North Coast Cumulative Effects Program Data Science Lead

The North Coast-Skeena First Nations Stewardship Society (NCSFNSS) is a non-profit society that enables First Nations communities on the British Columbia North Coast and lower Skeena River to collaborate on projects of shared value. The current focus addresses marine and coastal environmental issues and processes as they relate to fisheries and cumulative effects.

A key implementation priority in the North Coast is the collaborative development and implementation of the MaPP Cumulative Effects Framework (MaPP CEF, 2019), with the aim to collaboratively mitigate and manage the cumulative effects of industrial and non-industrial development on core coastal and marine values. During the initial phases of developing a CE monitoring program for the North Coast, over 120 values were identified. A smaller list of 33 foundational values was produced through multiple phases of engagement to move forward with for CE monitoring, assessment, and management.

The four initial values selected for the first phase were: Aquatic Habitat- Estuaries; First Nations Access to Resources; Food Security; and Pacific Salmon. On the North Coast of BC, the Skeena River estuarine habitat supports significant biological, social, cultural, and economic benefits for coastal communities. However, the condition of estuarine habitat and the benefits delivered by the Skeena estuary have the potential to be impacted by past, present and future human activities and natural processes that have occurred on the North Coast.

Taking direction from the Program Director of Cumulative Effects Strategic Initiatives, the Data Science Lead will support the North Coast Cumulative Effects Project Team (NC CE Project Team) to advance cumulative effects monitoring, assessment and management priorities. This will be completed through close collaboration between the participating North Coast Nations, the Province of British Columbia, and the Federal government, in support of initiatives such as the North Coast Marine Planning Partnership (MaPP) & Environmental Stewardship Initiative (ESI). Additional background and context can be further provided upon request.

This position offers an excellent opportunity for a candidate with knowledge and interest in monitoring and assessment to address complex resource management issues and advance their career in ecology/resource management.

This is a 1-year contract position with the possibility of extension subject to funding availability.

Responsibilities
The Data Science Lead is expected to manage, support and translate hard data and information into the soft science reports and deliverables as part of the NC CE Project Team.

Anticipated responsibilities include:
Core responsibilities:
- Provide oversight into the overall data collection and management needs of the NC CE Program including scoping, development and alignment of field plans;
- Be responsible and accountable for understanding resultant datasets and perform QA/QC checks as needed;
- Coordinate data collection to ensure that the data collected are effectively supporting value specific work, including the completion of current condition assessments, and make linkages to ways that

data can be used across all the values and with other initiatives (e.g. DFO data loggers, eDNA, Hakai and MaPP region on the Regional Kelp Monitoring Program for kelp data acquisition and analysis needs for the North Coast);

- Support and/or lead the development of reporting and communication materials to effectively report data analysis results;
- Provide oversight to support implementation of field program in alignment with value assessment and management needs including:
    - Work with key experts to refine, confirm, and consolidate, field program and assessment protocols
    - Work closely with the Field Coordinator and Value leads to develop field monitoring plans
    - Work closely with the Field Coordinator and Value leads to identify training needs and secure training contract(s/ors), as needed
    - Delegate and follows up on QA/QC tasks to be implemented within the NC DMS by the Field Coordinator and Data Management Coordinator
    - Work with the Field Coordinator to review post-field season implementation feedback and liaise with associated contractors to revise and/or update field forms and protocols as required
- Oversee post field season data processing, (i.e. Eelgrass and Kelp UAV and Towed Video data processing) including working with the PT to develop the SOW in alignment with the value assessment/management needs, and identifying and securing contractors or support staff;
- Provide oversight of the North Coast Data Management System, supported by the existing Data Management Contractor, to revise and update the portal as required;
- Scope and develop contracts for analysis and processing training, including the identification of participants and availability, and coordinating training sessions;
- Lead, supervise, provide oversight, and maintain open communication with technical support staff/sub-contractors in order to generate deliverables;
- Participate in Project Team, Sub-Group, Tier 1 (Nation only), and Tier 2 (including Province and/or Federal governments) meetings and provide updates and project summaries to the Project Partners as required;
- Lead work-planning initiatives in conjunction with the Project Team and assign tasks to Technical Working Group Support Team members accordingly;

Potential complementary responsibilities:
- Liaise with technical staff from related initiatives, e.g. MaPP and ESI, to carry out commonly defined goals as directed by the Project Team;
- Support internal and external communications and engagement, including supporting presentations more broadly to internal/external groups;
- Support sub-contractor(s) to lead/facilitation workshops/working discussions with project partners including Provincial and Federal government agencies and First Nations;
- Collaborate closely with the Estuary, Salmon, and Access to Resources/Food Security Value Leads to plan and implement data-related tasks required under the Workplan;
- Identify and work with Project Managers and the Project Team to develop and manage contracts to fill capacity gaps as appropriate; and,
- Conduct other related tasks, as requested, by the Project Managers.

Minimum Qualifications:
- Bachelor's degree in Resource Management, Geography, Biology, Computer Science, or GIS

- At least 3 years of relevant analytical experience that can be used to support cumulative effects assessment and reporting on abiotic and biotic indicators
- Experience conducting ground truthing or field verification for cumulative effects assessments, evaluation, monitoring and reporting
- Evidence of understanding of marine ecology, ecosystem-based management, ecological indicators, marine plan implementation and its importance to First Nations communities through previous work, authorship or other means
- Experience with software programs including R and ArcGIS or QGIS and managing large and sensitive datasets and data management systems
- Exceptional time-management and organizational skills and demonstrated ability to manage multiple projects and products within tight timelines
- Ability to work independently and be self-directed
- Experience managing and working effectively as part of a team

Desired Qualifications:
A combination of related skills and experience may be considered in lieu:
- Master's degree or MSc. candidate in Resource Management, Geography, GIS or equivalent work experience
- Experience with marine ecosystems monitoring and analysis
- Evidence of strong understanding of the MaPP Cumulative Effects Framework and the BC Cumulative Effects Framework
- Active participation in community or science-based field work
- Experience working with First Nations on collaborative initiatives
- Experience or a solid understanding of First Nations resources management
- Familiarity and experience working on the BC North Coast, and with the North Coast First Nations, is of additional benefit

Location:
Local applicants from the North Coast Region of BC are preferred. This role may be performed remotely; however, the successful applicant will need excellent computing skills, telephone and internet access, and the ability to travel (COVID-19 dependent).

NCSFNSS offers a competitive salary and benefits package, flexible hours, strong administrative support, and promotes a healthy work/home balance. NCSFNSS is pro-actively managing health and safety concerns for all employees related to the COVID-19 pandemic whether it be for field projects or office work.

To Apply:
Please submit via email by January 7th, 2021 a three-page application which includes:
- Cover letter/statement of qualifications that outlines how you meet the qualifications;
- Resume or Curriculum Vitae; and,
- References

Send to:
RE: NC CE Data Science Lead

To: Holly Booker, Technical Coordinator, Cumulative Effects (CE) Strategic Initiatives, Email: holly.booker@ncsfnss.ca

Cc: Maya Paul, Program Director, Cumulative Effects Strategic Initiatives, E-mail: maya.paul@ncsfnss.ca

NCSFNSS thanks all interested applicants but we will only contact those candidates selected for an interview.