

Keeping It Living...



Painting by Bev Byerly

A Vision and Guiding Principles for the Courtenay River Estuary

*The Estuary Working Group
Comox Valley Project Watershed Society
August 2009*

A Message from Don Castleden, Chair, Project Watershed

On behalf of the Board of Directors of Project Watershed and the Estuary Working Group, I am pleased to present this vision and guiding principles for the Courtenay River Estuary.

The need for a vision emerged out of a Courtenay River Estuary Symposium held in October of 2008. The Symposium, organized by Project Watershed, brought together scientists, estuary specialists and members of the Comox Valley community to review the past, present and future of the Courtenay River Estuary. The participants at the symposium came away with two convictions.

First, the estuary is under threat and unless we do something quickly to turn things around, we will lose this most precious feature of the Comox Valley community. Second, in order to turn things around, we need a vision and guidelines to direct the renewal of the estuary.

To guide our vision we have chosen a traditional aboriginal principle: *Keeping it Living*. This principle reflects ancient practices to preserve plants, animals and habitat. It speaks to resource conservation, sustainability, and contains a warning that we cannot take too much nor waste precious resources. The principle reminds us that we have a moral and ethical obligation to protect and restore the estuary.

This document begins with an overview of the Courtenay River Estuary, provides a vision and guiding principles and then, in broad terms, identifies the work we must do. The document ends with a recommendation for a collaborative governance structure to care for the estuary now and into the future.

On behalf of Project Watershed I want to thank all those who contributed their thoughts and concerns to the Heart of the Watershed Symposium on the Courtenay River Estuary and the members of the Estuary Working Group who worked together to make this vision a reality. It is our fervent hope that this vision and these guidelines will instill in all of us *a commitment to work together to usher in a new era for the Courtenay River Estuary*.

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Introduction

A heron waiting motionless for a small fish, eagles soaring overhead emitting their piercing cry, the beating of wings as swans sweep low over the river and rise to clear the trees at the water's edge, sandpipers darting here and there on the mud flats - their long beaks seeking small crustaceans buried in the mud, birds and frogs inhabiting the sloughs, salt marshes, and near shore producing a cacophony of sound that announces their presence and the renewal of life, salmon massing at the river mouth before moving up stream to spawn - this we hear, see, and experience in the Courtenay River Estuary. This is the ecological treasure that we are called on to conserve and protect.

The Courtenay River Estuary is one of only eight Class 1 estuaries in British Columbia. Classification is based on intertidal size, estuarine habitat, intertidal species, water bird density, and herring spawn. This estuary provides habitat for 145 bird species (more than 70,000 birds), 218 plant species, and 29 fish species including all five species of salmon.

We know that Indigenous people have lived on the estuary's shores for thousands of years, obtaining food and shelter in harmony with the natural eco-system. The large Aboriginal trap fishery, maintained in the estuary for well over 1,000 years, was conducted without depleting the fish resources or habitat. Over centuries, Indigenous fishers applied their knowledge of fish, habitat, and trap technologies (information gathered and refined through centuries of empirical observation) to ensure sustainable fish populations.

We envision residents living within the estuary and surrounding uplands in concert with the natural life cycles occurring within the estuary and its watersheds. Our vision includes the preservation of the marshes, sloughs, mud flats, gravel beds, shore grasses, shrubs, forest, streams, rivers, and the watersheds that provide nutrients that nourish life in the estuary. These natural features are interconnected, forming part of a whole. The estuary is a natural living landscape, framed by the sea, the mountains and the glacier.

Keeping It Living ...

We have adopted the theme *Keeping It Living*, shared with us by Traditional Hereditary Chief Kwakxistala Adam Dick, which describes indigenous practices that have been applied over the centuries to preserve plants, animals, and their habitat. The words encompass resource conservation and sustainability as well as constraints against taking too much or wasting abundant resources. *The theme Keeping It Living embraces a commitment to an enduring and intentional strategy and represents a philosophical approach that has both an ethical and moral basis for protecting and restoring the Estuary.*

For those of us who live in or visit the Comox Valley, it means connecting and reconnecting with the natural world of which we are a part, enjoying its wonder and its life forces, while building a human community that celebrates and cherishes the presence of this natural world around which we have gathered (Dan Buffett, Regional Biologist, Ducks Unlimited Canada, 2008).

