE THEAKSTONES..... Farmers! HUMPF! Disgraced farmers.....
After John passed away, many a time have the kids and I visited Fisheries bay and many a time have I screamed into the wind to let go of my grief... Many a time have I wanted to drive down Whaler's Way and up until last year was my wish granted. We drove through the gate, shamed at the lack of care that the Theakstone family have let the information kiosk, tracks run into abandoned ruination... Nevertheless the coastline is beautiful, wild and rugged. I loved it, even though it was a wet, blustery, cold and wild day. It was amazing to see it in it's wild weather nature. The rugged roads gave way to potholes, hidden gems, like the sea life at the bottom of the cliffs like the sea lions all lazing and swimming on the rocks and rock pools, native birds, the elusive whales and their calves swimming leisurely along the coastline past the cliffs, the caves, the waves crashing on the rocky shorelines, the long crevasse further along the coast, where the kids imagined the earth cracked upon moving and opening up, the native vegetation, etc. An utterly wild stretch of coastline UNTOUCHED by man! Up until now! SHAME!
The Theakstones, owners of that piece of some heritage lands within their land, through generations. Now a family divided by greed to sell to Southern Launch, according to one side of the Theakstone family kicked out of the farmhouse living on that land, because – "apparently" – a brother has sold the land from under the rest of the family to Southern Launch, a private company! So I am asking you does that mean that the population of Port Lincoln doesn't have a leg to stand on voicing their concerns about Whaler's Way because they are a private company? Again SHAME!
THAT land, Whaler's Way, that has SO much potential, for a family day out, camping, saving endangered species, fragile rock formations, fragile rugged coastlines, nature trails, fisheries, recreational fishing, etc...
The Theakstones had the perfect opportunity to upkeep that land and make something decent of it, but no greed of easy money blinded them to the land they have chosen to ignore, like the rubbish that remains from them renting a piece of their land to the TV program "Survivor" in December 2001. The rubbish from 39 days filming still remains. IT IS A DISGRACE! They should be made to clean it up.
Will Southern Launch clean up after themselves?? Doubtful! They'll no doubt get approval, back handers & money speaks volumes. I also hear, the dear Port Lincoln mayor is on Southern Launches payroll = employee. REALLY? Again, what chance do we Port Lincoln citizens have to say we are OPPOSED to launching Australia into the Space race... I would not want to think of the worse scenario: a fire. Would you put CFS/SES volunteers at risk? They are family members...
.No pros
Risk of & to:
. Fire
. Lack of water
. Wildlife
.Endangered species
.Whales
. Erosion
. Flora "& fauna at risk
. Beaches
.Nature
. Marine Life
. Noise
NOTHING GOOD WILL COME OF THIS. THE TOWN IS ALREADY UP IN ARMS ABOUT SOUTHERN LAUNCH BEING HERE & CITIZENS READY TO PROTEST!!!!!!!

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Applicant: Southern Launch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
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Name:	
Contact number:	
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Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	In my capacity as the Chair of the South Australian Nature Alliance (https://naturealliance.org.au/)

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

As Chair of the South Australian Nature Alliance, a collaboration between nature conservation organisations that each work to protect and restore nature in South Australia, I am writing to urge the State Planning Commission to **recommend against approval** of this development application for a permanent rocket launching facility at Whalers Way.

The groups represented by this submission are:

- Conservation Council SA
- Conservation Volunteers Australia
- Friends of Parks SA
- Greening Australia
- Landcare Association SA
- National Trust SA
- Nature Conservation Society SA

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

- Nature Glenelg Trust
- The Wilderness Society
- Trees For Life

We urge the Government to work with the applicant to find an **alternative site** for the proposed facility. An **independent review** of possible locations is required, as was undertaken for the Kangaroo Island Timber Port, if consideration of this application is to continue.

The key reasons for opposing approval of this development application are:

1. The site selected for this development is not appropriate due to unacceptable impacts on nature
2. Any future growth of this facility would result in further impacts at this site and possibly other nearby conservation areas
3. "Testing" of rockets from a "temporary" facility at the site has not yet taken place
4. The EIS does not adequately address the risk of bushfire at the site

The site selected for this development is not appropriate due to unacceptable impacts on nature

The EIS outlines unacceptable impacts on nature from this development application.

Of most immediate concern is that the proposal will result in the clearance of protected native vegetation that is home to threatened species.

Whalers Way is formally protected under the *Native Vegetation Act 1991* as a Heritage Agreement. The precedent that would be set by excising the areas needed to facilitate this industrial development from formal protection is of deep concern to our groups. The area to be cleared is relatively substantial, and the associated habitat degradation would impact a considerably larger area given that the impact of noise and vibration from launches is expected to elicit a behavioural response from animals several kilometres from the launch pad, according to the EIS.

The application, if approved, would have direct, unacceptable impacts on threatened species.

Of particular concern is the likely impact on Southern Emu-Wren (Eyre Peninsula), a small, shy bird threatened with extinction that only survives in approximately eleven populations on the Eyre Peninsula, with less than 1000 individuals estimated in total.

The applicant has failed to follow the advice of consultants engaged in the production of the EIS, who clearly stated "it is recommended that avoidance of all critical habitat for Southern Emu-Wren is prioritised due to the low distribution and narrow band of habitat available". Instead, the applicant had chosen the area of most importance for the Southern Emu-Wren within Whalers Way as the site for Launch Pad A (Figures 1 and 2).

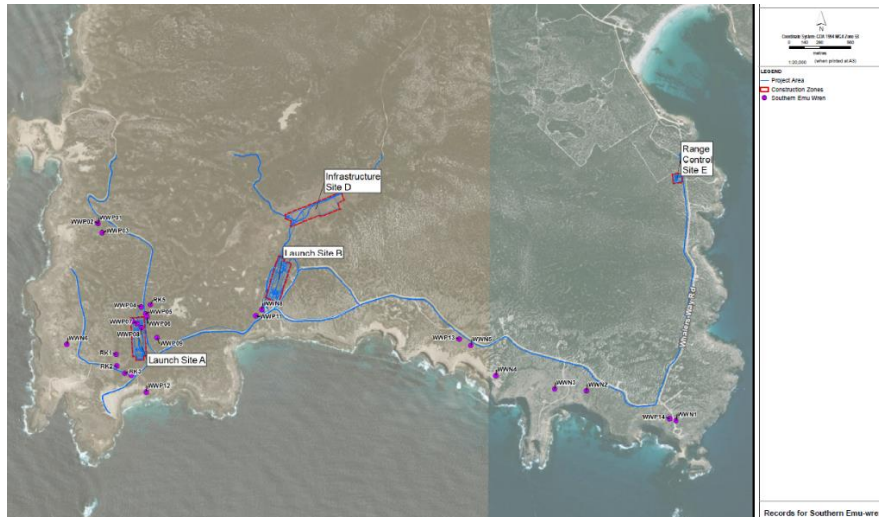


Figure 1. Records of the Southern Emu-Wren (Eyre Peninsula) (purple dots) and the location of proposed infrastructure. The area in and around proposed Launch Site A has been identified as critical habitat for the Southern Emu-Wren (Eyre Peninsula).



Figure 2. Close-up of records of the Southern Emu-Wren (Eyre Peninsula) (purple dots) and the location of proposed infrastructure. The area in and around proposed Launch Site A has been identified as critical habitat for the Southern Emu-Wren (Eyre Peninsula).

In addition to the Southern Emu-wren, we are concerned about the likely negative impact of this development on other threatened species in and around Whalers Way, including the Western Whipbird, Australian Sea Lion, Eastern Osprey and White-bellied Sea Eagle.

The development should be refused to protect nature, and particularly the threatened species, at Whalers Way.

If consideration of this application is to continue, we call for an **independent review** of possible locations for such a Launch Complex. To date, the analysis underpinning the selection of Whalers Way as the most suitable site has been undertaken by the applicant, who stands to benefit financially from the proposal.

We note that selecting potential rocket launching sites is highly technical, and therefore review by suitably qualified individuals is needed to test the assumptions made by the applicant and to critically compare the costs and benefits of alternative location options.

This step is essential if the South Australian community is to have faith in the sustainability of a growing space sector in this state.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

In June, Southern Launch was granted permission from the State Commission Assessment Panel (SCAP) to construct a “temporary” launch pad and launch three “test” rockets before the end December 2021.

In granting approval for the “tests”, the SCAP was advised that ‘the specific and limited purpose of the development is to inform the Environmental Impact Statement (and the validation of current modelling) under a major development process’.

However, the EIS for the major development process has been released prior to the ‘tests’ taking place.

We are of the view that no further consideration should be made of this major development application until the ‘tests’ have taken place and the data collected from them been made available for independent review.

The development should be refused because the ‘testing’ process, as approved to inform the EIS by the SCAP, has not yet taken place.

The EIS does not adequately address the risk of bushfire at the site

Whalers Way is located within the Hazards (Bushfire – High Risk) Overlay. The area has not burned for many years, which may account in part for the survival of species like the Southern Emu-Wren and the Western Whipbird in the area. The risk of bushfire to these species is critical: a population of Southern Emu-Wren (Eyre Peninsula) in the Koppio Hills was completely wiped out in 2005.

To date, there has been no consideration of whether a development of this nature is indeed appropriate for a high bushfire risk area, rather, the scant information available focusses on fire prevention and response by the applicant, such as indicating a reliance on CFS resources during launch events.

The Bushfire Hazard Management Plan was not even made available during the EIS exhibition. We do not believe that is acceptable, since the issues posed by fire are complex, and the community should understand plans for managing all aspects, including:

- How the risk of ignition from launches will be minimised
- How the risk of ignition from the many other activities likely at the site (e.g. grinding, construction) will be minimised
- How the site will be evacuated in case of an emergency
- How the ‘assets’ that would be built for this development will be protected in the event of a fire, independent of any launching activity

We do not believe it is possible to make the site safe for workers, if approved, and that asset protection activities, such as additional clearance of native vegetation, will be required.

This development should not be approved because it presents an unacceptable fire risk to humans, property and wildlife.

Closing statement

The *Planning, Development and Infrastructure Act 2016* aims to support the State’s liveability and prosperity ‘in ways that are ecologically sustainable...’. This proposal is not ecologically sustainable, as it will have unacceptable and permanent impacts on nature at Whalers Way.

Particularly, it is inconsistent with the State Planning Policy for Biodiversity², which seeks to:

‘Minimise impacts of development on areas with recognised natural character and values, such as native vegetation and critical habitat so that critical life-supporting functions to our state can be maintained.’

The native vegetation of Whalers Way, which provides critical habitat for the Southern Emu-Wren and other threatened species, would be protected from the impact of this development by the selection of a more appropriate site.

As the applicant noted to the State Commission Assessment Panel when seeking approval for the ‘temporary’ facility in June 2021, the land-use planning system does not specifically contemplate the type of development being applied for in any existing zone.

If the space industry is to grow in South Australia, the land-use planning system must be updated to reflect where such infrastructure would be contemplated, and in so doing clearly rule out sensitive areas of native vegetation and critical habitat.

² https://plan.sa.gov.au/_data/assets/pdf_file/0005/552884/State_Planning_Policies_for_South_Australia_-_23_May_2019.pdf

From:
Sent: Thursday, 16 September 2021 4:22 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

'----- This email and any attachments may contain legally privileged or confidential information and may be protected by copyright. You must not use or disclose them other than for the purposes for which they were supplied. The privilege or confidentiality attached to this message and attachments is not waived by reason of mistaken delivery to you. If you are not the intended recipient, you must not use, disclose, retain, forward or reproduce this message or any attachments. If you receive this message in error please notify the sender by return email or telephone and destroy and delete all copies. DEWC Systems carries out monitoring, scanning and blocking of emails and attachments sent from or to addresses within DEWC Systems for the purposes of operating, protecting, maintaining and ensuring appropriate use of its computer network. DEWC Systems puts the security of the client at a high priority. Therefore, we have put efforts into ensuring that the message is error and virus-free. Unfortunately, full security of the email cannot be ensured as, despite our efforts, the data included in emails could be infected, intercepted, or corrupted. Therefore, the recipient should check the email for threats with proper software, as the sender does not accept liability for any damage inflicted by viewing the content of this email. -----'

From:
Sent: Thursday, 16 September 2021 5:12 PM
To: DIT:SPC Reps
Subject: Formal submission opposing whalers way rocket launch

I am writing to voice my concern and opposition to the rocket launches proposed for whalers way. It is an incredibly diverse habitat, home to many endangered native species that will be negatively impacted by the rocket launches and clearing of vital habitats. The amount of water required for the process is unsustainable and will inevitably wash dangerous chemical waste from the launch site into the fragile ecosystem. It is concerning that they will be using such a huge amount of town water per launch and have unlimited access to one of our most essential resources in a time of such uncertainty in regards to drinking water quality and access.

There has also been inadequate consultation with the local Aboriginal community who are publicly opposing the launches. When there has been so much extensive land clearing in the area it seems ludicrous to clear 23 hectares of wild bush, surely there are better alternatives such as barren paddocks on some of the farms in the area. The risk of fire in such a vital natural habitat and so close to local farms, beaches and homes is also unacceptable.

I urge you to stop the launches immediately for the good of the local environment and community

Submission on Application
Development Act 1993
Submission on Application Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):



WALLMANS
LAWYERS

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human approach.

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www.wallmans.com.au

ABN 98 802 494 422

Our Ref: FJN:CMW:21-2453

Your Ref:

16 September 2021

The Hon Vickie Chapman
Minister for Planning and Local Government
Attorney-General's Department
GPO Box 1815
ADELAIDE SA 5001

Attention: Robert Kleeman, Manager, State Assessment Planning and Land Use Services

BY EMAIL: spcreps@sa.gov.au

Dear Minister

WHALERS WAY ORBITAL LAUNCH COMPLEX – EIS SUBMISSION

This firm acts for Jennifer Theakstone.

We have been instructed to prepare and submit this submission on behalf of Jennifer Theakstone concerning Major Development Number 922/P00/19 which has been submitted by the applicant SouthernLaunch.Space Pty Ltd (**Southern Launch**).

The subject land is allotment 101 Right Whale Road, Sleaford and is contained within Certificate of Title Volume 5993 Folio 374 (**Land**). The Land is owned by Theakstone Property Pty Ltd (ACN: 615 580 1060) (**Owner**).

Jennifer Theakstone is the daughter of Robert Theakstone. Theakstone Property Pty Ltd is a trustee of the Theakstone Family Trust, of which her father is a trustee. Jennifer Theakstone grew up locally and Whaler's Way is part of her ancestral home.

This submission will be submitted with Jennifer Theakstone's own written submission addressing the areas of her particular concern.

The purpose of this addition to her submission is to identify the technical and legal matters arising in the EIS. In particular this submission will focus on the following areas:

1. The precautionary principle and potential impact on the native flora and fauna;
2. The Heritage Agreement;
3. Bushfire risk;

1. PROPOSED DEVELOPMENT

The proposed development is described in detail at page 171 of the Environmental Impact Statement and paragraph 5 – Project Description.

A summary of the proposed development for the purposes of Major Development Declaration includes:

- Launch Facility A;
- Launch Facility B;
- Infrastructure Facility (Site D);
- Range Control Facility (Site E);
- General Site Infrastructure which includes;
 - Assembly facilities (both temporary and permanent);
 - Secure block houses, blast walls and firing bunkers;
 - Lightning rods and Anemometer Towers;
 - Propellant (liquid, hybrid and solid) storage;
 - Diesel powered generators and solar arrays;
 - Bunding for blast ways deflection;
 - Office, laboratory and research related facilities;
 - Visitor viewing facilities;
 - Road transport access;
 - Helicopter pad(s);
 - Water tanks;
 - Water capture and treatment systems associated with each site;
 - Installation of fibrotic and satellite communication systems;
 - And visitor viewing area and interpretative facilities;

The intended use of the Land is to establish a satellite launch facility to launch domestic and international vehicles for polar and sun synchronist orbit satellite insertion. The launch vehicles (rockets) will typically be in the range of 10 – 30 metres tall.

The Whaler's Way Orbital Launch complex (**WWOLC**) is expected to launch small CubeSat satellites into space. Southern Launch intend to launch approximately 1 rocket per fortnight to a maximum of 36 launches per year.

It appears that there is also some scope to add additional launch facilities on the site in the future. It is noted that the original proposal was for up to 6 launch facilities to operate from Whaler's Way. The current proposal has been reduced to 2 launch facilities, and is the focus of this EIS.

There is no indication in the EIS that Southern Launch intend to restrict the site to a maximum of 2 launch facilities. It appears that there is a likely intention to increase the number of launch facilities to operate from the Land at any one time.

It is noted that an increase of the number of launch facilities may or may not be subject to a further assessment by way of EIS pursuant to Section 1081(c) of the *Planning, Development and Infrastructure Act 2016 (PDI Act)*.

2. THE PRECAUTIONARY PRINCIPLE

The trigger for application of the precautionary principle is a threat of serious or irreversible environmental damage.

As relevant authority, the Minister should assess and consider the proposal with the precautionary principle in mind. The precautionary principle shortly stated is described by Stein J as follows:

"...the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty. Its premise is that where uncertainty or ignorance exists concerning the nature or scope of environmental harm (whether this follows from (whether this follows from policies, decision of activities), decision-makers should be cautious¹."

The desktop assessment by AECOM (Appendix P) identified 112 threatened fauna species that may occur within 10 kilometres of the project area. This includes 71 bird species, 36 fish species, 23 mammal species and three reptile species.

It has been identified that the proposed facility will be located squarely within the habitats of a number of threatened species including the Southern Emu Wren (Eyre Peninsula), of which there are less than a total 1000 remaining individuals and which is a known threatened species.

The conclusion of the AECOM report at page 21 stated:

"In the first instance, it is recommended that avoidance of all critical habitat for Southern Emu-Wren is prioritised due to the low distribution and narrow band of habitat available".

The report also concludes that:

"To further document and more accurately assess for the population extent and distribution of both species would require many weeks of field survey work which may result in significant disturbance and disruption to normal behaviour."

What is inconclusive is the potential impacts of further fragmentation and disturbance that is associated with the construction, infrastructure upgrades and operation of the project."

¹ *Leatch v Director General of National Parks and Wildlife Service (1993) 81 LGERA 270 at 282*

One of the primary concerns that has been raised is what impact the WWOLC will have on local fauna from the projected noise levels arising from the rocket launches. The EIS has identified, that *“noise disturbance will cause sudden nest abandonment leading to a loss of eggs or chicks through breakage, trampling, chilling, and predation.”*

This impact has been minimised in the EIS by referring to the time that each rocket launch will only last for a few minutes or more from take-off. However, the level of noise, even if for a short period, has the potential to have irreparable impact on the local species.

It is also worth noting that the temporary approval for the ‘test launches’ for the purposes of determining the impact on habitat, could have already disturbed and fragmented the local habitat to an irreparable degree.

Further unknown risks includes the impact caused by the debris from the orbital rockets which will fall back to earth after releasing the satellites. Southern Launch has stated that *“debris from failed launches with Polar and Sun-synchronous trajectories has the potential to impact Liguanea Island.”* (page 5, Appendix S). Liguanea Island is a known habitat for Long Nosed Fur Seals and Australian Sea Lions.

There is little detail in the EIS that sufficiently demonstrate the impact of the debris on the marine flora and fauna and the consequences of the toxic contaminants resulting from the rocket debris. Particularly, if there is scope or increase in the intensification of the activity at the site to 6 launch facilities and or a greater number of launches are proposed per year.

Notably, it is stated in the EIS that; *“Lithium ion batteries (about the size of two car batteries in volume) would likely rupture on impact with the sea surface or at depth. Lithium is already elevated in seawater and is not toxic, but would react with seawater and in sufficient quantity could cause alkaline conditions with localised, short term toxic effects”* (page 40-41, Appendix S).

It is clear from the EIS that the full extent of the impact on critical habitat on the threatened species, particularly the Southern Emu Wren and the marine flora and fauna is too unknown.

The potential threat is unacceptable. Particularly when considering the unacceptable fire risk a potential impact on this critical habitat which is addressed below.

3. THE HERITAGE AGREEMENT

Noted on the certificate of title for the Land is a Heritage Agreement (numbered 6456268) and dated 16 October 1987 (**Heritage Agreement**).

The agreement is between the then Minister for Environment and Planning, Donald Hopgood MP and the Land owner, Robert Theakstone. The agreement was entered into pursuant to the *South Australian Heritage Act 1978* (repealed). See Appendix L.

The heritage agreement provisions of that Act have since been superseded by the Native Vegetation Act 1991. Section 23 of the current act has replaced those provisions with respect to the legislative controls concerning heritage agreements.

A heritage agreement noted on a Certificate of Title for land flows with that land. It is binding on the owner of the land, whether not that owner was the person who entered into the original agreement.

The heritage agreement is still therefore an enforceable instrument under the Native Vegetation Act 1991.

The heritage agreement at Appendix L reveals that should Southern Launch clear the vegetation on the Land or contrary to the Agreement or operate contrary to the Heritage Agreement, the could be putting the owner of the Land in breach of the Native Vegetation Act 1991.

3.1. Land Subject to Heritage Agreement

Southern Launch have emphasised in their report at (Pages 154, at paragraph 3.2 on page xxxvi) that there were site specifically excluded from the heritage agreement. Southern Launch presumably took this information from the GRO Plan attached to the agreement. The plan is very poor quality and difficult to read. There appears to be areas hand drawn on that plan that includes the word "excluded".

Recital B of the Heritage Agreement is clear. It states that the agreement is entered into *"in respect of that portion of the land referred to in recital A as is delineated as "A", "B", "C" AND "D" in GRO Plan GP 463/1987 a copy whereof is attached to this agreement"*. Nowhere else in the agreement is there any reference to the area that is hand-marked as being excluded.

The terms of the agreement specifically state that the entire area contained within "A", "B", "C" AND "D" on the GRO Plan GP 463/1987 are subject to the terms of the agreement. There is no explanation as to the purpose of the excluded areas or why they are in fact excluded. Whether there was a last minute hand drawn change to the plan or not, is irrelevant. The excluded areas have no force or effect in the terms of the deed. The deed is simply silent on the excluded areas. See figure 1 below.

On this basis, it is noted that the temporary approval for the test launches has been approved on misinformation and is flawed.

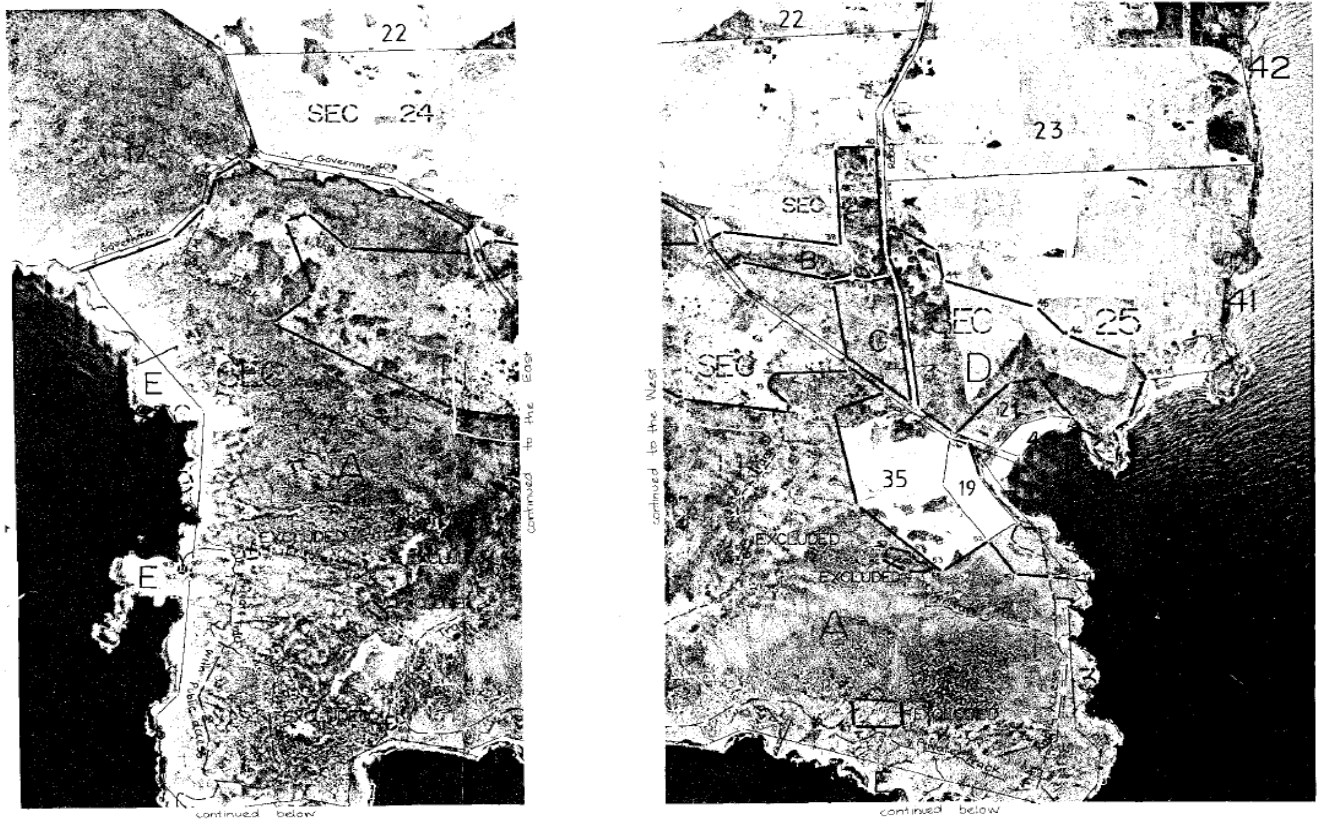


Figure 1 – Heritage Agreement Plan

3.2. Variation to Heritage Agreement

Southern Launch states (at page xlv or 5.3.2.1) that there is an *“In principle agreement has been reached to alter the existing Heritage Agreement and maintain the same area of vegetation subject to protection.”*

Only the owner and the Minister can enter into a heritage agreement pursuant to section 23 of the Native Vegetation Act. Southern Launch are not the owner and cannot force or require the owner or Minister to enter into a varied agreement. Nor can the approval of this development be subject to a requirement that a ‘third party enter into an agreement by condition’. Such a statement is flawed. There is no indication in the EIS report that the terms of the agreement have been varied or waived as against the owner of the land.

Even is a variation to the Heritage Agreement can be agreed between the Owner and the Minister, the statement above is misleading. The proposed launch sites in **Appendix M** and ‘Figure 3.4 – Site Plan Development Concept’ does not match up to those areas that have been identified as the supposed ‘excluded’ areas as shown in ‘Figure 3.3 – Site Plan – Existing Heritage Agreement’.

The whole of the areas identified in within “A”, “B”, “C” AND “D” on the GRO Plan GP 463/1987 are protected. Southern Launch will need to clear vegetation to construct the Proposed Development. It is simply not possible for Southern Launch to *“maintain the same area of vegetation subject to protection”*

3.3. Operative Clauses of the Heritage Agreement

Launching a rocket (or even a test rocket) will be in breach of the Heritage Agreement and the Native Vegetation Act 1991.

Clause 3 and 4 of the Heritage Agreement states:

3. *During the term of this agreement the subject land is **dedicated to the conservation of native vegetation and native fauna on the land** and subject to this agreement **shall not be used in a manner inconsistent with that dedication.***
4. *The Owner shall not, without the written consent of the Minister, undertake or permit on the subject land -*
 - 1) *the **clearance** of native vegetation;*
 - 2) *the **planting** of vegetation, whether native or exotic;*
 - 3) *the **construction of a building or other structure;***
 - 4) *the **grazing** of stock;*
 - 5) ***any other activity that, in the opinion of the Minister, is likely to damage, injure or endanger the native vegetation or native fauna on the subject land.***

Clearly, the reports in the preliminary reports in the EIS show that that launching a rocket will at the very least “*damage, injure or endanger*” native fauna, let alone the clearance of native vegetation of the land and contrary to the operation of clause 4(5) of the agreement.

Southern Launch are unable to vary the agreement, then the above clauses will be breached and potentially exposing the owner to enforcement. Mrs Theakstone is understandably quite concerned about the effect that this might have on her family and her families company.

3.4. Breaches of the Native Vegetation Act 1991

Section 26 of the Native Vegetation Act provides that clearing native vegetation contrary to Part 5 of that Act is an offence which attracts a maximum fine of \$100,000 or more.

Section 27 of the Native Vegetation Act provides that a breach of Part 5 includes clearance contrary to a heritage agreement.

Unless the Heritage Agreement is varied, the owner could be technically in breach of the Native Vegetation Act 1991, if the proposed development proceeds.

4. BUSHFIRE RISK

The Land is located in a High Risk Bushfire area and is located within the *Hazards (Bushfire - High Risk)* overlay in the Planning and Design Code.

The Bushfire Management Plan has been redacted from the EIS and prior to public consultation. This is a critical document that requires public scrutiny, particularly because of the potential impact that an ‘out of control’ fire could have on the broader community.

The native vegetation on the site is high density Mallee scrub, which, in the right conditions is very vulnerable to bushfire.

There is little to no information contained within the EIS as to how a bushfire will be successfully managed at the site. Strict management of bushfire risk will be required at all times, not only on launch days.

Fire escape can occur whenever there is any human activity at the site, including the many weeks ahead of proposed launch days. Further, the handling, transport and storage of highly flammable propellant (liquid, hybrid and solid) on the site creates additional concern and risk.

The proposed vegetation clearance of 5 metres is wholly inadequate. A dwelling in a Neighbourhood Zone in a *Hazards (Bushfire - High Risk) Overlay* is recommended to have a minimum of 20 metres of vegetation clearance. In this regard, the EIS has misrepresented the standard requirements for clearance and minimised the impact that the WWOLC will have on Flora and Fauna due to required bushfire safety clearances.

There is no suggestion that launches will only occur in the winter months or outside of the bushfire season. Southern Launch have not offered any limitations as to launch days in consideration of bushfire season. Nor is it proposed to restrict launch days when the Fire Danger Rating is catastrophic, extreme or severe.

It is proposed that there will be a local CFS truck on all proposed launch days. There is nothing in the documents to show that a formal arrangement has been entered into for this purpose.

The local firefighters are made up of volunteers and are a community fire fighting CFS truck and service. There are limited CFS services for the region. If a local CFS truck is required to be present at each launch day, this would place an unacceptable burden on local resources. It is not proposed to have additional resources in place in the event that the local CFS are fighting fires elsewhere on the proposed launch days.

There is insufficient information contained within the EIS as to the impact that a bushfire will have on the threatened fauna located at the site.

5. SUMMARY

We are instructed that Jennifer Theakstone has a deep connection to Whalers Way, an area of high amenity value with a dramatic coastline and natural beauty.

Jennifer Theakstone spent her childhood exploring the coastal area that has been part of her family since settlement of South Australia. Natural features of the area have even been named for her family, such as Theakstone Crevasse.

The impact of this proposal on her, the critical habitats and the community is unacceptable.

For the reason stated above, the application for the proposed development and Whalers Way Orbital Launch Complex should be REFUSED.

Yours sincerely
WALLMANS LAWYERS



FELICITY NIEMANN
Partner
Direct Line: 08 8235 3032
Email: felicity.niemann@wallmans.com.au

While I am supportive of a space industry in South Australia, I wish to comment on several aspects of the EIS presented by Southern Launch regarding the proposed Whalers Way orbital launch complex.

- Fire Hazard
- Impact on Eco-Tourism, Public Access & Recreation
- Impact on Commercial Fisheries
- Impact on Nao Traditional owners
- Pollution
- Impact on Fauna
- Impact on Flora
- Security & Safety
- Wind

Fire Hazard

p. 595 (or 653 in Final EIS PDF) 20.4.2.11 Bushfire Management Plan & the Emergency Management Plan (Appendix AB) ARE NOT INCLUDED / REDACTED

P618

Potential hazards have been addressed in the design of the development and strategy plans will be prepared to address the on-going management of hazards, in particular in relation to bushfires, chemical storage, and accidents.

Does this mean the redacted document remains incomplete?

p.367 (368 in pdf) 9.4.4 Guideline 3.4 3.4. Identify the potential impact of fire and explosion on native fauna, and the effects of fire risk management processes during both construction, operation and maintenance

The development is located adjacent to highly combustible Eucalyptus Mallee scrub¹ that has not had a true wildfire since Flinders arrived some 200 years ago²³ although Southern Launch document the last fire as 1931 in the EIS . An increased potential for wildfire caused by ignition of fuels and test launch activities is a public danger that may not be solved by a number of firefighting trucks. It's not an appropriate development for an area within the Hazard (Bushfire - High Risk) overlay⁴

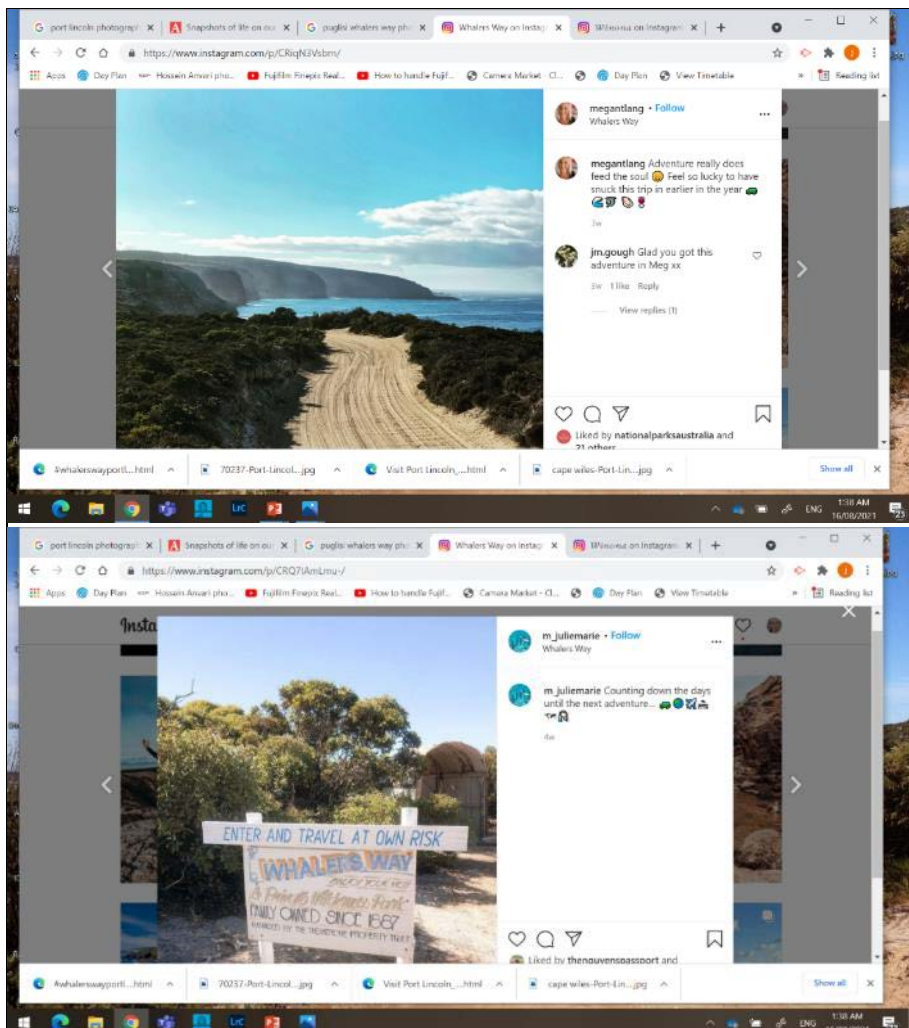
¹ "Typically, vegetation areas classified under MVG 14 – Mallee woodlands and shrublands: are among the most fire prone of all plant communities in semi-arid and arid zones." <https://www.environment.gov.au/system/files/resources/2edcda80-d9b7-49d4-9e97-36236b91e9f9/files/mvg14-nvis-mallee-woodlands-and-shrublands.pdf>

² This paper documents the increasing danger relative to the length of time a Mallee scrub area has not been burnt by fire. <https://www.bushfirecr.com/sites/default/files/firedynamicsinmalleehealthreport.pdf>

³ Flinders arrived in 1802. <https://monumentaaustralia.org.au/themes/people/exploration/display/110407-matthew-flinders-and-trim> This oral history has been recorded by the Theakstone family having lived in the area since 1887. A controlled burn in 1960 affected Fishery Bay scrub but not Whalers Way.

⁴ Vast firebreaks would assist however large firebreaks would scar the environment destroying flora, creating environmental degradation, loss of habitat and biodiversity loss
"It's not appropriate development for an area within the Hazard (Bushfire - High Risk) overlay" <https://www.ncssa.asn.au/>

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p.297 7.4.7 Guideline 2.7 2.7. Identify the potential impact of fire on native vegetation, and the effects of fire risk management processes during both construction and operation.

As discussed in Section 7.4.5.5, **an increase in fire frequency** is likely to disrupt the life cycle of flora and often results in a change in vegetation structure which includes loss of fallen timber and stags and is often followed by an increase in shrub density. While many Australian flora species have developed mechanisms to cope with fire in the landscape, frequent fires will decrease the resilience of the plant communities.

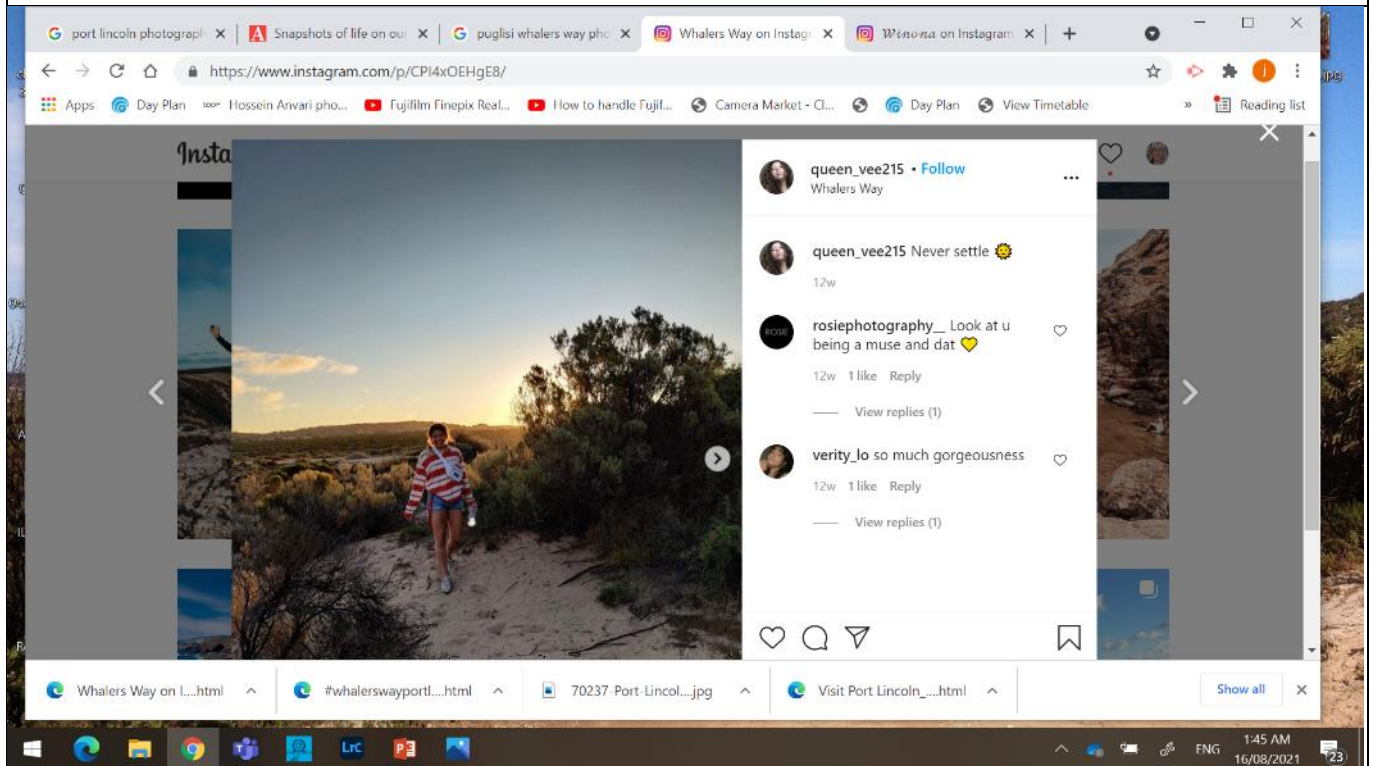
I find it extraordinary that fire incidents are so calmly expected to increase.

P 295 (353 in PDF) 7.4.5.5 **Increased Fire Risk**

An increase in fire frequency is likely to disrupt the life cycle of flora and fauna and often results in a change in vegetation structure which includes loss of fallen timber and stags and is often followed by an increase in shrub density. While many Australian flora species have developed mechanisms to cope with fire in the landscape, frequent fires will decrease the resilience of the plant communities. Some flora species may be burnt before they are mature enough to seed thus reducing the diversity of the vegetation community which in turn can further reduce its habitat quality. Excessively hot fires also have the potential to sterilise the ground by killing the seedbank and further altering the vegetation structure. The loss of fallen timber and stags decreases habitat availability for many native species and is likely to increase stress and resource pressure on fauna species. The loss of these habitat features may also increase the risk of predation of species by both native and introduced fauna.

