



Marine Plan Partnership (MaPP) Initiative Contract Announcement:

ASSESSMENT OF WASTE DISCHARGE IN HAIDA GWAI

The Marine Plan Partnership seeks to contract a consultant to assess the volume and treatment of major waste discharges in Haida Gwaii, its impacts on the marine environment, and options for addressing any issues.

Overview

The Marine Plan Partnership for the North Pacific Coast (MaPP) is a collaborative process for implementing marine plans completed in 2015 for the coastal and marine areas of four sub-regions of B.C. MaPP is a partnership between the Province of British Columbia, the Coastal First Nations-Great Bear Initiative, the North Coast-Skeena First Nations Stewardship Society, Central Coast Indigenous Resource Alliance, Council of Haida Nation and the Nanwakolas Council (the MaPP Partners). The partnership includes 18 member First Nations.

The four MaPP sub-regional marine plans will be implemented at the sub-regional level, and, where appropriate through regional initiatives as identified in a Regional Action Framework.

Tides Canada is supporting the MaPP partners by, among other activities, holding and disbursing funds. Tides Canada has set up a project called the MaPP Implementation.

One of the objectives in the Haida Gwaii Marine Plan that the Council of the Haida Nation and the Province of British Columbia have committed to implement is to minimize pollution from human activities and infrastructure, with sewage being one of the key contaminants of concern. Two of the strategies in the Haida Gwaii Marine Plan to achieve this objective are:

- Work with relevant agencies and local governments as necessary to identify, assess and monitor potential marine pollution from sewage, and upland and ocean sources. (Table 6.6, Obj 1.1, Strat. 1.1A)
- Review existing provincial and federal policies for the assessment of development projects and prevention of pollution, including waste disposal, and work with relevant agencies to implement best practices. (Table 6.6, Obj. 1.1, Strat. 1.1C)

The MaPP partners have committed to work with relevant agencies and local governments as necessary to identify, assess, and monitor potential marine pollution from sewage and other waste discharges.

Sewage discharge into local waters around Haida Gwaii occurs from septic fields, municipal outfalls, fishing/tourism lodges and logging camps (both floating and land-based), and small vessels. Fishing lodges, fish processing plants, and aquaculture operations also discharge offal waste and other organic pollutants. Sewage discharges have resulted in sanitary shellfish closures and can affect future economic opportunities, such as shellfish aquaculture. The Marine Water Quality Monitoring program of Environment and Climate Change Canada tests the level of fecal contamination twice a year at approximately 50 sites around Haida Gwaii. The results of this testing are used to determine sanitary closures for shellfish harvest.

The current sewage treatment in Haida Gwaii varies between communities:

- The communities of Greater Massett (Old Massett, New Masset, New Town) share a single sewage treatment plant located in Old Masset that includes three ponds, aeration, and UV treatment.
- The Village of Port Clements has its own sewage treatment plant, which consists of a single pond.
- Skidegate utilizes a secondary waste water lagoon that is run by the Skidegate Band Council.
- The Village of Queen Charlotte currently discharges raw sewage, but is assessing the possibility of sharing sewage treatment with Skidegate.
- The eastern portion of the community of Sandspit is connected to the sewage treatment plant for the Sandspit Airport. The remainder of Sandspit does not have a centralized septic system, and each house has its own septic tank that is regularly pumped out.
- The communities of Tlell and Tow Hill Road do not have centralized septic systems. Each house has its own septic system, many of which are septic tanks that are regularly pumped out.
- Sewage from septic tanks that are pumped out is transported to the nearest regional district disposal site. There are three disposal sites in Haida Gwaii: the Islands Solid Waste Landfill (between Port Clements and Masset); the Skidegate Transfer Station (by Miller Creek); and the Sandspit Transfer Station.

Several different reports have been completed by various agencies to assess the feasibility of different sewage treatment options for communities on Haida Gwaii. This includes assessments for sewage treatment at Sandspit, Skidegate/Queen Charlotte, and Port Clements. There have also been reports on marine pollution and contaminant sources in the region written for MaPP and PNCIMA (Pacific North Coast Integrated Management Area).

MaPP requires a contractor to review existing reports and data and gather additional data as necessary to assess waste discharges in Haida Gwaii, particularly the volume and treatment of sewage discharge and other waste discharges in Haida Gwaii, its impacts on the marine environment, and options for addressing any issues.