We envision the Estuary as a place accessible to residents and visitors in such a way that it does not diminish the estuary's ability to flourish. To enable this to occur, it is important for all political jurisdictions in the Comox Valley to come together to make the vision of *Keeping It Living* a reality. It requires the voice and passion of the citizens who live in this magnificent valley as well as their environmental organizations – and their biologists, naturalists, and ecologists – and the K'omoks First Nation's teachers and Elders – all of whom speak for and on behalf of life within the estuary, to join as partners in this collaborative effort to protect and restore the Courtenay River Estuary.

We have a duty to preserve key aspects of our planet, such as the environment and other species, for our descendants to understand and appreciate. ... we do not have complete and unambiguous ownership of what we find but are, at least to some degree, both enjoying [the planet] and looking after it for future generations.

From A Blueprint for a Safer Planet, 2009
By Nicholas Stern, Chief Economist, World Bank (2000-2003)

The Estuary Working Group believes that the time for action to protect and restore the estuary is now and that the political will to achieve this objective is present in the community and in our elected officials.

*One day you finally knew what you had to do, and began,
though the voices around you kept shouting their bad advice*

This quotation is Mary Oliver's description of moving away from the profane toward a deep sense of connectedness to the living world. We believe this day has arrived here in the Comox Valley.

Guiding Principles

The years have not been kind to the estuary. It has been dredged, channeled, rip-rapped and filled in. A modern city has encroached upon it yet it is still a place filled with natural wonder. Salmon still congregate here, albeit in smaller numbers, before swimming upstream to spawn. The marsh hollyhock still blooms, and a few Sitka spruce still remain to house the nests of the American bald eagles. That the estuary has changed is undeniable, however it is far from dead. Restoration efforts can help to turn things around.

(Frank Hovenden, Comox Valley Naturalists, 2003.)

In this document, we present principles and guidelines for enhancing protection and beginning the restoration of our estuary. This document builds on the Draft Courtenay River Estuary Management Plan (Fisheries and Oceans Canada, March 2000) that was presented to the relevant local governments in 2000. The Plan was never adopted or implemented.

We have taken great care to acknowledge human presence in the estuary and the Comox Valley while stressing the need for humans to live in harmony with the natural eco-system of the estuary and the Valley. We need not only preserve the ecology of the estuary but also recognize our human history and current dependence on the abundant life that exists in the estuary, the watersheds, and in the surrounding sea.

These guidelines provide recommendations for governing the estuary. Central to governance is the need for a partnership between all political jurisdictions which collectively represent the interests of the citizenry and those community organizations that have determined to speak for and on behalf of the total estuary in all its complexity and interconnectedness.

- All species, including the human species, have the right to exist in their habitat, and in the earth's interconnected life system.
- The health of the estuary depends on maintaining the quality and quantity of fresh and salt water from the streams, rivers, and ocean currents flowing in and out of the estuary.

- Natural estuary processes are critical to the functioning of the estuary and should be restored to the fullest extent possible.
- Resources taken or economic benefits derived from the estuary should not negatively impact the estuary and whenever possible, should benefit estuary eco-systems and natural processes.
- A coordinated and wholistic approach for managing human activities impacting the estuary should be adopted by all relevant political jurisdictions. This approach should recognize and consider the economic, social, environmental, and cultural interests of all.
- Effective governance will require a structure that fosters collaboration and is representative of all who have a responsibility to contribute to the restoration and maintenance of a healthy estuary eco-system and its natural processes.
- The K'omoks First Nation has a special relationship with the estuary. They should be consulted on all significant developments.
- Future planning and development activity in and around the estuary should take into account global climate change, rising sea levels, flooding, and expected increasing severity of storms.

Maintaining and Restoring the Estuary's Natural Systems and Processes

The ecology of the estuary includes many natural features such as plant and animal life, intertidal zones, shoreline, and adjacent lands with many large and small river systems and streams bringing fresh water and nutrients to mix with the salt water. The estuary provides a variety of habitats that are essential for the survival of plants and animals including mammals, birds and amphibians in addition to fish and other aquatic species. This is critical habitat when one realizes that estuaries in British Columbia cover less than 3% of the coast while providing habitat that is used by 80% of the species found on the coast.

