



KITAMAAT VILLAGE - HAISLA TERRITORY

COMMUNITY OBSERVATORY

Information for community members

At a Glance

Ocean Networks Canada has installed ocean monitoring equipment in Kitamaat Village – Haisla Territory. All data collected will be made freely available over the Internet. Community input is welcome at all stages of the project, and opportunities for collaborative education and science programs will be fostered. Further information is provided in the remainder of this document.

Background

Ocean Networks Canada (ONC), an initiative of the University of Victoria, develops, operates, and maintains cabled ocean observatory systems. The world-leading NEPTUNE and VENUS cabled observatories supply continuous power and Internet connectivity to a broad suite of subsea instruments from the coast to the deep sea, supporting research on complex ocean and earth processes.

Building on the successful technology and data delivery of the NEPTUNE and VENUS observatories, ONC is proposing the installation of additional community observatories along the coast of British Columbia. As coastal communities face a wide range of rapid environmental changes, real-time data from cabled observatories can be used to support informed decisions about their coast and marine resources.

ONC will design, provide, install, and maintain scientific instrumentation associated with the Community Observatory. As part of the permit approval process, Ocean Networks Canada submitted an application to Front Counter BC for a Crown Land Tenure as the Community Observatory passes through foreshore areas. ONC has also been working closely with the Haisla Nation during the initial project planning, permitting approvals, and the projected long term use of the Community Observatory data. The Haisla Nation has offered their commitment and support for this project. ONC has completed the permitting phase of this project and instrumentation will be installed in **March 2016**.

The equipment will complement existing community research efforts by enhancing access to local, relevant environmental data which supports applications in several areas:

- **Marine safety:** by monitoring and providing information to support assessments of sea state, ship tracking, and incident response.
- **Public safety:** through natural hazard alerts for earthquake ground-shaking, underwater landslides and near-field tsunamis.
- **Environmental monitoring:** by building a baseline of environmental parameters and being able to continuously monitor changing conditions.
- **Science-based decision-making:** by enabling the use of observatory data to support decision-making.
- **Education and outreach:** by providing students, teachers and community members access to locally relevant data and support in analyzing and utilizing the data.

Project Locations

Sites are being proposed for long-term deployment of observatories in the following regional areas:

1. Prince Rupert – Ts’msyen Territory
2. Kitamaat Village – Haisla Territory
3. Douglas Channel – Ts’msyen Territory
4. Campbell River – Kwakwaka’wakw / Coast Salish Territory
5. West Coast Vancouver Island – Nuu-chah-nulth Territory



Figure 1: Existing and planned observatory locations.

Instrumentation for Kitamaat Village – Haisla Territory

The region surrounding Kitamaat Village is witnessing a substantial increase in industrial development with the potential for additional energy export ports. This will bring new economic opportunities and potential impacts to the local environment in and around Kitamaat Village, including Kitimat and Douglas Channel. Before new waterfront development begins, and potentially brings increases in vessel traffic, it is important to have a baseline of the local marine environment. The publicly available scientific data from ONC observatories will contribute to the assessment of any long term, cumulative, or accident-related impacts.

The Community Observatory is installed within Kitamaat Village, located at the Haisla Public Works Waste Treatment compound. The observatory is equipped with a shore station that has a weather station and shore camera. The shore station will be cabled to subsurface instruments that track and record local water quality, underwater sounds of marine mammals and vessels, and live stream video from an underwater camera. In addition, this location will be equipped with an Automatic Identification System (AIS) antenna to track large vessels in the region.