The Project may increase the risk of fire due to hot works during construction activities and the chance of sparks occurring off the rocket launches during times of hot and dry conditions. Mitigation methods will be applied to all project activities to minimise the potential for impact on flora through increased fire events

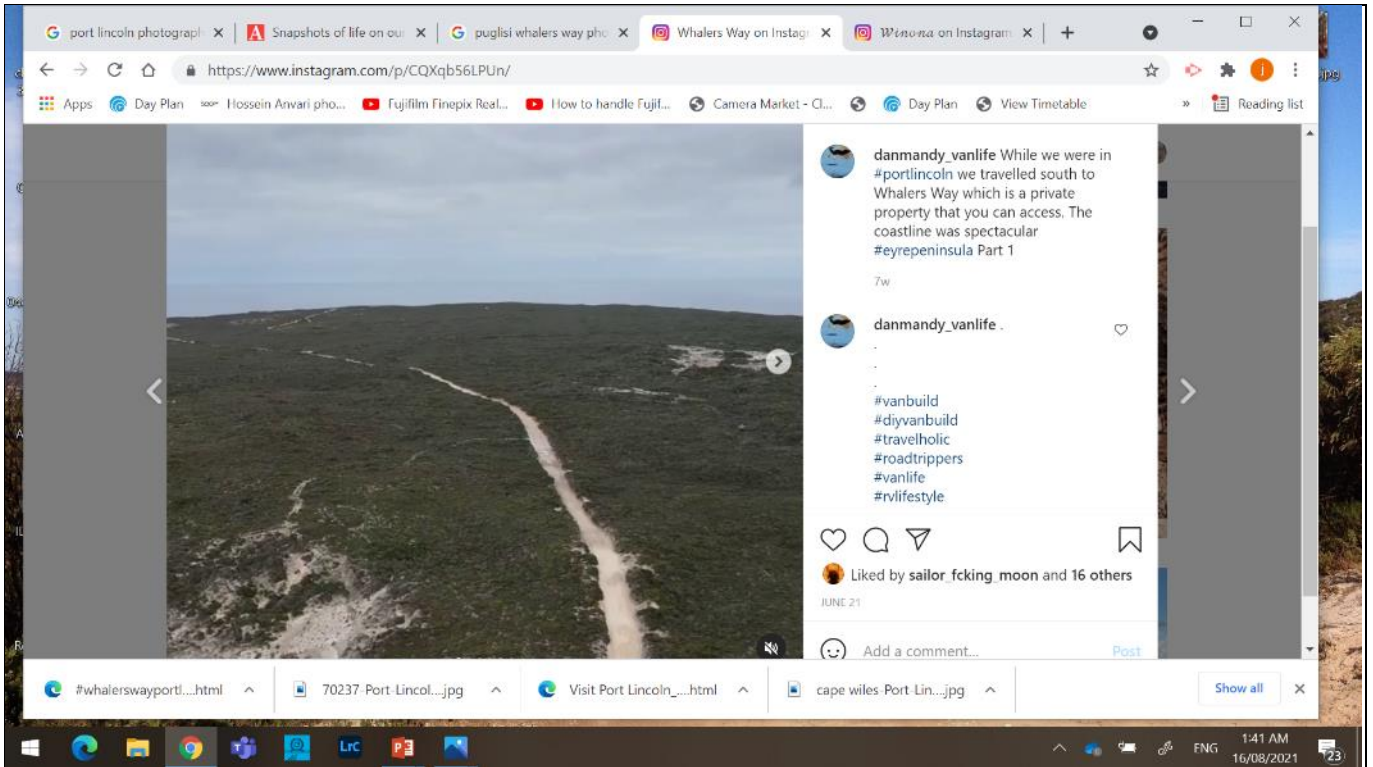
The increase of fire events anticipated through rocket launching activities is an unacceptable risk



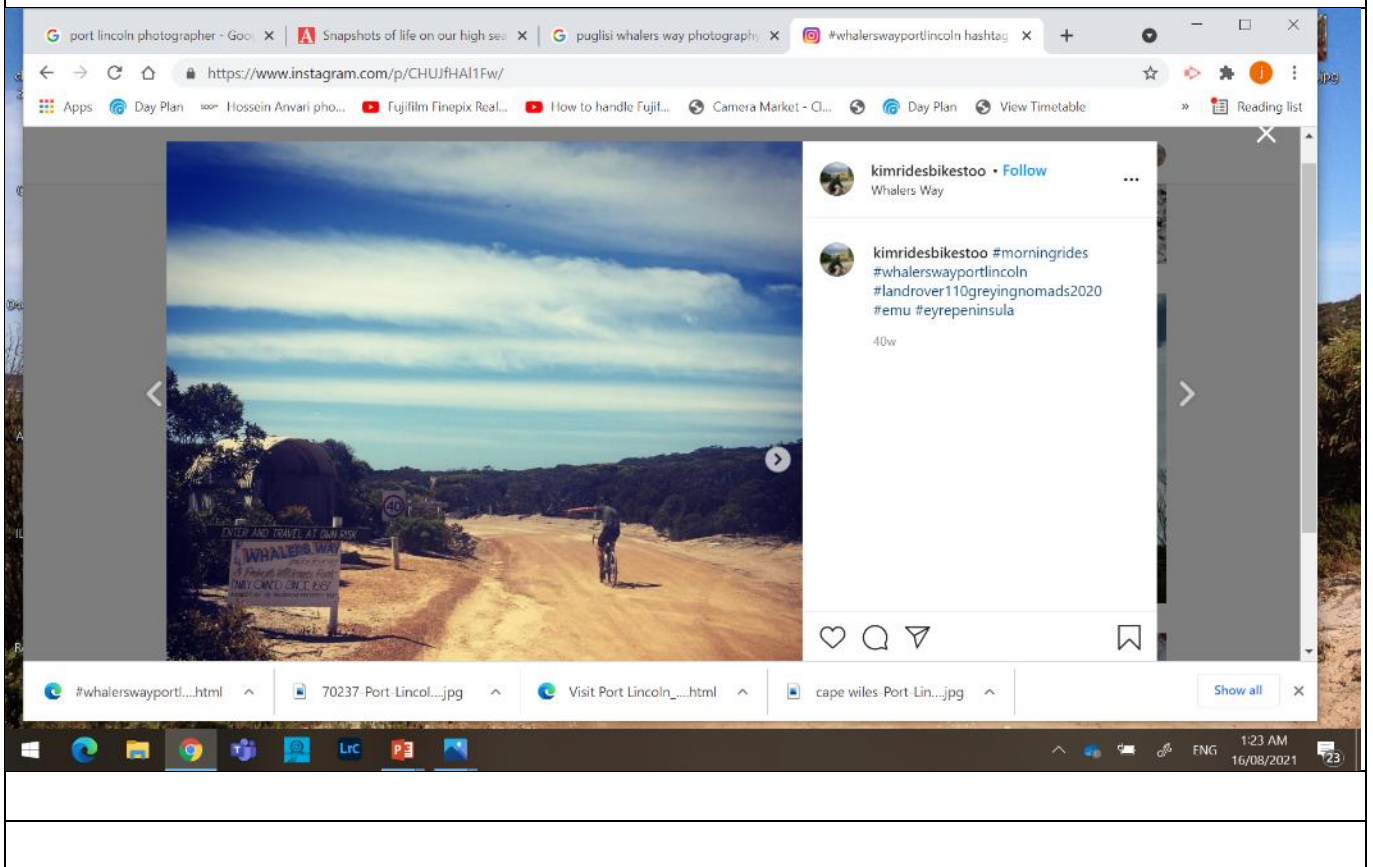
p. 276(374 in PDF) 7.4.2.1 Threatened Flora Species A desktop assessment undertaken by AECOM identified 11 threatened flora species that may occur within 10 kilometres of the Project Footprint. Following the baseline survey, a further desktop assessment of a 20-kilometre buffer was applied, and 33 species of Commonwealth and State conservation status were identified, including: • Five (5) species listed under the EPBC Act; and • 28 species listed under the NPW Act.

**Should a wildfire occur, significant damage to biodiversity is highly probable.
PO 1.1 development that significantly increases the potential for fire outbreak is contravened**

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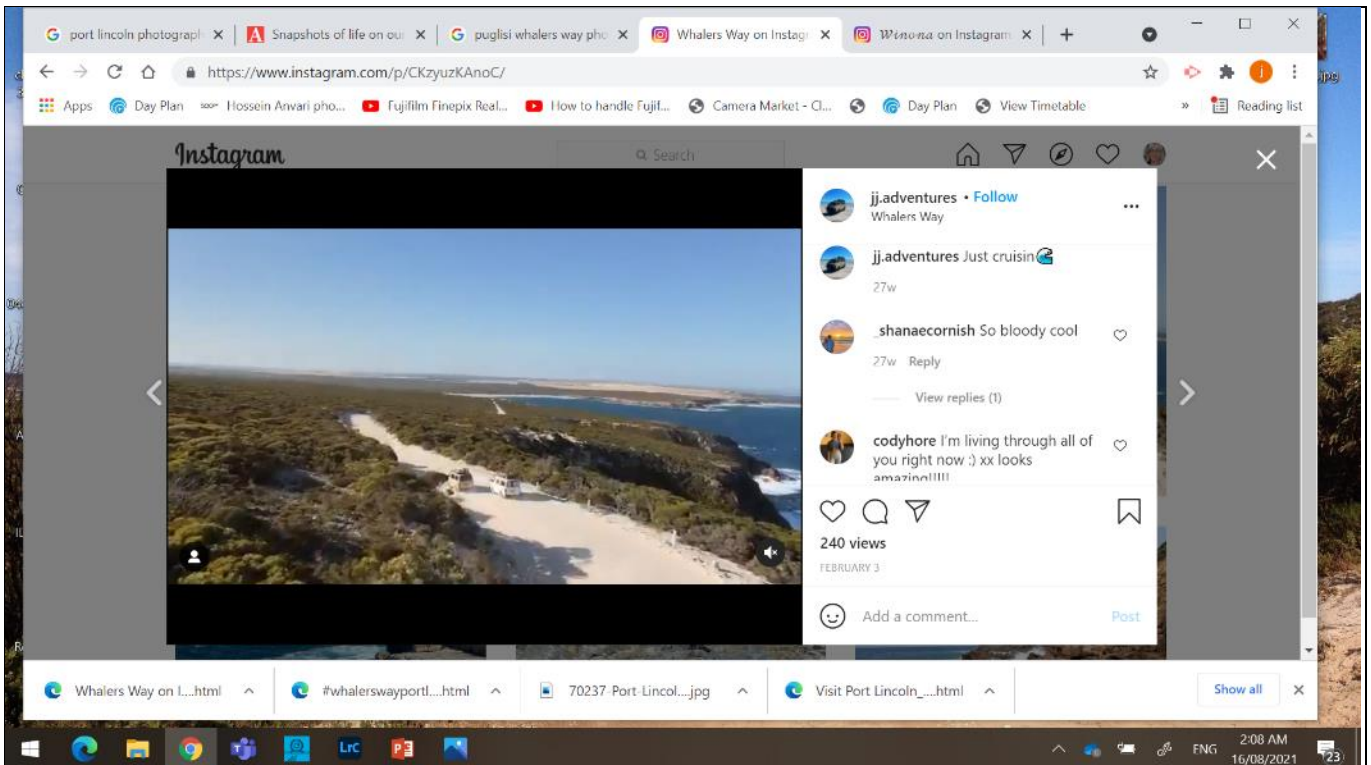


p.586 Risk Mitigation / Site Access



Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

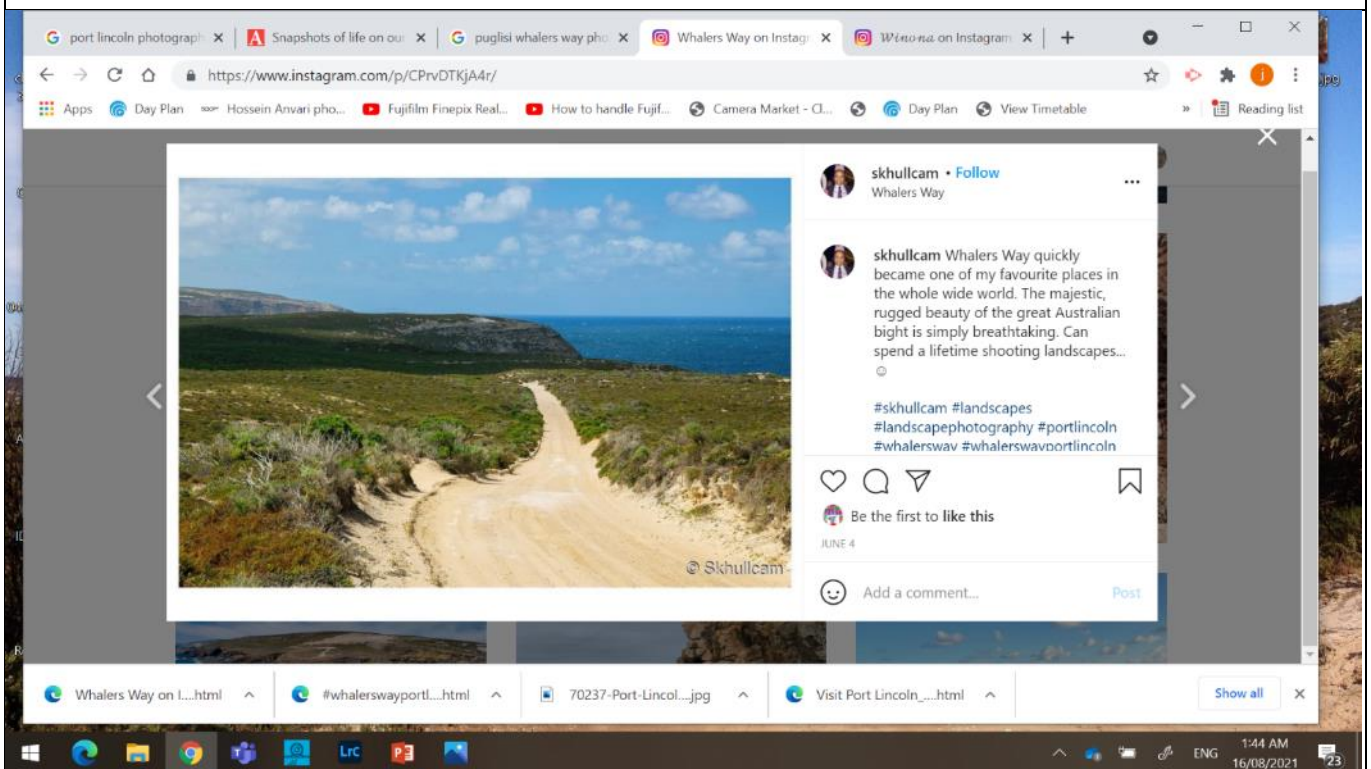
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Development Act 1993
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p.78 1.6.5 Environment Protection and Biodiversity Conservation Act 1999 (Cth)

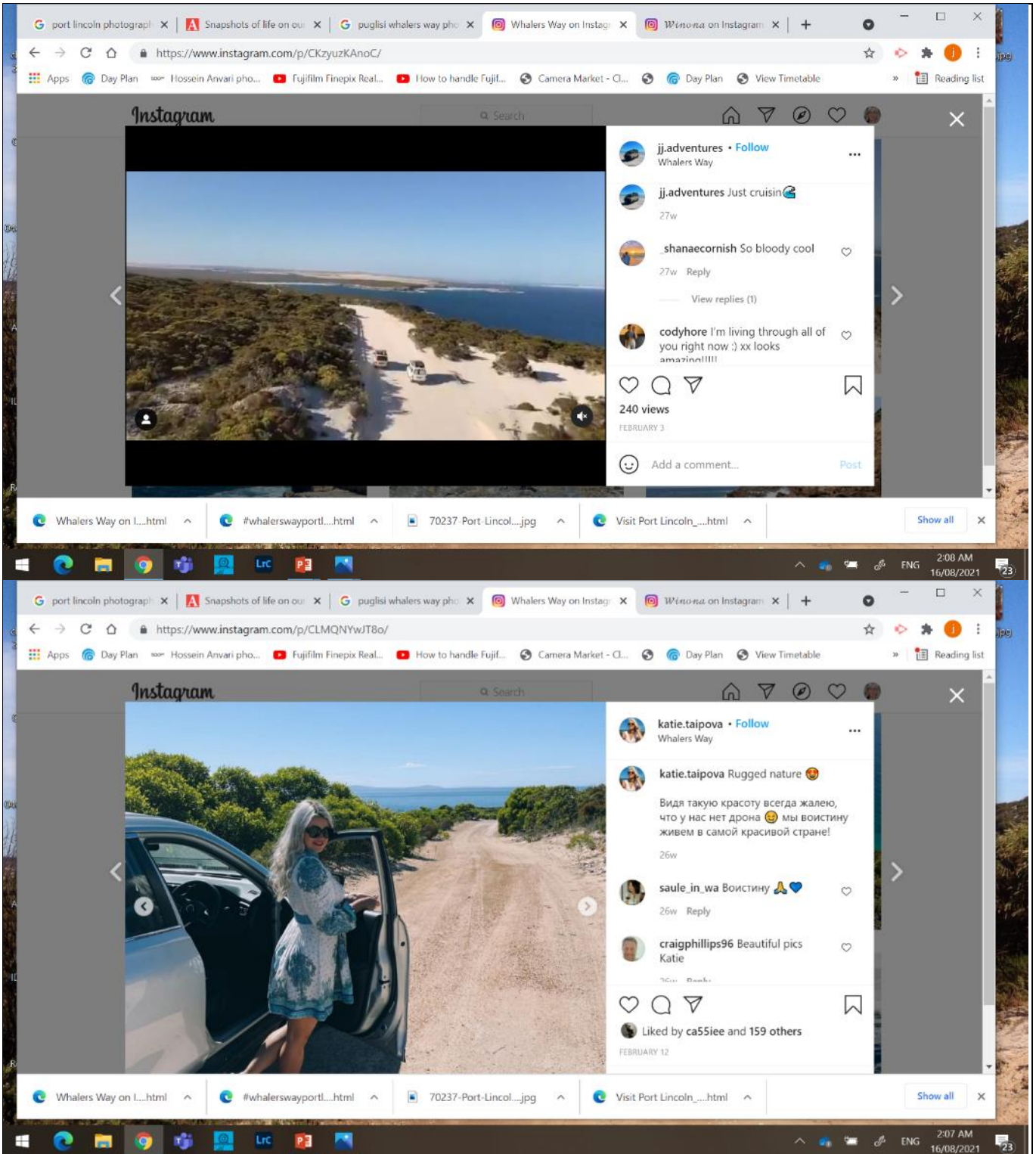
P276 7.4.3 Guideline 2.3 2.3. Describe the potential impacts on native vegetation fragmentation and the ability of communities or individual species to recover, regenerate or be rehabilitated during all phases of development.

the impacts of native vegetation fragmentation and the biodiversity offset program is contained within the AECOM report in Appendix P.



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Although fuels are not disclosed, many rockets use extremely combustible cryogenic fuels such as LOX⁵ and Liquid Natural Gas⁶. SpaceX uses the novel fuel LOX or Liquid Oxygen and has had problems with this

⁵ <https://www.airgas.com/msds/001190.pdf>

⁶ <https://www.cdn.fortisbc.com/libraries/docs/librariesprovider3/default-document-library/liquefiednaturalgasosha-whmis-ghssds.pdf>

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

fuel.⁷ I have noted that the SA Explosives act has recently been changed,⁸ possibly to accommodate the activities of Southern Launch.⁹

Rocket launching activities in Whalers Way pose an increased and unacceptable risk to the people, flora and fauna.

P 57 5.9.2.1 Hazards for Habitation and Other Activity

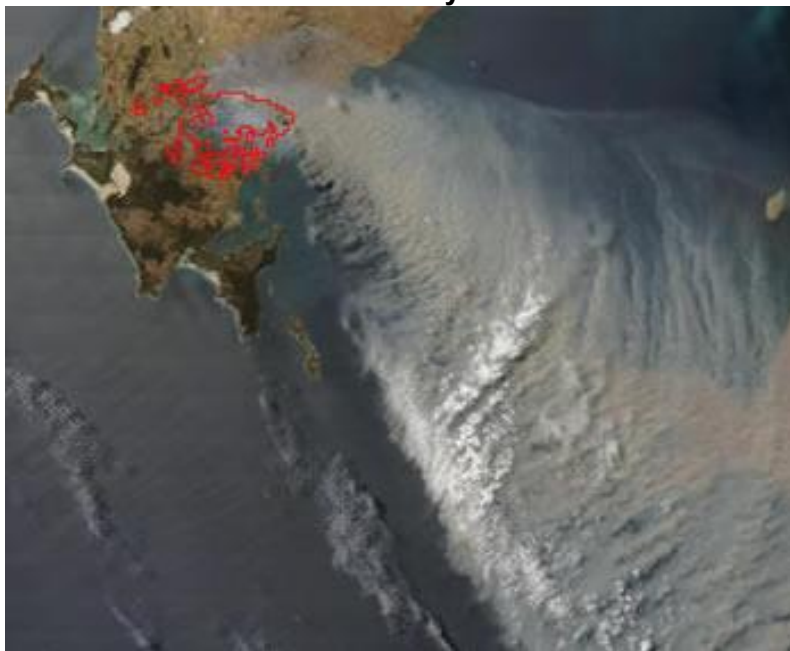
Noting the proposed launch path is to the south and directly over the sea, the risk of impact on surrounding dwellings and property, public infrastructure and human life arising from a catastrophic event on the range or during a launch event is considered to be minimal.

A bushfire incident is entirely likely given the lush thick mallee scrub is extremely flammable and hasn't burnt at all since 1931, the area is in a high hazard zone, the bushfire season extends from to With a Southerly wind, gale force or not, during the bushfire season or on extreme weather days even Port Lincoln could potentially be impacted by a wildfire It seems unwise to locate a fire hazardous activity as rocket launching anywhere near mallee scrub. The bushfire hazard is very real and does not constitute a 'minimal' risk to people and farms in the local area or even in a worst case wildfire scenario, the population of Port Lincoln. Climate change is increasing the number of extreme heat weather days and the intensity of the wildfires. This fact needs to be factored in to planning for a safer location for rocket launching.

p. 595 (653 in pdf) 20.4.2.11 Bushfire Management Plan

The current Fire Danger Season for this site is from 1 November through to 30 April

Discussing wind direction as northerly common is somewhat misleading as Westerly winds, South winds and south-westerly extremely common in fact the trajectory of the Wangary fire referred to was from the West to the East coast of Eyre Peninsular on the map.



P, 595 (653 in pdf) Common with most bushfires burning in the southern Eyre region, is a northerly wind that blows the fire in fingers to the south and the wind changes from the south-west in the early to mid-afternoon. This creates a fire that then turns towards the north-east and burns on a broad front. This was characteristic of the devastating 2005 Wangary fire which killed nine (9) people and devastated the

⁷ <https://www.youtube.com/watch?v=EjblRi7FzyU>

⁸ [https://www.legislation.sa.gov.au/LZ/C/R/EXPLOSIVES%20\(SEcurity%20SENSITIVE%20SUBSTANCES\)%20REGULATIONS%202021/CURRENT/2021.55.AUTH.PDF](https://www.legislation.sa.gov.au/LZ/C/R/EXPLOSIVES%20(SEcurity%20SENSITIVE%20SUBSTANCES)%20REGULATIONS%202021/CURRENT/2021.55.AUTH.PDF)

⁹ P 223 re vehicle specifications "The propellants are not classified as explosives in Australia"

southern Eyre region to the north of Port Lincoln and has been a common factor in most bush fires for the southern Eyre.

“The fire burnt rapidly to the east and southeast in a 70km/h wind, the mostly flat to undulating terrain and scrub, grass or grain crop vegetation offering no resistance. Shortly before 1pm, the CFS warned residents of Wanilla, North Shields, Poonindie, Louth Bay and Greenpatch to implement their bushfire action plans, while those in the last three hamlets were advised to relocate to the beach as a rescue point. By 3pm, the main front was moving toward the coast between North Shields and Louth Bay, but the wind shift was driving a second front NE towards Edillilie, and water-bombing aircraft were assisting. By late afternoon, this second front was in the Koppio area, continuing to burn NE towards Tumby, and by late evening the most intense fires were engaging 250 firefighters south of Yallunda Flat, while the eastern firefront was easing in **intensity or had burnt itself out at the coastline.**”

<http://www.australianweathernews.com/news/2005/050111.SHTML>

p.595 (653 in pdf) If there is an ignition point on the southern tip of the peninsula (i.e., from the launch facility) a fire may be push to the north-east and threaten aspects of the Complex itself and even some of the dwellings to the north-east. Adequate firefighting capacity, along with safe work practices on the site of the WWOLC along with quick reaction to an emergency should assist overcome some of these hazards.

This is quite simply not good enough / not satisfactory

It contravenes PO 1.1 to locate a fire hazardous activity in a extreme / high risk hazard overlay fire zone.

P 586 (644 in pdf) Due to the nature of rocket launches, local CFS units or trained Southern Launch personnel will be present leading up to and during any launch procedure. The presence of SAAS ambulance and staff stationed at the Range Operations Area as part of standard launch SOP will be required until trained Southern Launch employees can provide this service or until the risk of incidents is reduced through repeated launches....

As a standard operating precaution, the CFS will be notified of the launch. In initial launches, the CFS will be on standby at the range. In time Southern Launch staff will be trained in firefighting and HAZMAT and will be on site as standby.

At a public meeting recently held I understand from someone that was present that the local CFS chief said they “would not be doing that” after SL stated that one of the CFS trucks with volunteer firefighters would attend every launch event. Is it reasonable that Southern launch, a private company, is going to rely on volunteer firefighters and public equipment? The frequent strong even gale force winds in the area, Westerly winds, Southerly winds etc. increase the high likelihood of fire hazard that is associated with rocket launch activities, including potential failed launches. Without evidence to the contrary, siting a rocket launching facility in an extreme fire hazard zone really is an unacceptable risk.

There appears to be some inconsistency in the fire management plans that seem, at least initially, totally inadequate.

p.353 Adequate water supply for firefighting will be available at each site including water stored in 25,000 litre tanks at initial stages and then significant water supply through the dam and detention basins once established.

25,000 litres is not likely to stop a wildfire.

Initial firefighting capabilities during rocket launch attempts will be augmented by local Country Fire Service (CFS) crews. Sufficient water will be located onsite to successfully control and contain any unexpected fire. There will also be a fire truck on site during launches.

P 639 (681 in pdf) 23.4.3.7 Firefighting Water Supply Initially, water for firefighting needs will be trucked in and stored in two (2) 150,000 litre tanks between the assembly building and the perimeter of the site. Fire hydrants, pumps and associate infrastructure will be distributed around the site as indicated on the site plan. Once developed, firefighting needs will be supplied from retention main dam.

Are these two tanks the same deluge tanks used during launch to dampen vibration? Could they be spent / empty when fire ignition occurs after a deluge at launch? The dam size? 30GL ? inadequate for wildfire I believe.

p. 243 (301 in PDF) The water deluge system consists of a 20-metre-tall tank stand, 150,000-litre tank, pipework, and control system

P 580 (638) 20.4.1.1 Range Activities and Infrastructure Risks and Hazards The following risks and hazards have potential to occur as a result of the nature of the proposed launch complex:

- Rocket malfunction on the ground leading to explosion and/or fire.
- Damage to rocket launching infrastructure leading to rocket launch delay, failure, accident, or incorrect trajectory.
- Harm to persons, flora, and fauna from hazardous materials (fuels and oxidisers), accident and malfunction or natural events (e.g., weather or environment related)...

• Explosive fuel storage areas that could be one (1) or more of the following: - LOX, LNG, RP1, AVGAS, Helium, Nitrogen; - Explosive storage; and - Dangerous materials spills.....

• Rocket malfunction leading to explosion and/or crash. • Wrong trajectory leading to a crash (on land or sea), collision, or return to earth in the wrong location.

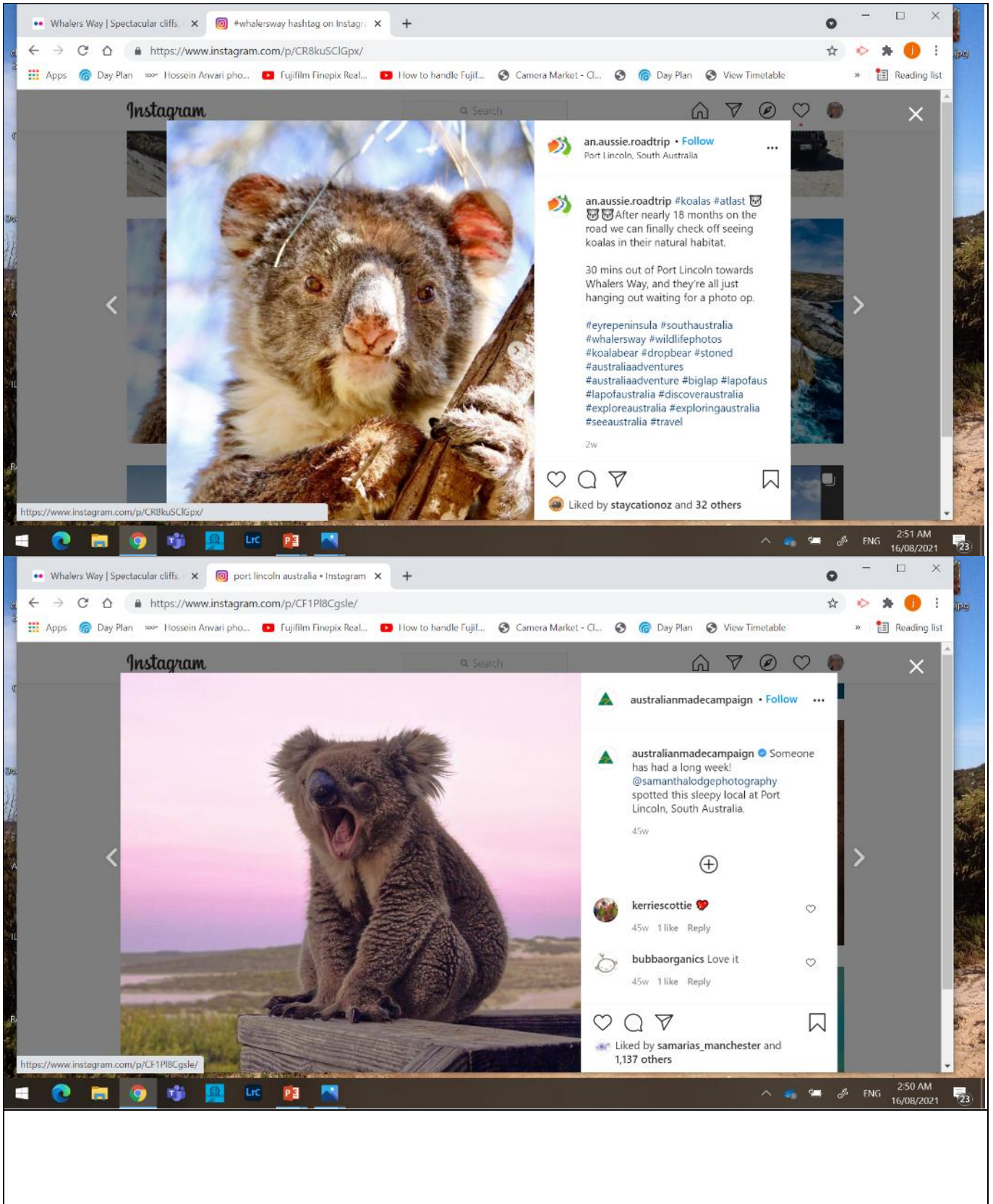
Southern launch has identified some of the risks and hazards, including many that could be caused directly by their activities. A private wilderness nature conservation zone is not an appropriate site for highly dangerous and often problematic rocket launching activities.

Impact of Increased Likelihood of Wildfire on Fauna

P 295 (353 in PDF) 7.4.5.5 Increased Fire Risk

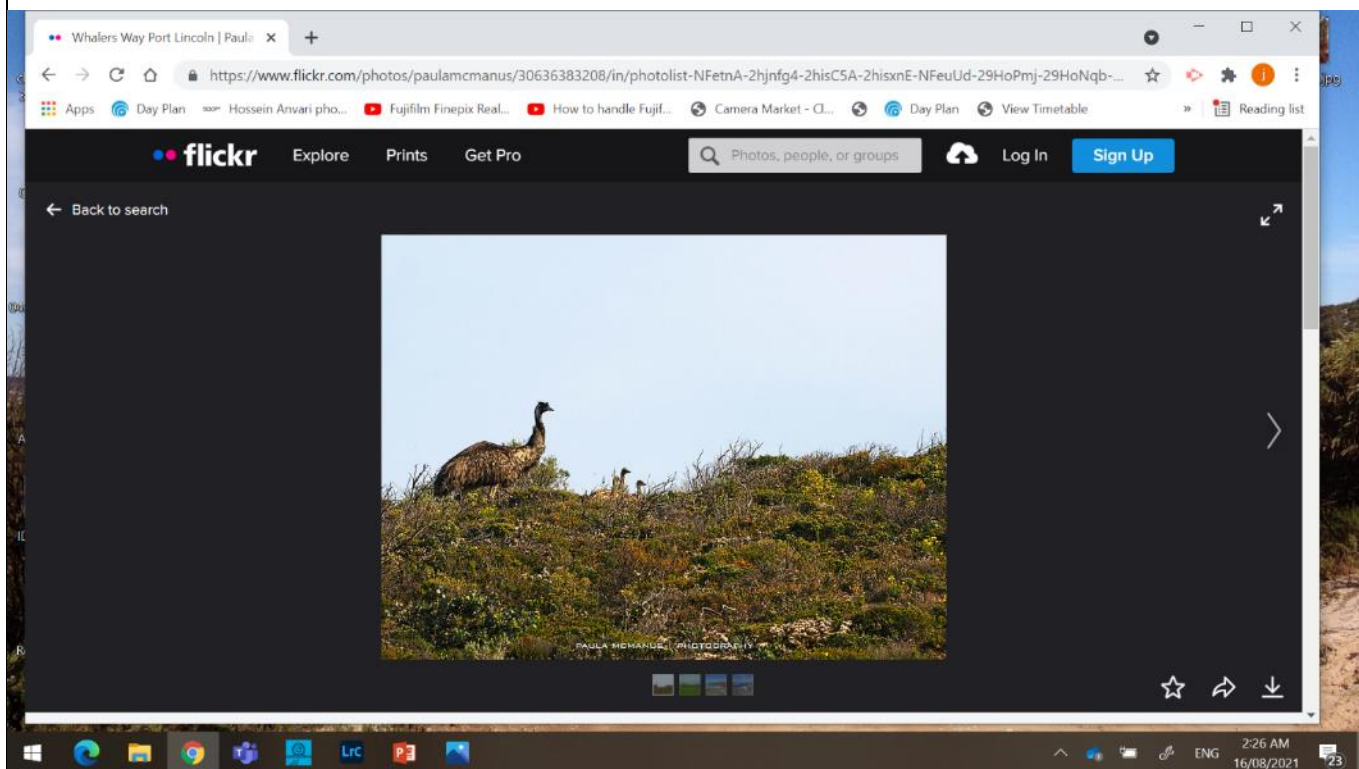
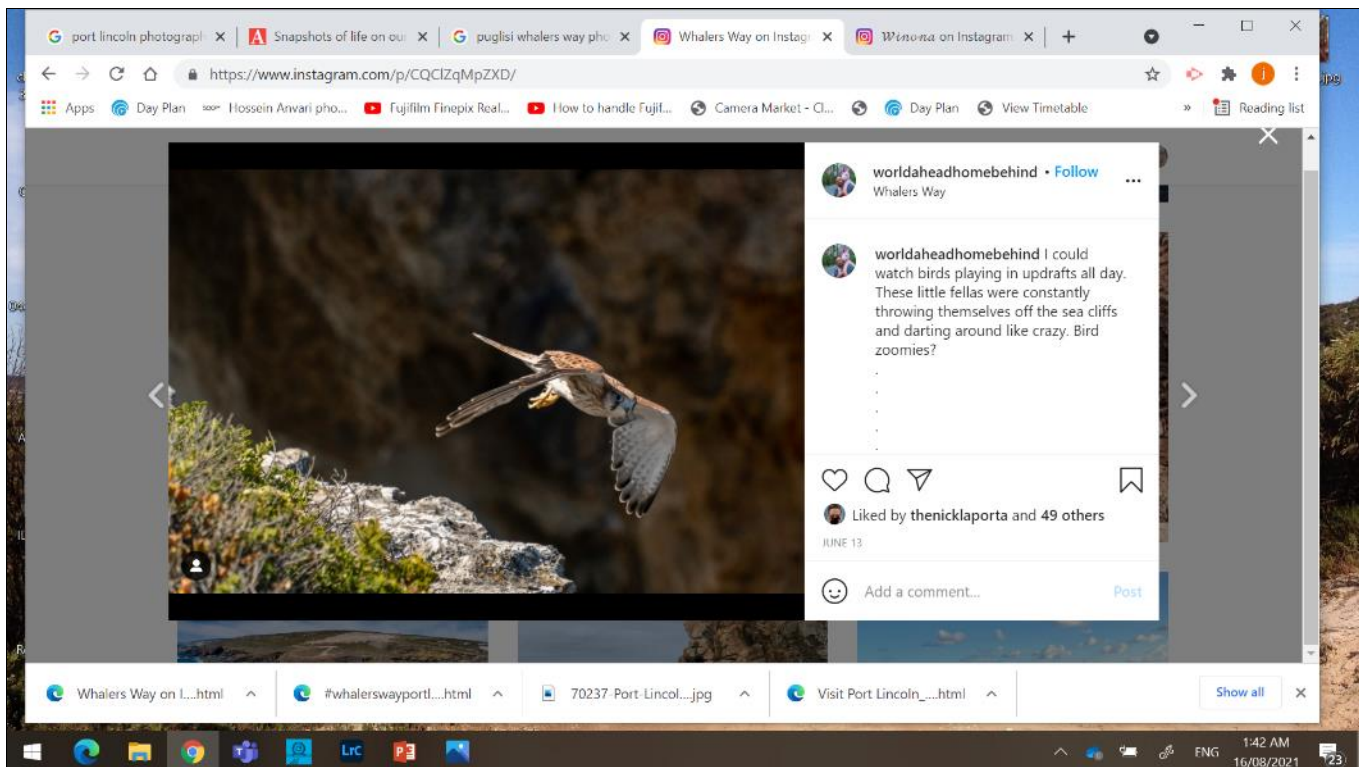
Southern Launch have acknowledged the increased fire risk and likelihood of fire events / incidents. The fauna including rare and endangered species living in this conservation zone would be affected.

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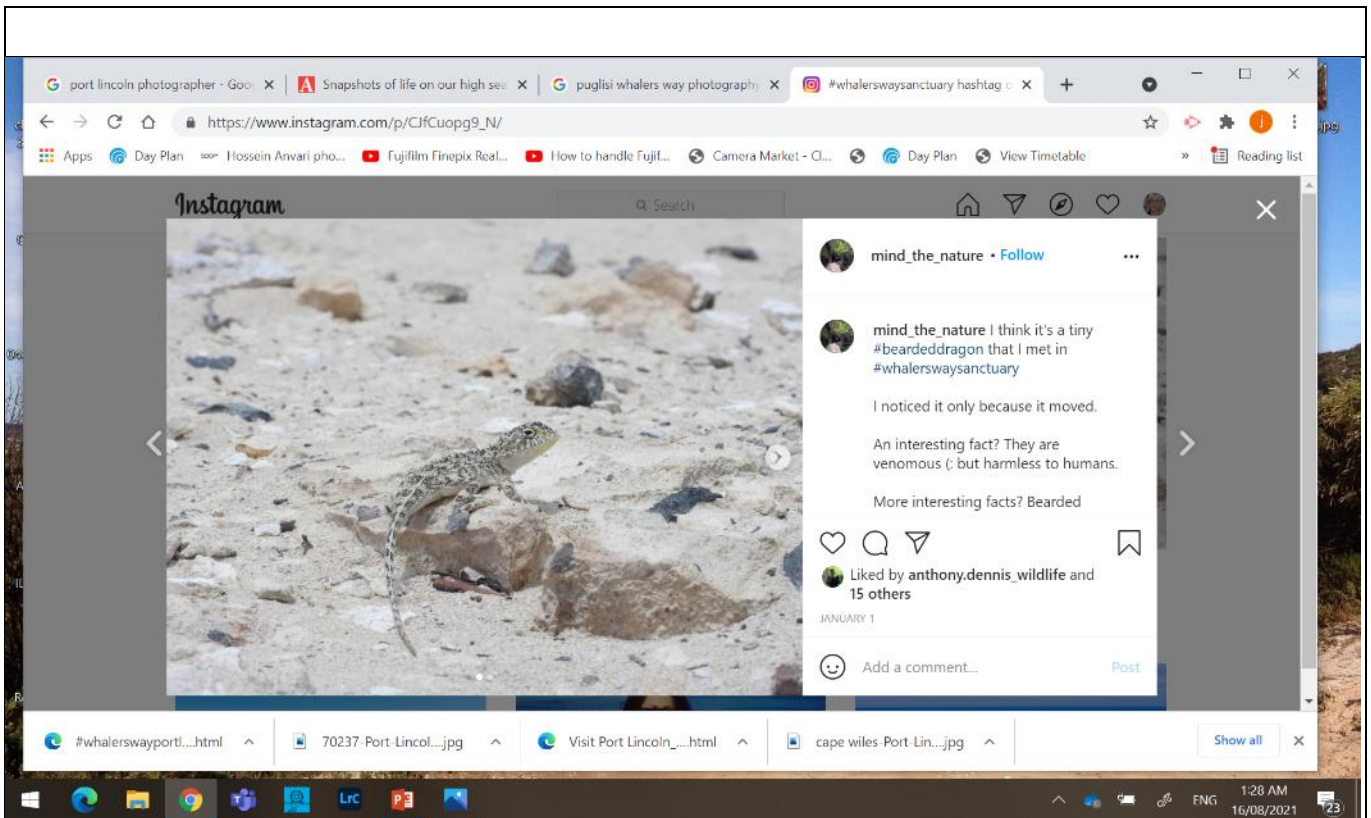


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Impact on Eco-Tourism, Public Access & Recreation

P 605 (664 PDF version) 1.4.1.2 Threat Intent and Capability Analysis Activism and Protests

In relation to “activism” the restriction of public access to the site, which is a popular tourist location, as well as perceived environmental impacts may inspire activists (Local Community and Environmentalist) to protest during the construction or operational phases of the project. To minimise the risk of protests from issue motivated groups, Southern Launch will develop a communication strategy prior to closing public access to the peninsula.

Whalers Way is an excellent and popular eco-tourism destination and needs to remain so. Eco tourists have a negligible effect on the environment and are much more suited to conservation land use than a commercial industrialised activity such as a spaceport (that will also be launching for Australian and possibly other countries military and as such could be described in part as a kind of privatisation of the military) Space tourism can be achieved in a non-sensitive ecological area. Actual ‘space’ tourism in the sense of launching paying customers into space would also require another much bigger launch pad site to be built, as the tonnage capacity of the two currently proposed is insufficient for a human payload rocket.

P112 Public access and recreation

Public access and recreation The development will result in some limitations when compared to the current level of public access to the allotment containing the site. However, appropriately managed public access will still be able to occur when there is no operational reason to exclude public access. Additionally, the allotment will be able to support managed tourism access and should support the growth of ‘space tourism’ where visitors come to observe launches and visit the facilities outside of active operations. These arrangements offer the ability to rehabilitate areas of the site which have been impacted by the existing public access arrangements.

Existing access for terrestrial camping

*The nature of the activities proposed is likely to result in some limitations on camping on the allotment containing the site. **This is a function of the nature of the proposed operations, which has specific***

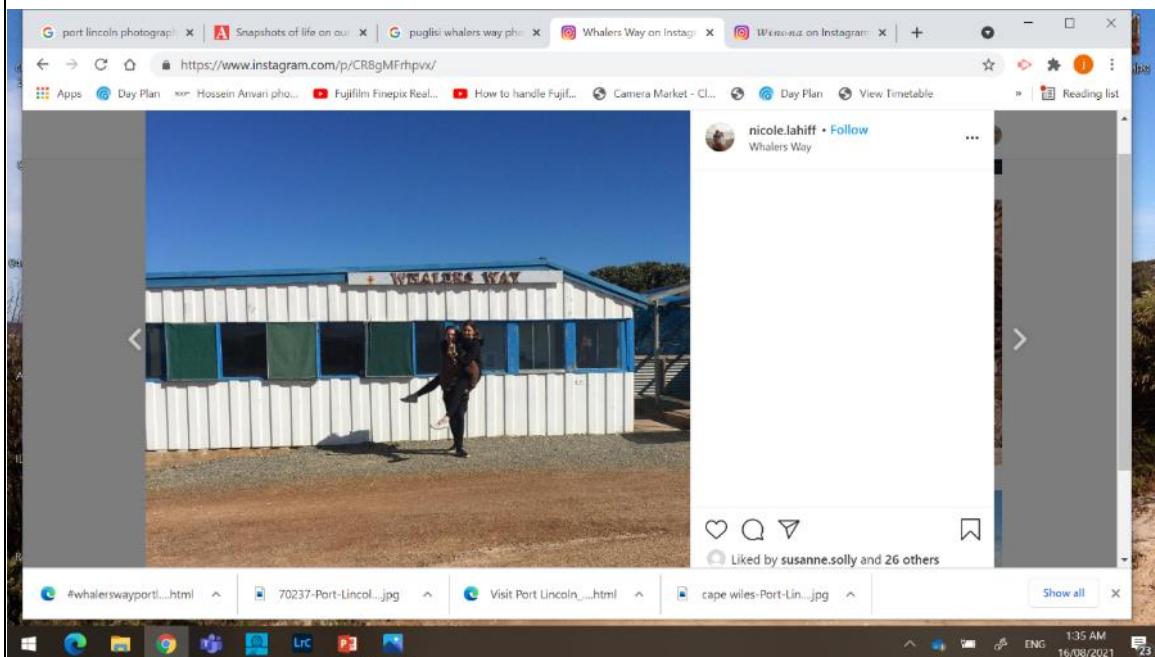
safety and security requirements. The exact nature of such limitations will be determined as detailed design and operational planning for the proposal proceeds. It is noted that the allotment containing the subject site is a privately owned freehold allotment, and as such public access is at the discretion of the landowner and there has never been a guarantee that such access to the site would continue in perpetuity.

Whalers Way is currently closed to the public until 31st Dec. Public in cars have not been granted access. I heard a tour bus was allowed but wasn't allowed to stop or anyone to get out including a girl whose fathers ashes were scattered at Cape Carnot and she was most distraught. Access to the site by the public is not under threat by anybody except Southern Launch. Whalers Way is a privately owned, conservation park that the local population have regularly enjoyed accessing since 1968.

**P 610/611 (668 / 669 in PDF) 21.4.1.4 Security Considerations - Operational Requirements
Public Access**

The site is a popular tourist attraction for sightseeing and camping. The site forms part of a larger privately owned property where public access is possible via a permit system. Access into the peninsula is provided by Whaler's Way Road, which intersects with Right Whale Road near the lookout. Access to this road is controlled by a locked metal swing gate which is adjacent to an old, abandoned gatehouse.

Gatehouse is functional and operates in school holidays ie not abandoned. Site is a wonderful tourist attraction for sightseeing and camping and a great drawcard for Port Lincoln / Eyre Peninsular tourism however SL have identified tourists / people / members of the public as potential threats to SL and at risk if they are present when SL launch a rocket.



P523 The WWOLC does not result in the loss of a coastal reserve area. The land is a privately held allotment utilised for tourism purposes at the discretion of the landowner and is not a National Park or Conservation Park.

Actually, it is a private conservation park made accessible to the public since 1968.

