

9. Conclusion

Priceless and irreplaceable

Canada's Pacific coast is a fragile archipelago with a boundary between land and ocean that changes by the hour, by the season, and over the millennia. The fragmented island and inlet nature of this ecosystem, nourished by the waters of the North Pacific, has fostered more diversity of plants and animals than occurs anywhere else in North America. The assembly of iconic animals such as whales, dolphins, wolves, and bears make the BC coast qualitatively different from most other exceptional places in the world. Distinctively, all these mammals, together with another 120 species of birds, are tied to the sea.

However, the very thing that has fostered this rich diversity also makes it fragile. BC's coastal ecosystem is an ecological treasure of species that can, evolutionarily speaking, be lost in the blink of an eye. Twenty-seven thousand kilometres of labyrinth seaboard place this web of diversity much more at risk than its 900 kilometre distance would suggest.

In the course of our work, we have been struck by the daunting reality that questions about BC's coastal environment far outweigh the answers. As part of an international desire to increase our understanding of this distinctive region, Raincoast committed to documenting the numbers and distribution of marine mammals and birds. The fact that five years of seasonal surveys provide only a snapshot into one aspect of this relentlessly mutable ecosystem emphasizes the complex nature of the BC coast. However, this data provides a foundation to build from and a place marker of where we stood at the beginning of the 21st century. Importantly, we have now identified where current or proposed high-risk activities might conflict with ocean habitats important for marine mammals and birds.

As we learn and understand more about the relationships of species with their environment, British Columbians are increasingly coming to cherish this maritime commons of animals, waters, islands, and forests. BC's coastal archipelago is a marvel of features and processes that support a remarkable diversity of life, including our own. *Priceless and irreplaceable*: its worth is immeasurable in monetary terms.

This is the very soul of British Columbia. The prospect of losing it compels us to think big and think long term. Accordingly, Raincoast's planning horizon is time without end. We want this ecosystem to thrive generations from now into perpetuity. Given that current political and economic thinking reflects the past and present, and not the future, we are embracing this conservation effort so the prospect for marine and coastal species is secured while the opportunity still exists.

At what price profit?

Attaching a dollar value to the damage that spilled oil does to marine ecosystems is impossible. The cost of the *Exxon Valdez* spill has been estimated at \$9.5 billion, of which Exxon paid \$3.5 billion, with taxpayers footing the rest. But does that even begin to cover the price of a pod of killer whales driven to extinction, or the demise of a coastal fishing community's way of life?

From Raincoast's perspective, species and wild ecosystems warrant protection for their intrinsic and aesthetic worth, regardless of the added utilitarian value that healthy environments provide for people. Clearly, the monumental global task of preserving biodiversity is fundamentally one of ethics. Nonetheless, a focus on protecting the services that marine ecosystems provide is realistic and relevant to framing the threats posed by shipping oil. Together, values and pragmatism compel us to safeguard all animals, including humans, which depend upon a healthy and ecologically rich coastal environment to maintain their cultures and communities.¹⁵²

Governments may eventually conclude that revenues from an oil corridor on the BC coast are more important than the health of our environment, or the wellbeing of the flora and fauna. The public, however, should be properly and clearly informed as to the risks and potential losses. If we get this wrong, these losses will be incalculable.

Coastal First Nations executive director Art Sterritt summed up the threat posed by oil tankers: "*The minute there is tanker traffic, there is damage to a way of life.*" If the Enbridge Northern Gateway pipeline is constructed, oil tankers at least as big as the *Exxon Valdez* would ply BC's rocky coastline almost daily. Twice a week, over 500,000 barrels of the world's dirtiest oil would be shipped out and condensate shipped in. Is the benefit to Alberta and the shareholders of Enbridge Inc. from supplying Asian and American markets with oil worth the risk, if it means subjecting the BC coast to the threat of a catastrophic spill?

Failure to reconcile ecology and commerce has been a hallmark of international marine policy for decades. Whereas conservation and restoration efforts are directed at improving current and future conditions, market interests usually discount future benefits and costs in favour of present consumption. Because information about the future is limited, a premium is placed on the present. Therefore, short-term profits are usually favoured over the uncertain profits of the future. This attitude continues to prevail because only monetary benefits and costs associated with resource products are recognized in conventional marketplace transactions. Accordingly, unchecked exploitation of the ocean environment has mortgaged the future while accruing a massive ecological debt.

