

# Clayoquot Sound UNESCO Biosphere Region, Canada: Nature, Education, Sustainability, Transformation (NEST)

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## Key Messages

- Collective action in an unsustainable social-ecological system can catalyze a shift towards increased community sustainability when supported with financial resources and appropriate local institutions;
- Cross-cultural knowledge sharing and place-based learning are integral to transforming social-ecological systems at the community level; and
- Social innovation can assist with transformation when supported by a network of collaborative organizations with a shared set of principles and a united vision to inspire change.

## Community Introduction

For millennia, the Indigenous Nuu-chah-nulth people have had strong cultural and livelihood connections with the terrestrial, fresh water and marine ecosystems of the west coast of Vancouver Island, Canada. Within this area, Clayoquot Sound is located primarily in the Nuu-chah-nulth *Ha' huulthii* (homelands) of Hesquiaht, Ahousaht and Tla-o-qui-aht First Nations, encompassing nearly 350,000 hectares of a complex and globally significant social-ecological landscape (Figure 1).

The ecosystems of Clayoquot Sound are rich in biodiversity and characterized by a large contiguous rainforest canopy of old growth western red cedar and western hemlock covering steep-sided coastal mountains throughout six watersheds. At the intertidal margins, where fresh and salt water mix, estuarine habitats are dynamic and diverse such as tidal mudflats, marshes, rocky shores, sand beaches and islands<sup>1</sup>.

Five different species of Pacific salmon originate from the rivers of Clayoquot Sound and play an integral role in the cultural, social, and economic relationships, connecting over 5000 people, of both indigenous and non-indigenous cultures, living in eight communities within the region: Hesquiaht, Ahousaht, Opitsaht, Tofino, Estowista/Ty-Histanis, Ucluelet, Hitacu and Macoah.

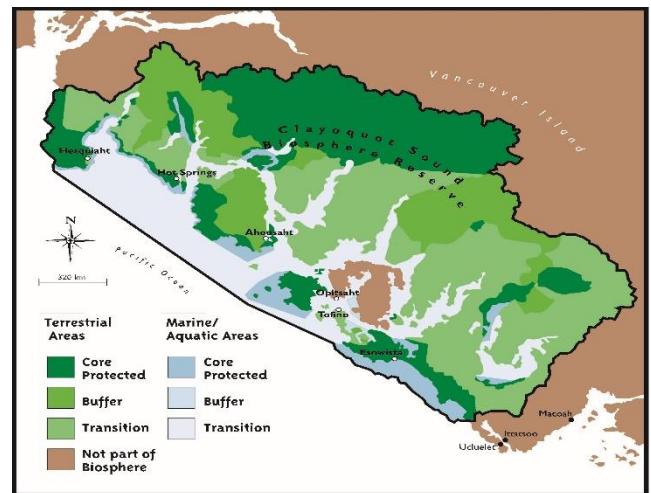


Figure 1: Clayoquot Sound UNESCO Biosphere region

Clayoquot Sound was designated a United Nations Biosphere region in 2000, after more than a decade of conflict and collective action to prevent the logging of old growth coastal temperate rainforests on Vancouver Island's West Coast.

While the Biosphere region designation does not provide legal protection for conservation areas, the purpose of the United Nations Educational Scientific and Cultural Organization (UNESCO) Man and Biosphere programme (MAB) is to unite communities and nations in peace and cooperation through education, science, culture and communication, and to safeguard the sustainability of natural and managed ecosystems<sup>2</sup>.



### Resource Extraction, Conflict & Collective Action

Over the last fifty years, local communities have constantly struggled to assert local access rights to Crown resources and shape government policies for more sustainable resource management practices in fishing and logging. In the forestry industry, unresolved Aboriginal land claims and corporate rights to Timber Forest Licenses were at the heart of unsustainable land use. For example, logging companies commonly built roads along steep mountain slopes, despite the high risk of soil erosion and damage to stream and river habitats. Similarly, large tracts of old growth rainforest were clearcut, causing significant ecological damage without the consultation or consent of the Nuu-chah-nulth *Ha' wiih*, who carry the traditional responsibility to preside over and protect the Nuu-chah-nulth *Ha' huulthii*<sup>3</sup>.

However, in 1982 the affirmation of Aboriginal rights and treaty rights within Section 35 of the Canadian Constitution marked an enormous shift in Canadian Law<sup>4</sup>. These rights were further strengthened in the seminal *Meares Island Case*, which catalyzed a transformation process still underway in Clayoquot Sound<sup>4</sup>.

