

LAKE WINDERMERE AMBASSADORS

TERMS OF REFERENCE

FINAL

September 15, 2010



1. Background

The Lake Windermere Project (LWP) is a partnership of government agencies, First Nations, organizations and local citizens that has been building community value, respect and understanding of Lake Windermere. The Lake Windermere Project, a five-year program, started in 2005 when it became speculative that development in the region was having significant impacts on the water quality and quantity of the Upper Columbia River, a river which provides water to 15 million downstream users. Lake Windermere has experienced a collapse in the burbot (*Lota lota*) fishery¹. Because burbot are a top predator, the health of their population is a good indication of the health of the ecosystem as a whole².

As seen in our 2005 Lake-Use Survey, the lack of water resource management on and around Lake Windermere has become a concern for area residents and second homeowners as this can cause long-term implications for the aquatic health of the system. This survey indicates widespread public concern about the sustainability of this important water source. Respondents expressed a need for information on maintaining septic systems, concerns about boat traffic congestion, aquatic plant growth, shoreline and upland development, water conservation and water quality. The Lake Windermere Project delivers scientifically sound, education and action-based stewardship efforts to help sustain this economically and environmentally crucial lake.

Wildsight has facilitated the Lake Windermere Project since its inception. Some key achievements of the LWP to date are:

- The continued monitoring of water quality parameters in accordance with the 2005 Masse & Miller Windermere Lake Water Quality Monitoring Program and Literature Review. In the first five years of the program, a total of 40 volunteers have contributed over 400 hours to assist our efforts in water quality monitoring and boat counts. Water quality has been monitored at three lake stations and on six tributaries of concern, to gain a watershed level of understanding of the health of the lake.
- LWP hosts the annual 'Water Wonders Workshop', an interactive, educational water stewardship event that is held at James Chabot Beach alongside the Lakeside Event, a long-standing local event that draws hundreds of people. This event has reached over 700 children and adults. The goal of the workshop is to garner a community understanding of the importance of water stewardship, and inspire admiration and respect for our local water resources. Previous Water Wonders Workshops have featured a number of educational displays and exciting activities including the popular 'Wild About Wetlands' tour, an interactive 'Stream Trailer' that depicts the effects of watershed alterations, 'Water in Africa' an activity that characterizes the importance of global water conservation, and a working 'Water Pollution Model' that demonstrates the impacts of non-point source pollution. Summer 2009, will mark the event's fourth year.
- The East Kootenay Integrated Lake Management Partnership (EKILMP) was organized in 2006 as a result of increasing development pressures on lake ecosystems in the East Kootenay. Lake Windermere was chosen as the pilot project for the Partnership due to the current LWP study, high fish and wildlife values, local partner support, source water issues, and a planning process that was underway (the Lake Windermere Area Official Community Plan). The LWP served as Chair of the Partnership from 2007 to 2009, and directed the organization through the completion of the first Sensitive Habitat Inventory Mapping project to be completed in the East Kootenay. The resulting Lake Windermere Shoreline Management Guidelines for Fish and Wildlife direct foreshore activities to protect, conserve and restore important fish and wildlife habitats. Lake Windermere is now being used as a template for seven other lakes in the East Kootenay.
- The LWP initiated an education article series in partnership with our local newspaper to emphasize our educational component and the importance of a healthy lake ecosystem. To date, a total of 187

¹ Ministry of Environment, East Kootenay Burbot Population Assessment 2006

² Ministry of Fisheries, BC Fish Facts

articles have been printed in local, regional and national media about the project. We have published 25 educational articles, which are available on our website at www.wildsight.ca/programs/windermere.

