



Department of
Conservation
Te Papa Atawhai

20-H-00161

20 July 2020

South Wairarapa District Council
C/- Debbie Donaldson
Perception Planning Limited

Debbie@perceptionplanning.co.nz

Dear Debbie

Consultation on the Wairarapa International Dark Sky Reserve draft plan change to the Wairarapa Combined District Plan

Thank you for your letter to the Minister of Conservation received by email dated 23 June seeking to consult with the Minister regarding a draft change to the Wairarapa Combined District Plan. Your letter has been referred to the Department for reply on behalf of the Minister.

The Minister and the Department are generally supportive of the proposed Wairarapa Dark Sky Reserve centred around Aorangi Forest Park in South Wairarapa. We see that implementing more stringent limits on outdoor lighting as set out in the draft plan change as complimentary to, and necessary to support the dark sky reserve accreditation being sought.

I note that the natural darkness of the night sky is a matter that may contribute to natural character of the coastal environment under Policy 13 of the New Zealand Coastal Policy Statement 2010. I consider the proposed permitted lighting standards within the proposed Dark Sky Management Area will be sufficient to provide for preservation of natural character of the coastal environment, and that there is also sufficient policy direction in the district plan currently to ensure development activities requiring resource consent have regard to protecting natural character of the coastal environment. The proposed standards will also ensure that lighting effects adjacent to public conservation lands are limited and maintain the inherent conservation values they possess.

Overall, I am supportive of the approach taken in the draft plan change, and I thank you for this opportunity to provide comments at this stage of your process.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Natasha Hayward'.

Natasha Hayward
Director Planning Permissions and Land

Department of Conservation *Te Papa Atawhai*
Hamilton Office, Private Bag 3072, Hamilton 3240

Our reference: 2020-0810

26th June 2020

South Wairarapa District Council
C/- Perception Planning
Debbie Donaldson

Email: debbie@perceptionplanning.co.nz

Dear Debbie

Initial Waka Kotahi response to a proposed district plan change providing for the introduction of a Wairarapa International Dark Sky Reserve

The New Zealand Transport Agency, Waka Kotahi, takes this opportunity to respond to your letter of 26th June 2020 in which you seek feedback on a proposed district plan change to the Wairarapa Combined District Plan that seeks to introduce provisions to secure a dark sky reserve area within the Wairarapa that will support an International Dark Sky Association (IDA) accreditation. State Highways 2 and 53 are located within the proposed Dark Sky Management Areas in proposed Appendix 13, but not within the core area of dark sky protection.

Waka Kotahi is generally supportive of the dark sky initiative and will work cooperatively with all parties to support the resource management outcomes for the proposed dark sky reserve. The matters of interest to Waka Kotahi are lighting of state highways, lighting required for road maintenance, road upgrades and emergency works; lighting for road signals; and lighting for accident/incidents/hazards. It is with these matters in mind we have reviewed the draft s32 Evaluation Report and considered how Waka Kotahi's activities are provided for in the Wairarapa Combined District Plan.

Mainly our activities fall within designations so are exempt from complying with usual District Plan rules. As rules in these circumstances do not provide a level of certainty for dark sky outcomes, Waka Kotahi has agreed to a Memorandum of Understanding (MoU) in which we can outline how state highway lighting, whilst meeting requirements of AS/NZS 1158 light design standards, can be changed to achieve as far as practical the limits of light output and sky glow as proposed in the plan change document. This will mean changing existing light infrastructure and equipment within the state highways to ensure the colour temperature does not exceed 3000K. Lumens outputs are significantly about 500-lumens and may exceed this limit however this cannot be changed under light design standards; and all road lighting is required to be tilted down (0°) with upward waste light levels less than 1% so no change to shielding or tilting would be required to achieve the sky glow outcomes sought. In order to effect light equipment change and improve colour temperature, our Systems Management team will need to secure funding through the National Land Transport Plan and program light replacement maintenance works for sections on both State Highway 2 and State Highway 53. Parameters around these activities can be signalled in the MoU.

Occasionally District Plan provisions apply to road infrastructure activities when maintenance, upgrade or emergency works step outside the state highway designated area. For these circumstances we have reviewed, with your assistance, existing District Plan provisions that apply and have reviewed the proposed plan change rules that would apply.

We understand that the proposed provisions for **Outdoor Artificial Light**, revised section 21.1.11, would not apply to roads including state highways however there is no proposed definition for 'outdoor artificial light' so we seek clarification on our interpretation.

When maintenance, upgrade or emergency works occur on or beside a state highway, it is our understanding these activities would fall within the ambit of a **temporary activity** as defined by chapter 27 of the District Plan:

“Temporary Activity – means an activity in any zone that is of a non-repetitive, transient nature and includes entertainment, cultural and sporting events.”

Section 21.1.16 of the District Plan provides rules for temporary activities. There are no proposed changes to the temporary activity rules of the District Plan to support dark sky outcomes. Existing provisions that may apply to maintenance, upgrade or emergency works for state highways are in rule 21.1.16(e) temporary storage of goods or materials limited to 6 months duration; 21.1.16(g) temporary signs restrictions and exemptions; 21.1.16(a) relating to temporary building and construction activities limiting works to 12 months in duration. Hence any lighting outside of a designation associated with temporary road maintenance/construction/upgrade/emergency works activities could be expected to occur for up to 12 months without a resource consent if the activity stepped outside the state highway designation.

In terms of lighting that would be used in these temporary circumstances, we can advise it would not meet the lumens or temperature output limits provided for in the proposed plan change under proposed rule 21.1.11 for Outdoor Artificial Light. Of reasonable importance however is there are no state highways within the core of the dark sky reserve area, thus we understand that Waka Kotahi's activities would not challenge the International Dark Sky Association Guidelines for Dark Sky Reserves.

Irrespective of this we believe it is best to include, within the MoU documentation, the potential temporary lighting situations that could not meet lumen output or colour temperature limits, so it is clear to all parties. I summarise this below for your benefit:

1. Traffic signals (permanent and temporary) - it is very likely that traffic signal aspects will exceed the 500-lumen limit. As these are required devices for safe operation of the network an appropriate exemption will be required in the MOU. It is anticipated that District Plan provisions will not apply to traffic signals.
2. Rotating beacons such as are used by emergency services (police, fire ambulance), and utility and road worker crews - generally between 1200 to 7200 lumens so will exceed the 500-lumen limit. As the safe operation of road maintenance work and emergency vehicles is critical to the network and community, these devices will need to be exempted in the MOU.
3. The strobe lights on the rear panel of TTM trucks – these are between 24,000 and 100,000 Lumens (very bright flash) so will require an exemption in the MOU. It is anticipated that District Plan provisions will not apply to such use of strobe lights which always occur on a temporary basis.
4. Worksite light - required for safe night-time maintenance or construction activity. The lighting used will exceed the 500-lumen limit and may also use light sources cooler than the 3000K warm white Dark Skies preference. Therefore, such activities will require an exemption in the MOU.

It is anticipated that the District Plan provisions will not apply to any of the above examples because they relate to temporary activities for road works or will be located within an existing designation.

Please keep us notified of the plan change process, any changes to the proposed District Plan provisions and any clarifications on the above you are able to make.

Waka Kotahi may make a submission to the plan change generally based on the above considerations.

Yours sincerely



Kathryn St Amand / Principal Planner (Consultant)

Consents and Approvals, Transport Services

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CC: **Mark Owen** / Manager, System Management Wellington

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