



CUASTAL GUARDIAN

WATCHMEN NETWORK

For the first time in history, our leaders have successfully negotiated land and resource agreements government-to-government with the Province to increase our rightful authority to govern and manage our traditional lands. The Province and Coastal First Nations have committed to setting aside new protected areas that accommodate our Aboriginal Rights and Title and to managing our resources on the remaining land base using the principles of "ecosystem-based management". We are committed to developing a thriving and diverse economy that is based on protecting ecosystem health and strengthening our cultures.

Ecosystem-based management (EBM) is a land management approach that recognizes that people, communities and the land are inseparable. Our choices must consider the health of both the people and the land that sustains them. EBM has two goals: maintain ecosystem health and improve human well-being.

Guardians and Watchmen of our Traditional Territories

For centuries our ancestors have lived close to the land. They had their eyes and ears on the land, noting changes from year to year. As we implement EBM, we must continue to be the eyes and ears of our land, ensuring that our decisions address the long term needs and well-being of our communities.

Through local Guardian Watchmen programs and activities, we are monitoring the health of our ecosystems and the resources we rely on for food and sustenance and the impact of management practices implemented under EBM.

LEARNING BY EXPERIENCE: MONITORING AND ADAPTIVE MANAGEMENT

"learning by experience" called adaptive management. Adaptive management is a framework that helps us determine whether our plans are achievable, whether we have enough information to make decisions, and whether our management practices are doing what we had intended. Monitoring is an integral part of an adaptive management framework.



Monitoring: Observing Trends over Time and the Impacts of our Actions

As we transition from planning to implementing EBM, monitoring helps us measure whether land use objectives are being implemented and effective, and provides the evidence to make changes along the way. For example, we can monitor whether forested buffers have been maintained along important fisheries streams and whether they are providing adequate habitat for emerging salmon fry.

Monitoring provides important baseline information for comparing EBM operating areas with similar protected areas. For example, permanent monitoring sites can help us compare stream habitat between a pristine watershed and one affected by upstream forest harvesting.

Through monitoring we can gather the evidence needed to support decision-making, refine policies or reduce conflicts about appropriate management strategies.

Baseline, Compliance or Effectiveness Monitoring? Depends on the Purpose

Monitoring involves routinely observing or measuring something and recording the data consistently so that we can compare changes before and after an action is implemented. It allows us to establish trends over time. Monitoring will tell us relatively quickly that something is happening as the result of our actions so that we can make changes on the ground.

CASE STUDY | COASTWATCH BASELINE MONITORING FOR CONSERVANCY MANAGEMENT

The Heiltsuk First Nation has a vision to create a generation of leaders committed to the sustainable management and use of Heiltsuk lands and resources.



Coastwatch was established to provide baseline ecological data for the Heiltsuk Nation's land and marine use planning processes and for decision-making. They monitor 23 protected areas within Heiltsuk territory.

Coastwatch has established key monitoring sites in several conservancies to monitor stream characteristics, salmon diversity, frog populations, grizzly bear population, Dungeness crab abundance, and culturally modified trees. These sites will serve as benchmarks to compare ecosystem health in adjacent EBM operating areas.

The Coastwatch program provides meaningful conservation-based employment in the community and serves as an outstanding model for similar programs in other coastal First Nations communities.

Three types of monitoring are important for implementing EBM on the coast:

- ▶ Baseline monitoring establishes a baseline inventory of the conditions at a certain point in time and is often conducted before any actions are taken (e.g. what is the temperature in a fisheries stream or what are the number of existing full time jobs for people in our communities).
- ▶ Implementation, or compliance monitoring determines whether what was planned was actually done (e.g. was a 10 meter wide tree buffer left standing along a stream edge or were jobs created in tourism).
- ▶ Effectiveness monitoring determines whether our actions had the impact that we intended (e.g. did leaving a 10 meter wide tree buffer maintain the existing stream temperatures or has there been an increase in job availability for young people in the nature-based tourism sector).



Choosing Indicators that Tell us the Impacts of our Management Activities

When we set out to monitor the impacts of our activities, we must carefully choose to measure what best describes ecosystem health. We measure 'indicators', the variables or factor that tell us what the existing ecosystem health is or what changes have occurred. Examples of indicators might be stream temperature, grizzly bear use, or the number of young people completing a guide-training program.

Because we have limited time and resources we can't measure everything, so we carefully choose indicators that do not vary much over time under natural circumstances. Good indicators will respond quickly to the impacts of our management activities. For example, Dungeness crab abundance is a good indicator of changes in water temperature. Monitoring Dungeness crabs has allowed the Heiltsuk to determine the impact of sports fishing on crab populations and marine ecosystem health.



Coordinating an Effective Monitoring Program

Monitoring activities are carried out at several levels by different groups:

- ▶ Local Guardian Watchmen programs implement communitybased monitoring and serve as the eyes and ears of our territories.
- ▶ BC Parks regulates compliance with government acts and regulations related to protected areas.
- ► Ministry of Forests, Compliance and Enforcement Branch enforces compliance by forest companies to Land Use Objectives.



Academic institutions, conservation organizations and the private sector also do monitoring. Our challenge is to coordinate and align the work of different agencies. Everyone involved should use the same indicators and standardized procedures so that in the future we can compare the information gathered between different communities.

CASE STUDY COASTAL GUARDIAN WATCHMEN NETWORK WORKING TOGETHER TO PROTECT OUR TERRITORIES

Guardian Watchmen in First Nation communities up and down the coast have formed the Coastal Guardian Watchmen Network to work together to monitor and protect our territories from over-harvesting, pollution,



illegal activities and other threats. We are a group of resource practitioners who act as the eyes and the ears on our traditional lands and waters and take care of our valuable cultural and natural resources. We are trained to monitor the impacts of resource activities such as fishing, logging, and tourism. We monitor the health of species that are important to us both ecologically and culturally, as well as monitor broader ecosystems to track changes and impacts from resource activities.

We operate under the flag of the Coastal Guardian Watchmen Network – look for us out on the water! As neighbouring Nations with a common vision to protect the resources in our territory, we work together to create a united presence on BC's coast. We know we are stronger when we work together to monitor our territories. For more information visit www.coastalguardianwatchmen.ca.



Turning Point Initiative Coastal First Nations

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