Collaborative Watershed Governance -Lessons Learned from Lake Windermere

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Challenges and Successes of Watershed Governance for the Lake Windermere Ambassadors

1 REFLECTING ON THE GOVERNANCE EXPERIENCE OF THE LAKE WINDERMERE AMBASSADORS

This report tells the story of how the Lake Windermere Ambassadors (LWA) have built a role for community in local water management and how experience is steering them towards a watershed-wide mandate. The report shares some of the challenges and successes experienced by the LWA in its seven-year history so that others may benefit from the lessons learned. For the people of the Lake Windermere area and the upper Columbia River Basin, this record explains the unique niche of the LWA and describes what the organization is working towards, providing a platform for ongoing collaboration. For the province of BC and those further afield, the report contributes to the legacy of analyses by POLIS, Living Lakes Canada, the Columbia Basin Watershed Network, and others that aim to understand the evolving role of community in local water management. For the LWA, telling this story is a chance to reflect on the past with a view to the future: What's next for the Ambassadors?

1.1 A brief history of the LWA

In 2005, a rapid population influx and surge of development on Lake Windermere foreshore motivated a regional non-profit organization, Wildsight, to take action to protect lake health. Some of the major concerns identified through a public survey included: habitat loss, water quality deterioration, motorized uses affecting human enjoyment and the environment, lack of public access to the lake, and the overall challenges of lake management.

It became apparent that preserving the health of Lake Windermere was in the public interest, and would require coordinated planning, resources and expertise, leading Wildsight to form the Lake Windermere Project (LWP). Supported by community associations, all levels of government including First Nations, and external research groups, the LWP conducted water quality monitoring, helped develop Shoreline Management Guidelines for Lake Windermere, and provided input into the Lake Windermere Management Plan which was adopted by the Regional District of East Kootenay and District of Invermere in 2011.

The five-year LWP concluded in 2009, laying a foundation of strong public and government engagement and a new library of current water quality data. In 2010, the Lake Windermere Ambassadors formed as an independent society to take over leadership of water monitoring and stewardship activities on Lake Windermere, with a vision of balanced management.

The Lake Windermere Ambassadors (LWA) represent a cross-section of stakeholders including business, government, First Nations, recreation, second homeowners, full-time residents, youth and non-government organizations. Their mandate is the protection of Lake Windermere in

perpetuity. Their vision is an ecologically healthy lake with balanced management approaches that support traditional and recreational uses, high fish and wildlife values, and economic prosperity in the region.

Over recent years, the LWA has highlighted the need for watershed-level stewardship and planning, since ongoing protection for the *lake* depends on coordinated community engagement and effective water governance at the *watershed* level. To this end, the society has also actively grown its participation in collaborative, lake management-related activities.

Currently, the LWA engages in water governance in a multitude of ways, including:

- shoreline guidance documents developed by East Kootenay Integrated Lake Management Partnership and incorporated into the Lake Windermere Management Plan;
- formally advising local decision-makers by providing comments on foreshore development referrals;
- leading citizen-science water monitoring projects and sharing information with decisionmakers, including industry partners;
- engaging citizens through water education, stewardship and restoration projects;
- building the capacity of the Lake Windermere community to participate in local water management and decision-making through convening public dialogues, bringing in expert speakers, and developing research partnerships that advance Lake Windermere water health and restoration.

1.2 Factors affecting watershed governance

In BC and beyond, difficulties in meeting the complex challenges of water management have demonstrated that governments on their own cannot protect watersheds while meeting the needs of communities. Players that were not traditionally involved in governance have increasingly taken on roles that help fill this gap, while offering communities and local organizations a part in watershed stewardship and sustainability.

"*Governance* is the dual process of decision-making and holding those that make decisions to account." (Brandes et al. 2014 p.vii) And "*Collaborative watershed governance*, simply put, is working together to reach shared outcomes and resolve differences among community, private sector and governmental interests, while maintaining or restoring the biophysical and ecosystem resilience of a watershed." (Wilkes 2010 p.1)

This report borrows expertise about watershed governance from two water research organizations to build its framework for exploring LWA's role:

- a 2014 report headed by Oliver Brandes, of POLIS: *Winning Conditions A Blueprint for Watershed Governance in BC* (referred to as "the POLIS Blueprint"); and
- a 2012 report led by Natalya Melynchuk at the University of Waterloo Water Policy and Governance Group: *Water Governance Challenges and Opportunities: Lake Windermere, British Columbia*, which in turn draws on a 2010 University of Waterloo report from the UW Water Policy and Governance Group titled *Challenges for Water Governance in Canada: A Discussion Paper*.

