



Marine Plan Partnership (MaPP) Initiative

Contract Announcement:

Pump-out System: Needs Analysis and Feasibility Study

The MaPP initiative seeks to contract a consultant or consultants to develop a needs analysis and feasibility study for a sewage pump-out system for small vessels (including pleasure craft, workboats and vessels that carry 12 or less passengers) and motherships on the Central Coast.

Background

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 Haida Gwaii, North Coast, Central Coast, and North Vancouver Island. MaPP is a partnership between the Province of British Columbia (B.C.) represented by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), the Coastal First Nations-Great Bear Initiative, the North Coast-Skeena First Nations Stewardship Society, the Central Coast Indigenous Resource Alliance, Council of Haida Nation and the Nanwakolas Council (the MaPP Partners). 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 Support Project.

The Central Coast Marine Plan outlines a vision, objectives and strategies for the stewardship and management of the Central Coast coastal and marine areas, and provides guidance and recommendations for First Nations and Provincial agencies in their evaluation of coastal and marine based activities and uses.

The Province of B.C. and the Heiltsuk, Kitasoo/Xai'Xais, Nuxalk and Wuikinuxv Nations ("the Central Coast MaPP partners") are working to implement the recommendations in the Central Coast Marine Plan, with input from Nation membership, stakeholders, local governments, and the broader public.

Overview

The Central Coast Plan Area (<http://mappocean.org/central-coast/>) extends from Laredo Channel and the northern tip of Aristazabal Island in the north to the southern limit of Rivers Inlet and Calvert Island. Bella Coola, Bella Bella, Ocean Falls, Wuikinuxv, Shearwater and Klemtu are the largest communities in the Plan Area, which supports an overall population of approximately 3,500.

Enhancing stewardship of ecological and cultural values by providing a vessel pump-out station is a key focus for the Central Coast MaPP partners. For the purposes of this contract, the pump-out station requires both:

- 1) Needs Analysis:** determine the current and potential future volume of sewage waste from small vessels (including pleasure craft, workboats and vessels that carry 12 or less passengers) and motherships in the Central Coast that a pump out system should be designed to accept.
- 2) Feasibility Assessment:** determine options for vessel pump out systems, including fixed point collection systems with transfer/connection to local treatment plants or portable/mobile collection systems with transfer to treatment plants, at three potential locations recommended by the MaPP Partners.

The consultant(s) will be expected to identify personnel, budget and equipment required to install, maintain and operate the pump-out system.

This work will help advance implementation of the following strategies from the Central Coast Marine Plan:

- **Pollution 1.1:** Work with relevant Crown agencies and First Nations to contribute to the ongoing review, assessment and, where applicable, amendment and implementation of marine pollution policies and laws, focusing on international best management practices.
- **Pollution 1.2:** Identify anchorages sensitive to pollution and develop policies and public awareness strategies to prevent impacts from human waste.
- **Pollution 1.3:** Promote the establishment of waste disposal infrastructure, including vessel haulout facilities and pump outs, throughout the Plan Area.

Contract Summary

Scope of Work

Work with the Central Coast MaPP partners to develop a needs analysis and feasibility study for a pump-out system for small vessels (including pleasure craft, workboats and vessels that carry 12 or less passengers) and motherships on the Central Coast.

The consultant(s) will be expected to:

- Review materials provided by MaPP – see the list below.
- Meet by phone with Contract Managers to confirm understanding of goals and objectives for the project, and review and agree upon deliverables and timelines for the project.
- Prepare questions and interview guides to conduct a maximum of 10 interviews with identified First Nation staff and key stakeholders to help: 1) determine the current and predicted volume of sewage from small vessels (including pleasure craft, workboats and vessels that carry 12 or less passengers) and motherships 2) identify any previous studies that have been conducted relevant to the scope of work for this contract, and 3) discuss environmental and cultural information that should be considered when identifying potential solutions. Travel to the Central Coast will not be required and is not included in the scope of this contract.
- Using relevant information from previous studies, data provided by the MaPP Partners, and information from interviews, determine current and predicted future vessel pump-out needs on the Central Coast, based on factors such as vessel type, characteristics, number, seasonality, and route travelled.
- Previous studies that have been conducted relevant to the scope of work for this contract may include studies from the:
 - Public Works department for the community of Bella Bella
 - Heiltsuk Tribal Council
 - Central Coast Regional District, and
 - Indigenous Services Canada
- Map existing pump-out locations on the Central Coast and describe their capacity to pump, store and/or transport sewage to treatment facilities as well as factors such as hours / seasons of operation, user fees, and frequency of use.
- Guided by environmental and cultural information provided by the MaPP Partners and interviewees, describe and evaluate pump-out systems that could meet current and predicted future sewage disposal