Acute and chronic condition

As dreary as it is to contemplate, we need to be honest about the extent of this ecological debt. There is now unequivocal evidence of significant decadal-scale biological changes, which have had adverse consequences for the abundance and occurrence of marine species. Not surprisingly, BC's marine waters, sea bottom, and coastline have been degraded by human activities. Many (if not most) marine mammals, land mammals, and seabirds that rely on the marine food web for their livelihood are already burdened by petroleum-based pollutants. This contamination is widespread, inescapable, and persistent. As evidence of immune and reproductive deficiencies mount, scientists are becoming increasingly concerned that marine dependent species are physiologically stressed.¹⁵³ To complicate matters, some of these stressed species are genetically compromised, the result of being driven to near extinction by a century of commercial exploitation. With lowered genetic diversity (from reduced genetic variability), the ability of species to respond or adapt to additional disturbance is reduced.

Add to this the implications of a rapidly changing food base (trophic collapse), the result of overfishing, habitat destruction, and a warming planet. By themselves these cumulative trends have serious consequences, but continuing climate change may compound them, creating further unpredictable disturbances. Alarming, these changes are often occurring faster than we can understand them. Although the exact course of climate change is unknown, we should be preparing for the effects. We should be acting with far greater prudence (the precautionary principle), if for no other reason than

to avoid the perils of hidden consequences. Climate change could be the catalyst that tips this already fragile system. Paradoxically, the choice to lift the oil tanker moratorium and approve the Enbridge pipeline would only intensify the disruption.

Our concerns are not new, nor are the problems that precipitated them. They are, however, a powerful argument in favour of urgent action to counter these perils; a reminder for all of us to set a better example by restraining our own biodiversity-threatening activities while adopting more sustainable behaviours. Clearly, there has already been a substantial price to pay for human progress. Moreover, if we fail to halt and reverse the juggernaut of our unsustainable lifestyles, our coastal ecosystem may pay the price. Although easy to confuse value with price, the unspoken question remains: is society willing to sacrifice the integrity of the coastal environment for the pursuit of monetary profit?

Given the condition of our coastal environment, we need to begin treating the ocean as an unhealthy patient in desperate need of care. We know that the primary problem is chronic unsustainable use and abuse, so our focus now must be to halt, slow, and reverse destructive activities, while eliminating the possibility of new threats. The bottom line is that the 35-year-old “now-you-see-it-now-you-don’t” moratorium on oil tanker traffic must be legislated and codified into law. From here, other protective and restorative actions can be taken, so the priceless and irreplaceable BC coast can continue its unparalleled evolutionary journey.

A future of past abundance

One hundred years ago, humpback and fin whales were hunted from the waters of Whale Channel around Gil Island. In the course of our surveys, we had several sightings of large baleen whales (including one sighting of 26 fin whales) in this general region. Queen Charlotte Sound and Dixon Entrance are likewise the historic habitats for blue, sperm and sei whales. Again, the slow return of these animals is occurring. Yet the proposed routes for Enbridge’s oil tankers traverse directly through these feedings grounds. Additionally, the proposed route transects potential critical habitat for northern resident killer whales. The projected level of shipping increases will occur synonymously in the habitat of these recovering whales and oil tankers place them at high-risk in the event of a spill.

Conversely, we could embrace the fact that whales are re-establishing their historic presence in BC's coastal waters and take action to protect their feeding grounds and other important habitats.

Similarly, changes to fisheries management and securing protection of habitat might rebuild the region's 2,500 plus salmon runs. Using an ecosystem perspective, these salmon runs could then be managed to sustain terrestrial species that earn part of their living from the sea. Likewise, the management of herring could also reflect the critical role they play in the maritime food web. Changing the way we manage humans and their activities might be enough to give our tired maritime environment the reprieve needed to recover and become healthy once again. We are poised at a crossroads. Polling on which direction to follow shows that for most British Columbians, the preferred path is an oil-free coast. The question remains, however, whether those within government who will determine the fate of BC's coast, *recognize exactly what's at stake*. Maybe more importantly, do they care?