Nature-based Tourism

Nature-based tourism is one of the world's fastest growing industries and is considered by SATC to be the number one driver of visitors to Australia. As outlined in South Australia's Nature-Based Tourism Action Plan nature-based tourism has the capacity to be a key driver of the State's economy and of job creation – particularly in regional communities. Port Lincoln and Southern Eyre are ideally positioned to benefit from the keen interest from visitors in nature-based tourism. With our unique experiences and our breath-taking and often untapped landscapes we have the opportunity to expand product offerings and to build upon existing ones.

https://www.portlincoln.sa.gov.au/_data/assets/pdf_file/0022/98050/FINAL201817-TOURSIM-STRATEGY-2018-2028.pdf

Eyre Peninsular priorities

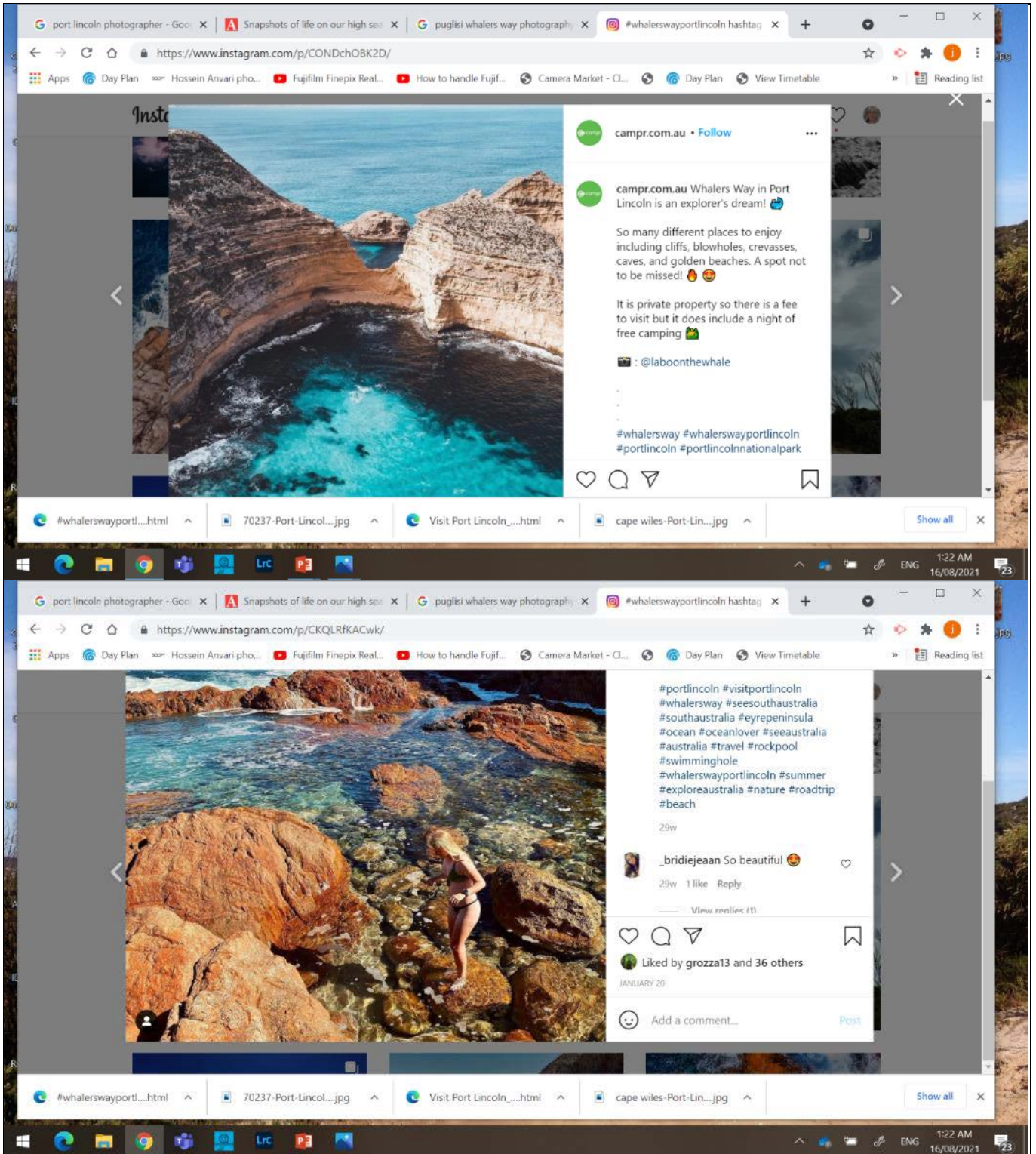
The opportunity for the Eyre Peninsular is to capitalise on its pristine nature, immersive wildlife experiences and coastal lifestyle to drive increased overnight stays from domestic and international visitors.

https://www.portlincoln.sa.gov.au/_data/assets/pdf_file/0022/98050/FINAL201817-TOURSIM-STRATEGY-2018-2028.pdf

file:///C:/Users/4012690/Downloads/satc_corporate-affairs_research-and-insights_the-value-of-tourism_january-2020_eyre-peninsula.pdf

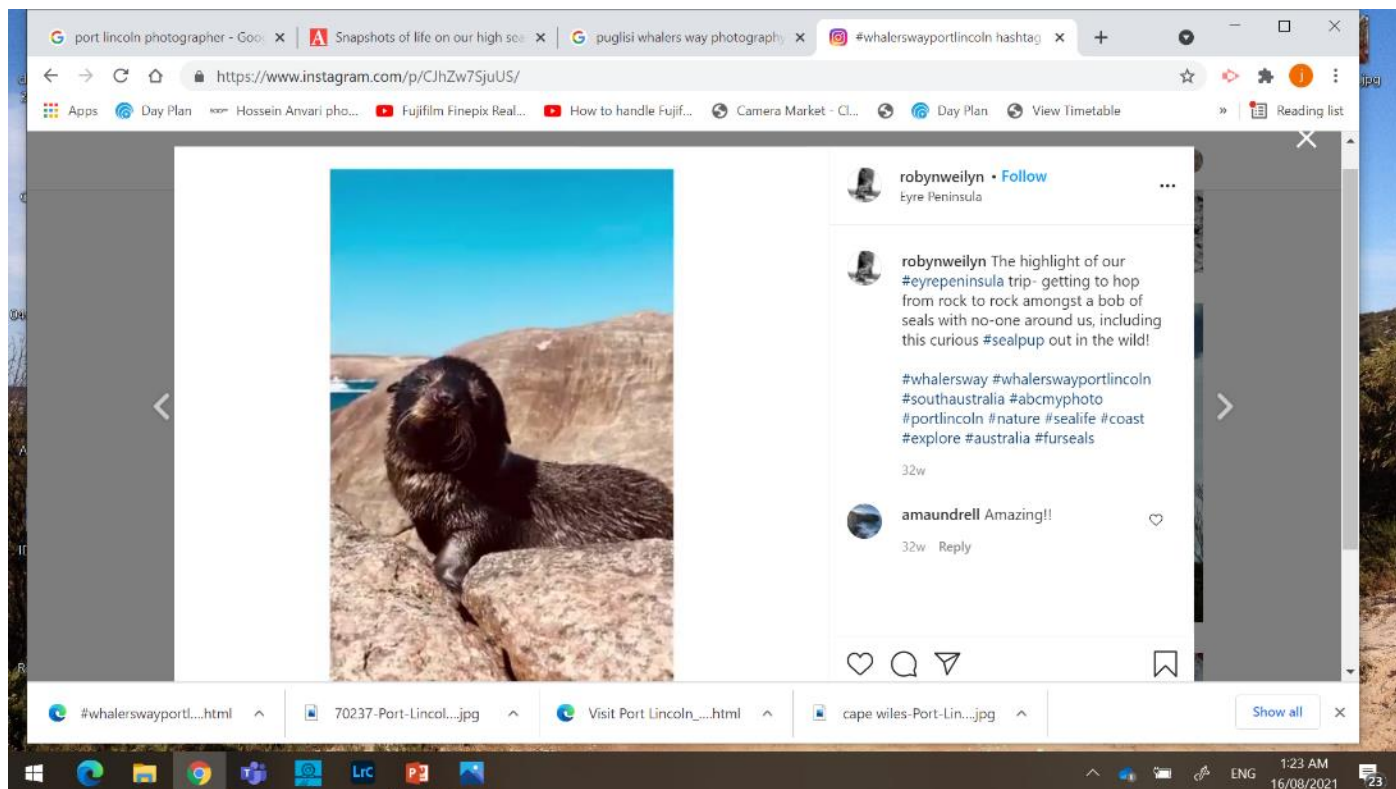
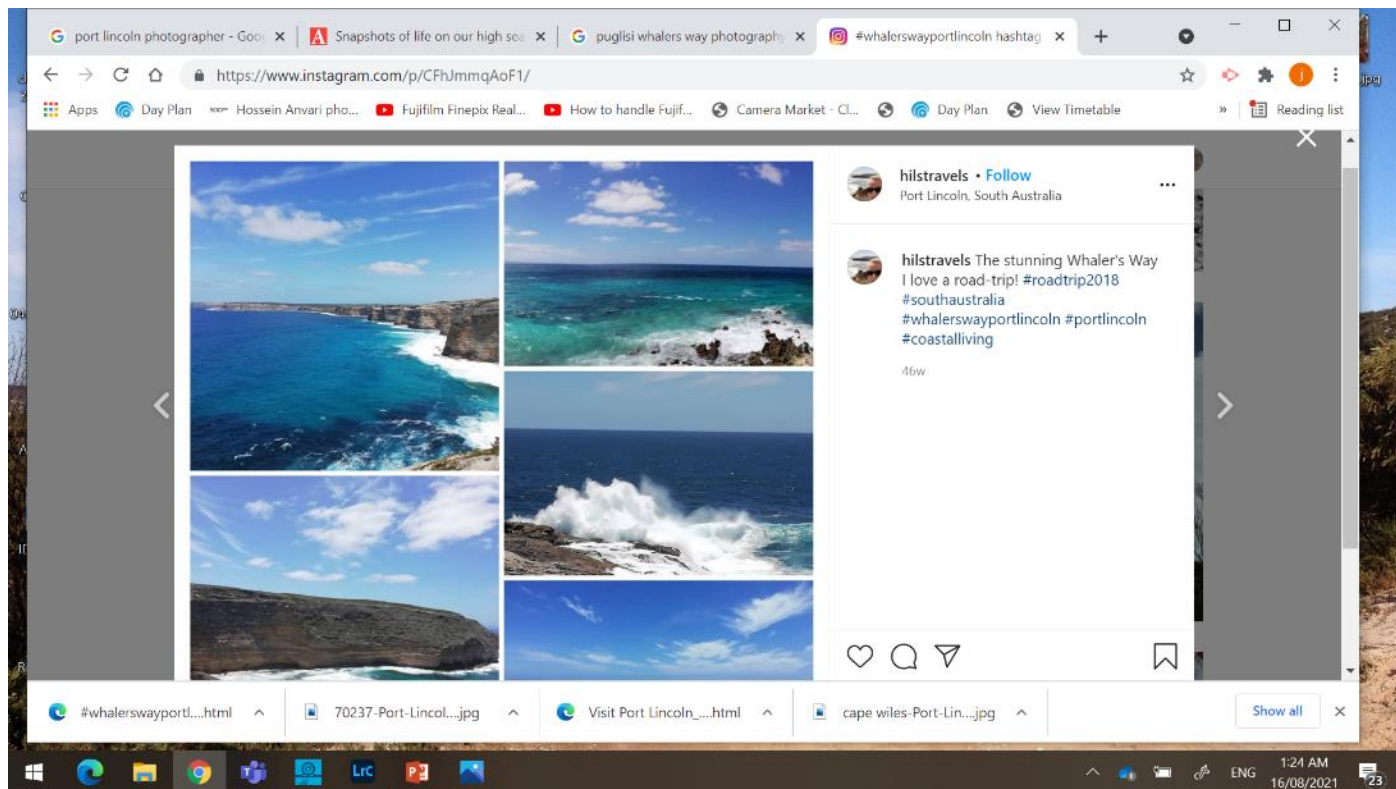
Whalers Way is better suited to Port Lincoln and Eyre Peninsular priorities aligned with Nature Based Tourism and there is NO equivalent location in the area. Whalers Way has many unique features and attractions.

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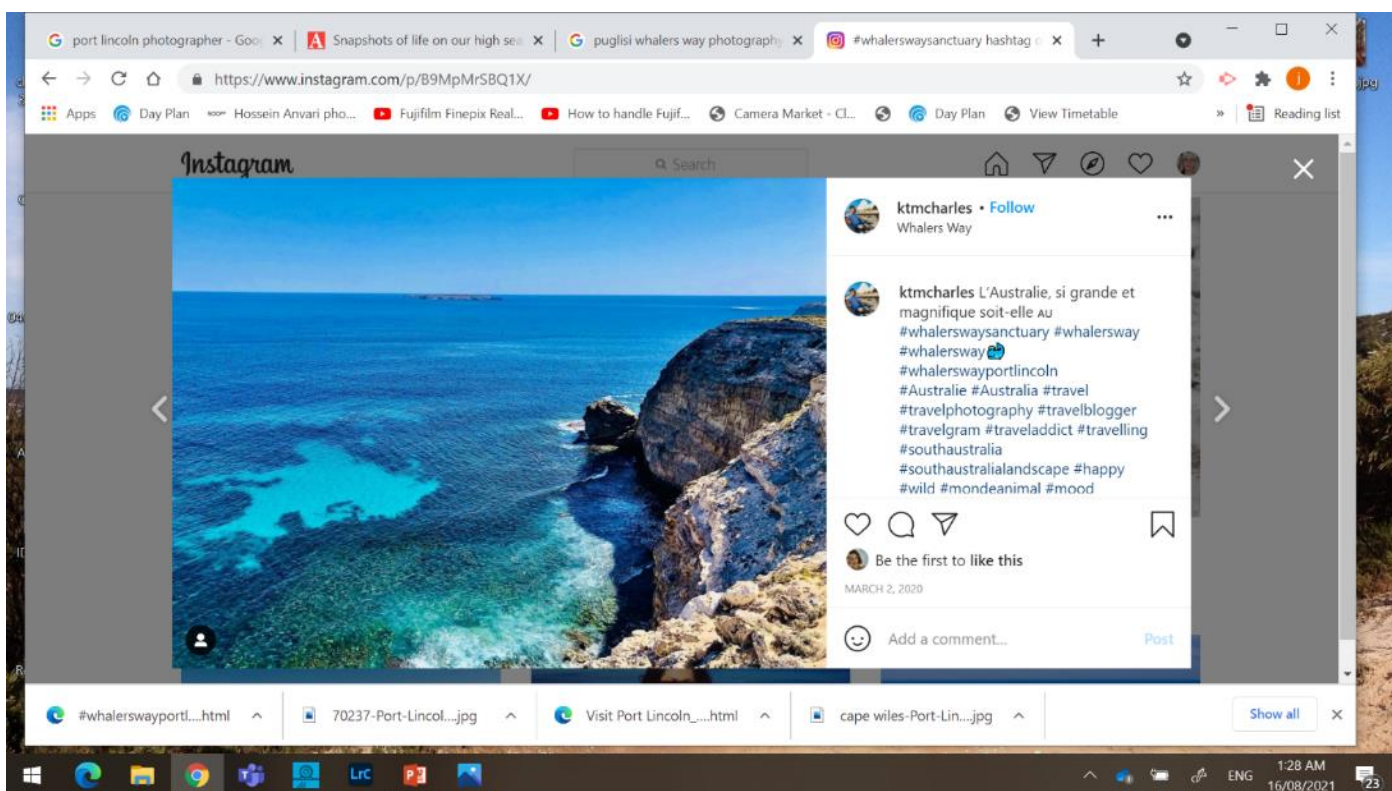
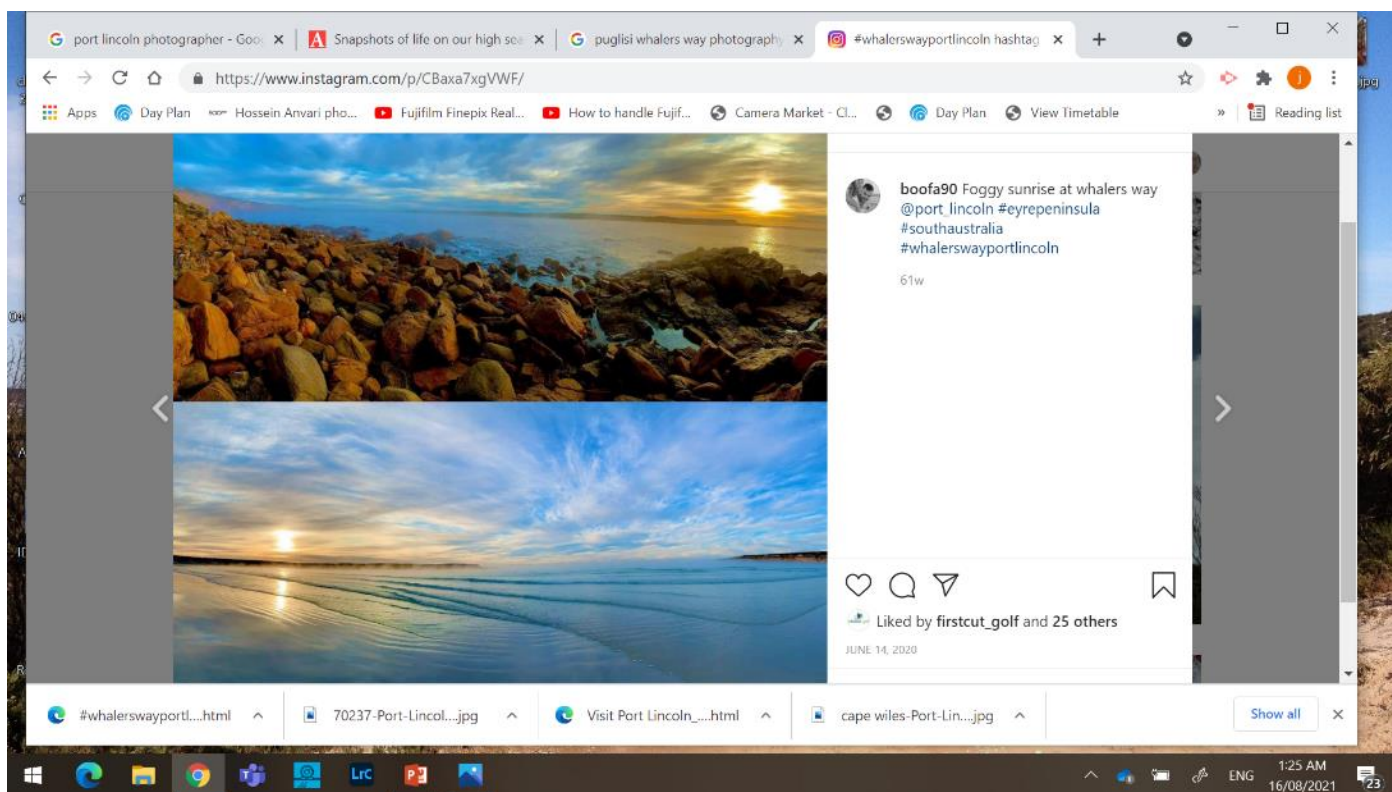
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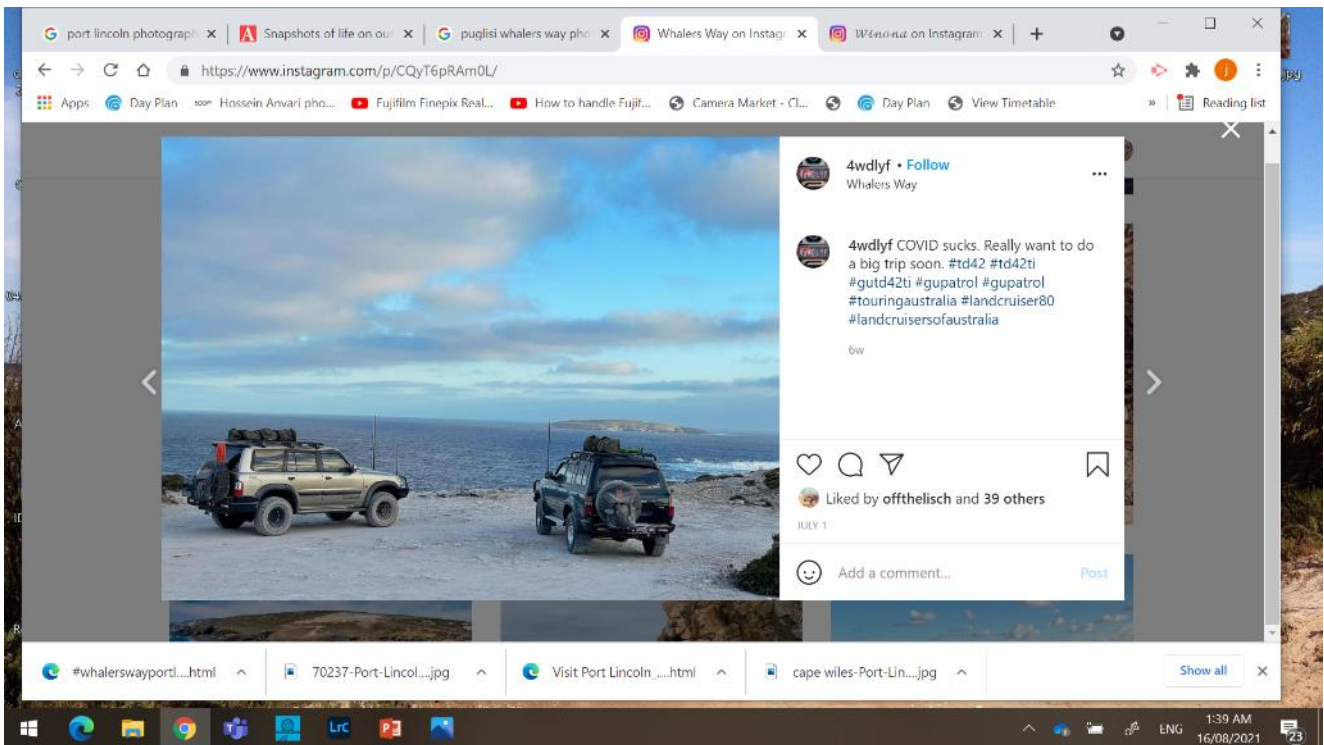
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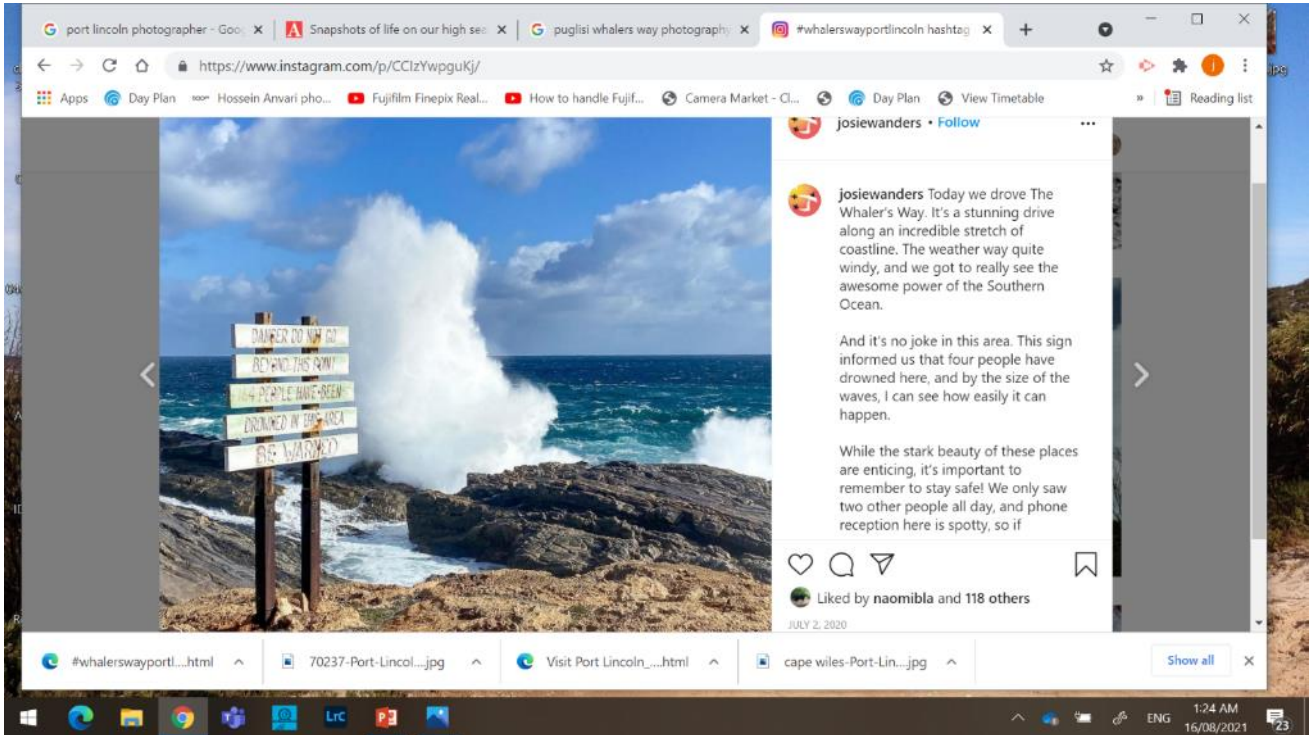
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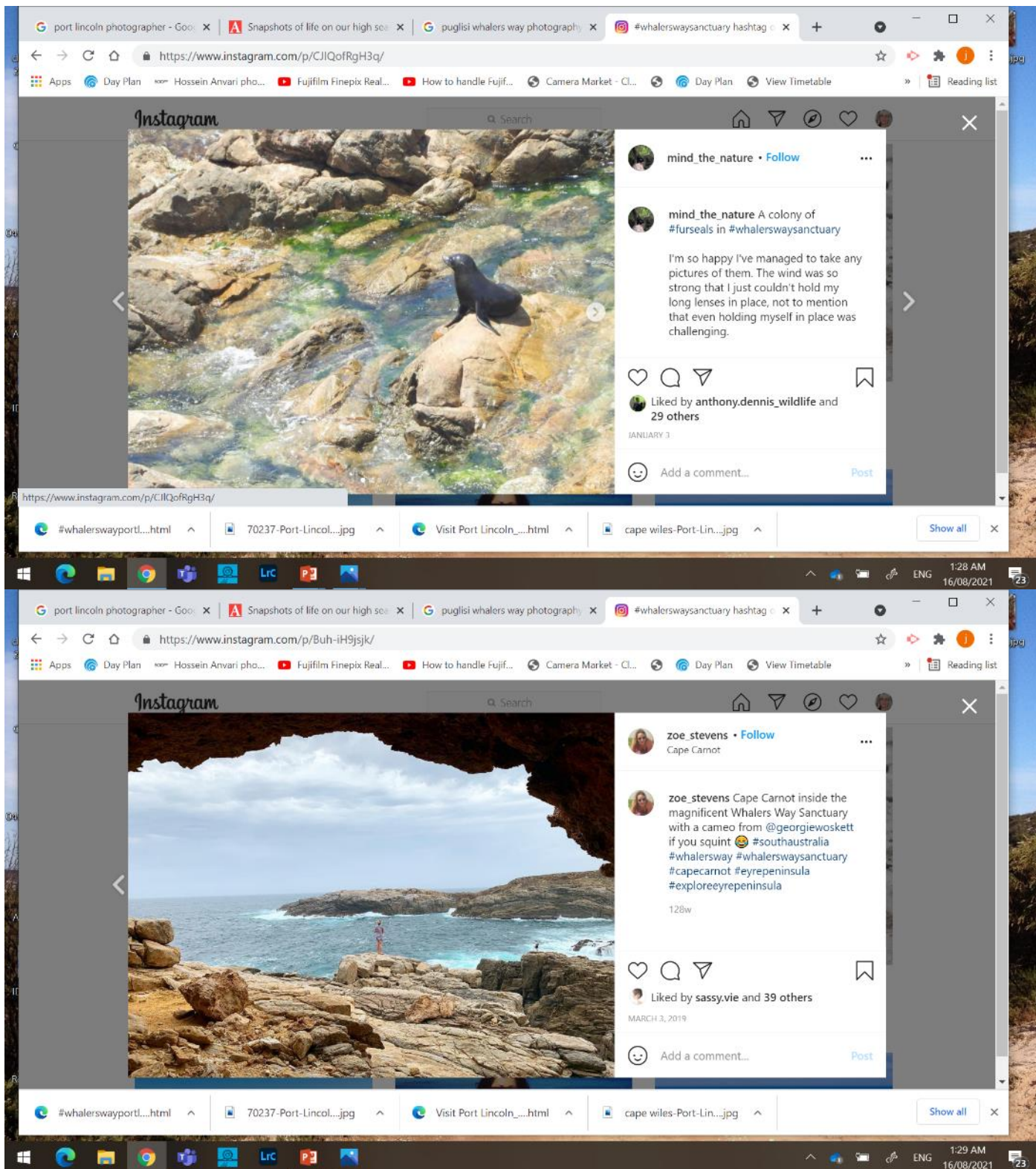
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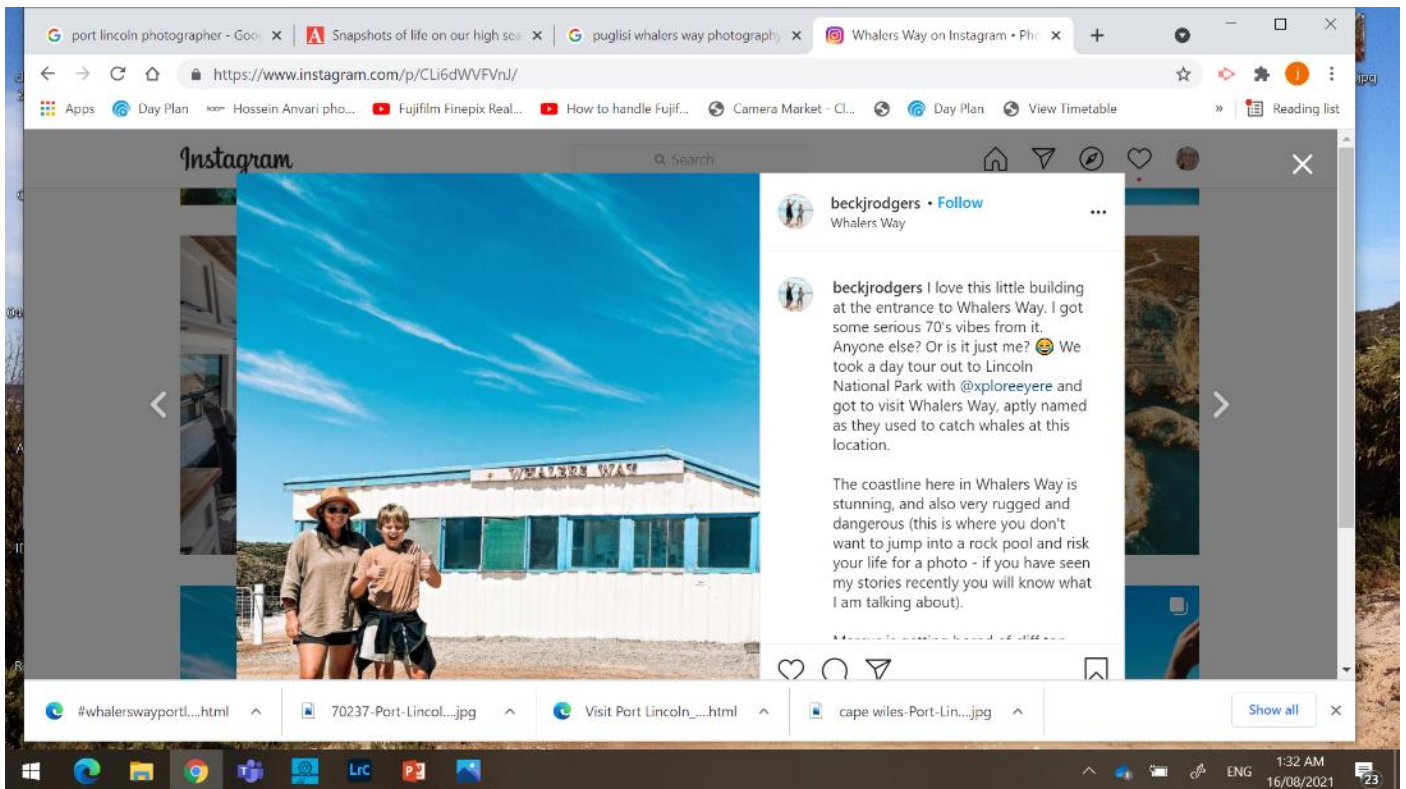
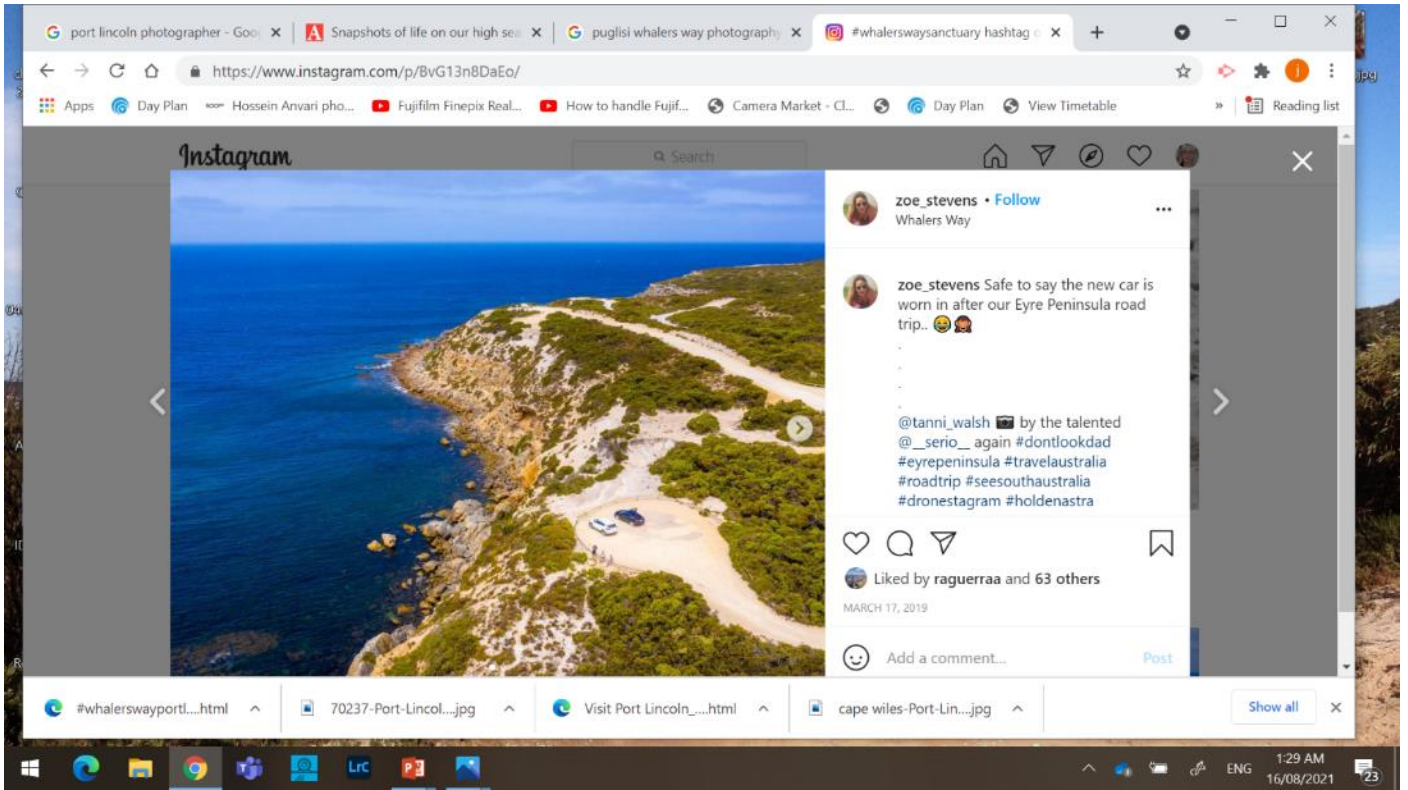
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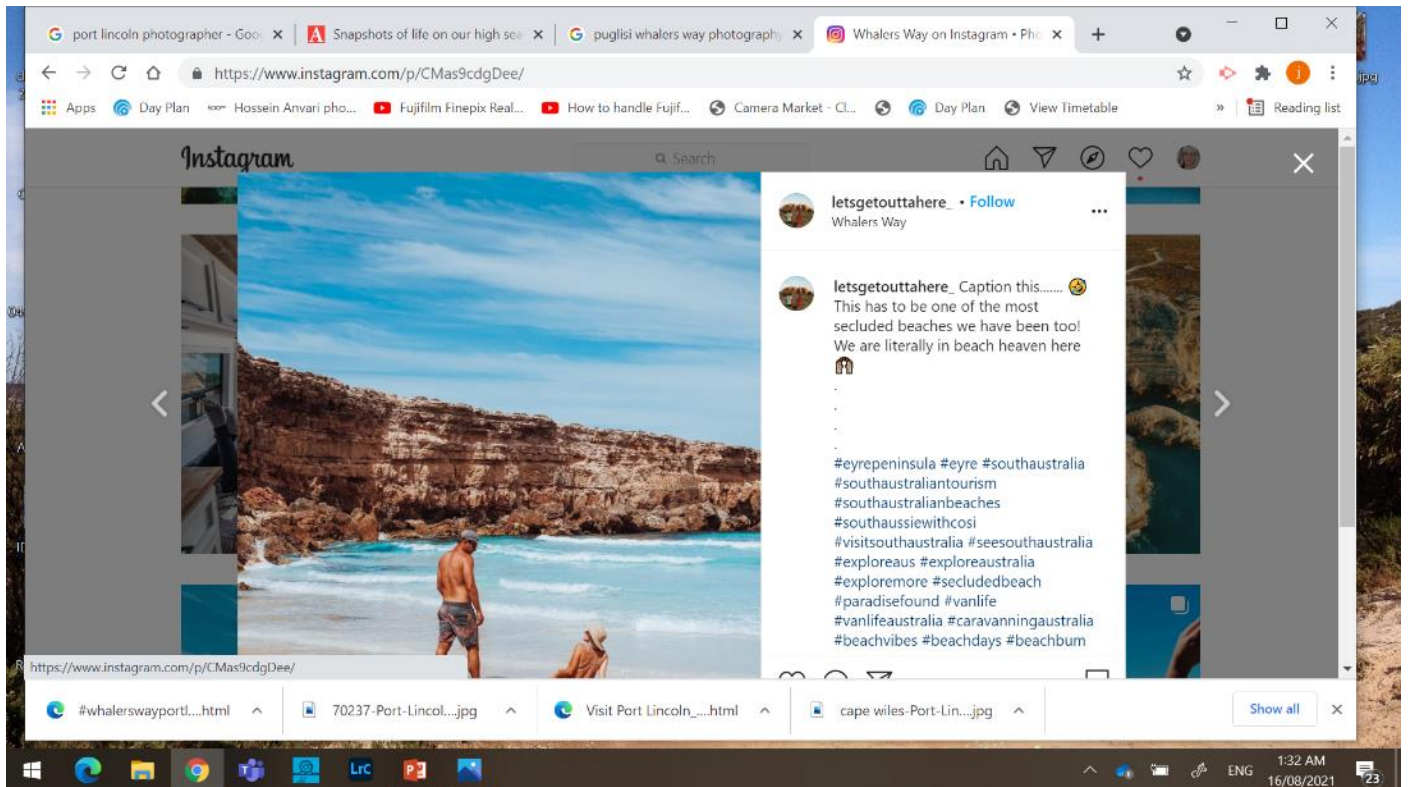
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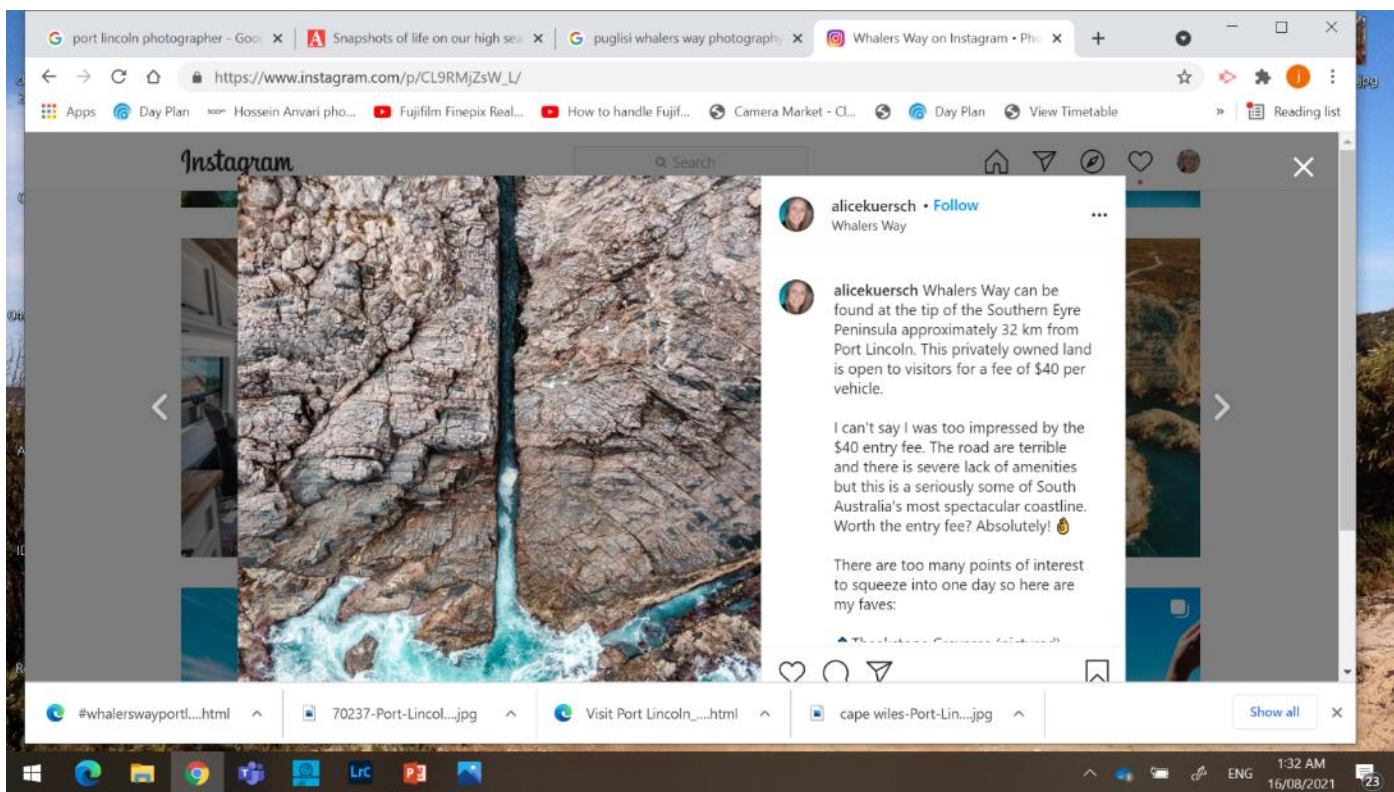
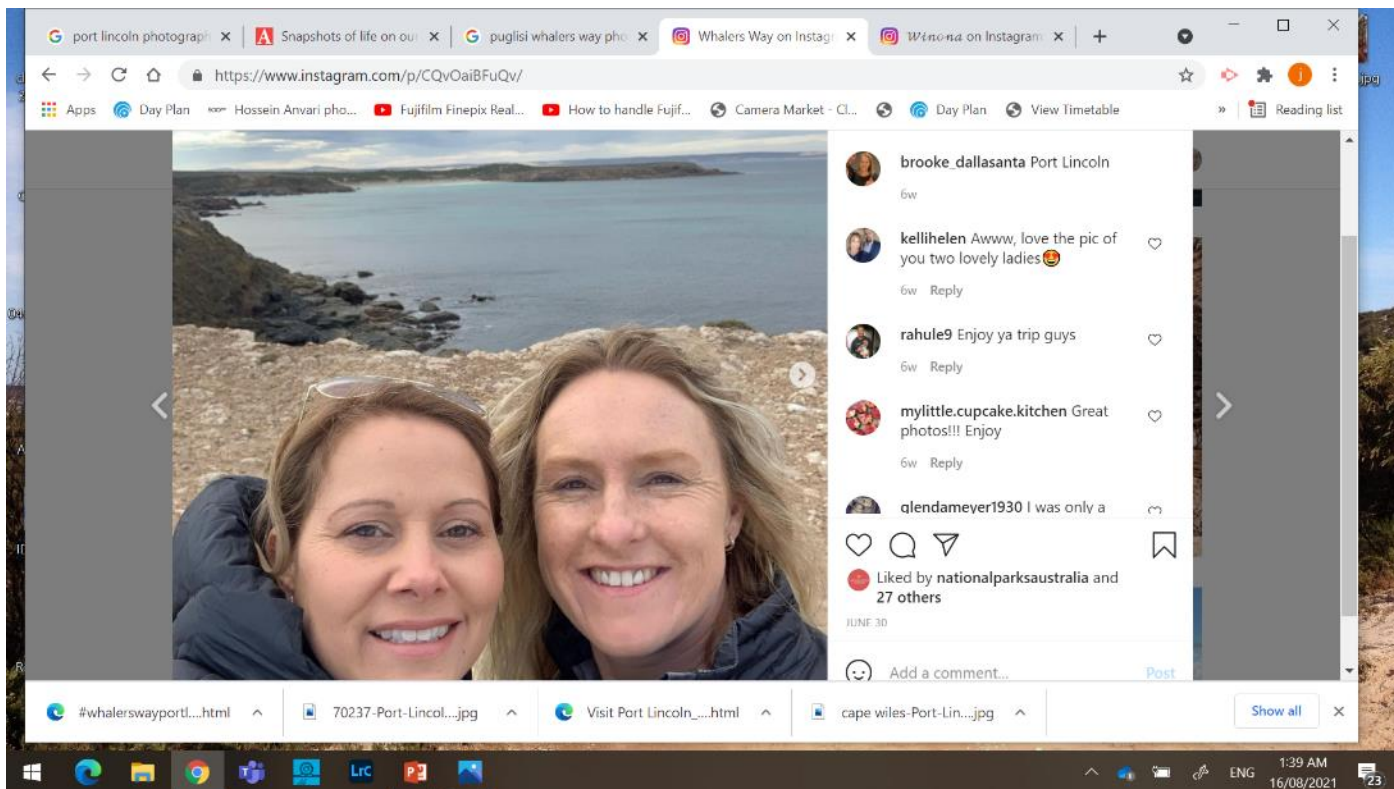


P 445 / 503 14.4.1.1 Existing Land Uses of the Subject Site

The existing land use is not adequately described – the existing land is predominately coastal wilderness that is much loved and enjoyed as a passive eco tourist recreational and camping area: a use that is entirely consistent with Whalers Way’s private conservation park status.