POLIS' "winning conditions" describe nine basic requirements for (or likely indicators of) success:

- 1. Enabling Powers in Legislation for Watershed Entities
- 2. Co-Governance with First Nations
- 3. Support from & Partnership with Local Government
- 4. Sustainable Long-Term Funding
- 5. A Functional Legal Framework for Sustainable Water & Watershed Management
- 6. Availability of Data, Information & Monitoring
- 7. Independent oversight & public reporting
- 8. Assessing Cumulative Impact
- 9. Continuous Peer-To-Peer Learning & Capacity-Building

Melynchuk and her co-authors focus on "water governance challenges" in these areas:

- Leadership and Commitment
- Resources and Capacity
- Legitimacy
- Accountability
- Actors, Roles and Relationships
- Learning
- Knowledge
- Adaptation
- Integrating Institutions
- Evaluation

Some of the above factors are more relevant to the role, context and experience of the LWA than others. In this report, they have been conflated into a set of five factors affecting the challenges and successes of the LWA:

- 1. Enabling governance framework:
 - Legal foundation
 - Engaging with local government in watershed planning
 - A formal watershed governance entity
- 2. Legitimacy
 - Accountability and legitimacy
 - Representation
 - First Nations
- 3. Capacity:
 - Sustainable long-term funding
 - Availability of data, information and monitoring
 - Organizational strength (strong leadership, knowledge transfer, strategic plan)
- 4. Assessment and adaptation
- 5. Thinking like a watershed:
 - Collaborating with watershed organizations
 - Building watershed knowledge
 - Ambassador role

This exploration of the LWA experience does not explore the full depth and breath of LWA accomplishments. Notably, it does not elaborate on stewardship activities or community education – the day-to-day, on-the-ground work of the LWA.

2 LWA EXPERIENCE WITH FACTORS IN WATERSHED GOVERNANCE

The challenges faced and successes accomplished by the LWA are explored here in terms of the five factors in watershed governance outlined above. The experience of the LWA brings forth lessons for each factor that can inform its work going forward as well as watershed governance elsewhere.

2.1 Enabling governance framework

This first factor concerns the formal structure and rules that underpin how a watershed entity may participate in watershed management. It's about influence within the framework of laws and governments in a watershed, and about opportunities to engage in decision-making. A watershed entity may or may not have legislated responsibilities and it may be more or less formally connected to governments that hold power over what goes on in the watershed. Local governments (including regional districts) are especially relevant to the work of watershed stewardship. A watershed management plan can provide a critical lever for engagement of a watershed entity in governance. This section explores these factors as they pertain to the experience of the LWA.

2.1.1 Legal foundation

Enabling powers in legislation can support sustainable water and watershed management (ecologically-based resource and land management) in several ways. Legislated frameworks can provide clarity "critical for building local legitimacy, leveraging financial and human resources, and providing a focal point to engage communities throughout the watershed to be part of a collective decision-making process." (Brandes et al. 2014 p.37) A strong, functional legal framework can provide tools such as legally enforceable watershed planning, citizen enforcement provisions, third party standing in key licence and permit decisions, and an appeal board for dispute resolution. These tools are, essentially, delegated governance functions.

Other than watershed planning, discussed below, the LWA has not followed a law-based route to influence. However, the new *BC Water Sustainability Act (WSA)* provides opportunities for local involvement in decision-making that the LWA may yet capitalize on. Pending more experience with implementation of the *WSA*, uncertainties remain as to how local government and organizations can engage in area-based water management more formally.

2.1.2 Engaging with local government in watershed planning

While the LWA does not have formal powers in legislation, it has achieved a formal role in supporting implementation of a guiding plan. The LWA is appointed Lake Management Committee (LMC) by two local governments. This role was established by the Lake Windermere Management Plan (LWMP). The plan, initiated as a pre-condition for lifting a moratorium on development, could take on legal status under the *Water Sustainability Act*. The LWMP could also obtain legal underpinnings through bylaws if the lake designations and other policies of the

plan were incorporated into the Regional District of East Kootenay (RDEK) Lake Windermere OCP and the District of Invermere (DOI) OCP. Water Quality Objectives and Shoreline Management Guidelines are already key governance tools stemming from the LWMP.

Meanwhile, the LWA can influence the implementation of the plan as the Lake Management Committee. The LMC mandate is to lead the non-regulatory lake management measures of the LWMP (mainly public education and water quality monitoring). The LMC also provides a forum for the LWA to review referrals and provide advice to local government on development proposals affecting the lake. This latter function is most relevant to the LWA's role in governance.

