Statement to the Hearings Panel of Commissioners, 14th November 2023 West Coast Penguin Trust

TTPP HEARING - GENERAL AND DISTRICT WIDE MATTERS: LIGHT

My name is Inger Perkins and I am the Manager of the West Coast Penguin Trust.

A quick recap:

Our Vision: Sea and shore birds and their habitat of the West Coast Te Tai Poutini are healthy and thriving

Our Mission is to achieve this Vision through research, education, awareness, advocacy and practical projects, founded on strong science. Penguins and other sea and shore birds are a treasure or taonga, and we strive to protect and conserve them and the wider marine and coastal environment.

Where there is a perceived risk to sea and shorebirds and their habitat, the Trust will advocate to remove that risk. I'm here as an advocate, not an expert, relying on the expertise of others including our late Chair and Scientist, Kerry-Jayne Wilson MNZM, and Dr Susan Waugh formerly of the Museum of New Zealand, Te Papa Tongarewa.

TTPP provides an opportunity to better protect the Westland petrel or tāiko. The species is listed as 'endangered' by Birdlife International and 'At Risk – Naturally Uncommon' by DOC, with a high degree of risk to survival due to breeding in just one area in the world, under the mostly coastal broadleaf forest of coastal ranges just south of Punakaiki.

The species faces numerous threats both on land and at sea.

Westland petrels, in common with other petrel species, can be distracted by lights.

Once distracted by light, these birds can land on the ground where they are unable to take off again. They may be killed by vehicles or predators or die from exhaustion.

Today, I wanted to explain a bit more about the threat posed by outdoor lighting at night and relate it to TTPP.

The normal flight path over land is from their colony to the sea and back again. Adult birds can be seen gathering off shore at dusk in large numbers before heading to their colony during the breeding season, around March to November.

During this period, they will forage predominantly over the continental shelf areas between Karamea and Bruce Bay, though also travelling via Cook Strait to the Kaikoura coast and even further afield. This species is known to forage closer to the shore than other petrels.

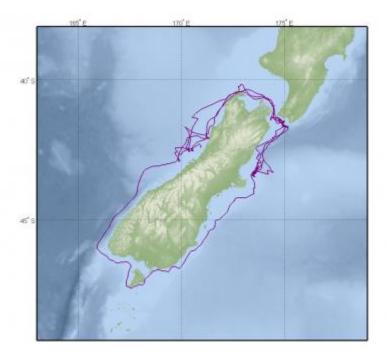


Figure shows foraging trip of one Westland petrel / tāiko during June 2012.

(From https://blog.tepapa.govt.nz/2012/09/21/westland-petrels-circumnavigate-south-island/, which includes a You Tube animation showing main foraging area beside northern half of West Coast.)

These birds have been recorded as downed having been distracted by lights from Hokitika to Westport. Fledglings leave the colony between November and January throughout the night, not the predawn departure of most adults. It is likely that fledgelings make it to sea before being disorientated by lights.

Adult tāiko are occasionally disorientated by lights, which is more likely on wet, still and/or foggy nights.

I'm explaining this to illustrate the importance of managing light to minimise risk to tāiko across the region, not only beneath the main flight path, and potentially in different ways at different times of year.

I'll turn now to the reports provided on this topic in relation to LIGHT objective 2 and policy 3.

In paragraph 40 of his expert witness statement, and in response to submission from DOC "to include a standard to require that light is directed away from any adjoining and adjacent overlay areas", Paul Wilson recommends that "All exterior lighting shall be directed towards the area within the site that is intended to be illuminated."

This method of light control is simple and effective, avoiding light spill upwards or outwards.

In the S42A 'General District Wide Matters' report, section 6.4 – 'Key Issue 3: Light Objectives', we supported the officer recommendation to amend and create sub clause (d) within **LIGHT-O2**, prompted by DOC:

(d) Protect the habitats and ecosystems of nocturnal indigenous vegetation and fauna and the species themselves.

However, we note that, in a recent Addendum to that section 42A report including this objective, the recommended wording has been altered from 'Protect', to 'Maintain'. As is pointed out in the addendum report, this will achieve consistency with Objective 1 of the National Policy Statement for Indigenous Biodiversity to maintain indigenous biodiversity and ensure no overall loss.