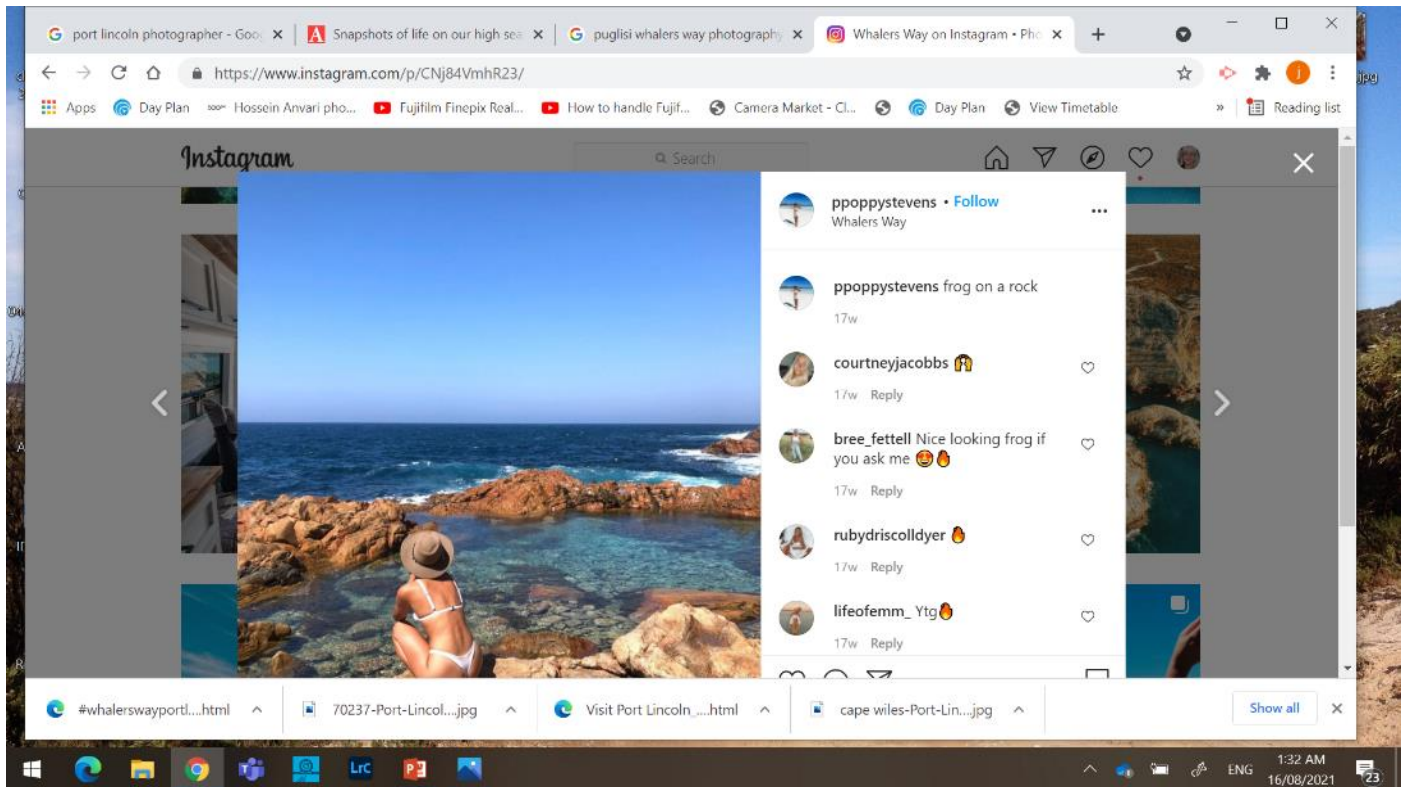
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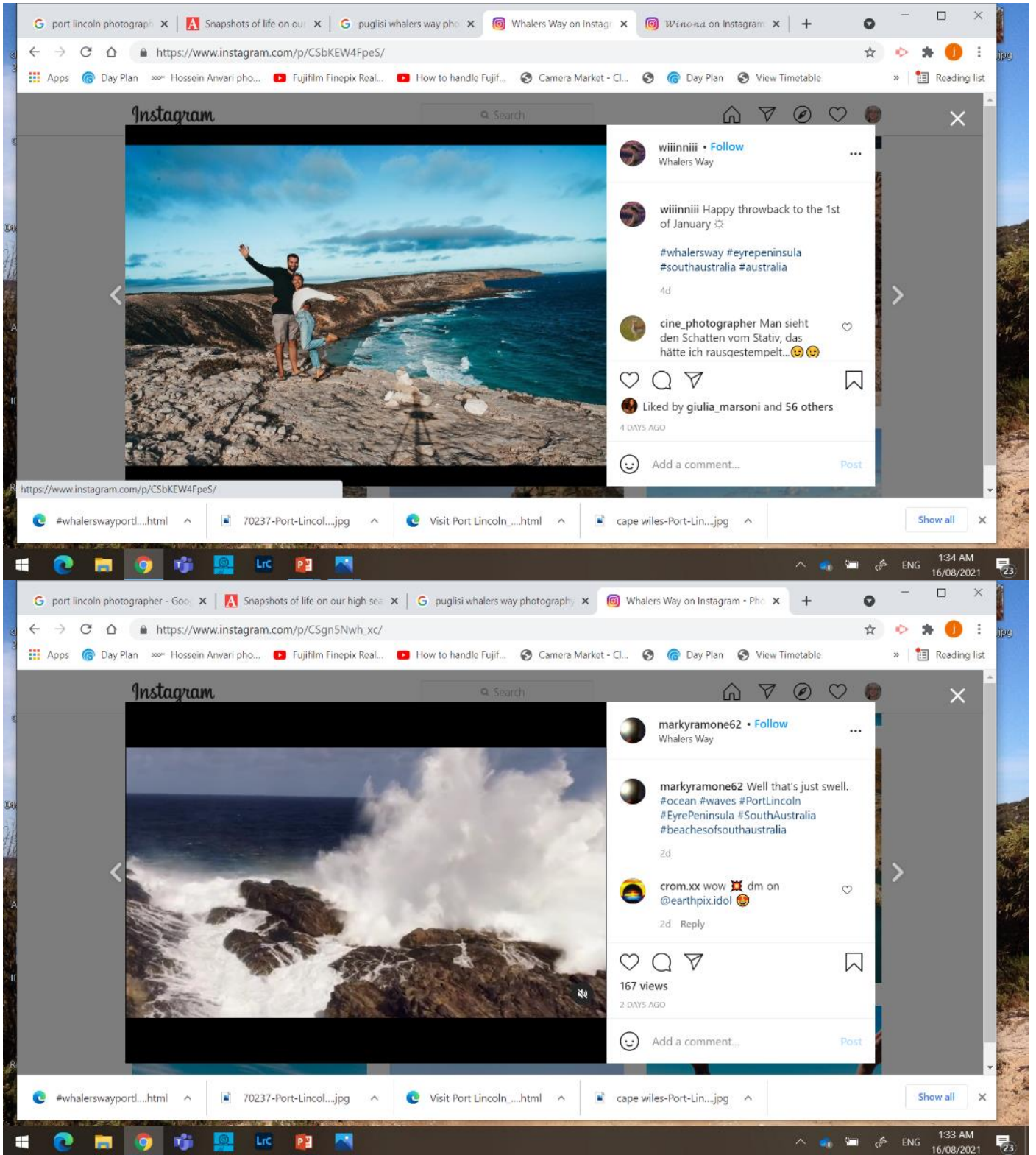
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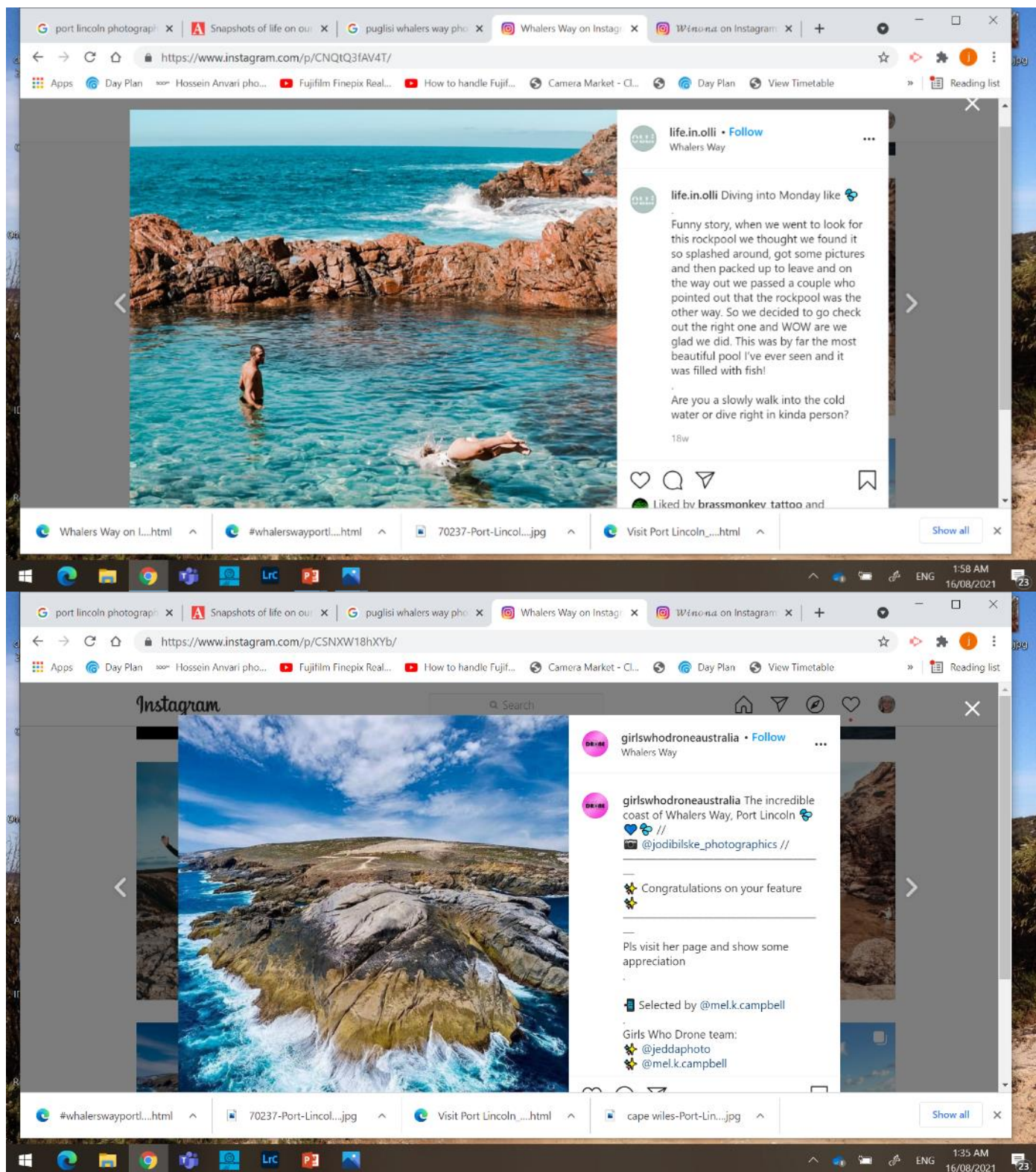
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The Impact on Eco-Tourism, Public Access & Recreation by land use change to industrial and commercial rather than conservation and tourism constitutes too great a loss for Port Lincoln and the Eyre Peninsular region to be considered an option. I hope that these randomly selected images from social media Instagram publicly available on the internet go some way towards developing an understanding of just how significant Whalers Way is to people.

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Space tourism compared

SL claim that:

p.52 5.5.2.2 Tourism

The proposal is anticipated to result in significant tourism opportunities for the region and South Australia. These will include visitors to the region to view launches, visitors seeking to explore and understand the facility and space industry.

Tourism opportunities for eco tourism are already existing at the site and are as acknowledged extremely popular. Visiting Whalers Way is a day trip that tourists from interstate and the local area repeat frequently. Space tourism opportunities are not likely to be as frequent (based on number of anticipated launches per year) and may indeed be quite frustrating given that launches seem to fail / not proceed quite often.

p. 63 The number of launches is anticipated to initially be low and grow over time, with approximately six (6) launches anticipated in the first year of operations, increasing to a maximum of 36 orbital launches in year five of operations. The frequency of launches will occur on a variable basis, with multiple rockets sometimes being launched over several days and other periods where there are gaps of weeks or even months between launches. In addition to the 36 orbital launches, the launches of up to six (6) sounding rockets by year five of operations will occur, with these rockets not reaching orbit, but gathering data to inform subsequent orbital launches.

p.310 6.3 Typical Launch Timeline

Given the typical launch timeline (in conjunction with security concerns) it is obvious Whalers way will be closed permanently to the public.

p.52 As a highly novel industry which is only located in small number of locations around the world, the facility has the potential to draw significant numbers of people to South Australia and the local region.

Where is the evidence for this?

Whalers way as an extremely popular eco-tourism and camping site draws people from all over the world to Port Lincoln. Infrequent and unreliable rocket launches will not be likely to draw anywhere near as many people as eco-tourism. Camping and recreational use of Whalers Way to the area in my opinion.

Current recreational activities on the subject land will be changed in respect to their management and arrangement, nevertheless similar opportunities for camping and recreation are available throughout the region and tourist activity can be accommodated without any substantive loss to the overall level of economic activity currently generated in the region.

A flawed argument as Whalers Way has the most impressive cliffs, stunning coastline, and amazing geographical features. There is not an equivalent experience. Also, a great many tourists that take a day trip to Port Lincoln stay an extra day to visit Whalers Way as it is a day trip experience equating to significant economic benefit for the town.

p. 47 5.3.2.1 General Effects on Human Populations Key Findings

Potential impacts of the Project have been considered in terms of practical, physical and economic impact. In particular:

• Existing land uses and general amenity will largely be unaffected by the construction and operation of the complex, including from rocket launches.

This is simply not true as evidenced further on in the EIS document. Tourists have been and will continue to be restricted from the site and the eco-tourism that currently occurs will not be allowed due to security issues and the change of land use from a conservation zone with predominantly heritage land area and passive eco-tourism activities to industrial and commercial activities (more akin to an industrial military complex)

p.47 The cultural and heritage values of the region are not impacted.

Yes, they are impacted. Whalers Way as a day trip or camping site is very much a part of the

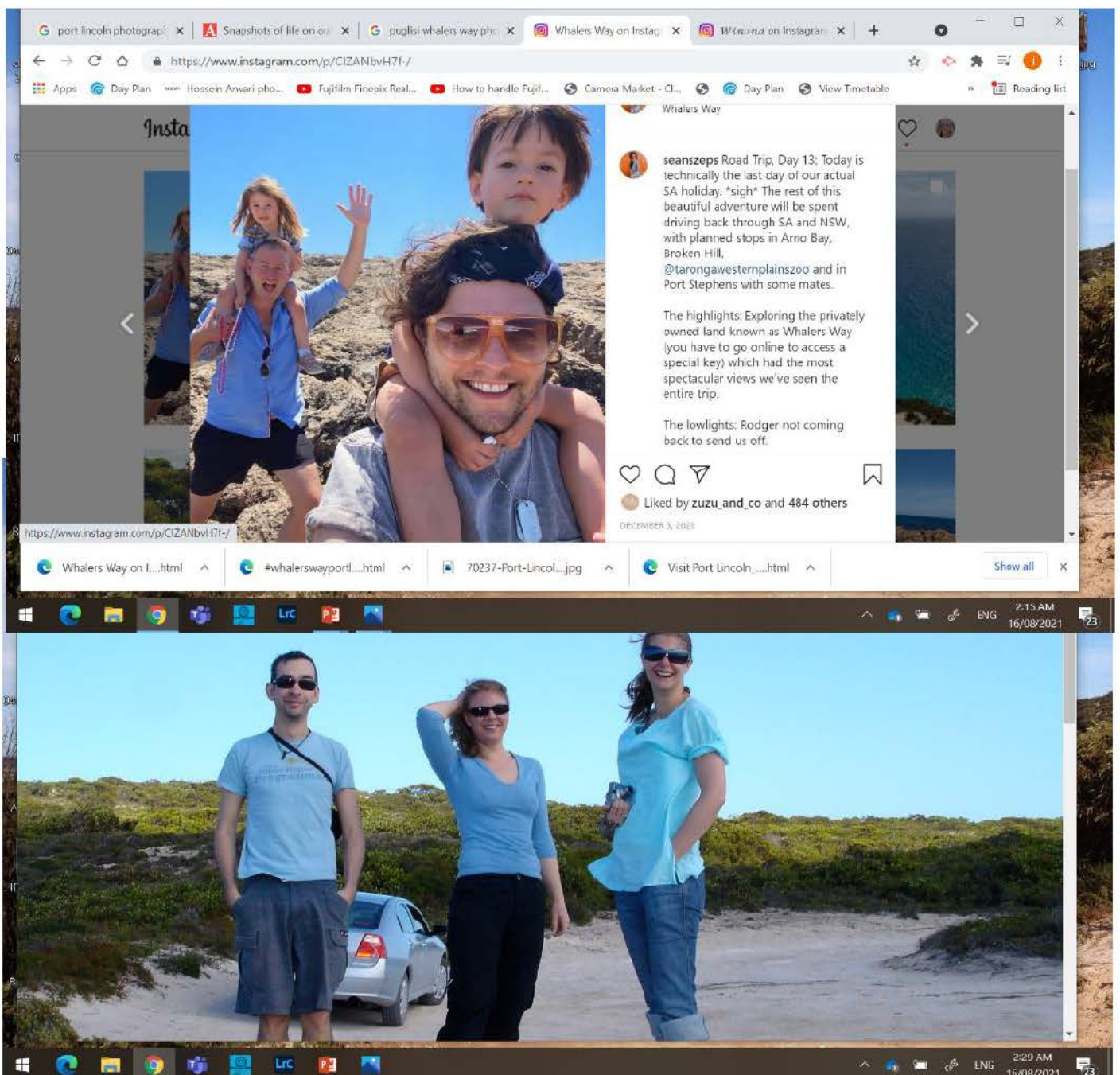
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identity of many of the local people of Port Lincoln and the cultural practices of getting out into nature and identifying with the local area. It is simply not good enough to suggest that there are other places people could go as those places are not the same or even similar. Since 1968 locals have enjoyed access to this recreational wilderness area and future generations deserve the opportunity to experience this beautiful country.

Some of the heritage scrub will be cleared. Indigenous sites of heritage value exist across Whalers Way.

p.75 The majority of the allotment containing the site is located in the Coastal Conservation Zone of the Lower Eyre Peninsula Council Development Plan – Consolidated 12 July 2018.

As Industrial & Commercial Activities are clearly incompatible with coastal conservation I object to the development in this location.



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14.4.4 Guideline 16.4 16.4. Identify the level of interference to landowners, land uses and activities in the immediate and surrounding environs.

There are a variety of tangential and direct interference impacts that the Project will have on immediate and surrounding land uses. In summary, these impacts are expected to include:

- **Inhibiting public access for current site users (recreational tourism, camping, hiking, animal watching).**

P522 The level of interference caused by the Project to current land users will be substantial as the Project will result in the termination of all use of the developed portions of the Whalers Way site for the tourism and recreational purposes previously undertaken

This is a tragic loss.

P523 The WWOLC does not result in the loss of a coastal reserve area. The land is a privately held allotment utilised for tourism purposes at the discretion of the landowner and is not a National Park or Conservation Park.

Actually, it is a private conservation park

P618

Potential intermittent impact on commercial fishing, shipping, and marine recreation will be addressed through ongoing management arrangements.

The proposed rocket launching activity is disruptive to the commercial fishing industry.

P 561 / 619 19.4.1.6 Land Not Within a Council Area (Coastal Waters) Development Plan.

The Plan also contained a number of Objectives and Principles of Development Control. Those most relevant to the nature and location of the proposed launch facility included the form and nature of desired development, coastal impacts, environmental protection, preservation of scenic values, maintenance of public access, hazard risk minimisation, protection of physical and economic resources, settlement, tourist facilities and other appropriate development.

Does seem to be inconsistent with several of these objectives

Conservation Zone (applies to site) The Project site sits entirely within the Conservation Zone. The Desired Outcome for development in the Conservation Zone is: "The conservation and enhancement of the natural environment and natural ecological processes for their historic, scientific, landscape, faunal habitat, biodiversity, carbon storage and cultural values and provision of opportunities for the public to experience these through low-impact recreational and tourism development."

Does seem to be inconsistent with several of these objectives

The Desired Outcomes for development in the Coastal and Offshore Islands Zone are: "Protection and enhancement of the natural marine and coastal environment and recognition of it as an important ecological, commercial, tourism and recreational resource and passage for safe watercraft navigation. Small-scale, low -impact development for the purpose of conservation, navigation, science, recreation, tourism, aquaculture or carbon storage."

Does seem to be inconsistent with several of these objectives

Performance Outcome 3.1 is of relevance to the assessment of the Project: "Development is undertaken in a manner which minimises the potential for harm to the marine and coastal environment or to fisheries and aquaculture, including harm arising from actions that introduce a biosecurity risk." A biosecurity risk would occur primarily as result of pollutants entering the sea from the land-based operations of the

launch facility, or pollution associated with an accident or planned landing of spent rocket components into the sea.

Rocket stages in a successful launch and possibly whole rockets will be dumped in the ocean.

P564 / 622 A detailed description and analysis of rockets, rocket components, and associated pollutants entering the sea both as a planned event and in the event of accident is outlined in Section 22.4 of this report. Specific impacts on the marine environment are analysed in Section 22.8. Procedures for spill management are outlined in Section 23.4.2.3. Specific legislative requirements for sea dumping apply in local, Australian, and International waters and the Project operations will be required to comply with such provisions.

P 565 / 623 Hazards (Bushfire - High Risk) overlay The Hazards (Bushfire - High Risk) Overlay seeks to ensure development responds to the high level of bushfire risk by siting and designing buildings to mitigate threat and impact of bushfires on life and property, facilitating access for emergency service vehicles and situating activities that increase the number of people living and working in the area away from areas of unacceptable bushfire risk.

Rocket launches are an inappropriate activity in a high bushfire hazard overlay zone.

P579 (637)

The Whalers Way Launch Complex will operate in the same fashion as many other major industrial complexes in respect to risk and hazards associated with workplace safety, hazardous material storage and use, construction and operating machinery and equipment, transport and security.

Southern Launch self-defined as a major industrial complex.

Impact on Commercial Fisheries.

21.4.1.4 Security Considerations - Operational Requirements

P611 (669 in PDF) Safety Exclusion Zones

Safety exclusion zones are required to exclude the public and commercial operators (fishing and aviation) from areas of potential danger during the launch, flight and return to earth of spent rocket parts. & Section 20. Detailed discussion in relation to spent rocket parts is outlined in Section 22.

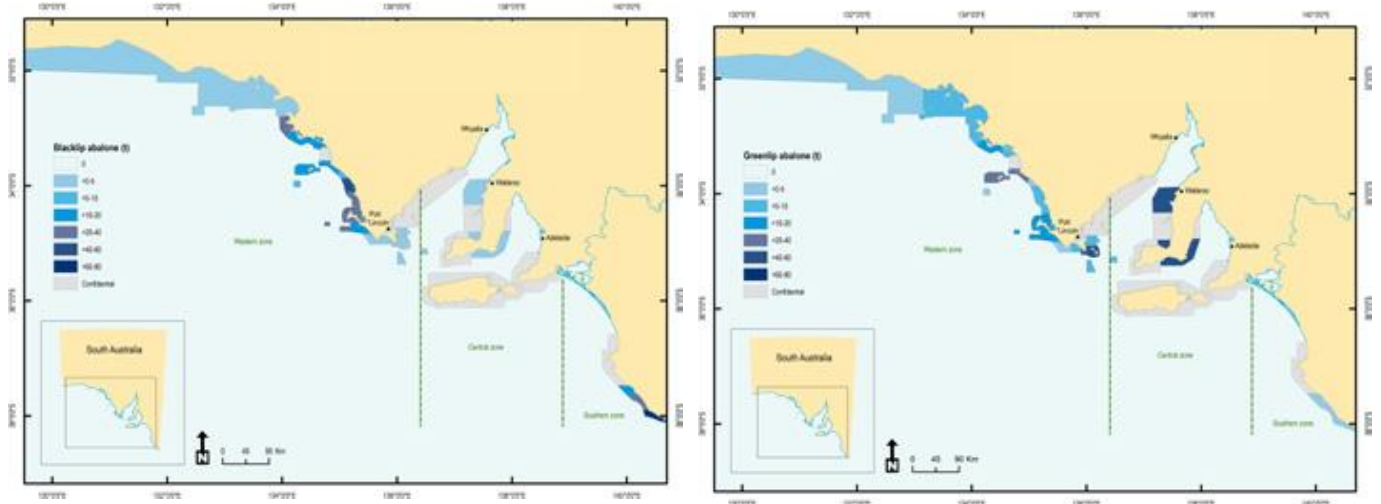
2 Ecological values of the Thorny Passage Marine Park

The potential marine impact zone (PMIZ) for the WWOLC overlaps an area towards the south-east of the Park, including parts of GMUZ-5 and the western end of HPZ-6, which contains Cape Carnot and Liguanea Island.

Famous as a whale watching site, Thorny Passage Marine Park has up to 13 species of whales that gather in the area, including the southern right whale.

<https://www.marineparks.sa.gov.au/find-a-park>

Abalone Grounds

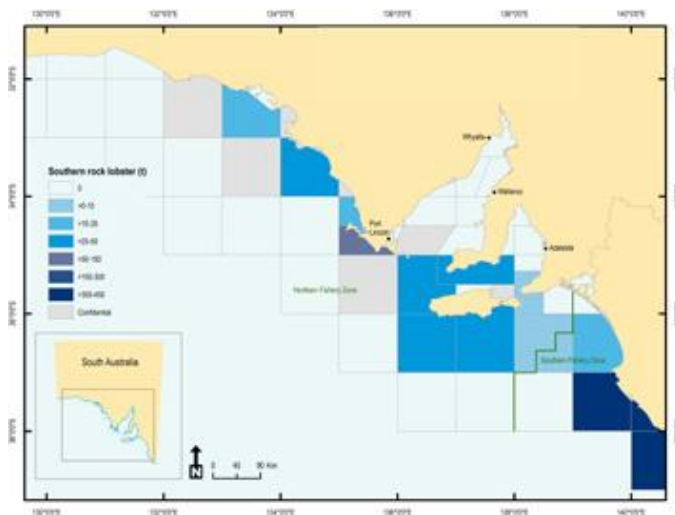


https://www.pir.sa.gov.au/data/assets/pdf_file/0020/262028/SAFS_Status_Report_v7.pdf

Rock Lobster Grounds

https://www.pir.sa.gov.au/data/assets/pdf_file/0020/262028/SAFS_Status_Report_v7.pdf

The area around Whalers Way is the most significant cray fishing area in Eyre Peninsula and second only to the South East in the state of SA. (see map below)



No surveys of invertebrate communities are known from within the PMIZ

Actually substantial well recognised commercial cray fisheries and abalone fisheries exist within the potential marine impact zone both black and green lipped abalone and in particular fisheries of Southern rock lobster

https://www.pir.sa.gov.au/data/assets/pdf_file/0020/262028/SAFS_Status_Report_v7.pdf

“Rock Lobster Fishing (and Bycatch Species) According to Aquaculture Group, PISA - Fisheries

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

(1997), Thorny Passage and Thistle Island are of the eight areas on the lower Eyre Peninsula where Rock Lobster fishing effort is concentrated.”

[http://www.environment.sa.gov.au > public > part 3](http://www.environment.sa.gov.au/public/part_3)

2 Ecological values of the Thorny Passage Marine Park

The potential marine impact zone (PMIZ) for the WWOLC overlaps an area towards the south-east of the Park, including parts of GMUZ-5 and the western end of HPZ-6, which contains Cape Carnot and Liguanea Island.

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<https://www.marineparks.sa.gov.au/find-a-park>

PDF

9 Feb 2011 — 9.2.11.5 *Thorny Passage* (Eyre Bioregion) ... *Abalone* has been described as one of the three major *fisheries* (along with lobster and whiting) ...

449 pages

‘From iconic wild catch species such as King George Whiting and Snapper to Southern Rock Lobster, Greenlip Abalone and Western King

Prawns, South Australia produces some of the most sought after, premium seafood species in the world.

Harvested in pristine waters which have a reputation for being among the cleanest and safest, the State’s commercial fisheries contribute

\$379 million (2012-13) annually to the South Australian economy in direct and indirect impacts and produce more than 44,000 tonnes

of seafood for domestic and international markets. This includes more than 2000 tonnes of Rock Lobster and Abalone, most of which is

exported to the major international markets of China and Hong Kong.

Locally, the seafood industry is a vital contributor to the State economy, with the sector also supporting more than 3,000 jobs, the majority

in regional South Australia.’

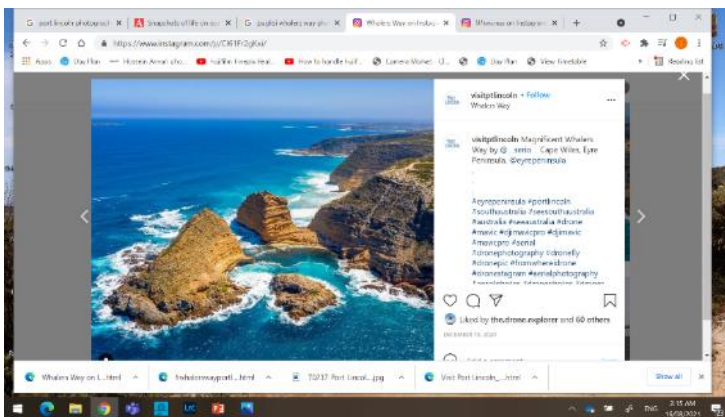
[https://www.pir.sa.gov.au/ data/assets/pdf_file/0020/262028/SAFS_Status_Report_v7.pdf](https://www.pir.sa.gov.au/data/assets/pdf_file/0020/262028/SAFS_Status_Report_v7.pdf)

P 52 5.5.2.3 Commercial Fishing Industry

Ocean and airspace areas directly affected by a rocket launch will be temporarily restricted by the establishment of Launch Exclusion Zone mandated by the Australian Space Agency under the Space (Launches and Returns) Act 2018. This will potentially impact on commercial fishing operations on an intermittent basis as operators will be excluded from entering the Exclusion Zones.

Given that the Hapith rocket launch has now had three 12 hour exclusion zones and still hasn't launched successfully it seems likely that significant disturbance to both commercial cray fishing, green and black lipped abalone fishing directly in the area and also other commercial and recreational fishing for king George whiting etc will be impacted to a significant extent.

The disruption caused by launch events and failed launch events or rescheduled launch events is a significant disturbance to the cray and abalone and other commercial fisheries that occur in the exclusion zone. This rocket launching site is detrimental to the cray and abalone industry in particular.



p.435 (493 in pdf) 13.4.2 Guideline 5.5 5.5 Identify any economic implications for the State and the region if the proposal does not proceed.

Great benefit for eco tourism, camping and recreational activities, great benefit to commercial cray, abalone and other fisheries, commercial fisheries, great benefit to the natural environment including significantly reducing wildfire risk, great benefit to flora and fauna, great benefit to Nauo and traditional peoples , great benefit for the lack of need to clear heritaged land, great benefit for the people of Port Lincoln and Eyre Peninsular and also for future generations. The project could proceed somewhere else, maybe even in SA.

436 13.4.3 Guideline 5.6 5.6 Consider and quantify the impacts of the development on commercial fishing areas during operations i.e. impacts on business if there is a need for temporary exclusion zones. It is noted in Section 18.4.5 that access and use of surrounding coastal waters will largely be undisturbed by the proposed operations, save for access to certain areas during specific launch events. Rocket launches are controlled by the Australian Space Agency which ensures that the ocean and airspace areas directly affected by Launch Exclusion Areas are cordoned off. Any Launch Exclusion Area or Corridor will be off limits when the Australian Space Agency mandates that they be free of any non-authorized person. Launch Exclusion Zones associated with the Project are discussed in Section 6.5, 6.6, and 6.7 of this EIS. The exact extent of Launch Exclusion Areas will be dependent on the particular launch but will extend over the ocean. This will potentially impact on commercial fishing operations on an intermittent basis as operators will be excluded from entering the Exclusion Zones. It is anticipated there will be up to approximately 42 conventional and sounding rocket launches per annum requiring implementation of an Exclusion Zone over a portion of the sea. Exclusion zones will be enforced for the minimum amount of time possible to ensure the least disruption to commercial fishing (and other marine based activities) and notified through Notice to Mariners (NOTMAR). With these management measures in place, and the intermittent requirement for implementation of the Exclusion Zones, impact on commercial fishing operations should be minimised as much as possible and with appropriate planning

should not be detrimental to the economic conditions currently experienced.

Will be frustrating and detrimental based on the experience so far 3 try's of 12 hours each and Hapith rocket is still not up yet. Cray fishermen and abalone divers won't find the delays amusing.

Impact on Nauo - Traditional owners of the land

P47 The subject site is freehold land and therefore native title rights over the site have been extinguished.

Native title claim exists along the coastline and cliff areas. What consideration for unrestricted access to this area has been given to the local Nauo peoples, traditional owners of the land?

p. 56 5.8.2.1 Aboriginal Heritage The Project is located within the traditional lands of the Nauo speaking people. As a freehold allotment, no native title claim under Native Title Claim Nauo No. 2 applies to the subject allotment. Native Title Claim Nauo No. 2 applies and will continue to apply to coastal land and waters surrounding the subject allotment.

.p.56 No artefacts or other signs of Aboriginal occupation were found in the remaining areas. The investigation concluded that the frequency of artefacts is so low as to have little cultural value and should not impede development of the complex.

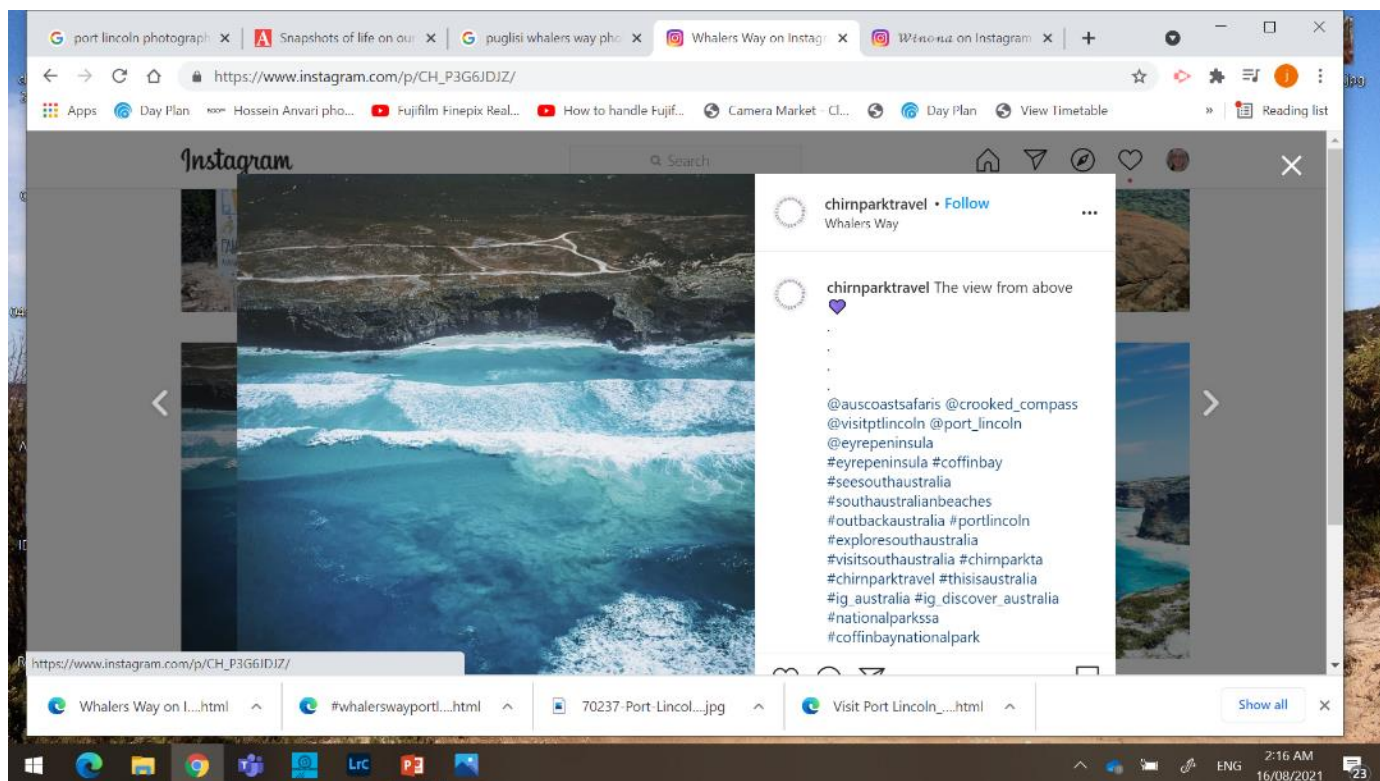
I grew up in the area and am aware of multiple areas with significant artefacts. I wonder why they were not found?

p.56 5.8.2.2 Non-Aboriginal Heritage

Heritage is not just about buildings and artefacts – cultural practices such as the access for local people to the area and native flora and fauna constitutes heritage values – to be enjoyed by future generations

P 463 / 521 14.4.3.3 Implications for Native Title Native title is the recognition that Aboriginal and Torres Strait Islander people have rights and interests to land and waters according to their traditional law and customs as set out in Australian Law. Native Title is governed by the Native Title Act 1993. Native title may include rights to: • Live on the area. • Access the area. • Visit and protect important places and sites. • Teach law, custom and engage in cultural activities in the area

Land may not be as is freehold however the coastal area – the cliff area is subject to native title.



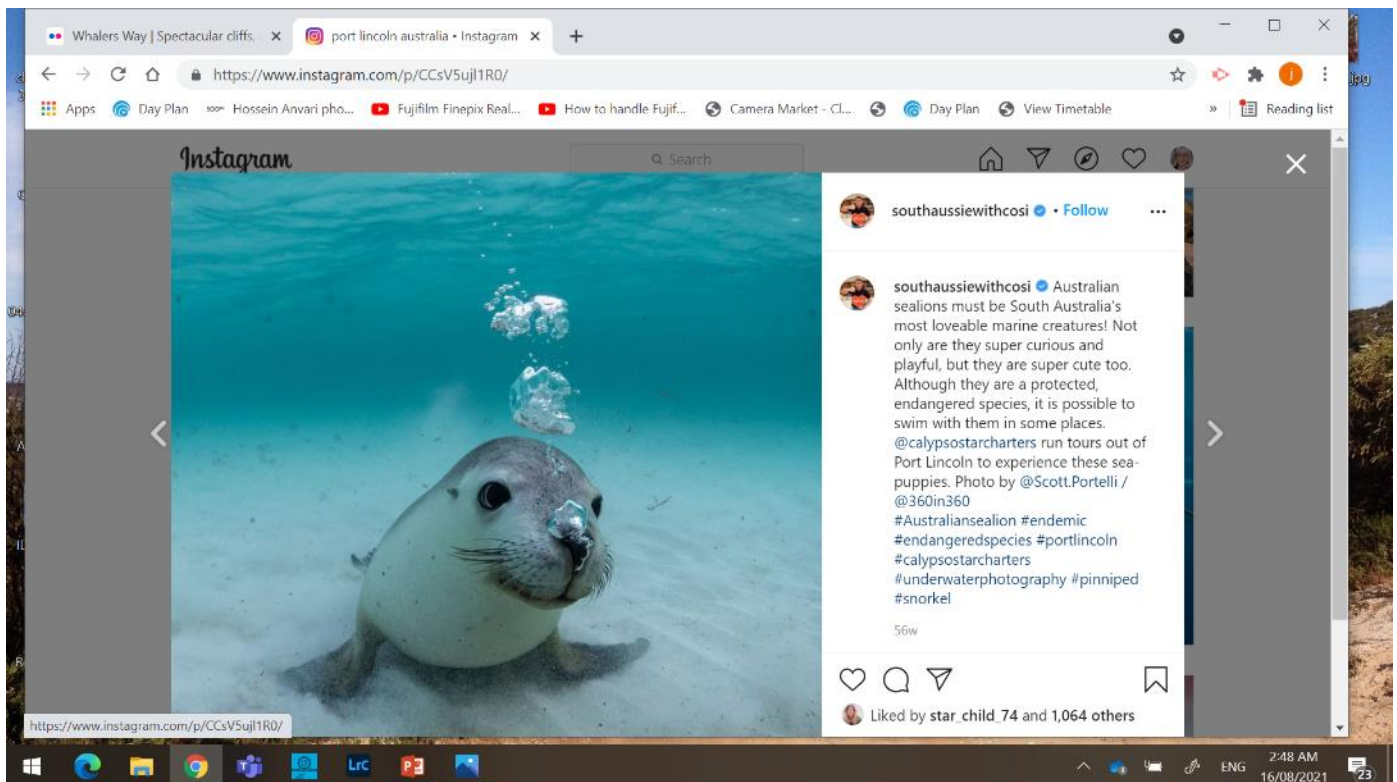
Pollution

p.366 (424 in pdf) Other impacts associated with debris The impacts of debris following contact with the sea surface depend on the nature of the rocket components of which the debris is comprised, which is described in Section 22. Key points include: • All component materials are inert and harmless to the marine environment **except lithium (within batteries) and copper (within electrical wiring)**. • Fuels would be expended before contact with the sea floor, or would burn, remain inert (rubber-based solid fuel) or vaporise (liquid fuels). • Most materials would sink, except **rubber-based solid fuels (and liquid fuels prior to vaporisation) and some small pressure vessels which have not been punctured**. • **Casings that have not already broken up during re-entry would generally shatter into thousands of pieces on impact with sea surface, with the possible exception of some thick carbon fibre components. Copper fragments would sink to the seafloor where their slow dissolution may have long-term local effects on sediment in fauna, or be dispersed from areas of hard substrate, adding a very low total mass of copper relative to natural oceanic copper quantities. Lithium, ion batteries (about the size of two (2) car batteries in volume) would likely rupture on impact with the sea surface or at depth. Lithium is already elevated in seawater and is not toxic but would react with seawater and in sufficient quantity could cause alkaline conditions with localised, short-term toxic effects.** The descent of debris to the sea floor is expected to slow enough to be avoided by mobile fauna, but **sessile organisms may be impacted by larger items of debris or accumulations of fragments settling on the seafloor. Fragile biota may be damaged or destroyed, and feeding or respiration may be inhibited, but the area impacted would be insignificant compared to the extent of the receiving environment. Particles would be created that are small enough for pelagic and benthic fauna to digest, potentially impacting individuals but with negligible impact at population level. The settlement of larger fragments of debris on soft sediment could result in a shift to benthic communities requiring hard surfaces, and floating debris may provide shelter for pelagic organisms and substrate for attachment and dispersion of sessile organisms.**

Discounting the effect (comparing the event in relation to the whole of the ocean) is a very poor

excuse for allowing the pollution of the ocean.

Similarly discounting the effect on Seal [and sea lion] pups .p. 369 / 427 In the event that seals were sufficiently startled to stampede towards the water, pups are unlikely to be injured by trampling because the narrow habitat does not allow for a sufficiently dense concentration of seals, and after their first month, the pups are quite robust. So, no launches when there are pups less than one month old? How could that be worked out?



Australian sea lions are extremely rare.¹⁰ They are protected by the Environment Protection and Biodiversity Conservation Act 1999 Noise pollution is one of the factors contributing to their decline.¹¹¹² The test launches will cause noise pollution.