Scope of Work

A) Contact the agencies that are responsible for managing waste disposal in Haida Gwaii to: 1) determine the volume of sewage (untreated and treated, with level of treatment indicated), 2) identify any documented environmental issues specific to Haida Gwaii, and 3) identify any previous studies that have been conducted relevant to the scope of work for this contract. These agencies and municipal organizations will include:

- BC Ministry of Environment and other provincial or federal agencies as appropriate
- Public works departments for the villages of Masset, Port Clements, and Queen Charlotte
- The Old Masset Village Council and Skidegate Band Council
- Skeena-Queen Charlotte Regional District
- Northern Health

B) Identify other significant sources of sewage and offal discharge into the marine environment of Haida Gwaii, and assess volume of sewage and offal discharge. This will include:

- BC Ferries
- Local Harbour Authorities

- Fishing lodges, tourism lodges, logging camps, and other land-based and float camps that discharge organic pollutants into the marine environment.
 - Fish processing plants and shellfish aquaculture operations that discharge offal and other organic pollutants into the marine environment.
- C) Review existing documents relevant to sewage and offal discharge in Haida Gwaii, including:
- Previous assessments of sewage treatment options for communities in Haida Gwaii.
 - Reports on marine pollution and contaminant sources in the region written for MaPP and PNCIMA.
 - Projections for population growth/decline in the communities of Haida Gwaii to assess future needs for sewage treatment (e.g. 50 years).
- D) Review current regulations regarding point source pollution that are relevant to sewage and offal discharge to the marine environment in Haida Gwaii, and assess the current monitoring and enforcement for these regulations.
- E) Review the monitoring data (number of sites tested, results) for fecal contamination in Haida Gwaii collected by the Marine Water Quality Monitoring program of Environment and Climate Change Canada over the last 10 years. Spatially identify existing sanitary closures for shellfish harvest.
- F) Identify potential impacts of the existing sewage and offal discharge in Haida Gwaii to people (health and safety, altering cultural practices, and impacting economic opportunities) and the marine environment.
- G) Based on your assessment of the volume of sewage and offal waste discharged into Haida Gwaii waters (current and future volume), policies and regulations, relevant studies and reports, potential impacts to people and the environment, and monitoring data, make practical recommendations to address gaps in:
- Sewage treatment
 - Offal disposal
 - Fecal contaminant monitoring

Deliverables

A report on sewage and offal discharge in Haida Gwaii that clearly describes the following attributes, including maps where appropriate:

- The major sources of waste discharge in Haida Gwaii
- The volume of waste discharge from each source
- The treatment of waste discharge from each source
- The existing monitoring for fecal contamination in the marine environment
- Existing sanitary closures for shellfish harvest
- The results of previous assessments of options for sewage treatment, offal or other waste discharge for communities in Haida Gwaii

An analysis of sewage and offal discharge in Haida Gwaii that will:

- Provide projections of sewage/offal treatment and discharge in Haida Gwaii for the future.
- Identify potential impacts of the existing and potential future sewage and offal discharge in Haida Gwaii, both to the marine environment and to potential user groups.

- Identify any existing or potential future issues for sewage/offal treatment and discharge in Haida Gwaii that should be addressed to improve ocean health.
- Explain current regulations regarding marine pollution and compliance that are relevant to sewage and offal discharge in Haida Gwaii.
- Suggest viable options for addressing existing or potential future issues with sewage/offal treatment and discharge in Haida Gwaii.
- Make recommendations for monitoring fecal contamination in the marine environment in Haida Gwaii to address any gaps in the existing monitoring program.

Contract Timeline and Milestones

Proposals due: April 24, 2017

Project start: May 1, 2017

Project completion: July 31, 2017

Contract Remuneration

- Up to a contract maximum of \$25,000 plus GST. If a site visit is necessary and would result in costs exceeding the maximum provide a rationale and cost quote.

Qualifications, Experience, and Skills

This opportunity is open to consulting firms or individuals who demonstrate:

- Experience with and an understanding of waste discharge regulation, monitoring and treatment.
- An understanding of the effects of sewage and fish processing offal in the marine environment and its impacts on water quality and resource use.
- A familiarity with the infrastructure, organizations, businesses and agencies involved in waste disposal and/or water quality monitoring in Haida Gwaii.
- Excellent communication skills.
- Strong research and analytical skills.
- Experience conducting interviews.
- Mapping skills.
- Excellent project and time management skills.
- Experience working with First Nations considered an asset.

To Apply

Please submit by April 24, 2017 a project proposal that outlines the proposed project approach, name of consultants, qualifications, and fees and expense projections. Please submit a writing sample. Extensions to the submission timeline may be granted if there are insufficient applications.

Send proposals to:

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