

Reducing street lighting in Matarangi

TO Mercury Bay Community Board
FROM Sam Edlin - Roding Engineer
DATE 13 March 2015
SUBJECT Reducing Street Lighting in Matarangi

1 Purpose of Report

For the Mercury Bay Community Board to decide how they want to proceed regarding reducing the amount of street lighting in Matarangi.

2 Background

Street lighting in Matarangi has been installed as part of new subdivisions by developers. In the past these subdivisions have been lit to a high standard with street lighting being installed as per New Zealand standards for urban developments.

There are 235 street lights currently in Matarangi.

The Mercury Bay Community Board has requested that Council staff review the number of street lights and to determine the costs involved in reducing the amount of street lighting and also the cost benefits in energy savings from the reduction in street lighting.

3 Issue

There have been a number of complaints from the Matarangi and Whangapoua communities regarding the amount of street lighting in Matarangi, as well as the effect of this on the night sky and energy usage of these lights particularly in the off peak season when there are few property owners in Matarangi compared with the peak season.

4 Discussion

Council staff have investigated the options with the help of the Matarangi Fire service, the Mercury Bay Community Board Chairperson and James Scott of the Matarangi Ratepayers Association, who identified the street lights that could be turned off or removed (essentially every second street light unless there was a need for additional lighting in some areas). It should be noted that consultation on the removal of street lights has been limited to the above.

A total of 83 street lights were identified and selected as being able to be turned off or removed to reduce the amount of street lighting in Matarangi.

Options

The estimated energy savings by turning off or removing 83 street lights (over a year) amount to \$10,116.

The table below details the options and the advantages/disadvantages of each:

	Cost	Pay-back Period	Advantages	Disadvantages
Option 1 turn off selected street lights over off peak season only	\$10,458 per year	Nil savings	<ul style="list-style-type: none"> Lights can be turned back on if required. 	<ul style="list-style-type: none"> Cost of turning lights on and off each year exceeds the energy savings gained Complaints may be received from public regarding streetlights not going (unaware that they have been turned off intentionally) Highest long term cost.
Option 2 turn off selected street lights permanently but leave streetlights in place	\$5,229	0.5 years	<ul style="list-style-type: none"> Lowest initial cost 	<ul style="list-style-type: none"> Complaints may be received from public regarding streetlights not going (unaware that they have been turned off intentionally). Poles will still need to be maintained or removed as they reach the end of their life so that they don't pose a safety issue to the public. Total cost of removing all of the poles as they reach the end of their lives will be greater than Option 3.

	Amount	Pay-back Period	Advantages	Disadvantages
Option 3 permanently remove selected street lights	\$35,000	3.5 years	<ul style="list-style-type: none"> • Permanent solution. • 12 poles to be removed are in good condition and can be used in Matarangi to replace old poles at locations that will remain. • Cost of this is \$10,000 and is additional to the cost of removing the lights. • Poles removed that can't be reused will be scrapped. 	<ul style="list-style-type: none"> • Highest initial cost • Risk of public requesting lights to be reinstated in removed locations in the future.

Staff Recommendation

Staff recommendation is that if the Mercury Bay Community Board wish to proceed with removal of the 83 street lights, that Option 3 is the best option to achieve this.

Funding

The table below details how the recommended option could be funded:

	Approx. Cost	Funding Source	Budget Available
Removal of 83 streetlights and disposal of 4 concrete poles and the remaining 67 steel streetlights to scrap.	\$35,000	2015/16 Mercury Bay Streetlight improvement budget with additional budget requested by the Community Board through a submission to the Draft 2015-25 Long Term Plan.	2015/16 Street light improvement budget = \$25,000 + \$10,000 additional funding requested through Draft LTP = \$35,000
Reuse of 12 standard oclyte poles which are in good condition to replace existing lights that are at the end of their lives.	\$10,000	Proposed 2015/16 Mercury Bay streetlight renewal budget	\$45,200

Street light energy is funded by the district therefore any savings in energy gained by removing street lights will be realised by the district and not solely in Mercury Bay.

Due to the timing of this report being after the close for submissions to the 2015-25 Long Term Plan (LTP), a submission from the Mercury Bay Community Board has been lodged to the LTP. The Council staff comment on the submission will reflect the outcome of this report.

5 Suggested Resolution(s)

That the Mercury Bay Community Board:

1. Receives the report.
2. Decides on how they wish to proceed in regards to reducing street lighting in Matarangi.
3. Approves staff recommendation that the specific ward requirements in the code of practice for subdivisions and land development for street lighting are reviewed.

References-Tabled/Agenda Attachments

Attachment A *Map showing streetlights proposed to be turned off or removed.*

Attachment A

[Attachment A - Map showing streetlights proposed to be turned off or r...](#)