P 409 Australian Sea Lion The Australian sea lion (ASL) Neophoca cinerea is currently listed as Vulnerable under the NPW Act and Endangered under the EPBC Act.

P619 (677in pdf)

recovery is only viable for very expensive components of heavy launch systems. The spent vehicles will therefore strike the ocean, and the debris will remain in the marine environment. This has been the approach for space launches since the inception of the space industry

¹⁰ The Australian sea lion is one of seven sea lion species. They are the only carnivorous aquatic mammal endemic to Australian waters and extremely rare. <https://www.afma.gov.au/environment-and-research/protected-species/australian-sea-lions>

¹¹ Chemical pollution, noise pollution, oil spills as well as diseases are among factors, threatening the sea lions' population. <https://animalia.bio/australian-sea-lion>

¹² There are 9 species of seals found in Australian waters and all of them are protected by the *Environmental Protection and Biodiversity Conservation Act 1999*. <https://www.afma.gov.au/environment-and-research/protected-species/seals>

p 622 (680 in pdf) The rockets are made up of: • Carbon Fibre Reinforced Plastic (CFRP). • Plastic. • Plastic (Bakelite). • Aluminium. • Stainless Steel. • Titanium. • Glass. • Copper wire. • Li-Ion Batteries. • Computer chips. • Fuel/Oxidiser. • Other gases.

22.4.1.3 Types of Fuel, Oxidiser and Other Gases

fuels such as methane gas, RP-1 (a pure form of kerosene) or forms of rubber in solid fuelled motors. in successful launches, there will only be minimal amounts of fuels and oxidisers remaining in the vehicle when it contacts the water.

P 622

Unspent fuel would float and may burn, evaporate (liquid fuels) or remain floating (rubber based solid fuels). Launch vehicle components could potentially fall into international waters, in the EEZ and/or state waters, depending on when the vehicle failure occurs.

p. 623 (p681 in pdf) Fuels, oxidisers and other gases used include: • Fuels: - Liquid Natural Gas (Liquid Fuelled); - Rocket Propellant-1 (Liquid Fuelled); - Styrene Butadiene Rubber (SBR) (Hybrid/Solid Fuelled); - Liquid Methane (Liquid Fuelled); and - Paraffin Wax (Hybrid Fuelled, Solid Fuelled). • Oxidisers (Liquid and Hybrid Fuelled): - Liquid Oxygen; - Nitrous Oxide; and - High Test Peroxide (HTP). • Other Gases (Liquid Fuelled, Hybrid Fuelled and Solid Fuelled): - Oxygen; and - Hydrogen.

Carbon Fibre Reinforced Plastic (CFRP)

s. Launch vehicles use CFRP for the majority of the structure including the skin that forms the external shape of the rocket, as well as the structure that forms the rocket motors and fuel tanks ..., . CFRP is inert and does not leach any harmful chemicals into the environment.

Refer to the articles below for information.

<https://www.sciencedirect.com/science/article/abs/pii/S1359836814000407>

https://www.researchgate.net/publication/223102917_Seawater_durability_of_glass- and_carbon-polymer_composites

The materials studied were glass/polyester, carbon/polyester, glass/vinyl ester and carbon/vinyl ester composites used in marine structures. When immersed in seawater at a temperature of 30 °C for over two years, the composites experienced significant moisture absorption and suffered chemical degradation of the resin matrix and fibre/matrix interphase region.

Plastic

Plastic is used within the launch vehicle to form a protective outer cover for electrical wiring. Plastic is non-reactive and does not leach any harmful chemicals into the environment

The sensitive marine environment will be polluted with rocket stages.¹³ While the EPA has granted an exemption

¹³ If the development proceeds pollution of the ocean by used rocket stages will affect the Southern Ocean marine environment. Southern Launch is not guaranteeing the recovery of potentially up to 2,000 rocket stages per year.

"The decision to collect spent stages will be made on a case by case basis with the relevant State and Federal agencies, environmental authorities and the rocket manufacturer." Likewise, the traffic of commercial cray and other fisheries will be severely impacted.

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for the three proposed tests on the grounds that “the activity will not cause any environmental harm”¹⁴¹⁵(p108)¹⁶¹⁷ the rocket components include plastics¹⁸ and I am sure we are all acutely aware of the damage plastics and micro plastics are doing to the oceans¹⁹²⁰²¹. Unfortunately Annex A B C D E & F are all missing from the EPA application²²(p282 of the application for a temporary change of land use to launch test rockets) so it is impossible to understand why the EPA have made this judgement.

p. 624(682 in pdf) Lithium-Ion Battery Rupture of the batteries on connection with the ocean surface or with the seabed could release highly reactive Lithium (Li) to the seawater – which would produce highly alkaline seawater conditions in the region surrounding the battery and dissolution of the Li into the seawater.

Copper can have negative effects on sea life

P 639 (681 in pdf) Debris from successful launches would not impact on Liguanea Island fauna (provided that suborbital launches avoid trajectories over the Island). An air burst over Liguanea Island would be a very rare event that could result in mortalities but there would be negligible impact at subpopulation level. Ground bursts on Liguanea Island would be a rarer event than an air burst (provided a flight termination system is used) but could impact more individuals. Although this may result in temporary reductions in ASL pup production, no long-term impact is expected at subpopulation level; • Within the Southern Ocean, including the waters of the Thorny Passage Marine Park surrounding Liguanea Island, there may be rare debris strike impacts on individual animals on the sea surface but no impact at population level; and • Other debris impacts, including ingestion by marine fauna, crushing or smothering of biota, emission of toxic contaminants, noise from debris striking the sea surface and provision of habitat, would be highly localised, the area impacted would be insignificant in comparison to the extent of the receiving environment and population level effects would be negligible.

Once again discounting the effect of pollution by comparison to the whole of the ocean.

Impact on Fauna

p.362 The Project includes clearing 23.76 hectares of Western Whipbird (eastern) habitat, with potential ongoing impacts from noise and lighting during operation. In consideration of the SIG 1.1

¹⁴https://plan.sa.gov.au/development_application_register/assets/get_document?applicationid=21006593&filename=51284let07-UpdatedNotificationPackage-350564.pdf.

¹⁵ Because “No significant contamination as a result of launch vehicle components falling into the sea” I wonder how significant is defined Likewise “No significant contamination of soils as a result of storage and/or use of hazardous materials.” No significant contamination of underground water as a result of storage and/or use of hazardous materials.” P.277 https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

¹⁶ P 268 Dumping the launch vehicles stages at sea – minimal to no environmental impact as the materials are inert https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

¹⁷ In the response to the submissions qualifications were made to the above previous statement “. Given the vehicle is comprised of largely inert components, by the time the vehicle contacts the water, the fuel and oxidiser will have been exhausted, with only small amounts potentially remaining.” P690 https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

¹⁸ P 279 “ Launch vehicles will not consist of materials which present a threat to the ocean. Main components will be carbon fibre. Aluminium and plastics. Fuels will be non toxic.” https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

¹⁹ <https://www.nationalgeographic.com/magazine/article/plastic-planet-health-pollution-waste-microplastics>

²⁰ <https://www.iucn.org/resources/issues-briefs/marine-plastics>

²¹ https://www.biologicaldiversity.org/campaigns/ocean_plastics/

²² P 280-284 https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

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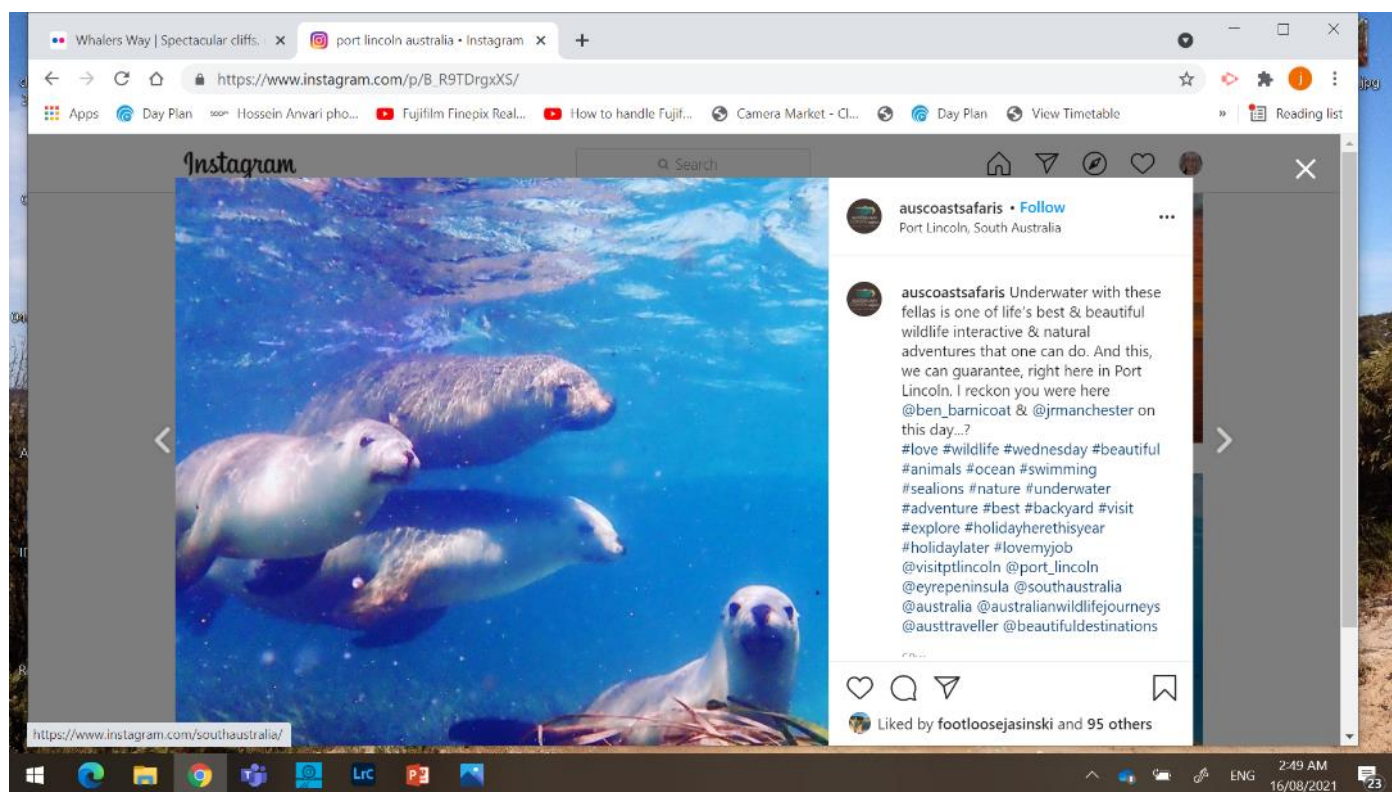
criteria, the Project is considered to have **the potential to have a significant impact to the Western Whipbird (eastern)**. In accordance with the EPBC Act an assessment of the likelihood of impacts in accordance with the SIG 1.1 guidelines is provided in Appendix P.

P160 Appendix H

Marine Parks (Managed Use) Overlay

PO 1.1 Development avoids or minimises harm to marine habitats, biodiversity or the functioning of ecosystems. DTS/DPF 1.1 None are applicable

I beg to differ, marine habitats particularly the federally protected Australian Sea Lions & Southern Right Whales will be likely impacted by launch activities, the functioning of ecosystems is also impacted when launches occur, particularly during breeding seasons of both land and sea creatures.



The specific impacts of more localised risks of the proposed development are addressed separately in Section 9 (Effect on Native Fauna) and Section 20 (Hazard Risks) and considered in detailed in the Marine Ecological Assessment contained in Appendix S..

p.631 (689 of pdf)

22.4.1.10 Impact of Spent Rocket Components on the Marine Environment

Appendix S. This assessment was informed by the aforementioned study undertaken by NIWA (2017), which is particularly relevant to Southern Launch as it was specifically undertaken to consider small launch vehicles.

The assessment in Appendix S concludes that:

- Debris from successful launches would not impact on Liguanea Island fauna (**provided that suborbital launches avoid trajectories over the**

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Island). An **air burst** over Liguanea Island would be a very rare event that **could result in mortalities** but there would be negligible impact at subpopulation level. **Ground bursts** on Liguanea Island would be a rarer event than an air burst (provided a flight termination system is used) but **could impact more individuals**. Although this may result in temporary reductions in ASL pup production, no long-term impact is expected at subpopulation level;

- Within the Southern Ocean, including the waters of the Thorny Passage Marine Park surrounding Liguanea Island, **there may be rare debris strike impacts on individual animals on the sea surface** but no impact at population level; and
- Other **debris impacts, including ingestion by marine fauna, crushing or smothering of biota, emission of toxic contaminants, noise from debris striking the sea surface and provision of habitat, would be highly localised**, the area impacted would be insignificant in comparison to the extent of the receiving environment and population level effects would be negligible

Impact on Flora

P 160 Appendix H

Native Vegetation Overlay

DO 1 Areas of native vegetation are protected, retained and restored.

p. 77 & 78 The key issues identified for the Eyre and Western region can be grouped into four (4) themes:

- *Environment and sustainability:*

locating development away from hazardous areas and ensuring that appropriate prevention measures are in place;

Economic development: - retaining and enhancing the region's unique natural assets and culture to support tourism;

- *Population, settlements, and culture:*

identifying cultural values and encouraging a 'sense of place' in each community;

Some land clearing will impact land fauna habitats and cause fragmentation of habitat areas.

p.296

The resulting calculation indicated 1312.94 SEB points in total. The overall SEB requirement calculated by Southern Launch for this project currently stands at \$915,078.45 plus an administration fee of \$50,329.31. The total SEB payment as calculated is \$965,407.76. Southern Launch will either provide a SEB in the form of an inground offset provided by SEB credit providers within the region, or through payment of the required fee. It is noted that a Heritage Agreement (HA) which protects vegetation for conservation currently applies to the areas of vegetation to be cleared. In most circumstances, when applying for clearance of protected areas SEB calculation would be subject to loading and the size of the SEB would be increased. Loading has not been applied to the SEB calculation in this instance. The HA will be varied prior to clearance occurring so that these areas are exempt from protection under the agreement.

This \$ being almost 1 million dollars (or more considering there should have been loading) could be spent instead improving access or amenities at an alternative site that doesn't have thick scrub and is a heritage conservation area.

Security & Safety

p.586 Risk Mitigation / Site Access

<p><i>p. 597 (or 655 in FINAL EIS PDF) Southern Launch will be operating two (2) launch facilities at Whalers Way.</i></p>
<p>Is there a guarantee that this number (2) won't be increased at some stage in the future? Their plans originally indicated 6 launch pads.</p>
<p><i>21.0 SECURITY AND SAFETY the Protective Security Threat Assessment and Security Considerations, Southern Launch Whaler's Way Orbital Launch Complex, Spartica Australia Pty Ltd, August 2019 (Appendix AB – note: this Appendix is redacted from the public version of the EIS for security reasons)</i></p>
<p>I will have to assume that the site, including site assets, ICT etc are potentially unable to be secured due to lack of information.</p>
<p><i>P 605 & 606 (663 & 664 PDF version) Table 21.3: Operational Phase Threat Level Assessment Rating (Spartica 2020, pp. 87-88)</i></p>
<p>It seems possible after examining references to the report by Spartica, that Whalers Way could become a military target for a rocket missile attack (possibly nuclear) at commencement or during international conflict that Australia or Southern Launch's customers such as Taiwan / South Korea may have with a country such as China eg war or other conflict scenario. Southern Launch do seem to have military connections.</p>
<p><i>The Protective Security assessment (Appendix AC) found little historical evidence of high impact attacks targeting spaceports globally. The risk of an attack on the WWOLC facility causing large scale damage and disruption during the construction, and or operational phase of the project is currently assessed as low.</i></p>
<p>Spaceports as such are relatively new and surveillance technology etc has advanced at a very rapid pace so lack of historical precedent is not relevant. In fact a spaceport could be seen as tantamount to a privatised military industrial complex might be likely to be a high target. During WW2 the Germans laid sea mines in the area. Uncle Sam found one.</p>
<p><i>p.607 There has been evidence of recent cyber-attacks from state-based actors on Australian government and commercial businesses in Australia. The current threat of foreign state espionage to the project is assessed as likely.</i></p>

P608 (666 in PDF) 21.4.1.3 Security Considerations - Infrastructure Critical Infrastructure National security requirements are built into the Protective Security Policy Framework (PSPF). This framework applies to non-corporate Commonwealth entities and assets subject to the Public Governance, Performance and Accountability Act 2013. Some State and Territory government entities have also aligned with parts of the Framework. Southern Launch and the WWOLC is a privately-owned corporation and therefore fall outside the scope and requirements of the PSPF

If The current threat of foreign state espionage to the project is assessed as likely.(as mentioned above) Southern Launch falling outside the scope of the PSPF would seem to be an unacceptable risk to national security.

If Southern Launch do launch any rockets for the military (armed or not, intelligence gathering etc) then under the PSPF I would think Southern Launch would fall under Key government services.rather than Transport. If Southern launch are launching rockets for example for weather reports or surveillance I think the purposes of the operation also constitute the classification of key services rather than transport, particularly when important documents such as the emergency management plan appendix AB cant be provided due to security concerns it appears that the operations of southern Launch and indeed the site itself and infrastructure including digital information communication technologies cannot be secured.

While SL may have a security plan, these principles [of the PSPF] are informative to the Southern Launch facility in developing a security plan. ??

P 613 (or 671 in PDF) Signage be erected to notify the general public that there is no entry. This can be simple signs on star pickets placed periodically along the boundary.

21.4.1.4 Security Considerations - Operational Requirements
P611 (669 in PDF) Safety Exclusion Zones

Wind

p. 65 Project rationale

The Whalers Way site at Sleaford has been identified as the preferred location for the launch complex through an extensive review of potential locations across Australia based on specific location criteria (discussed further in Section 4.0). In summary, the unobstructed flight paths, low aircraft/shipping volumes, low population in the immediate vicinity, year-round temperate climatic conditions, coupled with the skilled local workforce and a robust logistics supply network, makes the Whalers Way ideal for the establishment of technologically advanced launch operations at cost-competitive prices.

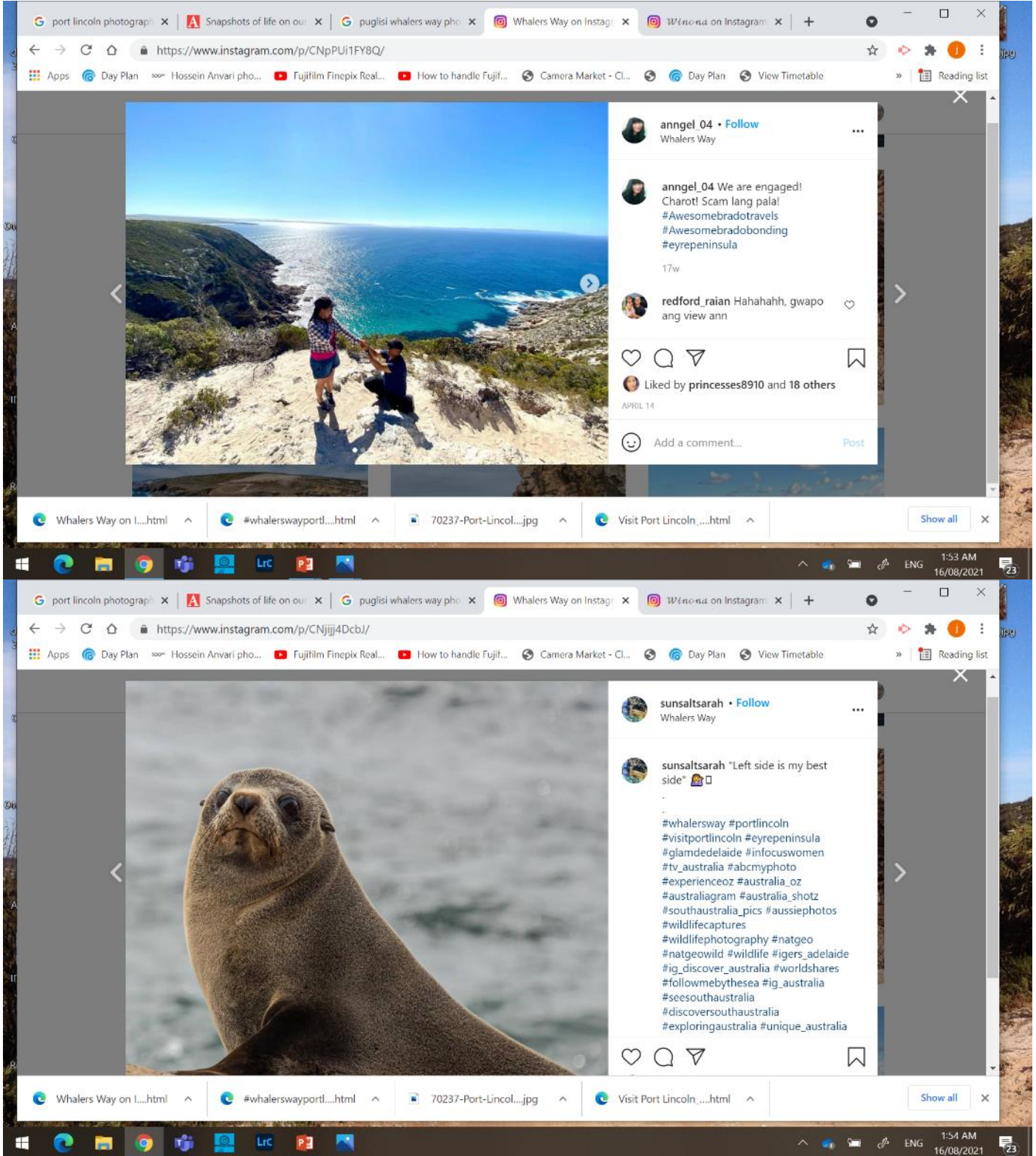
Unfortunately, SL has not considered the extremely windy frequently gale force / near gale force weather and extreme hazard zone bushfire risk due to highly flammable flora at the Whalers Way site. Apparently rockets cannot be launched in windy weather as they can be blown off course. Given a wind farm is next to the proposed launch sites it seems obvious that Whalers way would have windy weather.

p.177 The Cathedral Rocks wind farm comprising 33 wind turbines, is located on coastal land to the north-west of the site

This should be, as my children used to say when they were young, a ‘no shit Sherlock’ moment – it is obvious the site is unsuitable for rocket launching activities due to high levels of wind on

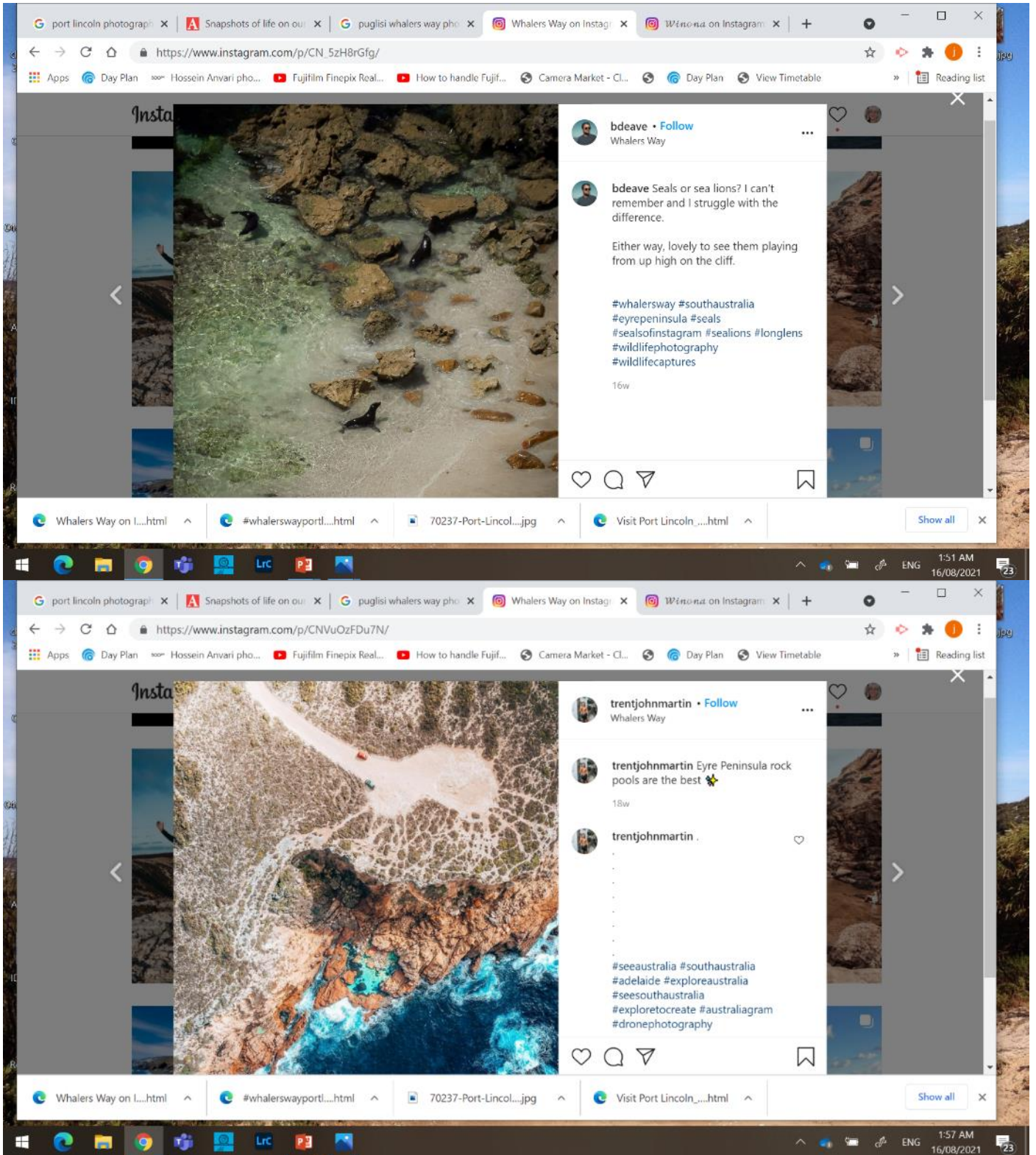
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most days.



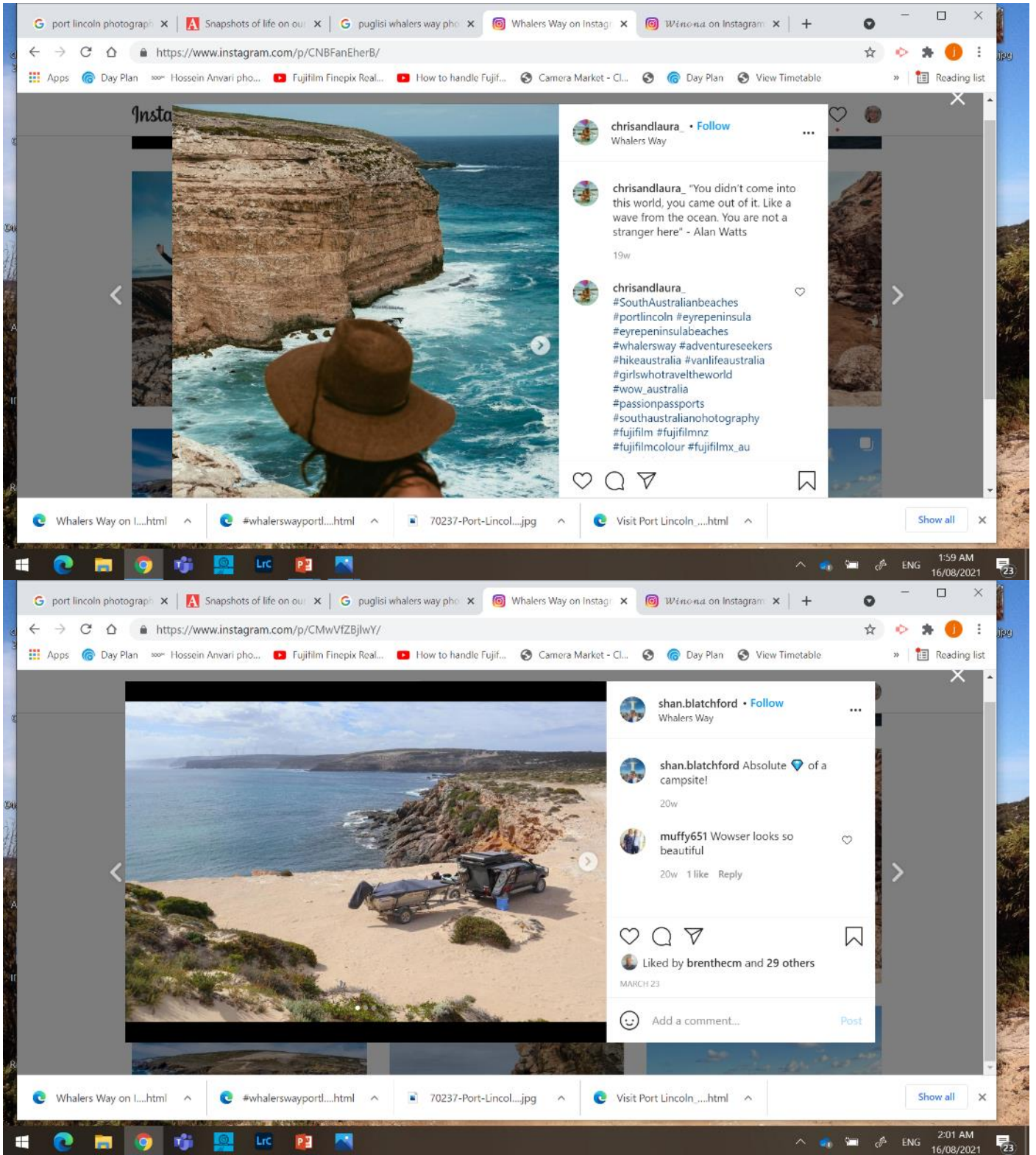
Scan and email to spreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Submission on Application Development Act 1993
Section 46B – Environmental Impact Statement – Major Development



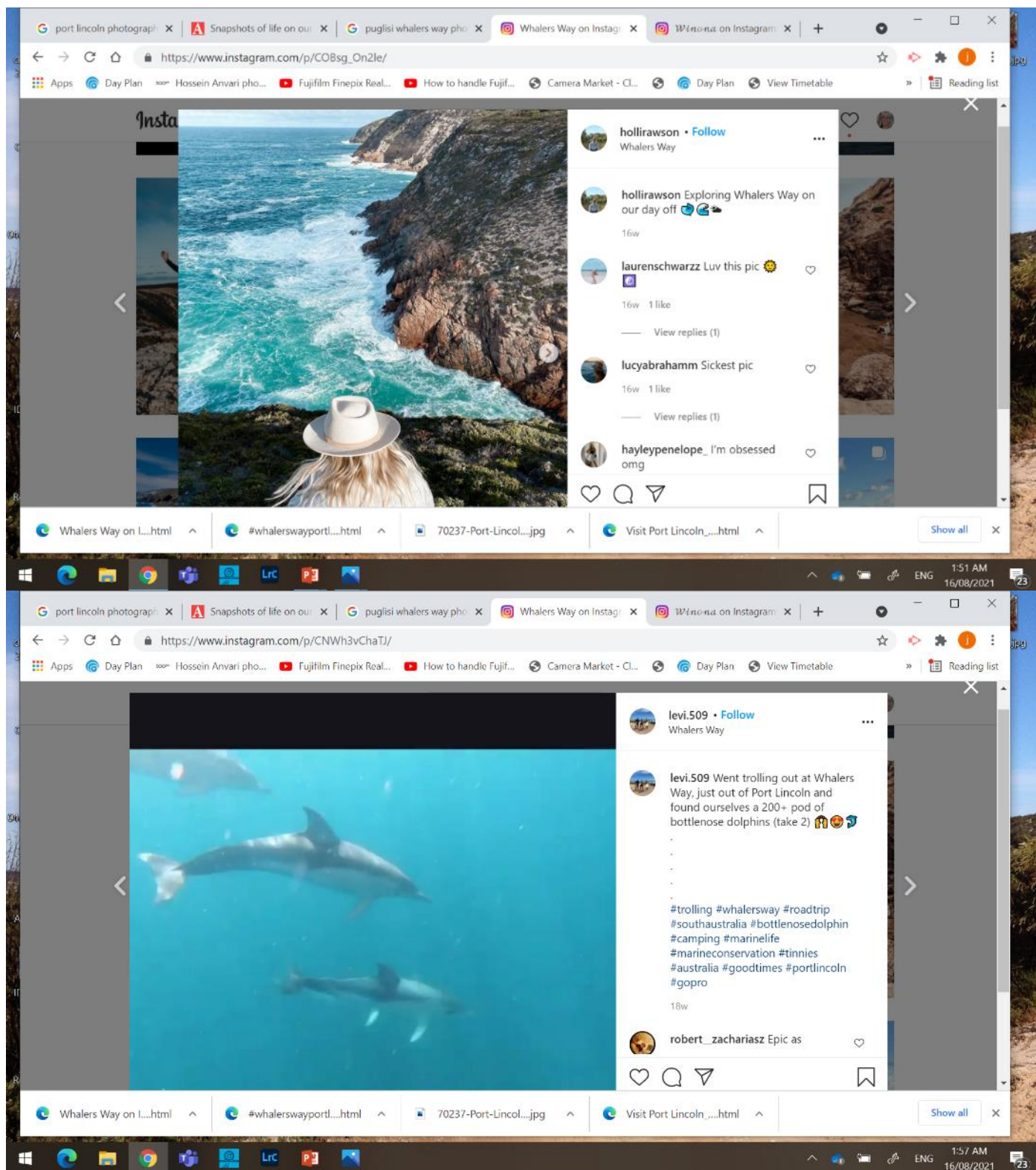
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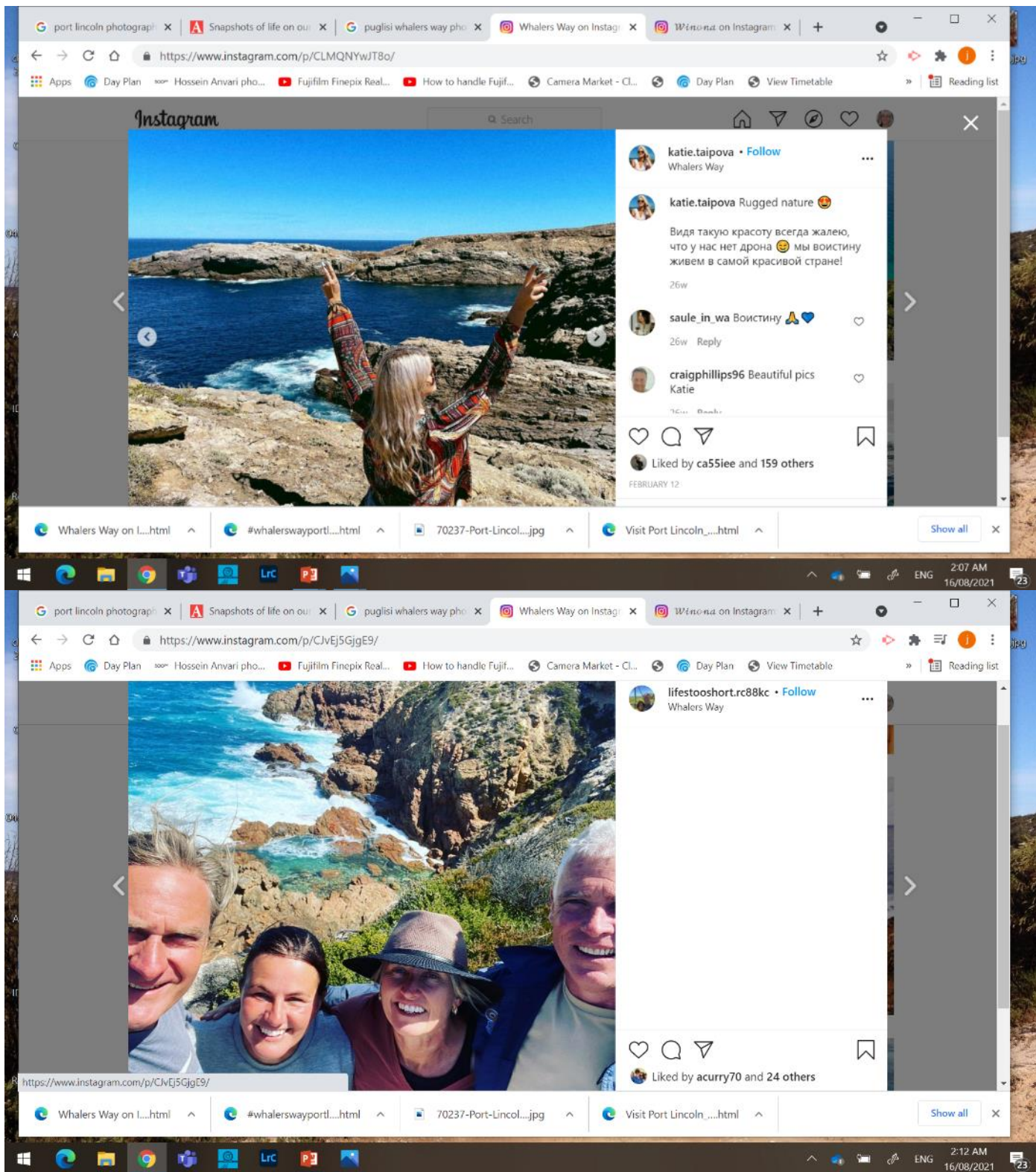
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Section 46B – Environmental Impact Statement – Major Development



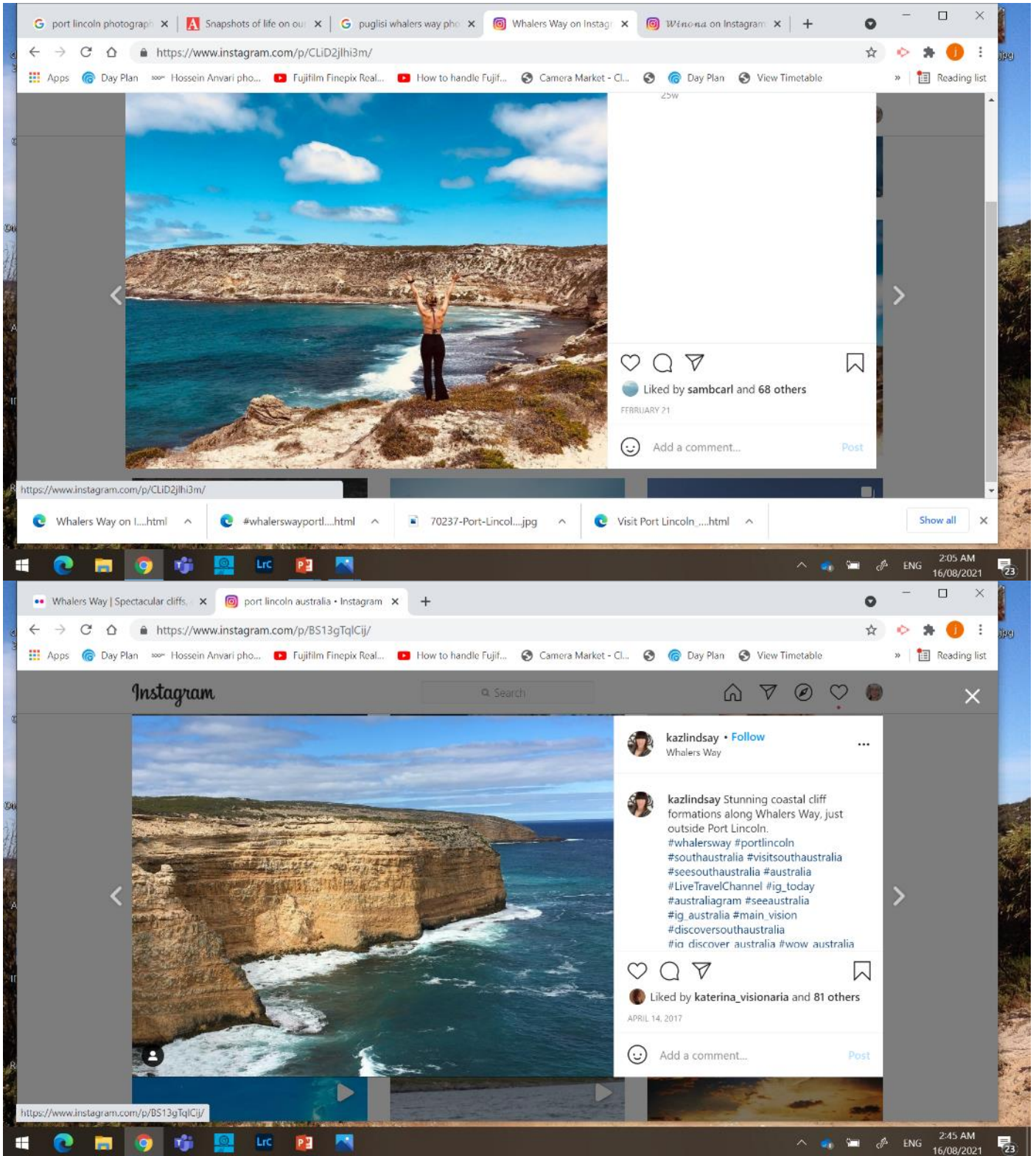
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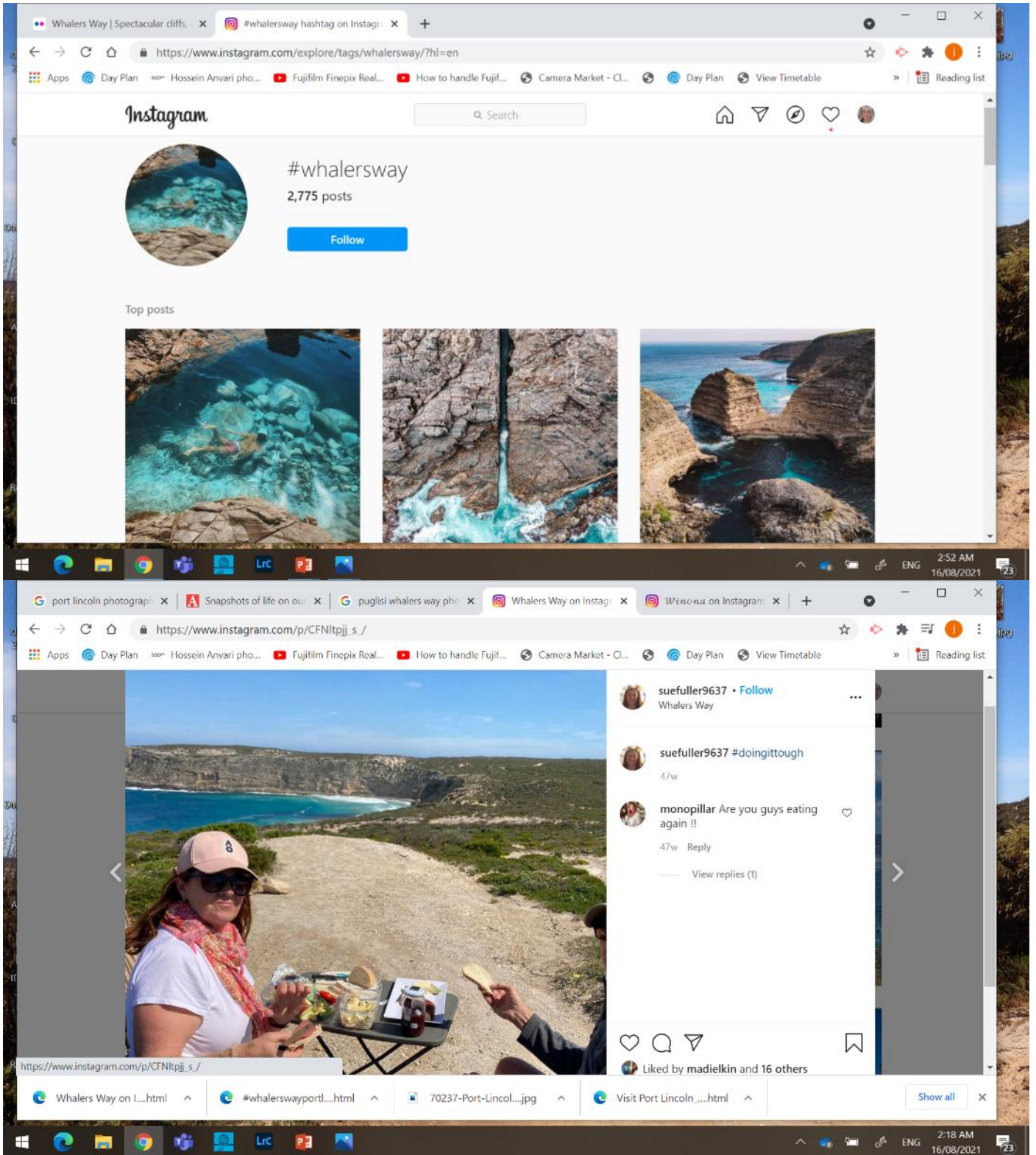
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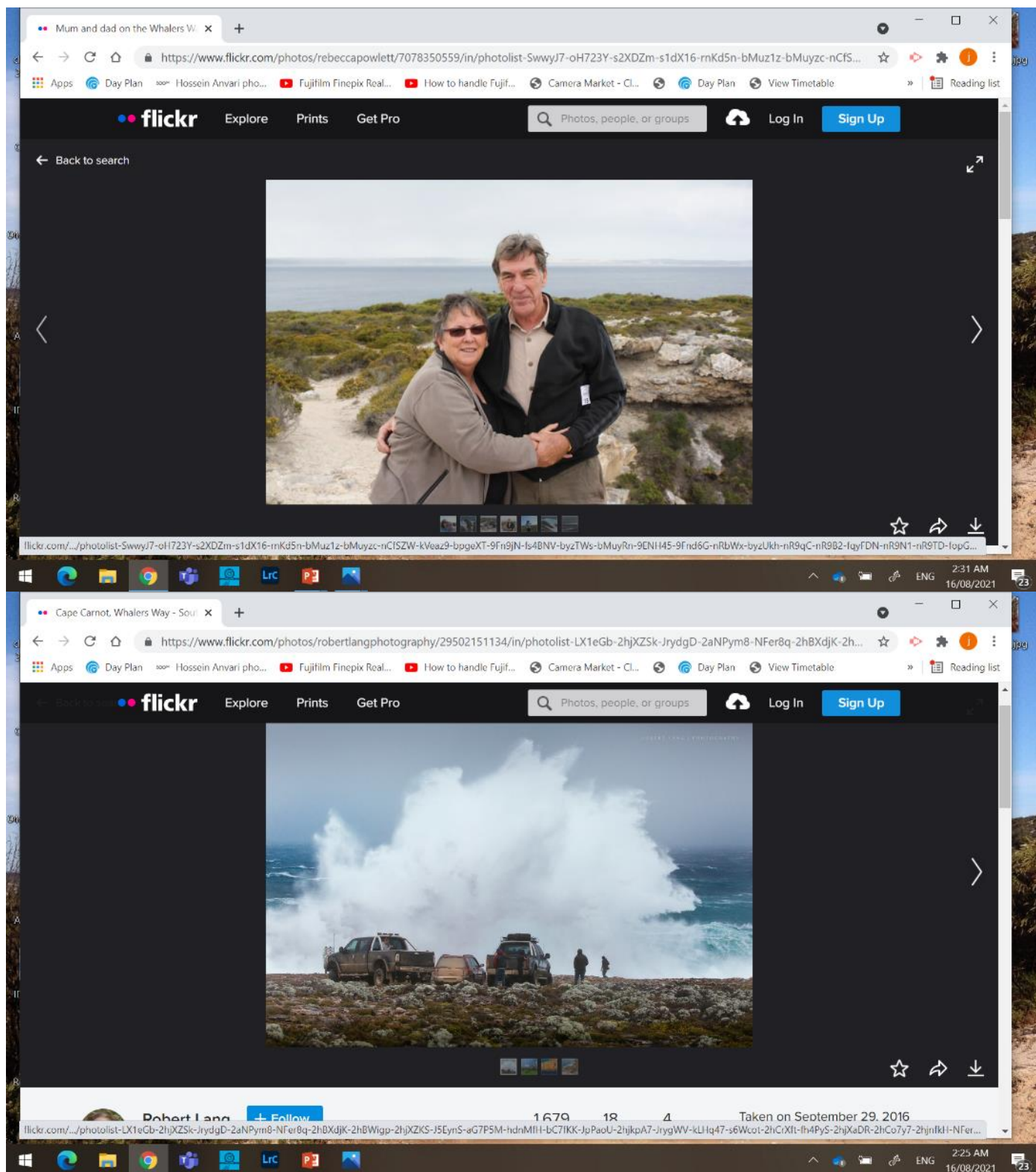
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The lush pristine coastal wilderness²³ has been enjoyed by tourists since 1968 without causing any bushfires. Tourists have much less impact or potential fire danger than rockets however there is every indication that the public will be permanently prohibited from entering the area in the future unless occasionally to watch rocket