- Coinciding with the Great Canadian Shoreline Clean Up, the LWP has organized and hosted the Lake Windermere Fall Shoreline Cleanup annually since 2006. To date, one tonne of garbage has been removed with the help of 79 volunteers. This event is supported by our local Sobey's grocery store, the Great Canadian Shoreline Clean Up, CP Rail, the District of Invermere, Regional District of East Kootenay and Waste Management.
- LWP partnered with the Canadian Cancer Society and other municipalities, organizations and businesses both locally and from across the Kootenays, to develop the Pesticide Free Columbia Basin Coalition. Through educational and partnership efforts, the District of Invermere became the first community in the East Kootenay to adopt a cosmetic pesticide bylaw in May 2009.
- The Lake Windermere Project was invited to present our project at the 12th Living Lakes Network conference in Umbria, Italy in September 2008 and the 13th Living Lakes Network conference at Lake Chapala, Mexico in March 2010. The international network has requested the use of the Lake Windermere Project as a template for other lake stewardship groups from around the world.
- LWP contractors have successfully completed the Streamkeepers Instructors program, making the two-day workshop available to community residents. Skills regarding protocol for stream habitat measurements, sampling invertebrates, fish and taking basic water quality measurements have been gained. This course enables LWP to deliver the 2-day program to area residents interested in initiating stream monitoring programs in their communities, or assist with LWP tributary monitoring programs in the future.
- LWP contractors are trained in Federal stream monitoring protocol through the Canadian Aquatic Biomonitoring Network program developed by Environment Canada. An indepth water quality and macroinvertebrate monitoring program has been established on Windermere Creek through the Columbia Basin Water Monitoring Group, a project of the Columbia Basin Watershed Network.
- LWP and Living Lakes member Lake Windermere, England established an official 'Sister Lake' partnership in May 2009. This partnership highlights our region and the aspects that draw tourists to our area, as well as the social, environmental and economic benefits that will come from such a partnership. The 'Sister Lake' Partnership is fully supported by the District of Invermere, Regional District of East Kootenay, the Columbia Valley Chamber of Commerce and Wildsight.
- LWP created a national Living Lakes Network Canada, in partnership with the Lake Winnipeg Foundation. The aim is to foster citizen-based stewardship of our lakes, wetlands and watersheds across Canada. The LLNC will facilitate and initiate projects that result in long-term protection of our precious freshwater resources. It will also increase the capacity of the water stewardship community so this work can continue into the future. Wildsight and the Lake Winnipeg Foundation consulted with water experts throughout North America and found unanimous support for the need to standardize lake monitoring, classification and rehabilitation methods.
- The Lake Windermere Project has recently been chosen as a national "best practices" case study for community-based environmental monitoring as part of a research project funded by the Canadian Environmental Assessment Agency (CEAA) and carried out by N.T.Yap Environmental Systems Analysts (YESA). This research aims to identify cases of successful community-based environmental monitoring activities, and identify the enabling conditions and institutional arrangements contributing to their success. The "best-practices" information will be compiled into a handbook-style guide to successful community monitoring. This will be used by the CEAA to ensure successful monitoring initiatives are undertaken in the context of Environmental Impact Assessment Follow-up.

The Lake Windermere Project has created a resource for area communities. Water monitoring equipment, an extensive library on related studies and knowledge on monitoring protocols is now readily available to the community.

In the final year of the Lake Windermere Project, the components of water quality monitoring, education and outreach will be handed over to the community under the direction of the Lake Windermere Ambassadors.

2. Vision

An ecologically healthy Lake Windermere with balanced management approaches that support recreation and traditional uses, high fish and wildlife values, and economic prosperity in the region.

3. Mission

Through collaboration of representatives of key community sectors, the Lake Windermere Ambassadors will serve as a resource for future projects benefiting the health of Lake Windermere.

4. Goal

The five-year goal is to establish a water governance board with delegated authority for the Lake Windermere watershed.

5. Geographic Scope

In southeastern British Columbia, Lake Windermere is located at the headwaters of the Columbia River, the largest river flowing to the Pacific Ocean in North America. The Columbia Wetlands, part of the Pacific Flyway and a Ramsar listed Wetland of International Importance border Lake Windermere.

