



Islands Trust



ISLANDS TRUST FUND

# Memorandum

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Date: January 28, 2015  
To: Gambier Island Local Trust Committee  
From: Kate Emmings, Ecosystem Protection Specialist, Islands Trust Fund  
Re: Islands Trust/Islands Trust Fund Eelgrass Mapping

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## Eelgrass Mapping in the Gambier Island Local Trust Area

Eelgrass Mapping for the islands off of the Sunshine Coast (e.g. the Thormanbies) was completed in December, 2014 by SeaChange Marine Conservation Society under contract with the Islands Trust (see attached report). These islands complete the mapping for the Gambier Island Local Trust Area which began in 2012. Findings for the islands off of the Sunshine Coast found that:

- Eelgrass comprises 19.6% of the combined linear shorelines of the Thormanby Islands
- There are significant amounts of eelgrass around North Thormanby Island primarily because of sandy sediments around the island
- No eelgrass habitat was noted off of Surrey Island, Bertha Island, or Merry Island
- Small amounts of eelgrass were found around the Trail Islands, Turnagain Island, Echo Island and Tiki Island

## About Eelgrass

Eelgrass is a critical nearshore habitat for birds, mammals, invertebrates and commercial and non commercial fish. Eelgrass beds are also an important carbon sink. Contaminants, shading from docks and overwater structures, increased sedimentation, marine traffic and development pressures from shoreline land use threaten eelgrass ecosystems and the species they support.

## Report Recommendations

The 2012-2014 Nearshore Eelgrass Inventory Report contains several recommendations. Some of the relevant recommendations for local trust committees are:

- Create setbacks from the shoreline in regulatory bylaws.
- Prevent construction of docks in eelgrass beds. Where dock construction cannot be avoided, ensure that docks are built to allow light to pass through to eelgrass beds below and that they are constructed from materials that have a minimum impact on water quality.
- Require removal of illegal shoreline modifications and habitat restoration where appropriate.
- Support education of the boating community and shoreline landowners regarding the importance of eelgrass beds and natural shorelines.

- Encourage the boating community not to locate mooring buoys in eelgrass beds and not to anchor in eelgrass beds. Where mooring buoys are located in eelgrass beds, encourage the use of line floats to keep chains and lines off of the sea floor where they can drag and scour the bottom, removing eelgrass habitat and killing species.
- Encourage dock owners to replace dock materials with light penetrable materials.

### Next Steps

The Islands Trust Fund has placed the eelgrass mapping and the associated report on its website at <http://www.islandstrustfund.bc.ca/initiatives/marineconservation/eelgrass-mapping.aspx> and has added eelgrass mapping to the MapIT public mapping site at <http://www.islandstrust.bc.ca/maps/mapit.aspx> (Shorelines Application). Local trust committees are encouraged to provide links to the mapping on their websites and consider actions within their local trust areas to include eelgrass protection in their official community plans and regulatory bylaws as per the Islands Trust Policy Statement, section 3.4.4 (see background below). Local trust committees may wish to direct staff to highlight maps and recommendations specific to their local trust area on their own webpage.

Attachment     Report: 2012-2014 Nearshore Eelgrass Inventory  
 Map 3c: Eelgrass Presence Gambier Local Trust Area Associated Islands Sunshine Coast Area

### Background

The Islands Trust Policy Statement, section 3.4.4, states:

*Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas.*

The 2013 Audit of Biodiversity in B.C. (Office of the Auditor General of B.C., [www.bcauditor.com/pubs/2013/report10/audit-biodiversity-bc-assessing-effectiveness-key-tools](http://www.bcauditor.com/pubs/2013/report10/audit-biodiversity-bc-assessing-effectiveness-key-tools)) highlighted the importance of collecting sufficient and reliable information on species distribution in order to make well-informed decisions about conserving biodiversity. With sensitive ecosystem mapping completed in the Islands Trust Area (2008-2010), the Bowen Island Municipality (BIM) and local trust committees have access to ecosystem data for terrestrial species. The Islands Trust and Islands Trust Fund are now working to acquire mapping of sensitive coastal areas to help island governments meet the requirements of the Islands Trust Policy Statement.

In 2012, the Islands Trust and Islands Trust Fund launched a project to map eelgrass as a partnership with the Seagrass Conservation Working Group and SeaChange Marine Conservation Society. The arrangement between the partners resulted in shared funding of the program between the Islands Trust, the Islands Trust Fund and the Seagrass Conservation Working Group (through grants acquired by its member group, SeaChange Marine Conservation Society).

Eelgrass mapping is intended to assist BIM, local trust committees and the Trust Fund Board in making science-based decisions about land use and conservation to preserve coastal ecosystems in the Islands Trust Area. Eelgrass mapping will serve as a baseline inventory to monitor the effects of conservation activities, such as Marine Protected Areas, as well as human impacts, such as potential increased tanker traffic, marine industrial activities (e.g. log dumping and booms) and foreshore use (e.g. wharves and docks). It will also enable marine conservation groups to identify areas ideal for eelgrass restoration.

Mapping Partnership:

Mapping was completed by SeaChange Marine Conservation Society through a partnership with the Seagrass Conservation Working Group and the Islands Trust Fund. The Mayne Island Conservation Society provided eelgrass mapping for Mayne Island free of charge. The total project budget was \$155,610 (over three years)

and the Islands Trust, primarily through Trust Fund Board budgets, contributed 54% of the total amount. The Gambier Island Local Trust Committee contributed \$2,000 towards the project in the 2013/2014 fiscal year.

Mapping is now complete for the entire Islands Trust Area. Islands were mapped over three years as follows:

2012:

- Gambier Island
- Lasqueti Island
- Mayne Island Local Trust Area (information courtesy of Mayne Island Conservation Society)
- North Pender Island
- South Pender Island
- Thetis Island Local Trust Area (excluding Valdes)

2013:

- Ballenas-Winchelsea (Executive Islands) Local Trust Area
- Bowen Municipality
- Denman Island Local Trust Area
- Gabriola Island Local Trust Area
- Galiano Island Local Trust Area
- Hornby Island Local Trust Area
- Gambier Associated Islands except those off of the Sunshine Coast (e.g. the Thormanbies)
- Valdes Island
- Cufra Inlet (Thetis Island)

2014:

- North Pender Associated Islands
- Islands off the Sunshine Coast (e.g. the Thormanby Islands)
- Lasqueti Associated Islands
- Saturna Island Local Trust Area
- Salt Spring Island Local Trust Area

#### Resources for local trust committees

The following are some resources for local trust committees. Please see references in the attached report for a more complete list.

Hutton, K. E. and S. C. Samis. 2000. Guidelines to protect fish and fish habitat from treated wood used in aquatic environments in the Pacific Region. Can. Tech. Rep. Fish. Aquat. Sci. 2314: vi + 34 p. Available at <http://www.dfo-mpo.gc.ca/Library/245973.pdf> .

Fisheries and Oceans Canada. Projects Near Water. Available at <http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html> .

Province of BC. 2011 (amended August 2013). Land Use Operational Policy: Private Moorage. Available at [http://www.for.gov.bc.ca/Land\\_Tenures/documents/policies/private\\_moorage.pdf](http://www.for.gov.bc.ca/Land_Tenures/documents/policies/private_moorage.pdf) .

EnviroVision, Herrera Environmental, and Aquatic Habitat Guidelines Program. October 2007 (revised June 2010). Protecting Nearshore Habitats and Functions in Puget Sound. Available at <http://wdfw.wa.gov/publications/00047/>.