In 1984, a coalition of leaders and residents from Tla-o-qui-aht First Nation and the town of Tofino sought to protect Meares Island, within Clayoquot Sound, from being logged by the MacMillan Bloedel forestry company. The Nuu-chah-nulth Tribal Council claimed the island as part of the traditional territory to which it had Aboriginal title and sought a court injunction against the logging of the Island. Subsequently, the logging company requested their own court injunction against the coalition. In an unprecedented decision, the British Columbia Court of Appeal granted the injunction to the Nuu-chah-nulth based on the irreversible damages of unsustainable forestry practices<sup>4</sup>. In the words of Justice Seaton,

*"It appears that the area to be logged will be wholly logged. The forest that the Indians know and use will be*

*permanently destroyed. The tree from which the bark was partially stripped in 1642 may be cut down, middens may be destroyed, fish traps damaged and canoe runs despoiled. Finally, the island's symbolic value will be gone. The subject matter of the trial will be destroyed before the rights are decided"*<sup>4</sup>(pg.149).

The victory of the *Meares Island Case* also marked the beginning of the Tla-o-qui-aht assertion of rights and title to the Meares Island Tribal Park, and ten more years of conflict<sup>3</sup>. In 1994, in an effort to resolve an escalating environmental campaign known as the 'War in the Woods', the British Columbia provincial government announced the creation of the [Scientific Panel for Sustainable Forest Practices in Clayoquot Sound](#). Through the Scientific Panel, the Nuu-chah-nulth principle of *hishuk-ish-ts'awalk* (everything is one and interconnected) inspired a set of new hybrid protocols designed to respect both Traditional Ecological Knowledge and Scientific Knowledge systems<sup>5</sup>.

Ten years later the Central Region Board, an 'interim measures' co-management body, based in treaty rights, finalized and approved the recommendations of the Scientific Panel through the official [watershed management plans](#). These plans now provide the foundation for adaptive ecosystem management within the Clayoquot Sound biosphere region. For example, the recently announced [Ahousaht Sustainable Marine and Land Use Vision](#) adheres to much of the watershed planning guidelines. In the words of Chief Maquinna:

*"The Ahousaht believe that this is the beginning of a new era, based on recognition and celebration of Ahousaht people and culture, conservation of the world-class forest and marine resources of Clayoquot Sound, and the development of a more diversified, sustainable local economy, including community forestry."*<sup>6</sup>

## Community Initiatives

Today, the principles and protocols established by the Scientific Panel are embodied in local



community organizations with new governance models based on the shared desire to build a sustainable future on West Coast Vancouver Island. One such example is the Clayoquot Biosphere Trust (CBT), established in 2000 with a \$12 million endowment fund from the Canadian government to uphold the spirit and intent of the Clayoquot Sound UNESCO Biosphere region designation.

As a granting organization, the CBT is both a member of the Canadian Community Foundation network and the World Biosphere Network. It is led by a voluntary board of directors, representing all local First Nations and communities within the Clayoquot Sound Biosphere region, with a vision

*"...to live sustainably in a healthy ecosystem with a diversified economy and strong, vibrant and united cultures while embracing the Nuu-chah-nulth First Nations living philosophies of Iisaak, (living respectfully), Qwa'aak qin teechemis (life in balance) and Hishuk ish ts'awalk (all things are connected)"*<sup>7</sup>.

One of the key projects of the CBT is the biennial publication of a Vital Signs™ report, which identifies several community development trends using a range of sustainability indicators. Over the last decade, the number of fishing and logging livelihoods has declined whereas employment in nature tourism has rapidly grown and is one of the main economic forces for West Coast communities, attracting over one million visitors per year<sup>8</sup>.

However, several early warning signals indicate the steady growth of tourism has potentially exceeded the sustainable capacity of many communities within the Biosphere region. For example, the escalating rise in the number of West Coast visitors is strongly correlated with the increased seasonal demand on emergency medical services, increased summer drought vulnerability, lower average income levels and a reduced supply of long term affordable housing units<sup>8</sup>.

Given these potential negative impacts, local leaders convened the *Tla-o-qui-aht/Tofino Ad-hoc Higher Learning Committee* to identify ways to

diversify tourism livelihoods with elements of the knowledge and sharing economy. Three key strategic actions of the Committee helped launch a new west coast learning initiative<sup>9</sup>:

- 1) A west coast learning council was convened, in collaboration with local organizations, educational institutions and government agencies, to identify community education needs and priorities;
- 2) Partnerships were formed laterally between several bridging organizations throughout the Biosphere region and vertically between municipal and provincial governments to align job training priorities; and
- 3) Funds within the region were leveraged to support an education asset inventory<sup>10</sup> and research on the feasibility of education tourism as a multi-pronged approach to build local learning capacity and develop a visitor market demand for place-based education<sup>9</sup>.