I refer to section 1.7 of the NPS-IB, "Maintaining indigenous biodiversity", which defines maintaining indigenous biodiversity as:

- "(a) the maintenance and at least no overall reduction of all the following:
 - (i) the size of populations of indigenous species:
 - (ii) indigenous species occupancy across their natural range:
 - (iii) the properties and function of ecosystems and habitats used or occupied by indigenous biodiversity:
 - (iv) the full range and extent of ecosystems and habitats used or occupied by indigenous biodiversity:
 - (v) connectivity between, and buffering around, ecosystems used or occupied by indigenous biodiversity:
 - (vi) the resilience and adaptability of ecosystems; and
- (b) where necessary, the restoration and enhancement of ecosystems and habitats."

Provided that the wording of LIGHT – O2 will achieve this interpretation, we accept this amendment.

Moving on to **LIGHT – P3**

Section 218 of the S42A report is as follows:

"Department of Conservation (S602.175) seek to amend LIGHT-P3 so that light is managed so that it does not adversely affect the habitats and ecosystems of all native flora and fauna. In my opinion this amendment is onerous and reaches beyond the requirements of Section 6(c) of the RMA which requires the protection of area of significant indigenous vegetation and significant habitats of indigenous fauna."

Forest & Bird and our trust want to see greater protection for the taiko from outdoor lighting at night.

Royal Forest and Bird Protection Society of New Zealand Inc. (Forest & Bird) (S560)	S560.0557 S560.0558 S560.331	Amend	It is not clear that the rules adequately provide for the significant habitats of fauna. Amend permitted activities to exclude any light sources that are in or near habitat of indigenous fauna, in particular the Westland Black Petrel. No overnight lighting in these areas should be permitted (see next submission point). These activities should require at least a discretionary consent.
West Coast Penguin Trust	FS45.44 FS45.45	Support	Include new rules, or amend existing, to ensure that areas of significant biodiversity (including ones that aren't on Schedule Four), wherever they occur, are protected by the rules. Any artificial light at night in these areas should require consent. Essential to avoid the adverse effects of light on Westland petrels / taiko. This is increasingly understood and managed for this species and must continue to improve, supported through TTPP rules.

In response to our further submissions, the author of the S42A report at s227 responds: "Forest & Bird (S560.0557, S560.0558 and S560.331) consider that the provisions do not adequately provide for significant habitats of fauna seeking amendments to exclude light sources near habitat. In my opinion this relief sought is onerous and unenforceable, potentially increasing development costs significantly having to obtain ecological assessments to determine habitats and potential light effects. I consider that LIGHT rules afford appropriate management of lighting effects."

The key issue here is the need to protect species and the unique Westland petrel - tāiko while providing for activities that require outdoor lighting.

Although breeding colonies are found in one area, these birds are affected by light over a much wider area. Objectives, policies and rules to manage light and to reduce this threat to their survival need to apply across the region.

There are a variety of ways that light can be managed to avoid light spill that could adversely affect tāiko that need not be onerous, including design techniques and light fittings or through timing of lighting.

TTPP needs to manage this clearly or enable management on a case by case basis, for example via discretionary consent for any overnight lighting in areas where tāiko are known to have been present.

DOC could provide relevant spatial data to the regional council and or recommend a lighting sensitivity zone, perhaps with a higher standard closer to colonies, say within a few kilometres, and reduced but higher standard than for the whole region in the known affected area, between Hokitika and Westport.

There's one more thing to note with regard to outdoor lighting and that relates to timing.

To reduce the risk of lights causing tāiko to be downed, the proposed curfew times need to be different. Adult petrels will be returning to land after dusk between March and November and leaving before dawn. Fledgling birds will be <u>leaving</u> the colony after dusk, and between November and January.

At paragraph 41 of his expert report, Paul Wilson recommends that artificial lighting within the Outstanding Coastal Natural Character Overlay must "be installed in a manner that precludes operation between 10pm and 7am the following day."

The light spill curfew times listed in various Rules need to be amended based on darkness at different times of year when and where tāiko could be affected. We suggest re-writing the Rules based on the following but ask that expert advice is sought from DOC to finalise them:

- To protect adult tāiko, extend morning restriction to 8am (from 7am) from May to August inclusive.
- To protect fledglings, extend evening restriction to start at 8pm (instead of 10pm) for November and 8.30pm for December and January.

This restriction will better meet the requirement of Policy 11(a) of the NZ Coastal Policy Statement to avoid adverse effects on threatened and at-risk species.

Light is a land-based threat that can be minimsed through plans such as TTPP and we ask that you keep this in mind as you finalise this chapter.

Thank you.



Photos show downed and rescued juvenile tāiko, tāiko in flight, tāiko on nest with egg.