needs at three potential locations suggested by the MaPP Partners. Both fixed point collection systems with transfer/connection to local treatment plants or portable/mobile collection systems with transfer to treatment plants should be considered.

- Outline any capacity or infrastructure limitations or other issues that may arise if the pump-out system were to link into an existing treatment facility.
- Based on the analysis of current and predicted future sewage disposal needs, environmental and cultural information provided by the MaPP Partners, relevant studies and reports, and current laws and regulations, make practical recommendations on:
 - Where to locate the fixed point or portable/mobile collection pump-out systems
 - Approximate installation and operating costs for each pump-out system
 - Technical and logistical considerations for each location and pump-out system, including human resource needs and vessel accessibility to the site.
- Be available for regular check-in calls with Contract Managers to discuss progress and resolve any issues.

Deliverables

- A draft table of contents for the needs analysis and feasibility study
- Summaries of interviews with identified First Nation staff and key stakeholders.
- Draft methodology for analysis of current and predicted small vessel (including pleasure craft, workboats and vessels that carry 12 or less passengers) and mothership pump-out needs on the Central Coast.
- A description of current and predicted small vessel (including pleasure craft, workboats and vessels that carry 12 or less passengers) and mothership pump-out needs on the Central Coast.
- Maps and descriptions of existing pump-out systems located on the Central Coast.
- A description of potential locations and the type of systems that could be installed at each location, including rationale for selection. Both fixed point collection systems with transfer/connection to local treatment plants or portable/mobile collection systems with transfer to treatment plants should be considered.
- A description of costs, personnel and equipment required to install, maintain and operate the pump-out system at each of the potential locations.
- A description of technical and logistical considerations for each location and system, including human resource needs and vessel accessibility to the site.
- A summary of capacity or infrastructure limitations or other issues that may arise if the pump-out system were to link into an existing facility.
- A draft report that incorporates the content listed above and provides a recommendation on where to locate the pump out system and the type of system to use.
- A final report which reflects feedback from the Central Coast MaPP partners.

Timeline and Milestones – (subject to change):

- Week of January 13th – Issuance of Contract and kick off meeting.
- Week of March 9th – Final report due

- Ongoing – Monthly check-in and report with Central Coast Implementation Technical Team to review progress against deliverables

Contract Remuneration:

- Up to a maximum of \$20,000 plus GST inclusive of all expenses.

MaPP will provide the consultant with:

- A summary of applicable laws, regulations and best practices that apply to sewage disposal on the Central Coast
- Nation information and Automatic Identification System (AIS) data on the number and type of vessels in the Central Coast
- Contact information for identified staff from First Nations and key stakeholders
- Letters of support or introduction for contacts

Qualifications, Experience and Skills:

- Consultant or consulting team with demonstrated expertise in designing and/or installing vessel pump-out facilities
- Demonstrated understanding of Canadian sewage discharge regulations, best practices and treatment options.
- Evidence of familiarity with the infrastructure, organizations, businesses and agencies involved in sewage treatment/ discharge on the BC coast.
- Experience working with First Nations
- Experience working with multiple orders of government

To Apply:

Please submit the following by no later than **5 pm on Monday January 6th**:

- A proposal that outlines a detailed approach to developing the needs analysis and feasibility study, including the spatial scale of the assessment and time allotted to prepare for and conduct interviews
- Identification of additional relevant tasks (if any) and rationale for inclusion
- A project budget that includes a cost breakdown for tasks and rates for consulting team
- A brief overview of relevant experience and qualifications along with CV's for consultant or consulting team

Send proposals to:

Central Coast Pump-out Station: Needs Analysis and Feasibility Study

c/o Kelly Wozniak with cc to Fiona Kilburn

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