

Preface



*I must go down to the Sea today,
for the call of the running tide...*

Spanning Canada, the United States, the Province of British Columbia, and the State of Washington, is one of the world's largest coastal seas. From the western entrance of the Juan de Fuca Strait, to the top of Georgia Strait, and bottom of Puget Sound, the Salish Sea mixes the freshwater flow from the Fraser, Skagit and dozens of other large rivers, with saltwater from the Pacific Ocean.

Weaving through an archipelago comprising hundreds of islands, the mixing of these waters in deep basins, shallow bays, and open straits has fostered a diverse abundance of life. The name, Salish Sea, reflects and honours the Coast Salish, the area's first human inhabitants.

Surrounded by the Olympic, Vancouver Island, and Coast Mountain ranges, the Salish Sea is an area of outstanding natural beauty. In some places, these snow-capped peaks still overlook lushly forested river valleys and deltas. The wealth of natural assets that arise from these lands and waters has sustained rich indigenous cultures since the last glaciation, at least 10,000 years ago.

From the smallest plankton to the largest whales, the archipelago supports a fertile food web of feathered, furred, and finned animals. Its popular residents include schools of herring and salmon, marine and shore birds, porpoises and sea lions, and of course killer whales. Connecting the sea and land is the shifting boundary of the intertidal world. It is a unique zone, hosting organisms that have evolved to live between the high and low of Pacific tides.

The Salish Sea region is an area of outstanding natural beauty. It hosts a diverse archipelago within a unique coastal sea that is surrounded by snow capped mountains.

PHOTO: B. HARVEY



One hundred years after two very large hydroelectric dams severed the Elwha River from its people and its salmon, their high profile public removal stands as a testimony to the power and awareness of communities determined to restore their connection to place. This historic breaching of two working dams has enabled salmon to reach their historic spawning grounds for the first time in a century and the river to recreate the delta that connects it to the Salish Sea.

PHOTO: J. GUSSMAN

Over the last two centuries, many plants and animals of the Salish Sea have undergone irrevocable shifts in their range and numbers. Unsustainable human enterprise and population growth have relentlessly depleted numerous species. More than ever, these coastal habitats are now the home of rare, threatened, and endangered species.

The Salish Sea region currently faces a dramatic escalation of threats, many of which stem from the demands of 8 million residents within the urban regions of Victoria, Vancouver, and Seattle. The natural ports and harbours that once supported fishing, forestry, and regional businesses have changed drastically. Linking Canada and the US to international markets, the Salish Sea has become a hub for commercial exports, making it a coveted place for fossil fuel exporters to ship non-renewable, and typically dangerous hydrocarbons to foreign markets. Kinder Morgan's Trans Mountain Expansion is the largest of these proposals.

Yet, there is hope. Citizens are organizing in opposition to these proposals in unprecedented numbers. They are saying 'no' to conventional economics that commodify natural habitats and reduce them exclusively to financial chattels. Many are demonstrating visionary and inspiring ways of living less consumptively and destructively. Others are developing and refitting their homes and businesses with renewable energy alternatives. Everywhere, citizens are standing up for the future of this region and its inhabitants—all of them.

Although several of the Salish Sea's species are in decline, others are returning in historic numbers. We are also rapidly gaining an understanding of our expanding 'human footprint' and its impacts on ecological processes at local, regional, and global scales. Empowered by such awareness, a conversation is happening about our future; people are recognizing that our fate is inextricably linked to the natural world.

As conservation biologists with a strong wildlife welfare ethic, we respect (and advocate) for the intrinsic right of wild species to exist. However, we also see that pipeline, supertanker, and fossil fuel development projects are seductively and illusorily,



What's in a Name?

In August 2009, the BC Geographical Names Office recommended that the name *Salish Sea* be adopted to refer to the waters of Georgia Strait, Puget Sound, and the Juan de Fuca, contingent on approval by the US Board on Geographic Names. In November 2009, the name *Salish Sea* was approved by the US Board on Geographic Names. The BC Geographical Names Office followed suit with approval in February 2010. The official French name is *Mer de Salish*. The name *Salish Sea* does not replace any existing names for this region, but complements them.

presented by industry and governments as necessities for BC's economic prosperity. For this reason, we address the economic benefits that are naturally provided by the Salish Sea region.

This ecological wealth is the essential link between our environment and well-being. However, the benefits and services generated from the region's natural wealth are generally unaccounted for and undervalued. Tragically, these benefits and ecosystem services are in serious jeopardy if development continues to proceed unrestrained.

Herein, we present a view of the broader socio-cultural, economic, and ecological values, which should contribute to decisions affecting the region's future. These values are not only important to us as humans, but also underscore the provisions of a highly complex natural world that may be approaching an incontrovertible tipping point.

Our report responds to the rising public, business, and indigenous concerns relating to planned increases in the shipping of tar sands oil through the Salish Sea by Kinder Morgan.

First, it provides an overview of the unique labyrinth of coastal geography and diversity we call the Salish Sea. Second, we examine how the Salish Sea's natural features and processes feed our region's economic health and cultural wealth.

Lastly, we examine risk. We believe Kinder Morgan's presentation of oil spill risk is selective in scope, assertions, and probabilities. It is based more on unsupported opinions than on valid, empirical data. Its conclusions about oil spills are unwarranted and unsupported.

Kinder Morgan's risk assessment misleadingly conflates ecological thresholds with socioeconomic and political ones. They omit environmental and social losses, dismiss uncertainty, and exaggerate their ability to manage events they cannot control. It is a false narrative, misleading in both the risks and the costs.

This carefully designed marketing strategy creates fear of lost economic opportunities if fossil fuel exports are not pursued. Government and industry rely on the hope that this fear of economic loss will supersede our concern of ecological harm. Economist Robyn Allan has described this pipeline proposal as



Canada's federal government has been actively promoting the idea that its tar sands decisions are "in the best interest of Canadians." But are they? The burning of fossil fuels is the number one driver of climate change. Oil spills can ruin lives, communities and economies for decades.

PHOTO: C. TATU

a false dichotomy fabricated by the energy industry to give the impression that Canadians must make a difficult choice. Despite millions of dollars spent trying to convince us, this is not a trade-off we face. The 'risk' reality is that we stand to lose both ecologically and economically in pursuit of an oil export economy.

The choice to extract, ship, and burn tar sands oil will likely affect our children for decades to come.

Remarkably, the choice whether or not to use our coastal waters to facilitate this objective is within our ability to make. The risks are real and consequential. They are a powerful argument in favour of a radically different course of action. Solutions to our energy and economic problems are everywhere if we make the individual and collective choice to implement them. We cannot afford to lose the foundation of an economy that provides stability, opportunity, and meaningful work. The premise of a sustainable future is not based on shortsighted exploitation, but thoughtful development that fosters a physical and social connection with the ecosystems that sustain us. Our coastal sea is a marvel of features and processes that support a remarkable diversity of life, including our own. It is priceless and irreplaceable; a worth immeasurable in monetary terms.

Growing appreciation and advocacy for free-flowing rivers, mature forests, natural shorelines, and all the parts and processes that connect to make them ecosystems, is driving a powerful defense of the place we call home.

PHOTO: J. TAYLOR