In 2016, the CBT, in collaboration with local First Nations, municipal governments, local education organizations and destination marketing organizations, launched the West Coast N.E.S.T (Nature. Education. Sustainability. Transformation). The N.E.S.T website ([www.westcoastnest.org](http://www.westcoastnest.org)) is a hub for connecting people to all current learning opportunities offered in the region, focusing on four key market sectors:

- 1) University field schools;
- 2) Professional development courses;
- 3) Adult learning; and
- 4) Youth learning opportunities.

The vision is to enable all local community members and education-oriented organizations to participate fully in the learning economy, together with visiting learners<sup>9</sup> (Figure 2). By linking learning with tourism, the West Coast N.E.S.T is creating a global network of learners who can help catalyze a new local economic opportunity while shifting values towards sustainable livelihoods.





Nested within the Nuu-chah-nulth values of *Iisaak*, *Qwa'aak qin teechemis* and *Hishuk ish ts'awalk*, and consistent with the Scientific Panel hybrid protocols, the education tourism initiative is an opportunity to transform conventional tourism to attract a different type of visitor: one who wants to stay longer on the West Coast, learn from local people, experience local culture and contribute to stewardship of this ecologically significant place.



Figure 2: Nuu-chah-nulth Elder Ray Haipee teaching visiting learners.

In this manner, local community organizations are working to shift away from an unsustainable tourist “consumer” economy and moving incrementally towards a new “conserver” economy in which broken cultures are restored and damaged social-ecological systems are re-built.

Done properly, education tourism has the potential to support an economic return from visiting learners while expanding local learning opportunities. Together, local learners, visiting learners and local teachers are cultivating a new education culture with the following seven principles for education tourism:

#### Seven Principles for Education Tourism:

- 1) **Attract Co-learners:** we welcome others to learn with us.
- 2) **Community Reciprocity:** we share benefits between communities.
- 3) **Local Knowledge Holders are Experts:** local people are reimbursed for sharing their knowledge.

- 4) **Learning Networks of Practice:** together, we are creating a culture of learning and collaborative problem solving.
- 5) **Stewardship-in-place:** every community has an outdoor classroom and a place to learn from the land.
- 6) **Holistic Hands-On Learning:** we learn best by applied learning and practice.
- 7) **Cultural Safety and Sharing:** we create safe spaces for learning and healing across cultural boundaries.

#### Practical Outcomes

The West Coast learning initiative has demonstrated innovative solutions for sustainable livelihood challenges. While the West Coast N.E.S.T education tourism economy is in its early stages, we are already seeing several positive outcomes from regional collaboration:

- 1) As more organizations contribute to education program development, there are more education initiatives for local and visiting learners, resulting in a broader distribution of economic benefits and sustainable livelihood options. In 2017, for example, 75 educational courses and 356 educational events were offered via the West Coast N.E.S.T. Over 150 temporary work opportunities were created delivering educational courses and 712 temporary positions were created to deliver educational events.
- 2) The West Coast N.E.S.T motivates both lateral and vertical connectivity across communities and organizations who share a vision for higher learning and contribute to sustainable economic diversification; and
- 3) Working within the principles and values of a Nuu-chah-nulth worldview helps to guide a regional vision for higher learning while also supporting a shared culture of place-based stewardship. Since 2015, the west coast Leadership Vancouver Island training program has graduated over 40 students, from Nuu-chah-nulth and non-Nuu-chah-nulth communities, within the Clayoquot Sound UNESCO Biosphere Region, who continue to volunteer their time to local community projects.



## Government Policy

The measureable benefits from West Coast N.E.S.T education tourism help to support local Municipal government plans and policies to further diversify the tourism economy and invest in sustainable economic development. For example, the *District of Tofino 2015-2018 Strategic Plan* identifies several economic development goals in support of education tourism such as “the goal for Tofino to become a centre of excellence in learning, research and development, [supporting] value-added industries, and sustainable eco-tourism activities”.

In summary, the West Coast N.E.S.T is an example of how cross-cultural collaboration, knowledge sharing and place-based learning are integral to transforming social-ecological systems at the community level. The increase in education opportunities help create more options for new and innovative forms of sustainable livelihoods, supported by Municipal government sustainable economic development. Over time we anticipate more organizational collaboration and investment in education tourism will result in further momentum in the ground swell of social change and transformation underway in the Clayoquot Sound UNESCO Biosphere Region.

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