²³ "Most of the South Australian Murraylands, Yorke and Eyre Peninsula areas were cleared before World War II."
<https://www.environment.gov.au/system/files/resources/2edcda80-d9b7-49d4-9e97-36236b91e9f9/files/mvg14-nvis-mallee-woodlands-and-shrublands.pdf>
Whalers Way is an extremely significant remnant of wilderness scrubland

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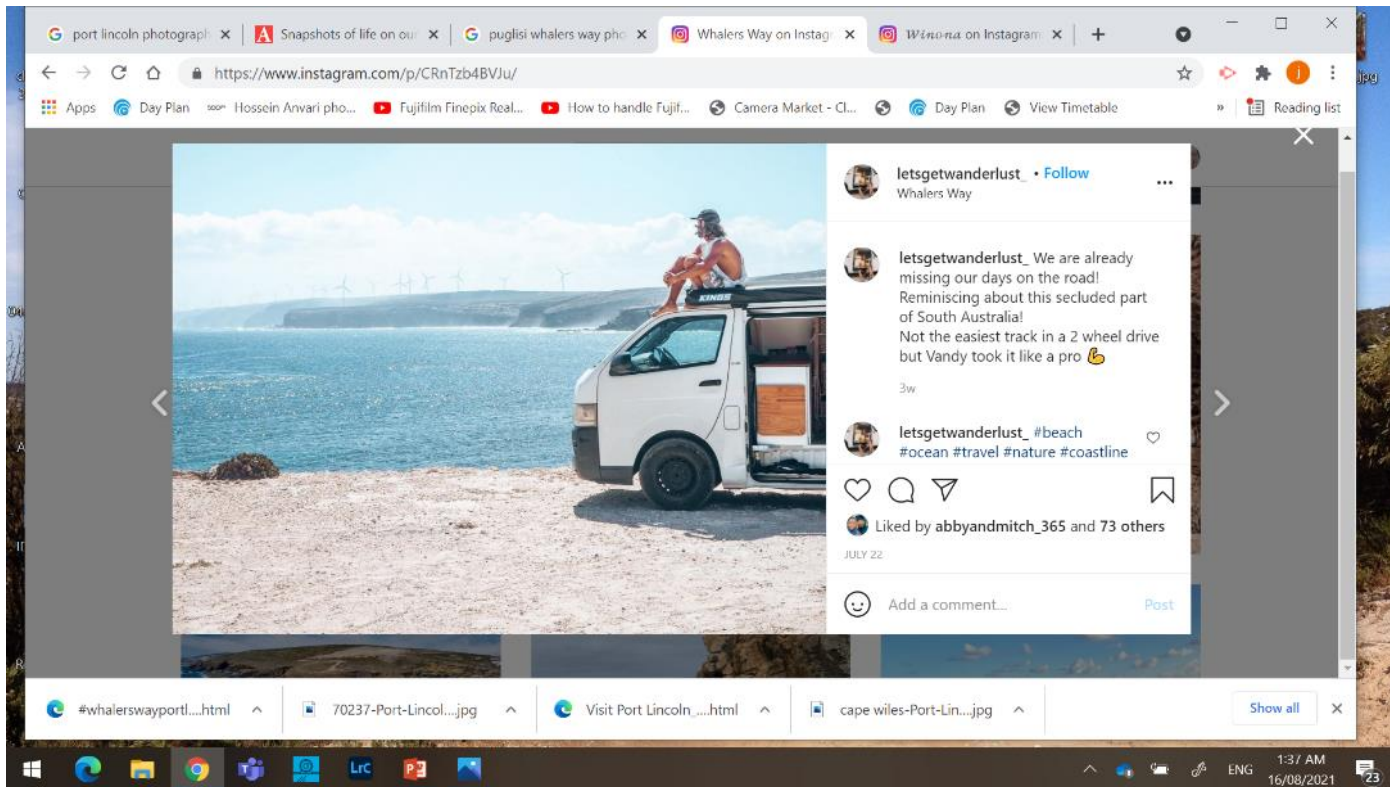
Submission on Application
Development Act 1993
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Section 46B – Environmental Impact Statement – Major Development

launches from Cape Wiles.

The traditional Nauo owners of the land will also be prevented from accessing the coastal crown land on which they have a native title claim.²⁴ ²⁵We must respect the importance for Aboriginal people to maintain their connection to country.²⁶

Industrial land use is incompatible with conservation by its very nature. This is a sensitive conservation area of high cultural significance to Aboriginal and non Aboriginal peoples. Whalers Way is not an appropriate location for an industrial rocket launch facility, either temporary or permanent.

Please SAVE WHALERS WAY for the people of SOUTH AUSTRALIA & the WORLD.



¹ In the response to submissions, it was stated that "Native Title Claim Nauo No. 2 applies and will continue to apply to coastal land and waters surrounding the subject allotment." P 692 https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

¹ "There is a significant risk of cliff edges collapsing. Staff and contractors will not approach the edges of the cliffs and we will undertake to restrict the general public from doing so." This will effectively prevent the Nauo people from accessing the Commonwealth territory, the areas

²⁴ In the response to submissions, it was stated that "Native Title Claim Nauo No. 2 applies and will continue to apply to coastal land and waters surrounding the subject allotment." P 692 https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

²⁵ "There is a significant risk of cliff edges collapsing. Staff and contractors will not approach the edges of the cliffs and we will undertake to restrict the general public from doing so." This will effectively prevent the Nauo people from accessing the Commonwealth territory, the areas around the ocean where many artefacts' prove cultural connection to country.

P.275 https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf

²⁶ "For Aboriginal peoples, country is much more than a place. Rock, tree, river, hill, animal, human – all were formed of the same substance by the Ancestors who continue to live in land, water, sky. Country is filled with relations speaking language and following Law, no matter whether the shape of that relation is human, rock, crow, wattle. Country is loved, needed, and cared for, and country loves, needs, and cares for her peoples in turn. Country is family, culture, identity. Country is self." [2] They have a profound [spiritual connection](#) to land. Aboriginal law and spirituality are intertwined with the land, the people and creation, and this forms their culture and sovereignty.

The health of land and water is central to their culture. Land is their mother, is steeped in their culture, but also gives them the responsibility to care for it. They "feel the pain of the shapes of life in country as pain to the self".

Source: Meaning of land to Aboriginal people - Creative Spirits, retrieved from <https://www.creativespirits.info/aboriginalculture/land/meaning-of-land-to-aboriginal-people>

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Submission on Application
Development Act 1993
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Section 46B – Environmental Impact Statement – Major Development

around the ocean where many artefacts' prove cultural connection to country.

P.275 [https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1 - SouthernLaunch.Space Pty Ltd - Report and Attachments.pdf](https://www.saplanningcommission.sa.gov.au/data/assets/pdf_file/0003/840396/2.2.1_-_SouthernLaunch.Space_Pty_Ltd_-_Report_and_Attachments.pdf)

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Source: Meaning of land to Aboriginal people - Creative Spirits, retrieved from <https://www.creativespirits.info/aboriginalculture/land/meaning-of-land-to-aboriginal-people>

From:
Sent: Thursday, 16 September 2021 6:21 PM
To: DIT:SPC Reps
Subject: Southern Launch Proposal

Submission on Application Development Act 1993 Section 46B – Environmental Impact Statement – Major Development Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000 Applicant: SouthernLaunch.Space Pty Ltd Development Number: 932/P007/19 Nature of Development: Whalers Way Orbital Launch Complex Proposal Assessment Level: Environmental Impact Statement Subject Land: Lot 101 Right Whale Road, Sleaford Phone Number: 1800 752 664 Close Date: 16 September 2021

Name:
Email:

Public Interest

The site is located within an area of lower Eyre Peninsula with high biodiversity value and high fire risk. (DEW 2009). Eleven Nationally threatened, endangered, CITES or ICUN listed species occur on the proposed launch sites or immediately adjacent, including offshore along the launch trajectories.

Many of the species listed under the EPBC Act that reside at this site and in close proximity, are vulnerable to fire. It is anticipated that the launch facility will likely increase ignitions in the landscape (e.g. misfires, accident, increased human activities) and thus potentially, fire frequency. Southern Emu Wren populations have become extinct in parts of their range from a single fire event on Lower Eyre Peninsula (Carpenter 2007; Pickett 2005,2006). Many other mallee bird species prefer long unburnt habitat, such as the Western Whipbird (Woinarski 1999).

The likely impact of acoustics from the rocket launches on a range of species is also of concern. Sound and vibration from the launching of rockets may have a significant impact on several whale species that are regularly sited or recorded in this area. The area is a significant breeding site for the Southern Right Whale which come to give birth or mate along this coastline over the winter months every year. Other whale species known to frequent this area include Killer Whale, False Killer whale, Long Finned Pilot Whale, Hectors Beaked Whale, Fin Whale and Sperm Whale. The limestone coast and underlying granite would readily transmit the blast sound. The sound travelling within 10 km of the launch site, through the sea, off shore from the launch site may be greater than 80 decibels (80 dB re 20 uPa) and at the same time in the vocalisation and navigation range for most species of whales and dolphins. Sound waves intensify as they travel through water and these sound waves may have a significant impact in the species listed. A rocket failure within 10km of the launch site would have to potential to have devastating impact on the Australian Sea Lion and Long Nosed Fur seal populations.

REFERENCES

- Carpenter, G (2007) Woodland Birds of the Southern Eyre Peninsula Bushfire Area 2006. Environmental and Biodiversity Services, Adelaide.
- DEW (2009) Fire Management Plan Reserves of the Southern Eyre Peninsula
- Pickett, M (2005) Habitat management planning for the Eyre Peninsula Southern Emu-wren in the 2005 bushfire area. Unpublished Report.
- Pickett, M (2006) Habitat management guidelines for the Eyre Peninsula Southern Emu-wren. Unpublished Report.
- Woinarski, J (1999) Fire and Australian Birds: A Review. In: Biodiversity Technical Paper No. 1: Australias Biodiversity - Responses to Fire (Plants, Birds and Invertebrates) (eds A Gill, J Woinarski and A York).
- J Acoust Soc Am. 2019 Oct;146(4):2552.doi: 10.1121/1.5129379.
- Long-term evidence of noise-induced permanent threshold shift in a harbor seal (*Phoca vitulina*)
Colleen Reichmuth¹, Jillian M Sills¹, Jason Mulsow², Asila Ghoul¹

Dorian S. Houser, When Is Temporary Threshold Shift Injurious to Marine Mammals?
J. Mar. Sci. Eng. 2021, 9(7), 757; <https://doi.org/10.3390/jmse9070757>

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen ✓
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

To Who It May Concern.
I write to respectfully oppose the Whalers Way Orbital Launch Complex Proposal and on the grounds that the chosen location is fundamentally unsuitable for this type of activity.
As a resident of Port Lincoln for 35 years and a very frequent visitor to Whalers Way and adjoining areas, I remain unsatisfied that the inevitable environmental impacts have been appropriately considered.
My opposition is underpinned by the following considerations and to each of which I seek satisfactory answers;
1. Impact to fauna, including coastal raptors - Can you please provide evidence as to the suitability of qualifications of the required "qualified coastal raptor expert" and who exactly that person is. Dr Zeta Bull is listed as "not a qualified coastal raptor expert", however nobody is listed to be a qualified coastal raptor expert. Please list the name of the person who is a qualified coastal raptor expert and what the prescribed definition of a coastal raptor expert is.
2. Impact to water basin(s) including Uley Basin South - Please provide evidence that the underground water basins will
not be contaminated by the activity and as noting these may supply potable water for human

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From:
Sent: Thursday, 16 September 2021 8:20 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

From:
Sent: Thursday, 16 September 2021 8:54 PM
To: DIT:SPC Reps
Subject: Development Number: 932/P007/19

To Whom It May Concern

I wish to state my opposition to the establishment of a rocket launching facility at Whalers Way on Eyre Peninsula. This site is completely inappropriate for an industrial development of this kind.

This area is environmentally significant and has been a heritage area set aside for the use of the public for over 50 years. The landholder received rate concessions in return for keeping this agreement. To have it suddenly become a restricted area to be used as an industrial rocket launch site is completely unacceptable.

This stretch of coastline is one of the world's most scenic coastlines and draws people from across the world. It's tourism potential is unlimited. To pollute and destroy it and hand it over to a private corporation to be exploited in this way is disgraceful.

The area contains precious remnant vegetation (which has already been impacted through clearance without following due process) and endangered species such as the Southern Emu Wren. It is in a vital breeding and migratory area for the Southern Right Whales which will be impacted by the noise and the toxic fallout. The fact that this industry will add 2% to SA's carbon output is unacceptable at a time when carbon reduction is at the forefront of public debate. If Taiwan won't let its rockets be launched in its own country because of the toxicity of the fallout, why on earth would it be allowed to happen in a pristine environment like this? This area has recorded the cleanest air sampling on the planet – straight from Antarctica. Could you think of a more inappropriate place to put a polluting industry of this kind?

Why is a private company allowed to shut down a complete area including maritime and air space exclusion zones while it sits around waiting for perfect launch conditions as it has in the past week 4 times? The fishing industry, which actually does provide 1000's of jobs, has been put on hold. This area also includes prime tourist spots and private properties. Restricting the public and the use of aggressive security guards is totally incongruent with this area.

Today's "misfire" is an indicator of how dangerous a site this is for an activity of this type. As someone who lost a property in the 2005 fires, the idea that someone would be allowed to put a launch pad that involves the extremely high risk of fire (as happened today) in a flammable area such as this is gross negligence. Who is liable when yet another catastrophic fire event occurs in this area? It is inconceivable that the EPA would approve of this siting, so who has approved it and who carries the liability? The requisitioning of emergency services away from communities is totally unacceptable and leaves us all at risk. Our volunteer services are already stretched without this added burden. This area is extremely windy and any wind will push a fire straight through Sleaford, Tulka and into Port Lincoln. Will Southern Launch be paying compensation?

The secrecy, lack of transparency and lack of genuine public consultation shows a high level of disinterest and lack of care for the impact this will have on the Lower EP community. The strong messaging is that this is a fait accompli and that Government is simply ticking boxes for appearance sake. Failure to follow any true public consultation process for a development of this magnitude shows a total disregard for the public. It is in direct contrast to the hoops local people have to jump through to do anything in a coastal protection zone. It shows quite clearly that there is one law for corporate business and another for the general public. No wonder trust in our government is at an all time low and plummeting daily. The fact that the environmental bird "expert" was the Director's father sums up what a farce this development application really is.

Eyre Peninsula is a unique, productive and fragile place that should be valued and nurtured. There are dozens of sustainable industries that that could be established which would bring great wealth and long-term prosperity to this region. Instead it is seen as a place to exploit and destroy with harmful, destructive activities that bring little in employment for locals and leaves nothing but ruin. If the best our leaders can come up with is to use Eyre Peninsula as a rocket launch pad/ nuclear waste dump / mine site then we seriously have the wrong people in charge.

Minister for Planning and Local Government

Attention: Robert Kleiman, Manager, State Assessment Planning and Land Use Services Attorney-
General's Department

GPO Box 1815 ADELAIDE SA 5000

16th September 2021

Dear Minister,

Addendum to my previous submission on 14th September 2021.

I have learned today that Southern Launch have been provided with exclusive access to the waters West of Fishery Bay to the exclusion of recreational and commercial fishers till the 31/12/2012.

I have fished these waters recreationally for many years. I fish West of Fishery Bay and around Liguana island for Tuna and Cray Fish and other fish species. The Northern Zone Season runs from 1 November to 31 May each year.

Quite a few recreational and commercial fishermen launch from Fishery Bay and fish to the west of the bay.

I am appalled that the public in the Port Lincoln area, have not been adequately advised of this closure before now.

I understand the need for a closure for the day of the launch but not a permanent closure.

These are public waters not owned or controlled by a private company.

Given the aborted launch and rocket fire that occurred today, I think the current Department for Infrastructure and Transport Aquatic Activity Licence should be rescinded immediately.



Hapith 1 Rocket on fire at Southern Launch pad.

If future launches are proposed by Southern Launch this year, the Department for Infrastructure and Transport Aquatic Activity Licence needs to be amended to allow access to to these waters by recreational and commercial vessels except on launch days before the 1st of November this year.

Further to this issue, I believe the State Government support for this development is seriously flawed and the Government needs to undertake due diligence checks on this company and the lease agreement between Southern Launch and the land holders. Southern Launch is a not a company we should be investing in, they have no previous credentials in this field. We should not be funding this private company, (\$2.4 million provided as a grant to Southern Launch Space Pty Ltd by the SA Government as disclosed in their EPBC Act referral to the Australian Government) to set up a launch facility or facilities.

A private company cannot be allowed to have total control of the importation or manufacture of rockets by third parties. The Hapith 1 rocket was brought into the facility as it was a commercial venture that could not be resisted by Southern Launch and presumably the Australian Government yet was not tested in Taiwan before it came here.

The Environmental Impact Statement (EIS) submitted by Southern Launch must be rejected by the South Australian Government not only on environmental grounds but because the EIS is not currently representative of the nature of the economic vagaries that Southern Launch cannot factor

into the launch facility. As their website states “we are open for business” meaning the EIS is not reflective of the multitude of different types of rockets, size of rockets and fuel types that are available or proposed to be developed in the future and the impact this may have on the wider Eyre peninsula residents and commercial operators.

Yours Sincerely

From:
Sent: Thursday, 16 September 2021 9:40 PM
To: DIT:SPC Reps
Subject: Rocket launches near Pt Lincoln

Hello, my name is [redacted] and I live in beautiful Port Lincoln. I am very concerned about the site of the rocket launching facility in Whalers Way, a stunning area of the coastline near our city. We were told that there wouldn't be launches when there were whales in the area, but that has been shown to be a blatant lie, as one was planned last week when there were 5 mothers with their calves nearby. We had taken a friend from Africa to see one at Sleaford Bay and he was enthralled.

I believe there is a risk of igniting a fire with launches and that is the last thing our area needs. We are so prone to fires because we're on the pointy end of a peninsula and we have already lost lives and homes and properties to several catastrophic fires. We get so many hot northerly winds nowadays, especially in spring and summer, and I believe that was a factor in deciding not to go ahead with the launch last week.

Whalers Way would have to be one of the windiest places in the state, if not the whole of Australia. Has that been looked into properly?

I am also concerned that it may make us a target in a time of hostilities between nations and I don't like the look of what China is doing in the Pacific area.

But my main concern is that this is such a pristine area and a huge draw for ecotourism. The little town of Fowler's Bay has had a great economic benefit from tourists coming to see the whales in recent years. And we are inundated by intra-state travellers discovering our beautiful beaches at present. This is providing jobs in the tourist industry. We don't want anything to damage that or our reputation in the seafood industry.

I know Vicki Chapman grew up in Kangaroo Island. Would she want a rocket launcher there? I hope the answer to that is No, Vicki.

Sincerely yours,

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	[REDACTED]
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I object to the Whalers Way Orbital Launch Complex Development.
1/ Extreme bushfire Risk Area - (historic catastrophic events have occurred in the district) Fire risk associated with the launching + misfiring of rockets.
2/ Sound + environmental pollution impacting endangered + threatened species eg Southern Emu Wren + the impact on farming, cattle + sheep etc in the surrounding area.
3/ Risk of pollution to the Uley Groundwater Basin and putting further pressure on our limited water resources

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 9:51 PM
To: DIT:SPC Reps
Subject: Development number 932/P007/19- representation submission

Development Act 1993
Section 46B Environmental Impact Statement- Major Development

Southern Launch.Space Pty Ltd
Development number - 932/P007/19
Whalers Way Orbital Launch Complex Proposal

16th September 2021

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

To whom it may concern,

We are wanting to express our deep concern and disapproval for the proposed Southern Launch Whalers Way Orbital Launch project. Whalers Way is major tourist attraction on Eyre Peninsula, which has been enjoyed in its natural state for generations. This vast area of stunning untouched coastal land is completely unsuitable for the purpose of launching rockets, having the proposed infrastructures built on fragile land, endangering animal and birdlife which have been identified as endangered species, and within such close proximity to the most popular beach and surfing spot of the Port Lincoln community. Already the attempts made by the current test project at Whalers Way has highlighted the potential danger for increased bushfire risk in the area. A significant fire in this region would threaten both human and animal life, with a local koala population just down the road and many residents who have established homes and farms in the area. The local beach at Fisheries Bay regularly hosts campers and surfers at all times of the year, with summer time seeing hundreds of visitors to the area. With one shared access road to local properties, Whalers Way and Fisheries Beach, a bushfire fire that could potentially restrict access in vacating the area poses an enormous risk to human life. The amount of traffic proposed with heavy vehicles travelling regularly over the unsealed road is not appropriate and again poses significant hazards. Provisions have not been allowed for in the EIS for road maintenance other than the occasional increase in ‘grading’ services by the local council. This is not sufficient in maintaining this road surface. Combining the local traffic and heavy trucks on this unsealed surface will endanger drivers. It is already a heavily utilised road for regular vehicles, especially in the summer season and is not up to standard in its current state. Whalers Way contains many historical sites, which have been recognised as heritage listed areas with links to local whaling traditions and practices. The local Aboriginal Peoples of Eyre Peninsula have also identified significant sites within the area. The preservation of these locations is pertinent to the stories and traditions of the local people. Currently, there have been several whales located in the waters around Whalers Way. Female Southern Right Whales come to the area between Sleaford, Fisheries and Whalers Way to calve. This migratory path will be negatively impacted by the proposed launches due to sound emissions and potential for debris to fall in the surrounding ocean. This could also have a catastrophic affect on the

local endangered Australian Sea Lion colonies located on the nearby Liguanea Island and around Cape Wiles. Southern Launch has stated in their EIS that there will be negative impacts on the wildlife around the site. It is unfathomable that this project could very likely end the existence of endangered species in the area.

We wish to convey our strong opposition to this proposal and suggest that a more suitable location will be utilised for the purpose of orbital launches. Leave this natural habitat alone for our future generations to enjoy!

Yours sincerely,



Concerned residents of Port Lincoln

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

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Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal
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Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I Have already put in a submission but would like to put with it

10/9/21 launch postponed:

15/9/21 Launch Fail. With smoke from launch Vehicle white presumably steam then a plume of Grey to Black smoke. Drifting across Native Veg. Lasted momentarily.

16/9/21 Launch back on very short notice certainly not the acquire time (12:00 hours?). Well "Launch Fail, again." Hardly any white smoke then Black smoke then more. I tried to video this from the top of my Parcel of Land 741 Fishery Bay Rd. This is serious we had Flame, and a few explosions. I ~~say~~ think it was going for at Least 20 mins.

(2)

Submission on Application
Development Act 1993

Section 46B – Environmental Impact Statement – Major Development

Southern Launch have just put our emergency services in danger. Country Fire Service, State Emergency, Ambulance and Police. They have been there for all 3 Launch attempts especially needed today. Who is paying?

I know it is a bit of a rant. (I am sorry) Just a worried Tax payer & Citizen

The videos & pictures I have do show alot. ~~all that~~ ←
if needed.

[Handwritten Signature]

16/9/2021

From: [REDACTED]
Sent: Thursday, 16 September 2021 10:16 PM
To: DIT:SPC Reps
Subject: Whalers Way Orbital Launch
Attachments: IMG_20210916_0001.pdf; IMG_20210916_0002.pdf



Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
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Postal Address:	[REDACTED]
Affected property (if different from postal address)	[REDACTED]
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Private citizen

**WHALERS WAY ORBITAL LAUNCH COMPLEX
ENVIRONMENTAL, ECONOMIC AND COMMUNITY IMPACT**

This project is surrounded by a Marine Park, adjoins Southern Basins Prescribed Wells Area (Public Water Supply) and Water Protection Zone, is subject to a Heritage Agreement, is a declared Historic Reserve, in a Coastal Conservation Zone, lies between the Lincoln National Park and the Coffin Bay National Park, plus there are Twenty-five species listed under the EPBC Act as Threatened or Migratory and/or Marine which occur in this area.

Southern Launch states that the full development plan is for at least six (6) launch facilities. *The launch facility at Site A is intended to cater for larger conventional launch vehicles of greater than 30 tonnes up to over 100 tonnes.* These will be developed incrementally. This stage of the development is for (2 launch pads) so all impacts listed must be multiplied to consider the full development impact over time.

ECONOMICS

Southern Launch is a privately owned business and they have stated they won't consider another site as Whalers Way is simply the **most convenient and cost effective for their own business.** This does not take into consideration the impact on the livelihoods of locals.

The Tourism and Seafood industries have spent years and millions of dollars creating a clean, green, pristine International Brand worth Billions of dollars to the South Australian economy and creating thousands of jobs with seafood and nature based tourism opportunities.

South Australian Tourism revenue is predicted to increase to **\$12.8 Billion** by 2030 and generate an additional 16,000 jobs from 59,600 to **75,600 jobs.**

The Eyre Peninsula's clean, green image has gained Fishing industry International Accreditation (Marine Stewardship Council, Aquaculture Stewardship Council, Friend of the Sea). Despite the Covid downturn, the Seafood industry still generates **\$461 Million per year** for the economy. Even with no increase in revenue pa, this calculates to **\$4.61 Billion** generated by 2030.

In comparison, Southern Launch offers South Australia total GSP, including consumption impacts over ten years to 2030, a total of **\$53.4 million and 76.2 jobs**. This is assuming consumption impacts from workers at Southern Launch and its supply chain are included in the analysis.

Once rocket debris and pollution falls into the marine and terrestrial environments from rocket launches at Whalers Way, the seafood and tourism industries will be severely affected, costing SA Millions in lost revenue and destroying our clean, green pristine Global Brand.

Tourists come to the National Parks for the peace, quiet, pristine beaches, boating, fishing, camping and native flora & fauna, they do not come to eat contaminated seafood or drink the water from a launch fallout zone.

Local and established Commercial and recreational fishers, pilots, and tourist operators are banned from the exclusion zone on launch days and can **lose a minimum of 42 days and up to 126 days income** from this area per year for the benefit of one privately owned company.

Local Fishermen, Pilots and Tourism operators all have weather restrictions on the days they can work, plus Fishermen and Divers also have industry closures so they all have limited time to earn their income and any lost days can severely impact their livelihood. Five days lost to date.

Members of the community and tourists are also excluded from the exclusion zones on launch days. To date there have been 5 aborted launch attempts, which already brings the closure days from 42 (36 rocket launches + 6 soundings) to **47 closure days** and counting.

<https://www.23billionby2030.com.au/sectors/seafood>

<https://www.premier.sa.gov.au/news/media-releases/news/tourism-industry-targets-128-billion-by-2030>

<https://www.agriculture.gov.au/abares/research-topics/fisheries/fisheries-and-aquaculture-statistics>

<https://www.tra.gov.au/data-and-research/reports/state-tourism-satellite-account-2019-20/south-australia-tourism-summary>

https://plan.sa.gov.au/state_snapshot/development_activity/major_projects/majors/sleaford_southern_launch EIS Document

FAR WEST ALTERNATIVE

Charra **exceeds all** the site selection criteria and more

- Southern Launch have already launched rockets from Koonibba, inland from Charra, so all required criteria and services are proven in this area
- Cleared land
- No Heritage agreement and conservation zone
- No Native Flora & Fauna on the cropping land
- Lesser Human population and exceeds safe distance
- Located on the country's east-west freight supply route
- Lower numbers of commercial shipping vessels
- Lower numbers of commercial and recreational fishing vessels
- Lower amounts of scrubland and vegetation with less risk of uncontrolled wildfire
- Southern Launch indicates no, or limited effects on marine and island dwelling fauna in the launch path from Whalers Way so launches over Nuyts Archipelago will cause no, or limited impacts too

- Whalers Way is on the tip of Eyre Peninsula so the winds are very unpredictable, increasing the risk at launch, the number of aborted launches due to weather and making the launch contaminant and debris fallout area difficult to predict. Charra is in a more sheltered area lessening frictional force and increasing the accuracy of wind and weather predictability

https://plan.sa.gov.au/state_snapshot/development_activity/major_projects/majors/sleaford_southern_launch

EIS Document: 4.0 Site Selection Process: 4.2 Site Selection Criteria: Table 4.1: Location Selection Criteria

ENVIRONMENTAL PROTECTION

5.2.2 Findings

A total of 34 fauna species were recorded on the land. This included 28 bird species, four mammal species, and two reptile species. Six threatened fauna species (birds) were recorded during field surveys and ten other threatened species are known to occur at Whalers Way.

Twenty-five species listed under the EPBC Act as Threatened or Migratory and/or Marine that are known, likely or possible to occur in Whalers Way.

*The Project Site is subject to a Heritage Agreement pursuant to the South Australian Heritage Act, 1978. Under the above agreement the land is dedicated to the conservation of native vegetation and native fauna. The Heritage Agreement will **require amendment to facilitate the Project.***

Amending and moving the boundaries does not equate to the new area having the same significance. Heritage and conservation areas are **created using evidence** of environmental or heritage listed significance in that particular area, not to be moved to an insignificant area for private gain.

Apart from the impact of noise, light, vehicle and human interaction on these threatened species, Southern Launch have indicated their intention to cover the small holding dams but have made no mention of covering the **30 million litre dam (100m x 75m) to prevent birds, animals, reptiles and insects from drinking contaminated water.** (Some of this water is collected from the launch site so it **will be contaminated to the allowable contamination levels.** These levels are not made available in the EIS.

https://plan.sa.gov.au/state_snapshot/development_activity/major_projects/majors/sleaford_southern_launch EIS Doc

<https://www.environment.gov.au/cgi-bin/sprat/public/publicshowmigratory.pl>

BUSHFIRE

The attempted launch today 16th September, (the first rocket to be launched at Whalers Way) resulted in the rocket catching fire. The public was advised on the CFS website that the incident was at The Mine, Sleaford Road, Sleaford Bay, when in fact, it was at the Rocket Launch facility at Whalers Way 15.7km away. Screenshots below

Scenario 1 is that the CFS were intentionally given the incorrect information to mislead the public and keep them away from the launch site. Scenario 2 is that it was a genuine mistake.

Either way, if the fire was out of control, locals and tourists would have felt safe travelling to Fishery Bay and driven straight into the bushfire zone with catastrophic consequences.

This region has had a number of severe bushfires. The Wangary fire burnt from coast to coast across the entire peninsula and we **lost 9 lives**, hundreds of homes and farm buildings, plus machinery, thousands of native animals and livestock plus tens of thousands of hectares of native vegetation and crops.

The added **possibility of bushfires being ignited for a minimum of 42 days** per year during launches has the community hypersensitive and is an ongoing **PTSD trauma trigger** to local communities.

It is impossible that any amount of bunding, other infrastructure and/or safety processes could prevent fires if a 20-100 tonne rocket explodes at 50-200m in the air. Flaming gas and debris will spread over a large area into vegetation creating uncontrolled bushfires.

While noise, human and vehicle interaction, and native vegetation clearing will impact threatened flora and fauna species on site to differing degrees, it is highly likely that they will all be totally destroyed when a rocket ignites a bushfire.

The launch complex is mainly native vegetation with limited tracks for firefighting access so the risk of fires becoming uncontrolled are very high. Any fires sparked by launches (especially night launches) have an extremely high risk of becoming uncontrolled wildfires.

- Southern Launch refuse to share their fire fighting plan with neighbouring property owners so there can be no coordinated approach to extinguishing fires
- No airborne water bomber support possible at night
- There is a corridor of scrubland north to Port Lincoln and east-west to the thickly vegetated national parks. (From past experience, fires in these areas are extremely difficult to control and cause a huge amount of damage).
- Thick scrub on the development site and adjoining land which is inaccessible by vehicle
- Limited access tracks through the development site and adjoining properties
- Limited vision over rough terrain with hidden holes and gullies increasing the risk to CFS volunteers
- Backup CFS crews have to travel 45min (½ on a dirt road to reach the launch complex)
- With residents evacuating and fire personnel entering the area in the dark, through smoke, on the one 33km access road the risk of accidents and possibly more fatalities, increases
- Firefighting access into the Southern Basins Prescribed Wells area is limited and if a fire escapes into this area it would be extremely hard to bring under control
- There is a high risk of a bushfire igniting from highly explosive fuel decanting and flame stacks
- Firefighting at night also increases the impact on wildlife creating more panic, stress, injuries and fatalities
- To date, 2 of 4 rockets Southern Launch have launched have misfired or caught on fire. The two rockets currently scheduled are from Taiwan and Korea so there is no surety they meet Australian Standards, increasing the risk of misfire or explosion. (Korean Rocket caught fire today)

As a private company, if there is a bushfire, Southern Launch can claim bankruptcy leaving the South Australian Government to pay compensation and clean up costs.



The Wangary fire, which burned from coast to coast and took nine lives, including 2 children and their grandmother burned alive in their car, was mainly in cleared land.

If a fire is ignited at Whalers Way there is a corridor of thick scrubland to Port Lincoln and across the lower peninsula to both National Parks which would make the wildfire impossible to control.

5:12 [icons] 35%

Warnings and inci...
cfs.sa.gov.au

DATE	TIME	LOCATION	TYPE
16/09/2021	16:51	HALLETT COVE, SANDISON ROAD	Grass Fire
16/09/2021	16:26	SLEAFORD, SLEAFORD BAY ROAD	Other
16/09/2021	07:21	CAREY GULLY, GREENHILL ROAD	Prescribed Burn
16/09/2021	07:19	SEAFORD MEADOWS, SAUERBIERS ROAD	Prescribed Burn



- <http://www.australianweathernews.com/news/2005/050111.SHTML>
- <https://theleadsouthaustralia.com.au/industries/space/south-korean-rocket-startup-to-launch-from-south-australia/>
- <https://www.facebook.com/fossbytes/videos/3014619752150973/>
- <https://www.cnet.com/news/us-space-force-blew-up-a-firefly-alpha-rocket-when-its-first-flight-went-off-course/>

WATER

Whalers Way Orbital Launch Complex adjoins the Southern Basins Prescribed Wells Area which is the Public Water Supply for the city of Port Lincoln and the Lower Eyre Peninsula.

Chemicals and debris from launches which fall within the complex, the water protection zone and the Southern Basins Prescribed Wells Area will filter into the public water supply and adjoining fresh water lenses used by neighbouring properties. These lenses are underground so it is impossible to remove pollutants once they enter the water.

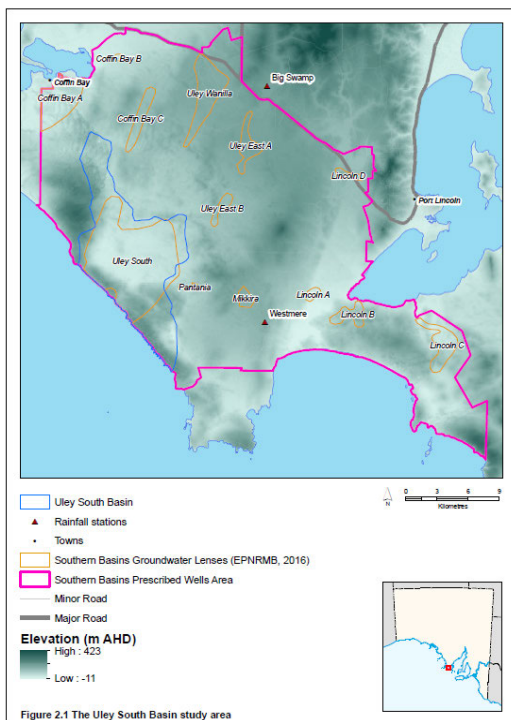
Southern Launch require 30 million litres of water per year for the two launch pads, therefore it is estimated that the full development of 6 launch pads will require 90 million litres of water. The Southern Basins (including Uley South) levels have been declining for decades, are at a critical level with licences already fully allocated.

An extra 30 million litres extracted for Southern Launch will exacerbate the decline in water level and increase in salinity. This will severely affect the groundwater dependent ecosystems (plants and animals dependent upon groundwater for their survival). Aquifers also contain distinctive, diverse communities of microorganisms known as stygofauna, which include bacteria that metabolise some biological contaminants in our water.

Chemicals from rocket launches which leach into the underground water basins will unbalance the natural ecosystems and adversely pollute the public water supply.

Changes in vegetation due to bushfire in the Prescribed Wells Area and recharge zone adjoining the launch site will affect the recharge rates to the underground water basins and the quality of the public water supply.

- Decrease in vegetation coverage increases evaporation rates
- Ash sediment and pollutants adversely affect water quality
- Ash sediment and pollutants adversely affect, groundwater dependent ecosystems causing long term damage
- The increase in fallen and burnt debris can block sinkholes and lessen recharge
- Decrease in recharge will allow seawater incursion into the public water supply
- Loss of vegetation increases both water and wind erosion affecting water flow to recharge areas



Prescribed Wells Area including the public water supply source adjoining the Whalers Way Orbital Launch Complex

https://www.waterconnect.sa.gov.au/Content/Publications/DEW/Eyre_Pen_2019_WRA_Technical_Note.pdf
https://www.waterconnect.sa.gov.au/Content/Publications/DEW/EP_NRM_Non-prescribed_GW_Assessment_2011.pdf
[https://www.waterconnect.sa.gov.au/Content/Publications/DEW/1_Uley_South_model_report_2020_FINAL%20\(1\).pdf](https://www.waterconnect.sa.gov.au/Content/Publications/DEW/1_Uley_South_model_report_2020_FINAL%20(1).pdf)
https://www.publish.csiro.au/ebook/chapter/9780643103283_Chapter_4
<https://blogs.agu.org/waterunderground/2017/06/02/fire-and-groundwater/>
<https://www.waterquality.gov.au/issues/bushfires>

AIR POLLUTANTS

5.4.2.3 Pollution and Greenhouse Gas Emissions

Southern Launch indicates both solid and liquid fuels including LOX, LNG, RP1 (kerosene), AVGAS, Helium and Nitrogen will be used.

Launch Pollutants include CO₂, carbon soot, carbon monoxide (which will bond and become carbon dioxide), Nitrogen Oxides NO_x, chlorine, alumina and sulfuric compounds. Chlorine is considered a hazardous air pollutant by the EPA. Nitrogen oxides, sulfur oxides and carbon monoxides are also considered pollutants.

Sulfuric compounds and nitrogen oxides can cause acid rain and damage marine life, terrestrial flora and fauna.

https://aerospace.org/sites/default/files/2018-05/RocketEmissions_0.pdf

https://plan.sa.gov.au/state_snapshot/development_activity/major_projects/majors/sleaford_southern_launch

Southern Launch EIS 5.4.2.3 Pollution and Greenhouse Gas Emissions

Southern Launch EIS 20.4.1.1 Range Activities and Infrastructure Risks and Hazards

MARINE

Rockets will be launched over the habitat protection zone, which is home to the endangered Australian Sea lion, long nose fur seals, and 70 other animal species.

Rocket debris, CO₂, water vapor, carbon soot, carbon monoxide (which will bond and become carbon dioxide), NO_x, chlorine, alumina and sulfuric compounds will be discharged and fall both on land and into the ocean. Decibel levels will be loud enough to cause temporary, and in some cases, permanent hearing damage to mammals.

The name says it all...Whalers Way is the point all Southern Right Whales pass on their migration to the Head of the Bight to give birth and on their return migration with their calves. They spend months in the bay to rest and nurse their calves.

Mothers and calves spend a large amount of time in shallow water and at the surface.

Whales can be seen breaching, blowing, pec slapping, spy hopping, lobtailing, body rolling and suckling their young when lying near the surface of the water. Whales will be physically and psychologically affected by rocket launches.

Tourists drive for days over thousands of km to watch whales from high cliffs at the Head of the Bight but they are now choosing to travel 7 hours by road or 35 minutes by plane from Adelaide to watch Whales close up from the beaches and low cliffs off Whalers Way and Sleaford Bay.

At the public information session, Southern Launch stated they will not launch if they can "see" whales, however there was no indication on how they would "see" whales in the dark during night launches, nor how far they would attempt to see in order to stop a launch when whales are in the bay.

Prior to the launch scheduled for Friday 10th September 2021, Southern Launch acknowledged that there was a Whale in Boston Bay, which is 35km away. They did not acknowledge **at least 8 individual Southern Right and Humpback whales and calves currently in Sleaford Bay adjoining Whalers Way**. They have continued in an attempt to launch another 3 days, with whales and calves still in the bay.

Marine Appendix S

[Lower EP Whale Sightings - Home](#)

<https://www.naturalresources.sa.gov.au>

<https://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/native-animal-facts/whales/southern-right-whale>

<http://www.ecolarge.com/wp-content/uploads/2012/06/IFAW-NWD-Report-FINAL-lowres.pdf>

<https://indaily.com.au/events/regional-showcase/2021/06/04/head-of-bight-visitors-centre-opens-for-whale-watching-season/>

NOISE

5.2.2.4 Noise Impacts on Fauna Population

Rocket launch and testing events have the greatest potential to disturb and cause an adverse physiological or behavioural impact on the local wildlife. Noise levels above the measured ambient level at distances further than 5.0 kilometres from the launch are predicted.