Lake Windermere is surrounded by the communities of Invermere, Windermere and represented rurally by Regional District of East Kootenay Area F. Two First Nations bands of the Ktunaxa Kinbasket Tribal Council have traditional lands in the area. The Shuswap Band Reserve is located near Athalmer and the Columbia Lake Band at the south end of Lake Windermere. The Ktunaxa traditional territory includes most of the Kootenay region and extends southwards into Montana and Idaho, in the United States. Traditional activities include hunting, trapping and fishing as well as harvesting of natural flora. The Lake Windermere area is a popular recreation destination area for year round activities.

6. Strategic Scope

Lake Windermere Ambassadors (Ambassadors) will direct future water quality monitoring and stewardship programs based on the findings of the Lake Windermere Project, and encourage the implementation of policies, guidelines, and recommendations of the Lake Windermere Management Plan, the Lake Windermere Shoreline Management Guidelines for Fish and Wildlife and other projects as applicable.

5.1 Lake Windermere Shoreline Management Guidelines for Fish and Wildlife

The East Kootenay Integrated Lake Management Partnership (EKILMP) is a coalition of various agencies, local governments, First Nations and non-government organizations with joint responsibilities to protect lake ecosystems. The mandate of the partnership is to maintain the integrity of lake ecosystems for fish, wildlife, drinking water, heritage, recreation and aesthetic values. EKILMP develops science-based, coordinated management guidance for land and water uses associated with East Kootenay lakes, in southeastern British Columbia.

Windermere Lake was chosen as the pilot study lake due to the presence of a highly motivated local water stewardship group, Wildsight and their Lake Windermere Project, heavy development pressures, high fish and wildlife values, ongoing land use planning processes and source water issues. Results show that 62% of Windermere Lake's shoreline is classified as disturbed³. Anthropogenic alterations include the construction of foreshore structures, riparian vegetation removal, wetland infilling and modifications of the land base, including the construction of roadways and the railway.

The Sensitive Habitat Inventory Mapping (SHIM) documents land use, water quality, fish and wildlife values, riparian and wetland habitat changes and identifies sensitive areas requiring protection. SHIM and a scientifically defensible Aquatic Habitat Index provides a cumulative impact assessment that will guide development and provide opportunities for conservation, enhancement and restoration initiatives.

The Partnership identified areas on Lake Windermere that are essential for the long term maintenance of fish and/or wildlife values through both the Habitat Index Analysis process and the Zones of Sensitivity analysis. These areas include most tributary outlets, wildlife corridors, contiguous wetlands, in-lake wetlands, natural grasslands, cliff/bluffs, important gravel/cobble areas used by burbot or other species for spawning/rearing and areas of high productivity such as mussel beds. It also includes remnant natural areas. EKILMP recommends that these areas be designated for conservation use, and that no development occur within them. Low impact water access recreation and traditional First Nation uses are permissible in these areas, but permanent structures or alteration of existing habitats is considered to be unacceptable.

The Partnership also identified shoreline areas where low impact development could occur, areas where development with normal constraints could occur and areas where redevelopment with restoration would benefit the long-term health of the lake.

SHIM results assist managers, planners and communities in land use planning, development of regulations, standards and policies, leading to improved scientific knowledge as the basis for decision-making.

5.2 Lake Windermere Management Plan

The management of a lake foreshore (the area of land between the low water mark and high water mark), is the responsibility of local, provincial and federal governments, and is regulated through various pieces of legislation and regulations. The percentage of foreshore on Lake Windermere within the RDEK is 55%, within the DOI is 20%, and within the Columbia Lake Indian Reserve #3 is 25%.⁴

The Lake Windermere Management Plan is an initiative of the Regional District of East Kootenay (RDEK) and the District of Invermere (DOI), and will guide long-term management of the lake and direct local government planning for the lake and shoreline. It will consider and integrate the environmental, anthropogenic, cultural, and biological factors and values associated with Lake Windermere.