Figure 2. Circle A is the location of the Kitamaat Village Community Observatory shore station and AIS within the Haisla Public Works Waste Treatment compound

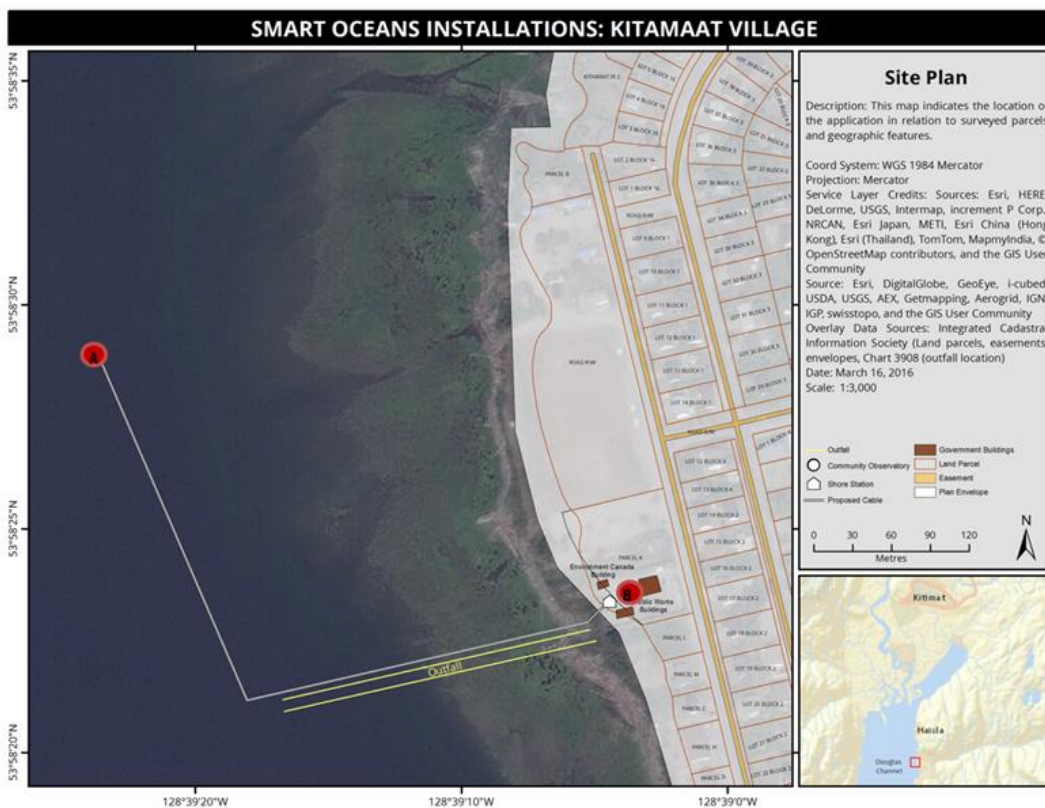


Figure 3. Circle A is the Kitamaat Village location of the ONC Community Observatory shore station and AIS. Circle B is the Community Observatory cabled subsurface observatory platform.

The projected duration of the operation and maintenance of the systems are 20 years or more. Once the instruments are operational, real-time and archived data will be made freely available over the Internet for the lifetime of the equipment. These data will provide independent and unbiased observations of any changes to the Kitamaat Village marine ecosystem, while offering the community a new window into their local marine resources.

Indigenous Community Engagement

A community engagement and education plan will be developed through a collaborative process involving the creation of working groups, face-to-face meetings, and workshops held in each of the regional areas. Community involvement is critical at all stages of the project, including planning deployment locations, development of educational programs, and long-term planning. It is essential that the data being collected by ONC instruments is relevant to community members and can contribute to priorities identified within the community.

Educational Opportunities

- **Local Observations. Global Connections:** Ocean Sense is an educational program based on students analyzing, understanding and sharing ocean data collected by their local community observatory.
- Educators and students will be invited to participate in the Ocean Sense program which links their community to other coastal communities through a web portal, video conferencing, face to face events, and social media tools.
- Other formal and informal educational materials and programs can be developed depending on community interests and needs.

Indigenous Knowledge

ONC would like to incorporate relevant Indigenous knowledge into the Ocean Sense Program through a collaborative process with the guidance and oversight of Indigenous community educators from the five regional areas. With the advice from community knowledge holders, Indigenous knowledge and language will be included into materials for educators and students, and where appropriate, shared with other communities in online materials and resources.

Contacts

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