The impact of people and the technological developments that have accompanied the wave of settlement that began in the 1850's have changed the functioning of the estuary's natural systems. These changes allowed for the development of Comox, Courtenay and Cumberland and generated commerce that has resulted in the Comox Valley we know today. We have benefitted from this commerce but all of us who currently live in the Valley now have a responsibility to meet the challenge of restoring the eco-systems which have been severely compromised. The goal is to restore the estuary so that it is once again a healthy and productive eco-system. This can be accomplished through an understanding of and care for the proper functioning of the estuary's natural systems. This understanding of natural systems and processes is fundamental to the restoration of the estuary and shaping a sustainable approach to human use of land, water, and resources in and around the estuary. The legacy that we leave our children, grandchildren, and all future residents of this valley will be determined by the actions we initiate as we enter the second decade of the 21st century.

Characteristics of a Healthy Estuary Eco-System

Animals, Plants and Habitats

- Thriving and productive populations of aquatic plant and animal species including microbes, shellfish, and fish populations in the estuary, Baynes Sound, and surrounding waters.
- The presence of land mammals and large populations of resident and migratory birds.

- Balanced plant and animal populations with increased biodiversity free of invasive microbe, plant, and animal species.
- A variety of habitats including increased side channels in the river to support fish rearing and migration, eel grass beds, inter tidal gravel beds for forage fish, salt marshes, and indigenous plant species.

Water Quality

- Clean water free of pollutants, fed by ocean currents and fresh water streams.
- Unrestricted flow of ocean waters flowing in and out of the estuary.
- Optimum water temperature, flow, and volume in the rivers to support thriving plants, animals, and habitats.

Inter Tidal Zones

- River flows meandering over wide flood plains with multi-channel wetlands, salt marshes, and mud flats.
- Natural depositing of sand and gravel to restore forage fish spawning areas.
- Natural flooding to restore nutrients and nourish plant life.
- Restored foreshores.
- Expansive undisturbed tidal flats supporting the diversity necessary to the health of the estuary.

Shoreline and Adjacent Lands

- Natural (soft shores) free of rip rap and other materials that harden the shore, preventing the effective functioning of natural systems and processes such as flooding, shore drift, and shoreline sedimentation.
- Reforested lands within and adjacent to the estuary as well as the uplands that cover and shelter the streams and rivers.
- Protected riparian zones.
- Wildlife access to the estuary.
- Diverse native plant communities free from invasive exotic plants.

Human Interactions Compatible with a Healthy Estuary

The estuary is a place where people have lived for centuries, obtaining food and sustenance from its teeming lands and waters. During this period the eco-system was preserved while producing an abundance of plant, animal, bird, and marine resources for the indigenous people who lived along the shore. The remains of thousands of wooden stakes demarcating Aboriginal fish traps attest to this industry. It is important to recognize this record and preserve these cultural artifacts still present in the mud flats of the estuary.

Our vision of the estuary includes human activities managed in accordance with the guiding principles of *Keeping It Living*. We have the teaching and wisdom of indigenous Elders and environmental science to guide us. In time, we hope everyone will become sensitive to the presence and importance of all estuarine plants, animals, and habitats and will develop an awareness of the impact human activity has on the estuary. The following are human activities compatible with caring for the estuary.

Economic Activity

- The harvest of food fish, shell fish, and wildlife that has been carried out for centuries will continue in a healthy estuarine eco-system.
- Economic activities that have a low impact on the estuary should be encouraged. Eco-tourism including birding, kayaking, and hiking together with creative and artistic activities are examples of low impact activities which lend themselves to human interaction with life in the estuary. These activities could be augmented with small locally owned restaurants and kiosks highlighting local foods.
- The use of land for development and infrastructure should be compatible with the long term health of the estuary's eco-systems. Decisions based on a "trade-off" of economic benefits and interests at the expense of the long term health of the estuary are incompatible with the principles of *Keeping It Living*. Industrial and other economic activities that create pollution and damage the estuary's eco-systems are not appropriate in or adjacent to the estuary.

Social, Recreational, and Spiritual Activities

- Low impact recreational activities that provide public access to the estuary from Comox to Royston along designated, managed, and maintained trails and walkways are recommended.
- Interpretive trails, kiosks, and an interpretive centre are possible ways to inform the public regarding natural features of the estuary.
- Non polluting water craft should be used in the river and estuary.
- The estuary is a place where one can connect with nature, hear the silence and the sounds of nature, observe the stars, and experience a mutually enhancing relationship between ourselves and the natural world. This is important to residents and visitors alike. It is and will remain a spiritual experience for many.
- A gathering place for social and cultural events and activities.