³ Windermere Foreshore Inventory and Mapping 2007

⁴ Lake Windermere Management Plan Draft May 2010

Areas that were identified as the focus of the Lake Management Plan are:

- Land use & zoning
- Shoreline and foreshore management
- Water zoning
- Recreational carrying capacity and management
- Public water access
- Water quality
- Fish and wildlife habitat

Significant work has already been completed in terms of planning on Lake Windermere, including:

- The Lake Windermere Area Official Community Plan was implemented in 2008 by the RDEK.
- Recognizing the existing planning exercises underway, Section 16 Map Reserves under the Land Title Act were implemented in 2008, and are in place until August 2010, with the potential to be extended. These reserves prevent the Province from granting new foreshore tenures.
- Shoreline Management Guidelines for Fish and Wildlife were completed in 2008 by the East Kootenay Integrated Lake Management Partnership.

Opportunities exist for community involvement in implementing the plan. The Lake Windermere Ambassadors are an established community group with the mechanisms to help implement management and stewardship goals and objectives reflected in the Lake Management Plan. These include, but are not limited to:

- Encourage public education that informs the community about the lake environment and how to preserve the natural characteristics of the lake.
- Establish a 'Community Lake Patrol Team' to communicate policies to the population and advise the appropriate authorities regarding infractions.
- Create a 'Lake Windermere Environmental Monitoring Team' that will ensure water quality and quantity, and potentially birds, fish, and aquatic macrophytes are monitored on Lake Windermere into the future.

It is anticipated that the Lake Windermere Management Plan will be finalized by the end of 2010.

5.3 Lake Windermere/Upper Columbia Catchment Water Governance Board

Residents of the Upper Columbia River basin watershed are becoming increasingly concerned about the lack of enforcement of existing policies, plans, and guidelines that are in place currently in order to help sustain a functioning watershed.

It is recognized that overlapping judiciary responsibilities make watershed management difficult and that capacity of the four levels of government (municipal, provincial, federal, and First Nations) is not likely to increase in the future.

Using models established across Canada, such as the Okanagan Basin Water Board, Bow River Basin Council, Mackenzie River Basin Board and the Fraser Basin Council, The Lake Windermere Ambassadors will assist in the creation of a watershed based governance model. This Board will provide advice and comment on development proposals and lobby government to enact effective policy that protects our water resources.

The geographical focus will begin around Lake Windermere, where substantial policies exist. Once proven successful, the committee may expand to include regions north and/or south.

It is understood that the Lake Windermere Ambassadors are an interim measure while a water governance model is established for the Upper Columbia River. It is understood that the Ambassadors will need to draw heavily on existing expertise in the water management community.

Needs:

- To understand government responsibility for each component of the above policies
- To understand where responsibility can be delegated to the Ambassadors
- To understand what type of board structure is applicable, ie. Staffing and volunteer requirements
- To understand where possible funding sources exist to support a Water Governance Board

5.4 Limits of Acceptable Change

The Lake Windermere Ambassadors will investigate the potential to establish a set of goals and objectives for Lake Windermere including the following areas, and monitor them annually.

- Water quality
- Water quantity
- Boating
- Marinas, launches and mooring buoys
- Summer and winter recreational use
- Noise
- Aquatic plants
- Lake clean-ups
- Fish populations
- Bird populations
- Effluents (sewage, tile fields, chemicals, fertilizers, etc)

7. General Membership

Participation in the Lake Windermere Ambassadors is voluntary and open to concerned and engaged community members. Efforts have been made to include all stakeholders in the community that have a role in management of the lake (see Appendix A).

7.1 Protocol

All Ambassadors have equal opportunity to contribute at meetings and responsibility to respect the opinions of others. Ambassadors are encouraged to actively participate in the discussions and use their experience, education, and insight to speak freely about any issues or opportunities to be considered.