There have been challenges in the referrals process from the LWA perspective:

- Timelines can be tight, limiting back-and forth communication between the LMC and the district managing the proposal.
- Access to information is limited such that it can be difficult to make informed decisions.
- The referral process has been, for the most part, a one-way relationship: The LMC responds to development proposals.
- The Ambassadors' vision for an ecologically healthy lake is intertwined with their role as LMC and they make recommendations congruent with efforts to maintain the ecological integrity of the Lake. Taking a long-term perspective to consider precedents set by applications as well as the cumulative effects of lakeshore developments on the whole watershed can be challenging for the multi-stakeholder Committee.
- Local government would prefer the LMC focus on each proposal's merit, on a case-tocase basis, and provide simpler recommendations.
- Due to differing goals and values, some local government recommendations and Provincial decisions go against recommendations of the LMC and are inconsistent with the goals of the LWMP.

Yet the LMC is making a contribution in its referrals role – for example, local governments have a stronger case for recommendations they take to provincial agencies when they can say that the community has had input. This is important, as it is usually the provincial government that has to implement changes, or at least pave the way for them.

Recently, a five-year review resulted in renewed support for the LMC. This was followed by a strategic planning session to set priorities and consider ways of addressing the above challenges. Local government partners confirmed that the LMC is highly valued for its advocacy for the lake, and for bringing lake-based issues to the forefront of the public agenda.

LWA's community-based water monitoring program supports the LWMP and in turn, the Plan provides strong backing for the work of the Ambassadors, with clear direction and a foundation for formal collaboration with government. Ongoing funding from both local governments for the operational activities of the LMC/LWA is itself a sign of success.

The LWMP has great potential. To be more effective going forward, priorities have to be set amongst the many objectives in the plan, and, with support from the LMC, RDEK and DOI, the LMC needs to think through a strategy for implementing management actions. LWA advocates that the LWMP should take a Basin-level approach to guidelines and regulations in the years to come, eventually leading to the creation of an Upper Columbia Watershed Plan and setting the stage for heightened collaboration and more consistent decision-making across jurisdictions. The POLIS Blueprint reports that "The most successful watershed organizations operating in the province today are those with some form of legislated authority or backing, such as the Columbia Basin Trust, or those functioning through the cooperation of local governments, such as the Okanagan Basin Water Board." (Brandes et al. 2014 p.37) In terms of cooperation with local governments, the LWA has an evolving relationship with RDEK and DOI that is on a positive learning track. In its promotion of a robust watershed planning and management process, the LMC/LWA keeps the pressure on for good governance. Regarding legislated authority per se, the LWA is functioning without this "winning condition."

Closely related to legislated authority is the option of becoming a formal watershed governance entity – with strong influence on decision-making embedded through partnership or co-management. These themes are explored below.

2.1.3 A formal watershed governance entity

POLIS and other experts in watershed governance emphasize the importance of collaboration amongst players in a watershed that goes beyond communication and coordination to shared decision-making. In practical terms, this calls for those holding jurisdiction and authority, from the Crown to local governments, to join in a formal decision-making structure through elected representation (or nomination and local appointment). "Co-governance," including with First Nations in a government-to-government setting, is the outcome. Representatives of stakeholders from sectors of interest in the watershed may also join in shared decision-making through powers delegated to the governance entity.

In 2010, the LWA included in their Terms of Reference a five-year goal to establish a water governance board with delegated authority for the Lake Windermere watershed. Although the LWA was already practicing water governance, using the Lake Windermere Management Plan, Water Quality Objectives, and Shoreline Management Guidelines as tools, the aim was to create a Lake Windermere Watershed Governance Board that ensured those tools were implemented. The intention was to form an "interim group" which would determine next steps for a watershed governance entity – possibly oriented to the Columbia Headwaters. The steps taken towards these ends turned out to be highly effective, not in forming a governance board, but in building relationships and trust amongst players in the watershed that set a foundation for strong watershed governance going forward.

2.1.4 Building a watershed ethic

The re-routing of the goal to establish a governance body started with the realization that important community players were not ready. Several of the key stakeholder groups in the Columbia Basin still lacked fundamental watershed awareness and were not prepared to assume the responsibility of establishing an engaged watershed governance group. Some sectors had yet to begin "thinking like a watershed" in the Columbia Valley.

Based on this finding, the LWA shifted focus to generating broader interest in the watershed and watershed-scale planning through education, raising awareness, and organizing activities that would build collaboration among stakeholder groups. The actions taken by the LWA included:

- initiating smaller-scale dialogues amongst watershed stewardship groups around cumulative impacts affecting water quality and quantity in the region;
- convening stakeholder-specific meetings;

- delivering education about the functions, values and vulnerabilities in the watershed in the form of watershed tours, articles, restoration events and school partnerships;
- hosting multi-stakeholder workshops and presentations;
- working one-on-one with industry groups on mutually beneficial watershed projects.