Calculated Single Launch **Sound Exposure Level at Site B is Between 140 and 115 dB over the entire area of Southern Launch's development site.** Levels at **residential properties** beyond the boundary of Southern Launch's proposed development will be between **120 and 115 dB.**

8.4.1.2 Noise and Vibration Levels and the Impacts on Sensitive Receivers

In respect to mammals, studies have shown that noise levels of 120 dBA can damage mammals' ears, and levels at 95 dBA can cause temporary loss of hearing acuity. It is likely that the possible impacts to mammals would be similar to birds, however mammals would be unable to move away from the noise being produced as quickly and may be exposed to higher levels for longer.

Southern Launch have advised of their intention to launch at night. They did not commission any research on the impact of intense light and noise on endangered fauna and marine mammals at night.

Wildlife can perceive thunder storms coming and find shelter but are totally unprepared for longer blasts of light and sound at 140dB. Birds, animals and marine mammals within the development site and surrounds will be forced to flee in a panic, leaving babies and/or eggs. Birds settle on their nests during daylight hours so many may not be able to relocate their nests or chicks in the dark and they will die of exposure during the night.

All wildlife, pets and livestock are also at risk of severe injury or death when fleeing in a panic in the dark through gullies, scrub and into fences. This can also lead to loss of the fetus in pregnant females.

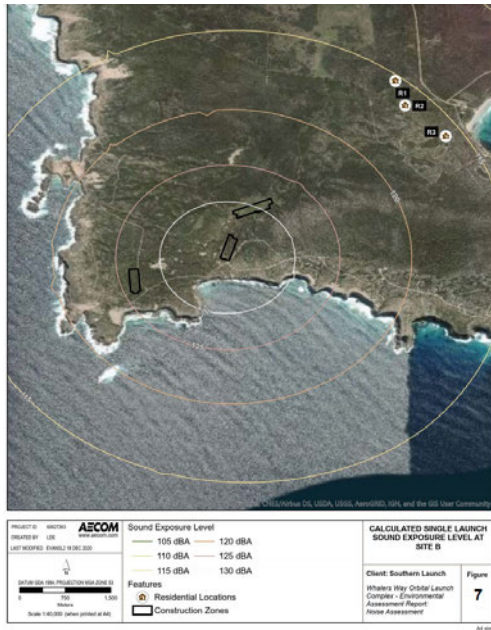
Whalers Way Orbital Launch Complex - Environmental Assessment Report Noise and Vibration

Whalers Way Orbital Launch Complex eis 19.4.1.13 National Parks and Wildlife Act 1972

51284let07-UpdatedNotificationPackage-350564.pdf

APPENDIX E Test Launch Campaign Summary

https://plan.sa.gov.au/_data/assets/pdf_file/0004/880555/Appendix_O_-_Noise_and_Vibration_Assessment.pdf



Appendix A Whalers Way Orbital Launch Complex - Environmental Assessment Report Noise and Vibration
[https://plan.sa.gov.au/data/assets/pdf_file/0004/880555/Appendix O - Noise and Vibration Assessment.pdf](https://plan.sa.gov.au/data/assets/pdf_file/0004/880555/Appendix_O_-_Noise_and_Vibration_Assessment.pdf)

TOURIST VIEWING

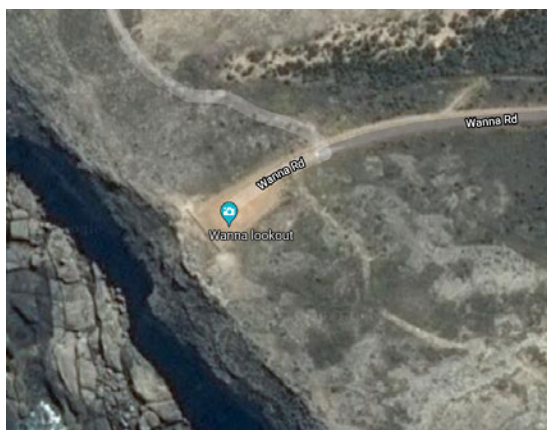
Southern Launch recommends viewing the launch from Wanna Lookout. This is 45 minutes into the Lincoln National Park, with a tiny area for car parking so people will drive over fragile native vegetation, bird nests and other fauna habitat to get the best viewing spot.

The entire coastline from Whalers Way to Wanna has a limited number of small parking areas at viewing areas on fragile sandstone cliffs. Extra vehicles and foot traffic not only destroy the cliffs, but when the fragile cliffs crumble it can cause serious injury or fatalities.

Southern Launch envisions hundreds of tourists flocking to see the launches, so if a bushfire broke out in the national park, there is only one road out through thick scrubland for both campers and Space tourists, increasing the risk to human life.

Space tourists will be waiting up to 12 hours (Southern Launch does not give an exact launch time, only a 12 hour window) Viewers will be moving around, eating, drinking and leaving litter over that time.

(There are **no toilet facilities** in these areas for Space Tourists waiting up to 12 hours)



COMMUNITY

Southern Launch have stationed 6 police vehicles, approx 12 policemen, CFS fire units and volunteers plus Ambulances and paramedics (Southern Launch will not provide the exact number) at the launch site for up to 12 hours during launch windows. There have been 5 aborted launches to 16th September. This is creating a huge risk to the community if there is a bushfire or emergency in another area with emergency personnel and appliances having to travel 45 minutes back to Port Lincoln.

The Port Lincoln City Mayor is employed by Southern Launch as Range Operations Manager at the Whalers Way Complex. As mayor his charter is to represent the residents for the benefit of the whole community, not the benefit of one privately owned business and the Mayor's personal bank account. This conflict of interest may be challenged under law in the future and affect development due process.

Southern Launch can give NO guarantee that foreign owned rockets launching from Whalers Way will not deploy spy satellites, contain poisons nor be programmed to land on Australian soil. It may sound far-fetched, but ASIO (**Australian Security Intelligence Organisation**) advises the current **threat to Australia is Probable.**

<https://www.nationalsecurity.gov.au/Securityandyourcommunity/Pages/National-Terrorism-Threat-Advisory-System.aspx>
<https://www.asio.gov.au/australias-security-environment-and-outlook.html>

A rocket launch facility purely for Australian Defence launches would be more beneficial to the community as a whole, instead of just for private profit. As this is a privately owned company there is also no law preventing Southern Launch from selling out to foreign investors (including China or North Korea) at any time after development approval.

A less risk averse and more cost effective solution would be for government funding to go to the Defence force. As part of hands-on training for army trades and non-deployed personnel:

- Construct a launch facility in a region with less impact on the environment and community
- Construct a desalination plant and solar farm to limit launch operation costs plus secure public water and power supply to the region
- Contract the launch management out to Southern Launch
- Have greater control over launch security
- All profit to go into the Defence Force coffers instead of private pockets

Regards



16th September 2021

Hon. Vickie Chapman,
Minister for Planning and Local Government
GPO Box 1815,
Adelaide SA 5000
Email: spreps@sa.gov.au

Dear Minister,

**RE: Development Number 932/P007/19 – SouthernLaunch.Space Pty Ltd Whalers Way
Orbital Launch Complex Proposal**

The development of a space launch facility on Eyre Peninsula is an exciting project with immense potential to benefit both Port Lincoln and South Australia. Those benefits have further potential to increase over time if rocket assembly can also be attracted to Eyre Peninsula.

The problem

The challenge is that the EIS clearly indicates that the Proposal would mean effective closure of the tuna industry's main area of flying and catching. The tuna industry generates over 1,000 FTE's in SA (see later) and is totally dependent on flying and fishing in the December to March period each year when the Southern Bluefin Tuna (SBT) are in the Great Australian Bight (GAB).

The SBT are only in the GAB in that December/March period, on their annual migration from South Africa to New Zealand. After the 300,000 fish are captured live each year, they are towed to Port Lincoln in large pontoons, then grown out for 4-7 months until August each year, before harvest and export.

Tuna from SA is Australia's largest aquaculture export, and SA's largest export to Japan (see later).

The solution

We consider these problems can be addressed by the Project approval including specific operating protocols or guiding regulations. These would include limiting the number of launches through peak fishing periods, when our fleet of vessels and aircraft are most active.

The flying/fishing operations

Our fishing operations only occur for a very discrete period, but throughout that time vessels have limited capacity to exit areas, especially when towing fish in pontoons. We have up to 5 planes flying at low altitude that need the flexibility to respond to prevailing weather

conditions. These planes do not have pre determined flight plans. They are guided by the conditions they encounter as they fly and the fishing vessels they service on each and every day. These conditions can include biological activity, tidelines, local weather, low cloud, sea haze and sea state that only become evident as they traverse the area. Typically fishing will occur from mid December through to the end of March (some years we finish earlier). Our flying / fish spotting operations normally commence late November and continue near daily (weather permitting) until the fishing is completed.

It is worth noting that while all the season's fishing may not always occur directly below Eyre Peninsula, the flying and tuna spotting activities are active in this region through the entire fishing period every year. The 5 aircraft involved in tuna spotting activities are critical for tuna farming; their role is searching out and keeping track of fish schools of optimum size and quality for the next and future fishing opportunities that will be capitalised upon within the season when weather permits. Tuna spotters operate across the entire area between longitudes 132 and 139°E from the coast to the 3,000m depth contour regardless of where the actual fishing vessels are located.

We emphasise that the aggregation of the tuna in this area of the GAB is unique. It is the surfacing behaviour that occurs in the waters adjacent to SA that makes large scale capture for tuna farming possible. This is the reason the migratory SBT can only be farmed in Port Lincoln not anywhere else in the world.

The importance of the area to the global SBT science

Further to the commercial operations, please be aware that CSIRO undertake a genetic tagging program at the completion of tuna farm fishing operations and this is directly in the path of a southward launch trajectory from Whalers Way. This tagging program supplies the critical fishery independent datasets used by the Commission for the Conservation of SBT (see www.CCSBT.org) to set the global total allowable catch of SBT, which is shared by many countries (including Australia, Japan, New Zealand, Republic of Korea, Taiwan, Indonesia, South Africa, European Union). The genetic tagging program also utilises fish spotting aircraft to locate 2 year old juvenile tuna of a specific size range.

More detail on the operations

SBT do not show this surface aggregating behaviour anywhere else they occur (across their global distribution from South Africa to New Zealand); and SBT only do this through daylight hours for the months of December, January, February and March. Within this 'summer' period, the surfacing behaviour is displayed in certain weather conditions, the frequency of which does vary from year to year – hence actual fishing opportunities can be at best, fishing 1 day in every 4; or in unfavourable seasons, fishing only 1 day in every 7 10days.

All of this is determined by the fish and we have no control over it therefore we must have the ability to respond at every opportunity.

The 2021 season had a particularly poor start with a 24 day climate induced delay until the first catch. In these situations, vessels remain on the fishing grounds for the period until sufficient tuna are in the towing pontoons ready to slowly transit back to Port Lincoln (at a maximum speed of 2km per hour). These are the realities of the tuna farming business; tuna

migration, distribution and weather conditions are aspects that we have absolutely no control over. If the tuna quota is not captured within the period that the fish are available in the Bight, the quota must be transferred to fishers in NSW and Tasmania (to the detriment of the SA economy).

Tuna Ranching creates a significant number of jobs both directly on the farms as well as through the flow on business activity associated with tuna farming, processing and transport. The most recent economic analysis has the total employment as 1,087 FTE in SA, and economic output of \$331 million (EconSearch 2021¹). The tuna farming sector underpins the very substantial local investment by tuna farmers in the local processors, shipyards, marina, property (e.g. hotels, commercial and residential), tourism and other industries (e.g. kingfish aquaculture, viticulture, waste recycling etc).

The onward impact of launch programs

The current approval to test 3 launches before the 31st of December 2021, has been a very welcome initiative for potentially impacted current users of the area to assess how a commercial rocket/satellite launching venture may or may not affect their activities. We submitted a letter to Southern Launch on the 17th June 2021, listing the items ASBTIA would appreciate receiving further information on once these launches were complete. To date no launches have occurred, but through the several scheduled and subsequently cancelled events we have had the opportunity to experience how Airspace Restrictions and Vessel Exclusion Areas will be notified and enacted.

This adds an additional worry as this commercial launch site is advertising itself as an experimental and test launch facility therefore it is highly likely that the instance of misfires and cancellations will be elevated as new or untested prototypes are proposed. This effectively means that even in the advent of 42 launches per year being proposed, the number of exclusions events (and the uncertainty this creates) may well be much higher. For example, the first rocket at Kooniba failed on the first day and was rescheduled. Likewise, the first launch proposed for Whalers Way (imposed the air exclusion area shown in Figure 1) and was aborted (that morning had perfect weather conditions for tuna spotting). The second, third and fourth launch dates were also aborted late in the day and finally today a misfire. So far it has been 5 days of disruption for a single launch, noting that the actual launch has still not occurred at the time of submitting this letter.

Whalers Way is in an extremely exposed area, so if weather conditions are a concern – the closures of airspace and disruption to fishing plans are likely to be much higher than the actual number of launches proposed. We certainly understand that there will always be logistical and technical issues that are encountered and part of the learning process with new projects and new industries. That is why we ask that there be a launch exclusion period at least through the years of learning and developing techniques and knowledge so that current viable industries can continue to operate efficiently.

¹ BDO EconSearch 2021. The Economic Contribution of Aquaculture in the South Australian State and Regional Economies, 2019/20. 79pp

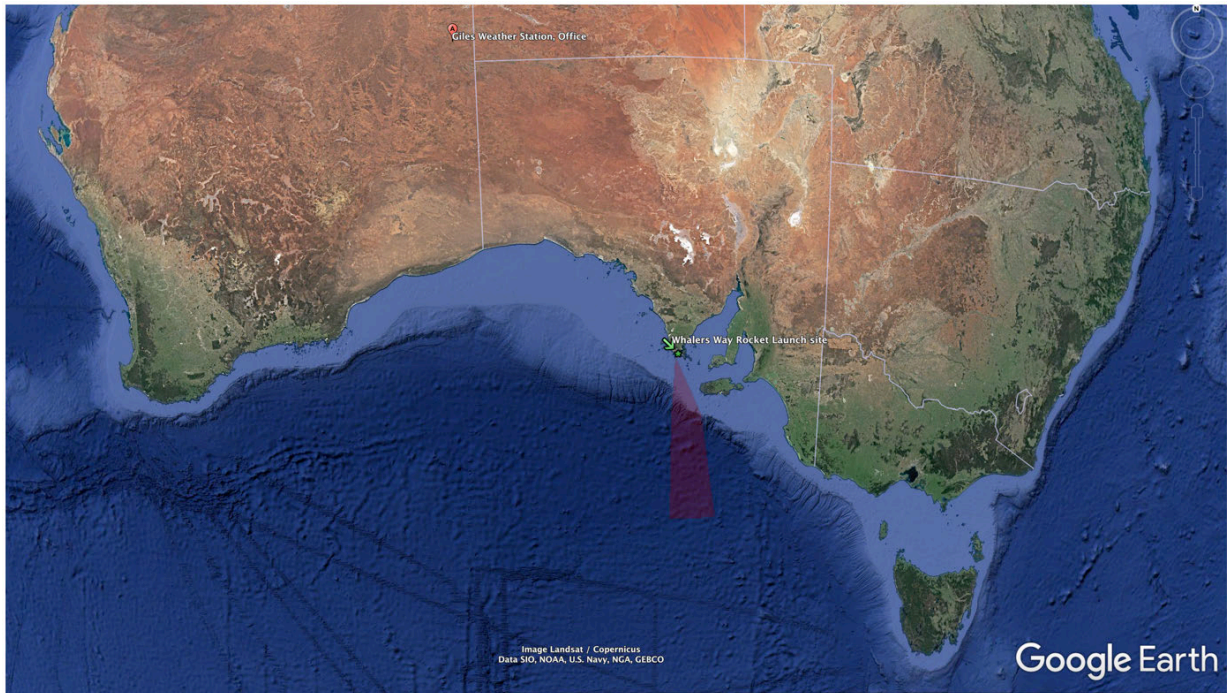


Figure 1: Broad scale map of Southern Australia showing the NoTAM flight restricted area to the south of Whalers Way (pale red shaded area to the limit of the Australian EEZ) and Giles WA – the location commercial flights were diverted to pass over to avoid the rocket safety area.

Our Situation – added detail

SBT farmed product is Australia’s largest aquaculture export. The global tuna farming methods and technology, were invented here in Port Lincoln through the early 1990’s. From 1991 onwards the farming volume was incrementally scaled up so that by 1999 over 98% of the entire Australian share (then ~5,000t) of the global Total Allowable Catch (TAC) of SBT was live captured for value adding in Port Lincoln’s tuna farms. The farms continue to use 90-95% of Australia’s TAC which due to successful global stock management now exceeds 6,000t+ per annum. Depending on currency exchange rates and international market price the export revenue generated for SA from tuna farming has ranged from \$130-290 million per annum throughout the past 25+years. Tuna ranching is also a significant employer in regional SA and invests in local business, tourism, and other industries in the region.

The farming process involves capturing about 300,000 live tuna in the Great Australian Bight (GAB) while they are seasonally available. These are transferred in situ to large specially designed pontoons and towed very slowly behind a vessel. The tuna swim in these towing pontoons over a period of weeks to months on their way back to Port Lincoln. Harvesting occurs between 4-7 months after they arrive in Port Lincoln and are transferred into growing pontoons. Through the farming period the fish double their weight and add substantial market qualities.

The industry invests in long term research programs collaborating with SARDI, a range of Universities (including the SA based Adelaide and Flinders Universities) and CSIRO which have enabled the industry to sustain a very low mortality rate of less than 0.4% of the input stock.

SBT distribution across the Bight over the past 10 years, recorded through aerial surveillance by tuna spotter is shown in Figure 2. Tuna spotting flying effort was a metric monitored over many years by CSIRO for verifying independent recruitment monitoring surveys for the global stock assessment. Examples of the collated flying effort of the 5 planes is shown in Figure 3.



Figure 2: Spatial distribution of SBT surface schools for the past decade 2011 to 2020 (ASBTIA member companies tuna spotter data aggregated and plotted by Kirsten Rough ASBTIA 2021).

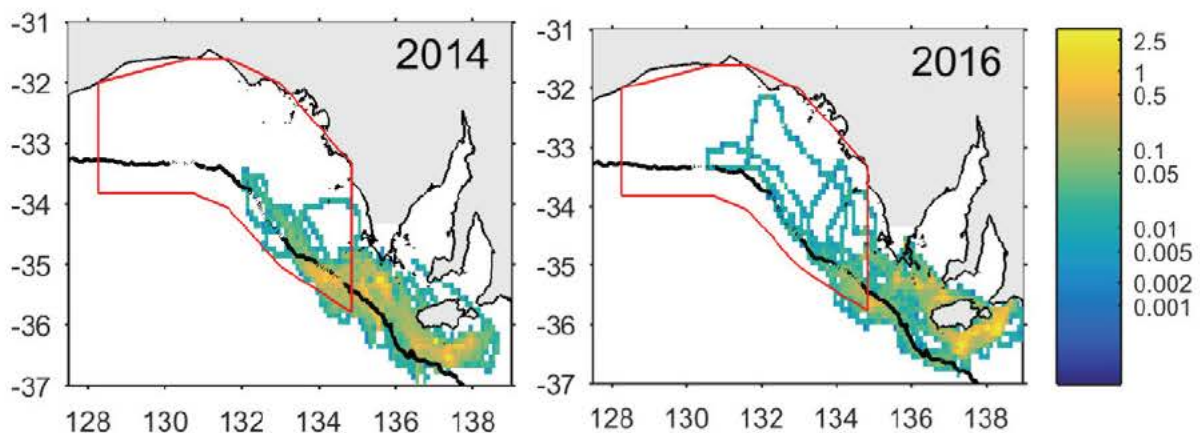


Figure 3: Search Effort by tuna spotting aircraft for a couple of the later years that this data was formally collated by CSIRO. Each plot shows the collective flight paths for all aircraft engaged in tuna spotting activities for the fishing season identified in each plot. This stock assessment metric was superseded by genetic tagging techniques from 2017 onwards. As can be seen, in all years there is a considerable amount of flying effort within what will become exclusion areas for rocket launches (CSIRO 2018).

Government policy changes creating Marine Parks means our fishery now straddles 3 sets of Marine Protected Areas. These each have different sets of rules for where fishing can and cannot occur. The reality of this situation is that if the weather is perfect for fish to appear at the sea surface and the school is located within one of these no fishing protected areas, we have to watch and wait for the next fishing opportunity. This may be several days to a week later, when the school will have hopefully swum across the line. It is our 5 tuna spotting aircraft that keep track of where these fish go and help guide the fishing vessels to the location where and when these schools have moved to an area that fishing is allowed. SBT distribution relative to Marine Protected areas can be seen by Figure 4.

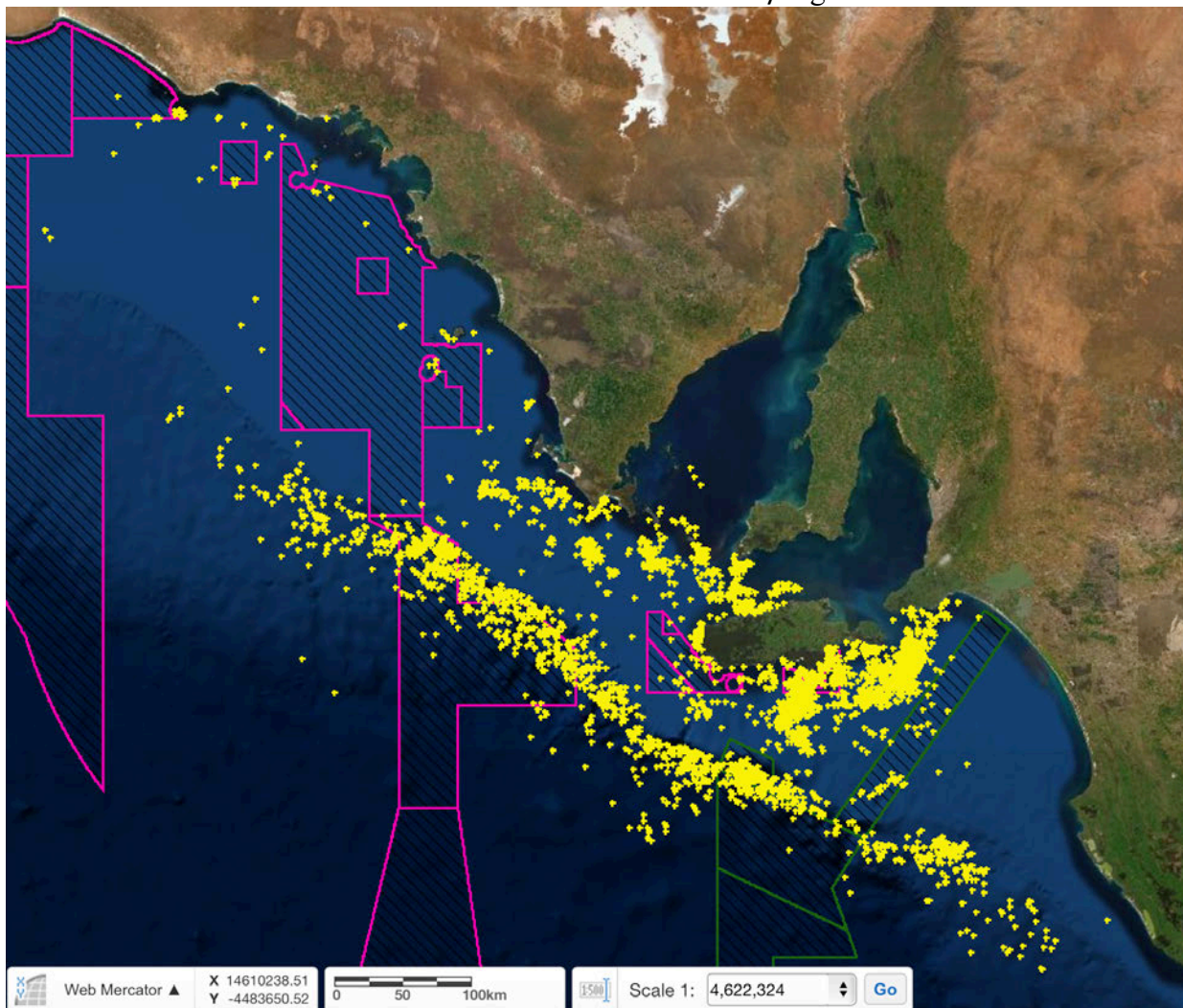


Figure 4: Spatial distribution of SBT surface schools for the period 2014-2020 overlaid with the Commonwealth Marine Protected Areas of the Southwestern and Southeastern Bioregions (ASBTIA member companies tuna spotter data aggregated and plotted by Kirsten Rough ASBTIA 2021).

The area around Kangaroo Island also has Restricted AirSpace Zones, where flying cannot occur when the Defence Force activates the area for running trials. The most significant of these is the one to the east of Kangaroo Island. When combined with a potential flight exclusion area for the Whalers Way rocket launching, a considerable area of the known SBT fishing grounds is not able to be surveyed (Figure 5). Figure 6 shows the impact of all of these potential closures.

If the Southern Launch approval does not impose seasonal launch limits the onerous burden already placed upon the SA tuna industry will mean it is inevitable more tuna quota will be transferred for fishing in NSW and Tasmania.

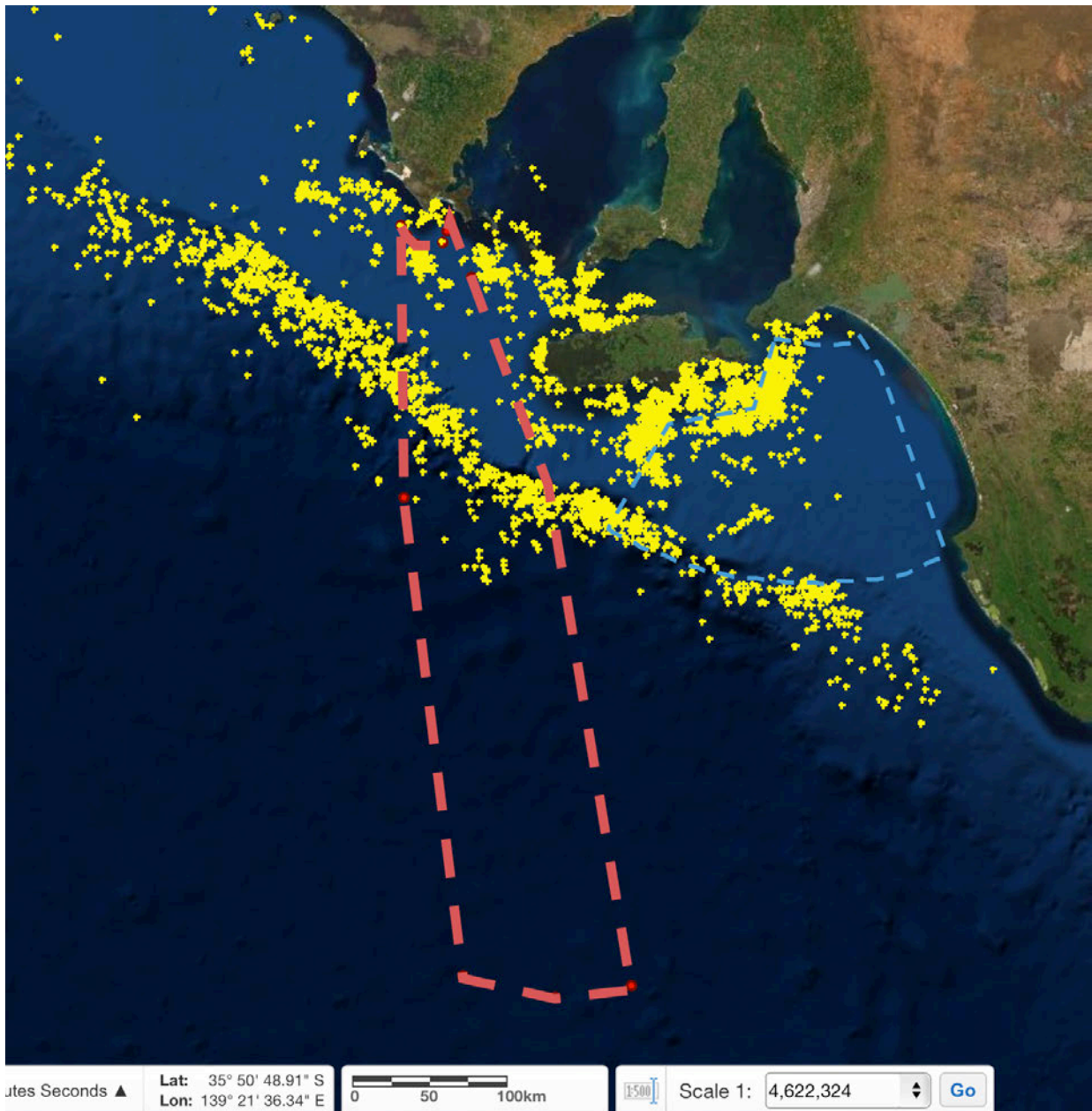


Figure 5: SBT distribution relative to the Flight Exclusion areas for Whalers Way Rockets (red dashed line) and the larger one of the Defence Force exclusion areas (blue dashed lines); noting that all of the area where SBT are on the northern side of Kangaroo Island is also subject to Defence Force flight exclusions.

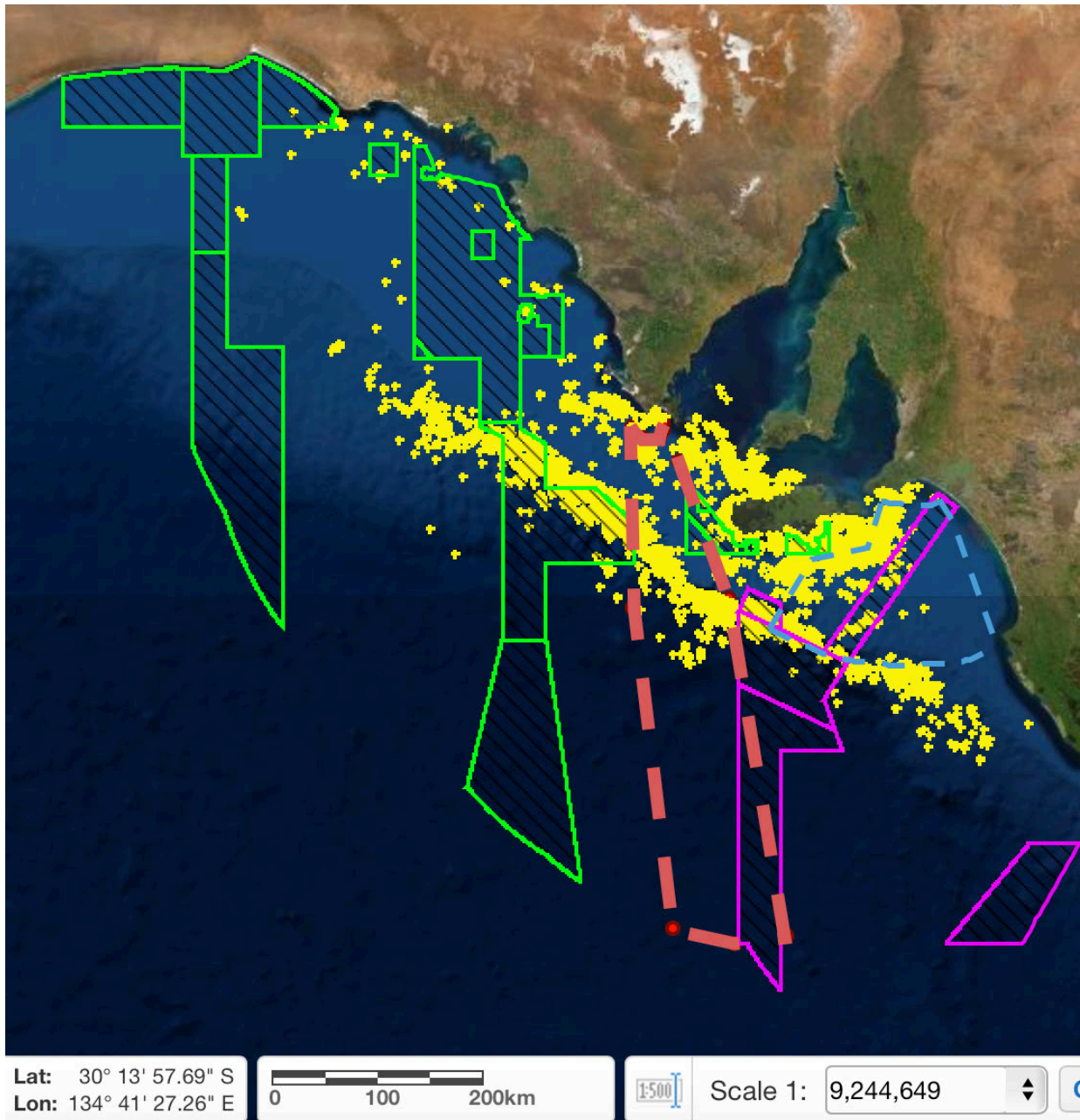


Figure 6: Spatial distribution of SBT surface schools for the period 2014-2020, combined with Defence and Rocket Flight Exclusions and Commonwealth Marine Protected Areas of the Southwestern and Southeastern Bioregions (ASBTIA member companies tuna spotter data aggregated and plotted by Kirsten Rough ASBTIA 2021).

Discussions so far

The tuna industry welcomed the opportunity to meet and discuss the Southern Launch proposal with representatives from the SA Government and Space Industry Centre on the 24th August 2021. As noted through discussions, we are supportive of this development but it cannot be at this existing industry’s expense. The major risks to the SBT sector could be entirely negated by having a launch exclusion period covering our short fishing/flying and live tuna towing period.

Other issues in the EIS

As also discussed through the meeting, there are a number of concerns that are not included in the EIS documents that the DA group needs to consider in the Assessment Process. We hope that this submission helps by providing a greater appreciation of what is actually involved in successfully securing stock for tuna farming and look forward to any questions arising through the assessment process.

While reading through the EIS we note several sections where information is factually incorrect, or is not available – will this document be re distributed for comment after this current Development Assessment process? And what is the likely period until the Project Development is reviewed?

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 10:41 PM
To: DIT:SPC Reps
Subject: Public Comment on Southern Launch's Environmental Impact Statement

To Minister for Planning and Local Government,

Please accept the following email as my submission of comment on Southern Launch's environmental impact statement for the Whalers Way Orbital Launch Complex Proposal.

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

Applicant: SouthernLaunch.space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 26 September 2021

Name: [REDACTED]
Contact Number: [REDACTED]
Email: [REDACTED]
Postal Address: [REDACTED]
Very Concerned Private Citizen

I wish to comment on the proposal as a deeply concerned local citizen. After reading through the Environmental Assessment it appears there are a lot of factors that are cause for concern and need to be further addressed.

The risk of bushfires appears to be a real threat with such a high density of native vegetation at Whalers Way. The storage & usage of fuels including kerosene, liquid oxygen, HTPB and Ammonium Perchlorate is a worry, although it isn't possible to comment on Southern Launch's assessment of bushfire risk as it has been redacted this certainly needs to be scrutinised with nearby homes at Fishery Bay and onwards to Sleaford and Tulka.

I am also deeply concerned about the threat to local fauna both terrestrial and marine. The endangered bird species Western Whipbird and the Southern Emu Wren can be found living amongst the native vegetation at Whalers Way. Along with threatened species Diamond Firetail Finch, Eastern Osprey, White Bellied Sea Eagle and Rock Parrot along with other species of birds. Southern Launch state that construction noise which will proceed for approximately 8 months 6 days a week between 7am and 6pm which may cause communication impacts to birds (p16, Appendix R). It is worrisome that Southern Launch have quoted Mike Damp, a bird enthusiast who

also happens to be Southern Launch's CEO Lloyd Damp's father, about the local osprey pairs activity (p9, Appendix R). When launching is it anticipated noise levels can reach a maximum level of 130-140dB (p17, Appendix R) and will reach a level of 98dB at osprey nest site 1 and 105dB at nest site 2. This is enough to cause temporary hearing loss to the birds and habitat disruption (p17, appendix R).

Marine animals in the area are also extremely sensitive to noise disruption. The endangered Australian Sea Lions, Long Nosed Fur Seals, Bottlenose Dolphins & Southern Right Whales all call this area home. The decibel levels predicted are enough to cause damage to these marine mammals if they are at the surface. Nursing Southern right whales, which are quite often spotted in the waters surrounding Whalers Way, spend quite a bit of time milling on the surface. These whales do not just come to the surface to breathe and then submerge straight away. The risk of any nearby whales suffering damage from rocket launches is very real. Not to mention the damage to nearby seals and sea lions, if not to their hearing then certainly the loud noises will frighten them into the water, which could result in pups being trampled, when they should be resting on land.

The clearing of 23.7 hectares of a habitat protection zone full of native vegetation for this project is such a backwards move when we should be protecting this untouched pocket of wildlife.

The use of Port Lincoln's already scarce supply of water to fill Southern Launch's dam is not ok and worrying about the future of the local water supply.

I also hold deep concern for air pollution that will result from the launches as well as rocket debris littering surrounding areas and ocean.

The fact that tourism of Whalers Way will essentially be shut down because of this project is terrible. Whalers Way has been an incredible tourist attraction for people visiting the Eyre Peninsula and Port Lincoln, with ticket sales to Whalers Way doubling in 2020. So much money has been filtered into promoting local tourism in SA, including the famous rock pools in Whalers Way. The income generated from tourism is much more sustainable both short and long term, with 2019 recording regional tourism generated \$400million within SA.

As an extremely concerned local resident of the District Council of Lower Eyre Peninsula I urge you to consider how detrimental this project will be to the local area & it's inhabitants. I fully support rocket launching but Whalers Way is certainly not the place to do it.

Regards



Subject:

FW: Whalers Way Orbital Launch Complex Proposal Southern Launch

Planning & Land Use Services | Attorney-General's Department



From:

Sent: Thursday, 16 September 2021 11:07 PM

To: DIT:SPC Reps <spreps@sa.gov.au>

Subject: Whalers Way Orbital Launch Complex Proposal Southern Launch

Please see
attached.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u> ✓
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I believe the entire E.P will have something to gain from Southern Launch Proposal.
The local employment, the tourism, plus it doesn't stop there. Local schools benefiting from the new drive students may show in space technology.
Keeping our locals here who may have moved away to seek employment.
Myself and our family spend a lot of time in the area and believe this project is a big win.
Previously rundown and minimal care I feel they will preserve the wildlife in a cleaner environment.



From: [REDACTED]
Sent: Thursday, 16 September 2021 11:27 PM
To: DIT:SPC Reps
Subject: Development number 932/P007/19

I wish to submit an objection to the above development on the following grounds.

There is a clear and critical fire danger that cannot be mitigated by relying on volunteers and staff who have a primary obligation to ensure the broad public safety, rather than provide free services to private for-profit businesses. There is only a single road available for entry and egress from the entire area, and in any significant fire event no possible additional resources are frequently able to enter the area safely, nor is leaving an option should the only road way become burdens with fire. This is well known and has occurred with increasing frequency in recent decades. The likelihood of fires being caused by superheated rocket gasses is phenomenally high once the drying of vegetation occurs between September and May of any year. There is only limited water sources and possibly little or no pressure available, and potentially the complete loss of access during any fire to the limited number of farmer and public firefighting water points - further making firefighting very hazardous and difficult

There are considerable numbers of native animals including several rare and endangered species that may only be found in limited areas such as the chosen location of this development. No sensible approach appears to be possible regarding the disruption and damage that will be the result of the sound pressure levels generated by commercial space launch vehicles. Cetatean activities and safety cannot be guaranteed. Recent statements by Southern Launch are very disappointing, particularly the apparent attempt to pretend there are no whales closer to the launch site than Boston Bay. If this is an example of monitoring Cetacean activities and ceasing rocket firing if any are located within their exclusion zone then there is no way to have any faith in any claims of protecting natural creatures despite claims otherwise... It is against all stated aims of protecting adult and juvenile Cetaceans to subject mothers and calves to 140db and greater sound pressure levels - it may in fact drive them away from the area permanently.

In recent years a full cost recovery model has been imposed on industry, fishing and recreational users alike across most services provided by Govt. Unless this 100% cost recovery model is also adhered to by users of this development then Police, CFS, SES, Fisheries etc. cannot be permitted to provide services for private companies and foreign interest alike. At this time there appears not to be any indication of how current and future cost recovery is to be managed. If there is no such management plan and financial plan available then it appears the intent is not to contribute...

The road system to this location was never constructed to cope with commercial and heavy traffic in the volumes suggested in the EIS - there appears to be no plan or budget towards the upgrading of the road system to suit the proposed use.

There is the certainty that local residents and visitors will be required to leave their properties and that the multimillion dollar commercial fisheries will suffer considerable or total exclusion from local waters. A report has been made of commercial vessels operating at and beyond the continental shelf being instructed to leave an exclusion zone nobody was aware of. The inshore exclusion zone published by Souther Launch appears only to extend to south of Liguana Island, but if this is projected out beyond the shelf there are profound consequences for commercial shipping as well and commercial fisheries to the south of the Eyre Peninsula.

There are far more suitable inland areas already built for experimental, defence and commercial rocket activities that present a fraction of the difficulties the current development causes. It defies any reasonable

logic to persist with this until most of the issues are fully resolved or engineered out of the process - if this cannot be done then another location is the only acceptable answer.

Regards,

[Redacted]

[Redacted]

Part 1.

Firstly may I acknowledge the hard work ,commend the exemplary standard put into this environmental impact statement, as the environmental impact assessment alone would have taken many hours, multiple researchers , collating & editing and I have a great deal of respect for the enormity of this task. I have much respect for the author's.

As per section 46 B of the development Act 1993 it does however lack an executive summary in the PDF format.

As it is a major development that seems to have a very strong Commonwealth connection as well with the Regional Development Australia Whyalla Eyre Peninsula body were the brokers in introducing Southern Launch to THEAKSTONE PROPERTY TRUST 48155984020.

Section 1.1 second paragraph, page 27.

Defence experts denotes the scope of this major development will already produce a strong in direct impact potential.

An easy example of this is the new roads required the impact of raw materials large of Mount of roadstone and impacts of quarrying and preparing this is an indirect impact that was not seen to be addressed in the gis.

Defence also brings a spatial and temporal aspect all unknowns should be considered critical into otherwise showing in a major development of this calibre

Part two of my comments are in pre printed version in a priority stamped envelope at the reception of the address of planning and land youth services Attorney General's department 50 Flinders Street.

Part 3 continues on from the consequences of considering all of the aspects of part 2.

They are as follows.

On page 33 the site proposed is cited in the map legend as c o n which is conservation.

In several gis modelling of the area there is a pinned Whaler's Way Sanctuary.

I'm not going to go into too much detail as I feel I will be doubling up on the conservation issues however taking consideration of the volume of potential launches due to the extra use of defence should indicate that further monitoring methods beyond desk-based dominant methods should be utilised.

Best practice would have seen the scoping process attempts to identify all the potential impacts that this development project may imply the extensive list that that would have produced would have been significant and the eventual consent decision will be based on hopefully a much more comprehensive transparent and unambiguous understanding of the extent of the defence launch proposals.

I understand that the secondary scoping takes the first long list of impacts and arrows it down to a shorter list of key significant impacts.

However in terms of potential launch payloads projected through the Australia space agency and International launchers I feel this EIS is still missing some significant gaps.

Even the combined expertise of a group of c.l.a. practitioners is really sufficient adequately scope a project as first-hand knowledge of the details of local circumstances is vital and this can only be gathered from people and organisations which have an intimate knowledge of the area.

Part 2.

[] In the follow-up to the comments related to section 1.1 second paragraph page 27 in the PDF. As per the online submission,

I would like to enclose the following comments and have enough understanding to feel that the following comments were best delivered in a pre printed format for potential sensitivity of these comments.

Section 13.4.1.1

Page 430 per contents/ chapter tabling or page 488 per PDF

The last sentence contribute to the ambiguous Nuance as defence launches are likely to be heavier and more impactful. Please feel free to contact me for further clarification.

Additionally,

"Only the private sector launch

operations were included in the analysis, with the defence launches and engine testing being out of scope." Is possibly going to need further clarification as part of transforming the ambiguous nature of such concerns as outlined in part 1 submission online

Section 18.4.4.1

Page 437 per table in reference or page 595 per PDF format

Engagement proponents dot Point 3 Commonwealth government in particular space agency this point will be referred to in the forthcoming comments

Section 21.4.1.3

Page 607 per tabling or page 665 per PDF

National security requirements are built into the Protective Security Policy Framework (PSPF).

This framework applies to non-corporate Commonwealth entities and assets subject to the Public Governance, Performance and Accountability Act 2013. Some State and Territory government entities have also aligned with parts of the Framework.

Southern Launch and the WWOLC is a privately-owned corporation and therefore fall outside the scope and requirements of the PSPF.

The Australian Government defines critical infrastructure (CI) as:

'Those physical facilities, supply chains, information technologies and communication networks which, if destroyed, degraded or rendered unavailable for an extended period, would significantly impact the social or economic wellbeing of the nation or affect Australia's ability to conduct national defence and ensure national security.'

