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Habitat Recovery in the Salish Sea, One Community at a Time: Community engagement for socio-ecological resilience of coastal restoration projects

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Successful restoration of marine nearshore habitats is predicated upon long term and sustaining relationships within coastal communities. When fissures within and among communities that cause habitat destruction in the Commons begin to close, the need for restoration diminishes.

The Challenge

The Salish Sea is an inland sea between Vancouver Island and the mainland of British Columbia, Canada. It is in trouble. Results from monitoring indicators of ecological health indicate **marine species are in danger**. Salmon and orca populations, marine water quality and stream flows are declining. Nearshore habitats, including habitats for keystone species such as forage fish, are not protected or monitored on a large scale.

With increasing human populations on the coast, problems are becoming more complex. Many settlers are not aware of the rich ecology of these waters, and of the harvests of shellfish, fish, and plants that **Indigenous Nations sustained since time out of mind.**

Climate changes compound the cumulative effects of over-population, industrial development and resource extraction, and may be leading these declines to the precipice of a regime change to simpler habitats and fewer species.

Community involvement in nearshore habitat mapping and restoration is critical to success.

The Project

A five-year project (2017-22) led by our non-profit organization is creating **locally driven, regionally coordinated efforts to recover marine nearshores** in four regions of the Salish Sea: the Gulf Islands, Sechelt Inlet, Howe Sound and Burrard Inlet.

A healthy eelgrass (*Zostera marina*) bed provides food and shelter for invertebrates, fish and shorebirds.

Our Approach

Work begins with **participatory digital mapping** at community meetings to identify potential sites for **seagrass transplants** and **marine riparian revegetation, and removal of marine debris** at these sites. Habitat surveys are then conducted with a boat, underwater camera and SCUBA divers to narrow down suitable sites.

Indigenous Nations' and other jurisdictions' permissions are obtained before restoration activities begin. They often share knowledge about traditional and historical uses of proposed restoration sites, providing an understanding of baseline conditions and factors that may affect restoration.

Community members participate in restoring habitats and return to help choose more sites for the next year.

Conclusions

Net habitat gains and capacity within communities to care for the nearshore are building as a result of this **participatory, community-driven project.**

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