Social Ecology

The Estuary currently includes established and temporary communities, residences, and businesses. This activity impacts the estuary. We foresee that over time this impact will align with the principles embodied in this document. It is hoped that local residents and all who pass through the estuary will work to enhance its health and that those who are closest to the estuary will come to represent the very essence of *Keeping It Living*.

Governance

Human interaction in the estuary has been governed for millennia by the indigenous people who have inhabited these shores. Currently, the Sathlloot, Sasitla, Saitla, Jeeksun, Puntledge, Cha'chae and Tat'poos live here. Known as the K'omoks First Nation, they maintain their inherent right to govern these waters, shores, and uplands. The settler population that has lived here since the mid 1800's is governed by the Government of Canada, the Province of British Columbia, the Comox Valley Regional District, and the municipalities of Courtenay, Comox and Cumberland. All of these governments are collectively responsible for regulating human activities in the estuary and its surrounds, and for protecting and restoring the estuary's natural eco-systems.

Currently the estuary is governed by a number of jurisdictions. This divides the management of the estuary into discreet components and areas of responsibility, with each government focusing

on its own area. This has not always been compatible with *Keeping It Living*. It is important to see the estuary as a single entity, made up of numerous components that are linked together organically. These components continually influence and affect one another. Decisions governing the estuary need to be made from the perspective that it is an integrated whole.

A cohesive governing body is needed in order to:

- Pursue a common vision for its long term protection and restoration.
- Co-ordinate the management of human activities in and land use around the estuary consistent with the principles of *Keeping It Living*.
- Facilitate collaboration between stakeholders enabling agency staff to work across organization and political boundaries.

Membership of the Governing Body

Representation from all key stakeholder groups is required for effective decision making and integrated management of activities that impact the estuary. This should include:

- Government of Canada
- K'omoks First Nation
- Province of British Columbia
- Comox Valley Regional District
- Municipal governments including the City of Courtenay, Town of Comox, and the Village of Cumberland
- Community Environmental Groups and Conservancies
- Research and Science community

Conditions for Successful Governance

The governing body should:

- Have a clear mandate, based on legislation, with delegated authority from respective government bodies and organizations.
- Have adequate resources to carry out the work - for example, staffing should include a coordinator/estuarine ecologist, support staff, office space, supplies, and equipment.
- Have a communication strategy that keeps the public informed and aware of natural life in the estuary, as well as initiatives and practices designed to protect and restore

the estuary. The communication program should provide the public with opportunities to discuss activities related to the estuary, provide regular updates on the state of the estuary, and create opportunities for public input into the governing process.

- Adhere to the guiding principles presented in this paper.

Appendix A- The Estuary Working Group Member Organizations and Independent Professionals

The Estuary Working Group, a sub committee of the Comox Valley Project Watershed Society, formed in the fall of 2008 following the highly successful Heart of the Watershed Symposium on the Courtenay River Estuary. The Estuary Working Group is committed to conserving and restoring the Courtenay River Estuary.

Organisation	Name	Title
Comox Valley Project Watershed Society	Don Castleden	Chair, Project Watershed Chair, Estuary Working Group
Comox Valley Project Watershed Society	Caila Holbrook	Manager, Mapping Centre
Comox Valley Environmental Council	Larry Peterson	President
Comox Valley Land Trust Society	Jack Minard	Executive Director
Comox Valley Naturalists Society	Dave Lacelle	President
Courtenay and District Fish and Game Protective Association	Ron Watanabe	1 st Vice President
Fisheries and Oceans Canada	Bev Bravender	Habitat Research
Fisheries and Oceans Canada	Dave Davies	Community Advisor
Mountaineer Avian Rescue Society	Maj Birch	Wildlife Rehabilitator
Puntledge River Restoration Society	Meagan Kohlmeyer-Hurd	Representative
Sierra Club - Comox Valley Chapter	Mike Bell	Chair
Steelhead Society of BC, Comox Valley	Dionne Hurd	Representative
Tsolum River Restoration Society	Wayne White	Representative
Independent Professionals	Nancy A Greene	Archeologist
	Paul Horgen	Biologist, Professor Emeritus, U of T
	Norma Morton	Courtenay River Estuary Historian
	Jeff Whetter	Biologist