The Lake Windermere Ambassadors will select a spokesperson to speak to various media, government agencies, etc. on their behalf.

8. Operational Scope

8.1 Roles and Responsibilities

- Board of Directors

The Board of Directors will manage the operations of the Ambassadors and their projects. Board Directors will serve a minimum 2-year and a maximum 5-year term, and not more than half of the board shall change at a time. The 2010-2011 Lake Windermere Ambassadors Board members are listed in Appendix B.

- Fundraising Committee

The Lake Windermere Ambassadors Fundraising Committee is involved with the organization of, and solicitation for the endowment fund. Monies raised will be contributed to the endowment fund to be used for projects benefiting the health of the lake. The fund is to be directed in partnership by the District of Invermere and the Columbia Valley Community Foundation.

- Special Events Committee

The Lake Windermere Ambassadors Special Events Committee is primarily involved with shoreline cleanups and the annual Lake Windermere Regatta that celebrates the lake as a community asset.

- Lake Windermere Project

The Lake Windermere Project will serve a technical advisory role to the Lake Windermere Ambassadors until it comes to completion in September 2010, at which point it may evolve into the Lake Windermere Environmental Monitoring Team.

- Lake Windermere Environmental Monitoring Team

This committee will continue the work of the Lake Windermere Project to ensure water quality monitoring continues on Lake Windermere, following protocols and sampling regimes established by the Ministry of Environment and Lake Windermere Project. An annual review of the Lake Windermere Water Quality Objectives developed by the Ministry of Environment, Environmental Protection Division, will take place to ensure water quality guidelines are being met. The team will also consider establishing bird, fish and aquatic macrophyte monitoring programs.

- Community Lake Patrol Team

The Lake Windermere Ambassadors, in cooperation with government agencies, will assist in implementing policies that result from the Lake Windermere Management Plan, Windermere Lake Shoreline Management Guidelines, Boating Regulations and other policies as applicable. The Ambassadors will communicate policies to the population and advise the appropriate authorities regarding infractions.

8.2 Schedule of meetings

The Lake Windermere Ambassadors will meet quarterly, unless more frequent meetings are required and agreed upon by the group.

8.3 Voting of board members

Each board member will have a vote, majority rules.

9. Structure

9.1 Lake Windermere Ambassadors Board

9.1.1 Chair

The Ambassadors will elect a Chair to serve a term of three to five years.

9.1.2 Secretary

The Ambassadors will elect a secretary to serve a term of three to five years.

9.1.3 Treasurer

The Ambassadors will elect a treasurer to serve a term of three to five years.

9.1.4 Standing Positions

The Ambassadors Board will include a standing position from the current Regional District of East Kootenay, Area F Director, District of Invermere elected council, and the Canadian Columbia River Inter-tribal Fisheries Commission.

9.1.5 Directors at Large

The Ambassadors will elect five directors at large to serve a term of three to five years. The Ambassadors may select additional directors as required.

9.2 Lake Windermere Ambassadors Committees or Working Groups

Currently, the Lake Windermere Ambassadors are subdivided into various committees. Future working groups may include; field committee, grant review board, community engagement, etc. The Committee as a whole will discuss and determine when it is appropriate to add a new working group.

Appendix A: Participants

- Businesses
- First Nations
- Governments
- Non-government Organizations
- Local Residents
- Recreation
- Resorts
- Second Homeowners
- Youth

Appendix B: 2010-2011 Lake Windermere Ambassadors Board

Chair - Paul Christy

Treasurer – John Rowse

Secretary – Heather Leschied

Regional District of East Kootenay, Area F Director – Wendy Booth

District of Invermere Council – Al Miller

Canadian Columbia River Inter-Tribal Fisheries Commission – Kenton Andreashuk

Directors at large:

Bob Shaunessy

Gurmeet Brar

Taoya Schaefer

Gerry Wilkie

Brian Colgan