Then continues with a possibly contravening notion below.

Please compare the above quote to the second paragraph on page 608 or PDF page 666

The Australian Government's commitment in developing capability within the space sector will likely place this physical facility, once established, as significantly critical to the social and economic wellbeing

of the nation.

It's at this point I will bring forth these additional considerations, as no doubt they may find themselves circulating in broader understanding in community concerns out of grassroots level.

>Ref <https://www.industry.gov.au/data-and-publications/australian-civil-space-strategy-2019-2028/actions-to-grow-australias-space-industry>

National Civil Space Priorities, commencing with investing in national enabling infrastructure to support the growth of Australia's space industry. For example, through the Space Infrastructure Fund, and Geoscience Australia's initiatives, Digital Earth Australia (DEA), National Positioning Infrastructure Capability (NPIC), and Satellite-Based Augmentation System (SBAS).

If not for war, then why is the division in the military?

The Australian Space Agency was set up only a few years ago, and it, among other roles, regulates and authorises space-based technology such as weather and land-monitoring satellites.

So why does the space division need to sit within the military, if war isn't on the cards?

Alongside people in remote corners of Australia, pretty much every aspect of daily life across the nation involves satellites, whether that be banking, weather forecasting or health services — or military purposes.

REcon(Defence Project 799 Phases 2 and 3) unavailable as a live link/ def: error link not found

The ASDSS is IWD's planned capability based on the 2016 Defence White Paper recognition that operations are "reliant on space-based satellite systems to support our networked capabilities and to communicate" and that "priority will be given to strengthening the resilience and redundancy of satellite-based communications".

The strategist

The Whalers Way site is optimal for deploying satellites into high-inclination (polar or sun-synchronous) orbits, with rockets flying out over the Great Australian Bight. These orbits are ideal for intelligence, surveillance and reconnaissance tasks, such as those that would form the core of the Defence Department's project for a sovereign space-based ISR capability (DEF-799 Phase 2)

ADF space command is the right next step for Australian space power.

[] It's also vital that the ADF space command have an enduring connection with the Australian Space Agency and Australia's commercial space sector. Harnessing our vibrant commercial space sector for satellite development, sovereign launch capability and ground segment support is an obvious step for Defence. The space command will need permanent civilian liaison from the Australian Space Agency.

[]

[] An ADF space command centralises policy formulation and capability planning, enhances cooperation with like-minded allies, and energises networking with Australia's rapidly growing commercial space

sector. It can also contribute towards more ambitious opportunities for the ADF in using space. For example, there's growing support in the space sector for Australia to develop the means to launch Australian-made satellites on Australian launch vehicles from Australian launch sites on a regular basis. That would be an indicator for a mature national space capability that could be transformational for ADF space operations. But that vision needs a coherent organisational core in order to be realised. An ADF space command that brings together and sustains expertise and skills is a logical and sensible step towards achieving this goal. In embracing a space command, Defence has signalled an important next step for Australia in space

[]

[] For example, the trajectory for a launch from Whalers Way into a polar sun-synchronous orbit would enable a constellation of satellites to fly over key areas such as the South China Sea on a regular basis. They would provide near-constant surveillance of activities, including allowing monitoring of changes in activity and of deployments of military forces.

Nb:

<https://www.industry.gov.au/regulations-and-standards/regulating-australian-space-activities/notice-of-minister-decisions-about-space-activities>

So which federal minister granted Launch facility licence Launch facility at the Whalers Way Orbital Launch Complex at Sleaford, South Australia for a suborbital test launch campaign. Granted: 12/07/2021 Shouldn't the same Minister have granted an overseas orbital permit for the launch of the current Taiwanese TiSpace Hapith 1, which was in situ after a failed launch due to systems failure at the time of compiling this submission report

[] So the usage is going to be well Beyond the scope of our lined in the EIS which will mean that all the parameters and all of the risks to all of the eager systems and all of the vegetation will be affected dynamically by such a increased output yet to be transparently disclosed in stage 5. Comments on this are still to follow

[]

[] Cautionary experience to reflect on

<https://www.theguardian.com/environment/2021/sep/05/texas-spacex-elon-musk-environment-wildlife>

Cautionary 2

<https://www.texasmonthly.com/news-politics/elon-musk-boca-chica-starbase-texas/>

When SpaceX first proposed a launch site in Boca Chica, the company suggested that its footprint would be minimal. After buying up tracts of private land amid the wildlife refuge, SpaceX told regulatory agencies that it planned to launch its proven Falcon rockets at the site, along with the Falcon Heavy, the same rocket, with boosters attached. An environmental impact review conducted by the Federal Aviation Administration found that the project was "not likely to jeopardize the continued existence" of sea turtles, ocelots, and other species. But after federal and state authorities gave their approval and construction began, SpaceX changed its plans. Instead of launching the Falcon, the company would use the site as a test facility to develop its much larger and louder Starship and the Starship Super Heavy configuration. The FAA approved the company's expanded operations, though it is now considering

whether a new environmental study is required. "

And finally for this part 2 of submission I would like for Appendix W, Page 5, stage 5 of the outlining of the stages to be addressed.

As this in reading through this very comprehensive EIS seems to be again not transparent and therefore not leading to an overall transformation to reflect due diligence in the more generic aspects of the EIS which I will go into further in part 3 in the online submission.

The baseline stage in itself should normally expect very detailed study of conditions in the receiving environment. I'm hoping that the points brought up in part two of my submission can be taken into consideration as I feel it may provide useful guidance on the aspects and require further refined detailed appraisal. This of course will require further Disclosure on the actual impact of the whole scope of launches including stage 5.

I'm hoping indeed in this body of work that the ecological Surveys in themselves went through all three phases and not just desk studies of the ecological baseline.

The region of the proposed exclusion zone around the launch pads are subject to seasonal variations in the climate and the cliffs are a nesting area for seabirds this is a phase 3 detailed survey analysis I don't seem to see the outcomes in the ~~gjs~~ of this phase 3.

The 742 Pages, as impressive as the document is and no doubt will be worked on further I feel needs further treatment to transform the ambiguous nature of some of the aspects into transparency that will translate to due diligence in moving forward if that is it possible.



From:
Sent:
To:

[REDACTED]
Thursday, 16 September 2021 11:53 PM
DIT:SPC Reps

Minister for Planning and Local Government Attention: Robert Kleeman, Manager, State Assessment Planning and Land Use Services Attorney-General's Department GPO Box 1815 ADELAIDE SA 5000

I am writing to express my absolute dismay at the proposed construction of a rocket launching facility at the Whalers Way site on the Southern Eyre Peninsula.

It beggars belief that a proposal of this nature would even be considered, let alone trialled with a series of 'test' launches to pave the way for a long term facility in an area such as this.

Whalers Way boasts some of the most spectacular and pristine wild coastline in the region with breathtaking vistas and a largely unspoilt and intact natural environment. Home to a number of endangered bird and animal species and part of a coastal protection area, it is shocking that such a precious place could be so easily given up for the short term profits of a private company.

I feel it pointless to even begin to pick apart the ridiculous document that passes for an environmental impact statement as this would somehow imbue it with a semblance of credibility. Statements suggesting whales should dive to avoid damaging high decibel noise from launches are utterly nonsensical and the entire proposal should be treated as such. Any company with a shred of environmental or social conscience would never consider a site of this nature for an operation of this type, nor would a government charged with protecting the environment and the interest of its local constituents.

A rocket range here would bring nothing to the local economy or contribute to the amenity of the area for locals or visitors. On the contrary, access to the area will be effectively cut off as the number of launches increases each year. 'Space Tourism' is a complete misnomer as by Southern Launches own admission the area will be off limits during the setting up, testing and dismantling periods of operation. Visitors to the area are not interested in looking at concrete block buildings and blast walls, they come to see the unique location and experience the pristine natural environment.

The adjacent Fishery Bay is one of the most beautiful beaches in the area and is visited regularly by locals and tourists alike. Building a launch facility so close by would affect the amenity of the area and possibly even see access restricted should the operational circumstances of the facility change. Not only would Whalers Way be despoiled by Southern Launches activities, but the surrounding areas would be directly affected by noise pollution, heavy vehicle traffic, and airborne pollutants.

There are few wild places left (outside of the tiny remnants left intact within national parks) where private citizens are still able to be immersed in a natural environment such as this. Places where children especially can be moved by the wonder of such an expansive natural encounter and learn the value of such precious ecosystems.

I trust that the right decision will be made to put people and place above profit and leave Whalers Way intact for future generations to come. As once an area like this is developed in such a way there is no going back.

Yours Sincerely,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Friday, 17 September 2021 9:15 AM
To: DIT:SPC Reps
Subject: Southern launch Development

To whom it May Concern

I support the Whalers Way Rocket launch development.

Regards,

[REDACTED]

[REDACTED]

[REDACTED]

From:

Sent:

[REDACTED]
Tuesday, 14 September 2021 4:15 PM

To:

DIT:SPC Reps

Subject:

Southern Launch Development

Dear Sir/Madam,

I support the Whalers Way rocket launch development.

Kind regards,

[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Tuesday, 14 September 2021 5:02 PM
To: DIT:SPC Reps
Subject: Southern Launch development

I support the whalers way launch complex project.

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Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 8:48 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I Katrina Dawson support the Whalers Way Rockets Launch Development

Kind Regards,
[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 9:39 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

To whom it may concern,

[REDACTED] supports the Whalers Way rocket launch development.

Yours sincerely,

[REDACTED]

[Redacted]

From: [Redacted]
Sent: Wednesday, 15 September 2021 9:07 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

[Redacted]

[Redacted]

[Redacted]

[Redacted]

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From: [REDACTED]
Sent: Wednesday, 15 September 2021 12:04 PM
To: DIT:SPC Reps
Subject: Submission on Application Development Act 1993 Section 46B – Environmental Impact Statement

Submission on Application Development Act 1993 Section 46B – Environmental Impact Statement

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal Assessment Level: **Environmental Impact Statement**
Subject Land: Lot 101 Right Whale Road,
Sleaford Phone Number: 1800 752 664
Close Date: 16 September 2021
Name: [REDACTED]
Contact number: [REDACTED]
Email: [REDACTED]
Postal Address: [REDACTED]

Affected property (if different from postal address) You may be contacted by your nominated method of contact for further clarification or notification of a decision.

My interests are (tick or circle):

Owner of local property

Occupier of local property

A representative of a company/other organisation affected by the proposal

[A private citizen](#)

[Other: X A Surfer who reguarly surfs Fishery Bay \(about 2-3 times a week\)](#)

*Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am deeply concerned on the environmental impacts the rockets will have on the wildlife & vegetation.

I am also very concerned on the following:

- **The breakup of rocket debris during re-entry or on impact with the sea surface**
- **Contamination of surface water (chemical spills)**
- **Harmful propellant gases that will be released into the atmosphere & their health hazzards**
- **Noise**
- **Increased fire risk**
- **Increased traffic of heavy vehicles on Fishery Bay road**
- **How it will affect tourism as you will not be allowed to visit Whalers during certain times**
- **Water that is being used**

CONTAMINATION:

Southern Launch have advised that the three main chemical contaminants will be

1. Hydrochloric acid 2. Unburnt hydrocarbons – including polycyclic aromatic hydrocarbons

3. Aluminium oxide "The key chemicals of environmental concern identified in the literature review were HCl (which form hydrochloric acid when dissolved in water), carbon black (which may contain a traces of PAHs) and aluminum oxide (Al₂O₃)." (page 23, appendix V, Southern Launch EIS) Southern Launch have created a diagram to show how

the harmful propellant gases will be released into the atmosphere – when launched, the "heated ground cloud" of atomised and/vaporised water deluge will mix with the atmosphere, here the chemical contaminants will "mix with the water and fall/rain out at some distance from the launch site" (page 6, appendix V, Southern Launch EIS).

Literally raining hydrochloric acid on surrounding areas, including Port Lincoln Township?

"Hydrochloric acid is **corrosive to the eyes, skin, and mucous membranes**. Acute (short-term) inhalation exposure may cause eye, nose, and respiratory tract irritation and inflammation and pulmonary edema in humans.

Chronic (long-term) occupational exposure to hydrochloric acid has been reported to cause gastritis, chronic bronchitis, dermatitis, and photosensitization in workers. Prolonged exposure to low concentrations may also cause dental discoloration and erosion. EPA has not classified hydrochloric acid for carcinogenicity.

REFERENCE <https://www.epa.gov/sites/default/files/2016-09/documents/hydrochloric-acid.pdf>

VEGETATION The photos in the EIS consistently misrepresent the area as denuded coastal scrub. A short walk into the hinterland will quickly show that the area is a rich and diverse example of pre settlement Mallee forest, especially in the gullies between the dunes. Due to its relative inaccessibility it has mostly remained intact.

(App_P_Q_X_Y_Z)

Appendix Z (pg 10) : "Several ridgelines run north-south across the peninsula. These landforms vary in height from 30 metres up to 80 metres. To the centre of the subject land is a broad coastal basin with woodland pockets...the extent of vegetation here is more pronounced due to the shelter provided." Southern Launch will clear 23.76 hectares of native vegetation, which will be offset by a \$915,078.45 contribution to "credit providers within the region" (p.10, Appendix P

WILDLIFE : "IT is likely to lead to the long term decrease in an important population of several critically endangered species. (App P), including the Western Whipbird and the Southern Emu wren. Also threatened are the Diamond Firetail Finch, Eastern Osprey, White-bellied Sea Eagle and Rock Parrot. Ten other threatened bird species are also known to occur at Whalers Way"

MARINE (App_S)" Rockets will be launched over the habitat protection zone, which is home to the endangered Australian Sea lion, long nose fur seals, and 70 other animal species, including our much loved and viewed Southern Right Whale. Rocket debris will be discharged into the ocean, assuming they get a clearance from the EPA. Decibel levels will be loud enough to cause temporary hearing damage to mammals on the surface, and to frighten seals on Liguanea Island and Cape Wiles."

TOURISM : Whalers Way is an important EP tourism destination; a jewel in our tourist crown. SATC figures show that Regional Tourism in 2019 generated \$400million, and directly employed 1,700 people. In 2020 WW gate takings doubled, as SA locals took advantage of opportunities to travel within their state. The desire for the "wilderness" experience is growing exponentially, "the cornerstone of this appeal is our coast, our fresh seafood, viewing local wildlife, and uncrowded beaches". (SATC) This figure is predicted to reach at least \$500 million by 2030. Appendix AA states "The nature of the development (in Whalers Way) means that tourist and recreational access will be more limited once operations commence". "The predicted volume of escorted tourists is up to ten 4WD/SUV type vehicles and 1 bus per day" "These visits will be restricted when a launch is to take place." With plans for 36 launches per year (within 5 years), with each launch needing 3-4 weeks to set up, and dismantle, it is plain that there will be very little scope for any visits, and certainly no visits that are not part of a "guided tour". No more individual or family trip

WATER A water deluge of 150,000 Litres is required for medium launches, to absorb heat and sound. This water is apparently being sourced from Port Lincoln's already limited water supply. Much of this water becomes a cloud of chemical laden steam which will drift with the prevailing wind onto land and ocean. This does not include water for other purposes, such as drinking and ablutions. There is a plan to catch storm water which clearly is inadequate for the amount of water likely to be acquired. (App U and V)"Some chemicals present in the rocket exhaust may be transferred to the deluge water, potentially causing contamination of water collected in the launch site stormwater detention basin." (page 6, appendix V, Southern Launch, EIS)

This amount of water usage, along with their 30 million litre dam is a significant amount of water from a town that regularly has water rations.

TRAFFIC Proper Bay Road/ Fishery Bay Road_App_AA This route will need to be upgraded to allow for this volume of traffic. The EIS makes no mention of this, other than in App AA: (pg 16) "This traffic on Fishery Bay Road may require slightly more frequent grading operations (by Council)." For cyclists, surfers, beach visitors, and local road

users; these roads will become dangerous. The dangerous section of Right Whale Road, where the fragile overhanging cliffs are less than 10 metres from the road, is completely ignored in the EIS.

Please change the location of the rocket launching!!!!

Whalers Way is just too precious and fragile to launch rockets!

I believe we should preserve and keep the coastline pristine so that the wildlife & native vegetation can flourish so we can continue to enjoy this coastline for generations to come!

NO TO ROCKETS IN WHALERS WAY!!!!!!

Yours Sincery [REDACTED]

Submission on Application Development Act 1993 Section 46B – Environmental Impact Statement – Major Development

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 12:02 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development. This is an important industrial and commercial opportunity for the state and the country. Australia needs to embrace advanced technology and science and inspire the next generation of workers in those fields.

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 1:20 PM
To: DIT:SPC Reps
Subject: Southern launch development

I support the Whalers Way rocket launch development

[REDACTED]

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Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

at the beauty and untouched coastline. We have witnessed kangaroos sleeping on the side of the road under bushes. Emus gathering at the water bath and numerous native birds, reptiles and mammals. The whales that are in the bay at this very moment are returning mother and babies.

Please consider the importance of conserving this precious fragile coastal land. Numerous people gather in this area to scatter loved ones ashes & have quality family time at the beach. The thought of coming to this area and being defamed by rockets is unsettling and upsetting.

Rocks or boulders have already started falling onto the beach at Fishery Bay. These large trucks are already having an impact on this delicate environment. This is an area where families gather for quiet quality time, for swimming surfing, bird watching and reflecting.

Is there still coastal protection and if not, why not? This land is heritage listed and maybe should be national park, or offered some protection.

I have spent time in this area with my children will we not be able to do the same for future generations and our grandchildren.

Please consider our pleas for future generations we need to look at the big picture, which will be of benefit for everyone not just a select few.

Whalers Way has South Australia's oldest rock a massive granite boulder dating 163,000+ million years old, ospreys nests, magical landforms, crevasses, rock outcrops, sealions, fur seals, great white sharks, endangered birds etc. Please protect this beautiful coastline.

Thanking you

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input type="checkbox"/>
	A private citizen <input type="checkbox"/>
Other:	

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The aspects of the proposal I wish to make comment on are (add pages as required):

As a local resident of 50 years and a rate payer for 30+ I was horrified to hear of this proposal.

My parents moved from Adelaide 50 years ago seeking a more peaceful life style. As children we spent numerous hours enjoying the natural beauty of this coastline and bushland.

After returning from Adelaide for tertiary study I was fortunate to work as a bus tour guide which included Whalers Way. This area is extremely unique and precious it needs to be protected not destroyed. I have had the privilege of taking passengers from cruiseship who come from all areas of the globe. These people were amazed and speechless.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Southern Launches proposal is in no way sensitive to the surrounding land use and tenures for many reasons. The proposed launch sites are located within an ecological hot spot. Eleven Nationally threatened, endangered, CITES or ICUN listed species occur on the proposed launch sites or immediately offshore from the launch trajectories.

I have highlighted some key concerns with the proposed launch site below:

Unacceptable risk to water supply

Eyre Peninsula sources its water from the Uley South Basin catchment area immediately to the North of this proposed site. This is the sole water supply for the majority of Eyre peninsula. Uley South aquifer is already threatened as water levels continue to drop and any risk to this critical source needs careful consideration. Prevailing Southerly winds will carry fallout from launch emissions over the Uley South catchment area which is a unconfined shallow limestone aquifer. Any surface pollutants will find their way into the supply water with the next rain event which is pumped to Port Lincoln and the Lower Eyre Peninsula all the way to Cowell on the East Coast and Ceduna on the West Coast. SA Water has extremely tight environmental restrictions around activities on the catchment area and approving a commercial rocket launching complex upwind of this area is illogical. Hydrochloric acid, a known carcinogen is just one of the expected pollutants. There are no measures in the EIA to launch only under certain wind conditions/directions to protect a critical water supply from fallout residues.

Debris from rockets into the marine environment

In 2021 no pollutants should be able to reach our marine and aquatic environments. This is simply not good enough NIWA were unable to conclude there would be no impact from rocket debris, Southern launch rockets will impact regularly on the same area of the Southern Ocean. This is clearly admitted and stated in their EIS document and is unacceptable.

Environmental destruction in a heritage listed location

Clearing 23 hectares of native vegetation home to multiple endangered species. Air and residual pollutants including hydrochloric acid settling on the surrounding areas. Any winds from a Northerly direction during launching will carry pollutants over a colony of endangered Australian sealions at Cape Wiles. The area is also under heritage agreement which should be legally binding and exclude industrial activity from the site. Again, the proposed activity is out of character with surrounding land use and tenure.

Inadequate fire and emergency response

Considering the volume and scale of fuel being burnt at each launch there is a complete lack of environmental regard by this proposal. One local CFS truck attending on site per launch is completely inadequate considering there could be tens of thousands of litres of fuel aboard each rocket and the fuel load in the area is moderate to extreme.

Tourism impacts need to be considered

The Whalers Way site and Fishery Bay are 'must see' destinations for tourists and has been gaining popularity with visitor numbers increasing significantly since covid and are expected to continue to rise. Turning this coastal conservation area into an industrial zone with restricted future access will limit the natural wilderness appeal and tourism potential of this area. Any argument that rockets will attract more tourists to the area should support a case for relocating the proposed site to an area that didn't already have a significant tourist appeal. South Australia has numerous regional towns that could benefit from tourism and economic activity.

Lack of adequate disaster response plans

Both land and marine. What is the plan if there was a launch disaster resulting in up to 90,000 litres of fuel crashing into the sensitive marine environment or surrounding land and water catchment area?

Whalers Way is not the ideal location for the proposed activity. A site that is already cleared with no Nationally threatened, endangered, CITES or ICUN listed species or impacts to the marine environment that is not near a critical water should be strongly considered. Whalers Way has an intrinsic wilderness value and huge potential to build on the existing nature based tourism. South Australia has many regional towns and sites without the above issues that may welcome a

rocket launching complex (such as Woomera) and Southern Launch existing site at Koonibba. These alternatives should strongly be considered.

If you visited the site you may understand the opposition. It is impossible not to respect if you connect with the area.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am opposed to The Southern Launch development.
My concerns are regarding the Native Vegetation and the Wildlife in Whalers Way which will be affected by the proposed 23.75ha development.
The EPBC Act referral, section 3 described the flora and fauna relevant to the projected area.
The list includes 11 conservation significant flora species, 4 of which are threatened.
• Alcocks wattle
• Port Lincoln Guinea flower
• Western Daddy-long legs
• West Coast mint bush

CONT...

Scan and email to spreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

34 Fauna species were recorded during a field survey, including 28 bird species, 4 mammal species and 2 reptile species.

There were 6 conservation significant fauna species recorded, including

- Diamond Firetail - vulnerable
- Eastern Osprey - Endangered.
- Eastern Whipbird - Vulnerable
- Rock Parrot - Rare
- Southern Emu-wren - vulnerable
- White bellied Sea Eagle - rare.

Section 5 of The EPBC Act confirms that there will be significant impact on threatened species or any threatened ecological community.

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 4:28 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the whalers way rocket launch development

[REDACTED]

From: [REDACTED]
Sent: Wednesday, 15 September 2021 7:33 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

Dear scapreps,

I support the Whalers Way rocket launch development.

Yours sincerely,

--

[REDACTED]
[REDACTED]
[REDACTED]

Whalers Way is protected under the native vegetation heritage agreement – please explain how this area can be approved as an industrial site?

I REQUEST THAT THIS DEVELOPMENT NOT PROCEED AS IT REQUIRES AN INDEPENDENT ENVIRONMENTAL STUDY AS THE ONLY ANALYSIS DONE HAS BEEN BY THE APPLICANT WHICH HAS VESTED INTERESTS. According to the applicants EIS there are multiple endangered birds at risk from loss of habitat due to clearing of the vegetation, full or partial hearing loss from the noise, increased stress etc – all of which would make them as risk to predators. There is not a lot of credibility in the report when those asked for advise admit they are not raptor bird experts and another 'expert' happens to be the father of the CEO!! And what about the risk to the marine animals? Seals and whales are also at risk of hearing loss. What about the falling debris that may cause injury or death? Seals may in their panic trample other seals as they rush to safety in the water. How is any of this a satisfactory outcome??? Would it mean that the whales and their babies that have found sanctuary in the nearby bays will be frightened away by the noise, falling debris and pollution??

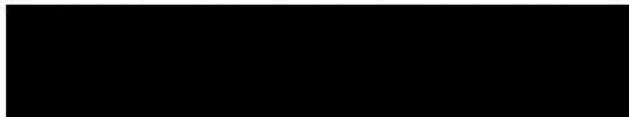
What about the degradation to the roads with increased volume and large semitrailers and tucks?? Of main concern is the fragile coastline at Right Point near the entrance to Whalers Way. There are already reports from locals of rocks falling onto the beach below. And it is not enough to claim that the council will grade it more often – at who's expense? The ratepayers?? (I am one).

There's no water out there and so the applicant plans to cart water from Port Lincoln??? Can our precious water supply stretch that far??

What about the bushfire risk from the flammables stored on site? Will the applicant launch on total fire ban days? Do they have a comprehensive bushfire plan? Using the government funded CFS who's firefighters are all volunteers does not sit well with me - We all rely on that valuable resource in times of bush fire.

And what about the risk of chemical filled air pollution to the nearby residents? The applicant has already had a failed launch due to wind (on 10/9/21) – I am concerned that that wind will move the pollutants over the wider area risking our health? I saw today on video footage from the launch that was abandoned – there was lots of smoke!! And why would you even consider launching rockets from a site right next to a wind farm? (It's clearly a windy place).

Whalers Way and surrounds is a premier tourist attraction. Tourists love the pristine environment. This draws in much welcome revenue to the local towns. I have heard people say that 'space tourism' is popular? I am wondering how successful this would be when there are so many factors that need to align for the rockets to launch. How can people who want to see the rockets launched be guaranteed they would even see them? I believe there will be about 70 employees – What?? That will do nothing to boost jobs!! Eco tourism is I believe of greater value to the area however this would be at risk due to the environmental damage caused by the proposed development at Whalers Way.





Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Steaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	[REDACTED]
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

THERE IS A HUGE ENVIRONMENTAL RISK FOR ALL THE WILDLIFE AND PLANTS. THIS PART OF THE COAST IS SO PRECIOUS TO SO MANY PEOPLE, IT WOULD BE DEVASTATING TO SEE IT BECOME RUINED

From:
Sent:
To:
Subject:

Thursday, 16 September 2021 6:53 AM
DIT:SPC Reps
932/P007/19

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 684
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/>
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

1) AUSTRALIA REQUIRES SOVEREIGN SPACE INDUSTRY CAPABILITY. SOUTHERN LAUNCH'S ACTIVITIES WILL HELP RETURN AUSTRALIANS WORKING OVERSEAS TO AUSTRALIA. INTERNATIONAL CLIENTS INDICATE DESIRE TO MANUFACTURE ROCKETS IN SOUTH AUSTRALIA.

2) REGIONAL SOUTH AUSTRALIA NEEDS ECONOMIC DEVELOPMENT. INTERNATIONAL CLIENTS HAVE INDICATED DESIRE FOR FINAL ASSEMBLY OF ROCKET COMPONENTS IN PORT LINCOLN.

3) THE LOCAL TUNA FISHING INDUSTRY IS IN RECEDE WITH MANY LOST JOBS. THE 'SPACE REPORT' INDICATES THIS DIRECT & INDIRECT JOB OPPORTUNITIES IF ONE OF SOUTHERN LAUNCH'S CLIENTS RELOCATES TO SA. THERE ARE CURRENTLY A NUMBER OF CLIENTS CONSIDERING RELOCATION OF FINAL ASSEMBLY TO PORT LINCOLN.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

- 4) SPACE TOURISM IS BIG. SOUTHERN LAUNCH HAS 600 VISITORS IN SEPTEMBER 2020 WITNESSING THE TWO KOONIBSA LAUNCHES. SPACE TOURISM ON THE LOWER STRE PENINSULA WILL ENHANCE THE CURRENT TOURISM GROWTH.
- 5) WHARF WAY HAS NOT PREVIOUSLY BENEFITED FROM ECOLOGICAL CONSERVATION MANAGEMENT. SOUTHERN LAUNCH HAS ENGAGED CONSERVATIONISTS TO ASSESS & REVISE AN ECOLOGICAL/BIODIVERSITY MANAGEMENT PLAN. SOUTHERN LAUNCH HAS ALSO ENGAGED TO FUND A UNIVERSITY PhD STUDENT ONE ON LANTANA & THE OTHER ON THE SOUTHERN BURN WREN & THE WHARF.
- 6) TOURISM ACTIVITIES WILL BE CONTROLLED & MANAGED TO MAXIMIZE ECOLOGICAL EDUCATION.
- 7) KERRA ANIMAL (CATS & FOX) ERADICATION WILL BE INITIATED.
- 8) THE AREA OF LAND REQUIRED FOR ROCKET LAUNCH ACTIVITIES IS \pm 2% OF THE TOTAL HERITAGE AREA.

I BELIEVE THE PROTECT SOUND PROGRAM.

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 9:46 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

To whom it may concern,

I support the Whalers Way rocket launch development.

Kind Regards

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 1:02 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development!

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 1:34 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

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[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 1:53 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Pat Moran

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 1:06 PM
To: DIT:SPC Reps
Subject: submission on the EIS for Whalers Way : Environmental Impact of Whalers Way Orbital Launch Complex

To whom it may concern on the SPCREPS

As an professional ecologist in South Australia with over 40 years on ground ecological experience, research, academic teaching, and training, I am writing to express my concerns about the Whalers Way Orbital Launch Complex.

In most regions of South Australia, there is less than 10% native vegetation remaining. This is already below the tipping point for wide spread decline and local extinction of species; apocalyptic in scale.

The viability of whole ecosystems is dependent on large (1000s of hectares) of connected intact areas of native vegetation.

The larger the intact area of native vegetation, the greater the chances of the long term survival of individual species and ecosystems. Incursions and disconnections reduce the effectiveness of the area for wildlife.

There are endangered species present in the proposed site for the Whalers Way Orbital Launch Complex threatened by the proposed development and the flow-on impacts such as wildfire.

I am not necessarily opposed, per se, to a rocket launching facility and the research and jobs that may flow from this in South Australia. I oppose the current location.

With my 40 years' experience of watching and measuring the slow relentless decline in the quantity and quality of native vegetation in South Australia, I am of the strongest opinion that the proposed location is tantamount to a crime against nature and our children's children.

Please for the sake of the planet, the people of this state, and the precious living environment, move this facility to a more environmentally appropriate location.

In my opinion, using this current location will have a similar effect on nature as allowing kindergarten children to finger paint over the surface of Shearing the Rams, our iconic 1890 painting by Australian artist Tom Roberts. A travesty.

I am confident that there will be many locations without critical native vegetation and endangered species nearby and along the Great Australian Bight.

Regards

[REDACTED]

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 2:02 PM
To: DIT:SPC Reps
Subject: Development Number: 9321P007/19

As a long time ratepayer at my place of residence

[REDACTED]
I am submitting my objection to this proposed development on the grounds of

:Destruction of the areas natural environment including flora and fauna

:Damage to the already inadequate roads

:The safety risks including and very importantly the risk of bushfire in our high risk area

:The use of taxpayer emergency personnel

:The continual lack of entry and access to public areas in the vicinity

:The foreign investment in this company that hasn't been disclosed

:And the many more objections that have been cited indicating there are many people objecting to the go ahead of this venture at Whalers Way

Sincerely [REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 2:39 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I Support The Whalers Way Rocket Launch Development

Kind Regards,

[REDACTED]



[REDACTED]



BRAEMAC COVID-19 STATEMENT: <https://www.braemac.com/post/braemac-covid-19-update-23-03-20>
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[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 2:47 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 4:04 PM
To: DIT:SPC Reps
Subject: "Southern Launch Development"

I support the Whalers Way rocket launch development

Regards,
[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 4:49 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 5:15 PM
To: DIT:SPC Reps
Subject: Whalers way rocket launch.

The impact of the rocket launches is an unacceptable risk to the fragile local bush environment, farms, homes and community recreation areas. The dangers of fire and pollution are unacceptable. Surely there are alternative sites.

Yours sincerely

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 7:08 PM
To: DIT:SPC Reps
Subject: Southern Launch development project

Hey there,

Hope you are having a wicked one,

Yeah I know this is late but I'd also still like to loop in my support for the rocket launch development!

Thanks,

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Thursday, 16 September 2021 8:45 PM
To: DIT:SPC Reps
Subject: Environmental Impact- Southern Launch

Applicant: Southern Launch Space Pty LTD
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

To Whom It May Concern,

I'm very concerned about the environmental impact of the above. The reasons for this are many and wide-ranging. They include:

1. The devastating impacts the development will have on flora and fauna, including several endangered marine and bird species that are found nowhere else on Earth;
3. The bushfire risk, which has been redacted from the Environmental Impact Statement;
4. The economic consequences that will result from permanently altering access arrangements to Whalers Way, the jewel in the crown of Lower Eyre Peninsula's tourism strategy;
5. The considerable water requirements associated with the development in such a low rainfall area, and the strain this will place on both the critically important Uley basin and the underground aquifers both in and around Whalers Way.
6. Impacts on sacred sites which are the subject of Native Title claims and are considered of high archaeological significance and cultural importance to the Barngarla and Nauo people.
7. The use of public resources to ensure security from the public in such difficult and challenging terrain, and the invasive use of camera devices, security guards, lighting and fencing;
8. Increased dust, light and noise pollution in a scenic and heavily visited rural beauty spot;
9. Pollution fallout and the impacts this will have on Port Lincoln's sustainable, profitable and internationally renowned fishing industry;
10. The negative impacts on local businesses whose economic models rely upon the perception of Port Lincoln and the Lower Eyre Peninsula as a place of eco-tourism, sustainability, unique wildlife and natural beauty.

I strongly believe that the Major Development proposal associated with the Whalers Way Orbital Launch Complex ought to be refused planning consent.

Kind Regards,

[REDACTED]

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/>
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am a frequent visitor to the area, mainly Fishery Bay, which I access by both car and/or boat. If this proposal does not affect the access to the Fishery Bay beach I am in total favour of the proposal.

I am in favour of the proposal for the following reasons

- space is the way of the future & Australia needs readily available access to space which this facility will provide. This will enable us to maintain our sovereignty & launch our own satellites, which benefits the whole of the Australian population as we all rely on satellites on a day to day basis for the simplest things - ie directions, weather, communication
- new industry - space - will benefit the region & state through increase in jobs & investment as well as long term prosperity.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

[REDACTED]

From: [REDACTED]
Sent: Friday, 17 September 2021 7:06 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

To whom it concerns,

I support the Whalers Way rocket launch development

Kind regards,
[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Friday, 17 September 2021 7:54 AM
To: DIT:SPC Reps
Subject: Whalers Way rocket site

I am writing to you regarding the development at Whalers way - 932/P007/19.

I object to this development on the following grounds:

- security guards patrolling Right Point, a popular surfing and tourism spot
- inappropriate CCTV footage being taken of people at Fisheries Beach
- Fishery Bay Road being used by an industrial level of heavy traffic
- police, CFS and ambo resources being constantly diverted for a private company's use
- constant maritime and air exclusion zones at extremely late notice (four in the past week)
- the chemical fall out and what it will mean for Port Lincoln's clean, green image
- the extreme bushfire risk associated with misfires (as seen yesterday)
- the impact on the migratory routes of our whales (whale and calf currently at Sleaford)
- and the endangered species which call this area home

The areas surrounding Whalers Way are critical to our tourism industry and to our environment and should not be put at risk. The proposal is ill considered and not wanted by our community.

Why put at risk our clean green image when there are so many isolated places in SA that would welcome this development?

Regards,

[REDACTED]

[REDACTED]

From: [REDACTED]
Sent: Friday, 17 September 2021 10:31 AM
To: DIT:SPC Reps
Subject: I support the Southern Launch Whalers Way Development

Hello

Regards

[REDACTED]



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[Redacted]

From: [Redacted]
Sent: Monday, 20 September 2021 9:33 AM
To: DIT:SPC Reps
Subject: Support for Southern Launch Whalers Way Launch Facility

Hi,

I support the development of Southern Launch facility at Whalers Way near Port Lincoln.

Regards

[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

OPTUS

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This email may be confidential. If you received it accidentally, please do not send it to anyone else, delete it and let the sender know straight away.

Please think of the environment before printing this email.

[REDACTED]

From: [REDACTED]
Sent: Monday, 20 September 2021 10:47 PM
To: DIT:SPC Reps
Subject: Support for Southern Launch Whalers Way Launch Facility

Dear PlanSA,

I personally fully support the development of the space launch facilities of Southern Launch at Whalers Way.

The future of business in Space is growing rapidly, and enabling a sovereign access to space will advance Australia's space economy.

This aligns with the Commonwealth, and Australian Space Agency, roadmap and goals to add 20,000 jobs by 2030.

Having launched 10 satellites into Space that provide national critical infrastructure for Government, Defence, Enterprises and everyday Australians, we are well aware of the importance of such facilities, that may start small, but can grow to launching spacecraft to Mars and beyond!

You may contact me at the below, should you have any questions,

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]



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Please think of the environment before printing this email.

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

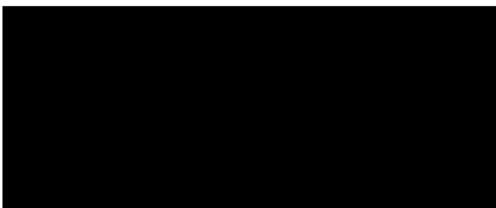
The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,



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I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,

A large black rectangular redaction box covers the signature and name of the sender.

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

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I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,





7.9.2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
ADELAIDE SA 5001

AttorneyGeneral@sa.gov.au

Dear Minister Chapman

I am writing to express my strong opposition to the proposal to establish a rocket launching facility in the Whaler's Way Sanctuary, which is under a Heritage Agreement in recognition of its environmental value and spectacular beauty.

Whaler's Way has long been an icon for the local tourism industry. It is true that the internal roads, tourist facilities, signage and rubbish collection have been long neglected by the owners of the land, but this has not affected the ecological value of the land.

The Whaler's Way Sanctuary is sited between two national parks (Lincoln and Coffin Bay), and near to SA Water land. It has spectacular coastal scenery at Cape Wiles, Cape Carnot and Theakstone's Crevasse (and other sites) and is ideally situated for day-trip tourism, as has been long established.

The Sanctuary is home to a number of threatened and endangered species, such as the Southern Emu-wren and the Western Whipbird. The proposed Site A is in the middle of an area where the Emu-wrens cling to existence, after disappearing from elsewhere on Eyre Peninsula and suffering as a result of the Kangaroo Island bushfire. The delicacy and outright cuteness of this little bird brings forth a strong desire to preserve this species. On nearby Liguanea Island, part of Lincoln National Park, a colony of Australian Sea-Lions exist. This species is the focus of a local tourist enterprise, Swim with Sea Lions. The proposed flight path of rockets is overhead, and will likely scare and deafen these iconic animals.

I am very concerned too at the proposed loss of native vegetation in the Sanctuary. There are a number of diverse habitats within the Sanctuary within which few weeds exist and Phytopthera is absent. The proposal is to clear 24 Hectares of native vegetation plus a 3 metre buffer on the sides of roads, possibly increasing to 6m on each side. The erosion potential of this level of clearing should also be of concern.

The proponent's Environmental Impact Statement includes no information about bushfire prevention or mitigation plans. The CEO of Southern Launch declared at a recent public meeting that details of the plans would be kept secret due to "security concerns"; however he mentioned the need to call upon the local Country Fire Service should the need arise. A quick google search of the nature of rocket launch failures results in concerning visuals. I try to imagine the likely outcome on

natural ecosystems, nearby farms and the national parks should something go wrong and a fire begins in the Sanctuary. I see in my mind's eye the CFS calling volunteers, getting in the appliances, driving the 30kms or so from Port Lincoln on dirt roads (likely negatively impacted by the heavy vehicle traffic associated with the launch facility) to arrive at Whalers Way, and I am frightened.

This community already carries deep scars from major bushfires.

Southern Launch proposes to launch over 36 rockets per year, straight out into the ocean, and thereby create even more rubbish in our clean seas, and overflying a Marine Park in which migratory whales return each year to breed. There will be a sonic boom following the rocket as it goes. The fuel for the rockets will be transported to site, burnt with each launch, excess disposed of on site, all of which creating risk and pollution. All for what? The payloads of these rockets will last only 2 years or so, the proponent informed the recent local meeting. Surely, with the global concern about our impacts on the environment, this proposal should have never got to the trial stage.

The local roads are not sealed, require frequent upkeep and are already prone to pot-holing. It is certainly not clear to me who will pay for the upkeep of these roads, but I suspect it will not be Southern Launch, as they say the existing road network is adequate.

The proposed launches will require the use of substantial amounts of water which will be derived, initially at least, from the local water supply. Our local sources of water from the underground basins are already severely stretched. The proposal to construct plastic-lined dams also throws up further concerns. Existing environmental flows will be interrupted, wildlife will be impacted (small animals can get through chain link fences) and even more vegetation will be cleared. Water used as deluge during launches will possibly introduce pollutants to the local environment.

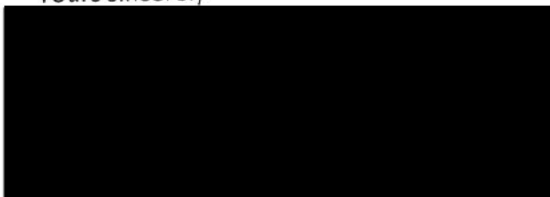
It is also of concern that this proposal is promoted as being good for local job growth, whereas I think it is likely that the jobs on offer will be highly skilled and therefore filled by very few local people. I think this local job growth and economies are much more reliant on the 'clean-green' image of our local environment and food industries, and could well be increased by a focus on environmental tourism.

I am distressed at the proposal of Southern Launch to completely dismiss the importance of the Whaler's Way Sanctuary to the plants, animals and people of the region. I consider that the Environmental Impact Statement has flaws derived from the quality of the 'experts' recruited, and the inadequate amelioration strategies proposed.

Surely we must draw the line somewhere in the inexorable trashing of natural systems for financial gain.

Please refuse approval for the Whalers Way Orbital Launch Complex.

Yours sincerely



10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

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This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

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I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,

A large black rectangular redaction box covering the signature area.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

<ul style="list-style-type: none"> • of all the places you could choose for the site for a orbital launch complex – you choose a heritage listed, conservation site. This makes no sense! • Why should our pristine coastline be restricted, with limited scope for visits ~ unless we are part of a guided tour? No thanks. • Noise – with larger rockets reaching up to 140 decibels! This will have terrible impact on the local wildlife.
--

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

10 August 2021

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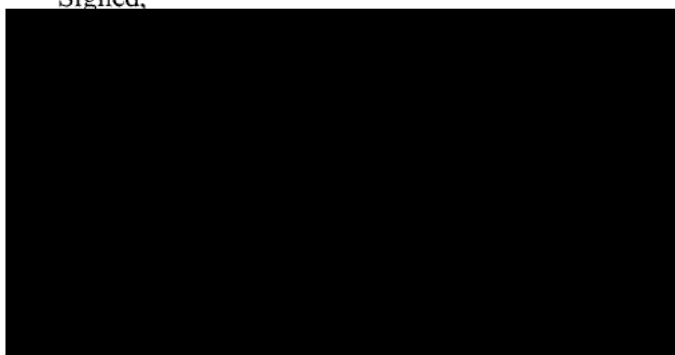
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Name:	[REDACTED]
Contact number:	[REDACTED]
Email:	[REDACTED]
Postal Address:	[REDACTED]
Affected property (if different from postal address)	[REDACTED]
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
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	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I WISH TO CONGRATULATE BOTH THE STATE AND FEDERAL GOVERNMENTS FOR RECOGNISING THE INOVATION AND POTENTIAL OF THE WHALERSWAY ORBITAL LAUNCH PROJECT. REGIONAL AREAS ARE DESPERATELY IN NEED OF COMPANIES AND NEW BUSINESSES TO CREATE NEW WORK TO KEEP PEOPLE IN THESE AREAS. WHILST I CAN UNDERSTAND THE NEED TO PROTECT OUR PRISTINE ENVIRONMENT. IT IS OBVIOUSLY CLEAR THAT EVERY POSSIBLE STEP HAS AND WILL BE TAKEN TO DO THIS. LET US MOVE QUICKLY TO ASSURE THAT THIS PROJECT CAN BE DONE WITHOUT ANY INTERFERENCE FROM THE MINOR NAYSAYERS

Submission on Application
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Applicant: SouthernLaunch.Space Pty Ltd
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The aspects of the proposal I wish to make comment on are (add pages as required):

*I thoroughly support Southern Launches choice of Whalers Way as a launch site & commend both State & Federal Govt for their support.
 Launch site is an unpopulated area with complete safety due to its very remote locale.
 The great potential of Southern Launches project will bring considerable employment & manufacturing prospects to Port Lincoln & area.
 I believe most people in Port Lincoln & district consider this project to be a massive asset & opportunity with other countries keen to partner/sale. Please continue to support this project going forward*



10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
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At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,

A large black rectangular redaction box covering the signature and name of the sender.