By adapting its orientation from establishing a watershed governance entity to building awareness and encouraging broader participation, the LWA has found traction. It has started to cultivate an appetite in the community and amongst stakeholders for proactive watershed management by building relationships and trust among community and government stakeholders. The steps the organization has taken to strengthen relationships "are important and should help the LWA in its efforts to address the integration, capacity and legitimacy challenges that face most water governance organizations." (Melynchuk et al.et al. 2012 p.iv)

Also, as related above (in terms of a legal foundation and engaging in watershed planning), the LWA already has undertaken some key actions to strengthen its participation in water governance. While the Lake Management Committee can't regulate, it does have a clear channel to influence decision-making. Moreover, increased watershed awareness resulting from LWA activities can lead to behaviours that support stewardship objectives without relying as much on regulation and enforcement. Yet, in terms of cultivating a role in decision-making for itself and coordinating other groups and governments in the watershed, is this the path the LWA should sustain? Or, does better governance and decision-making depend on committed support of provincial and federal regulators, First Nation governments, local governments and resource users in the form of a governance entity?

The POLIS Blueprint aims "to fundamentally change the scale at which critical decisions impacting watersheds are made and to develop a clear role for watershed entities (WEs) in formal decision-making as community-based institutions that operate at a watershed scale to provide a nexus for integrating whole-system thinking with local ecological, economic, and social requirements." (Brandes et al. 2014, p.viii)

As a stewardship group with strong grassroots, LWA is in a valuable position to help community members and stakeholders understand that watershed governance is not just an abstract concept. However, the collaborative nature of this enterprise also means that one group cannot steer the ship alone, and watershed governance in the Upper Columbia Basin must be informed by perspectives and values beyond those of the Ambassadors. Furthermore, for such a group to be sustainable, it must be different in structure and in funding from LWA.

For the time-being, through educational watershed programs and projects, and with help from expert partners, LWA aims to continue to coordinate dialogue between stakeholder groups to engage them in long-term, whole-watershed thinking. As well, the LWA has made strides to build watershed-level stewardship by helping a new society – the Columbia Lake Stewardship Society – come into being. Through the efforts of the LWA, a core group of diverse stakeholders is working together to ensure continued protection of clean water and healthy waterways in the Columbia Headwaters watershed.

2.2 Accountability and legitimacy

Accountability and legitimacy are closely intertwined factors in watershed governance. Representation of watershed interests helps achieve legitimacy and is also central to the accountability of a watershed entity. First Nations buy-in is also key to legitimacy, since their governments hold rights and title to the territory at stake.

2.2.1 Accountability and legitimacy

Legitimacy exists when those who are affected by the actions of governance genuinely approve of those taking the actions. Accountability depends on clearly defined roles and responsibilities, consequences that are linked to outcomes and performance, and responsiveness on the part of decision-makers. (Melynchuk et al. 2012) While government is typically accountable to its electorate, non-government organizations too must have legitimacy and be accountable for their actions to be credible in the eyes of funders, decision-makers, communities and stakeholders.

The main way that the LWA maintains legitimacy (in addition to representation, described below) is by ensuring regular contact and engagement with the broader community through outreach and engagement in stewardship activities. LWA has a reputation for using a sound science framework (as applied in its water monitoring program), and its access to expertise in the scientific community also lends credibility.

The LWA's adaptation in focus from establishing a governance entity towards awareness-raising and relationship-building is also an exercise in building legitimacy. Recognizing that public trust is built on cumulative evidence of legitimacy through actions, the LWA didn't push the concept of the governance entity on people who were not yet open to that agenda. Instead, effort was invested in activities like creatively engaging the community in the water quality program.

Other assets of the LWA that contribute to its legitimacy within the community include (Melynchuk et al. 2012 p.9):

- the degree to which the LWA is embedded within the community,
- the referrals role played by the LMC,
- the support of both the Regional District of the East Kootenay and the District of Invermere,
- acknowledgement by respected organizations such as the International Living Lakes Network,
- involvement of the LWA in the Lake Windermere Management Plan,
- the diversity of actors within the LWA (see Representation, following).

Organizational tools are also pivotal to accountability and legitimacy, and the LWA Board is accountable for the responsibilities laid out in its Terms of Reference. Regular strategic planning communicates agreement at the organizational level on tasks and long-term goals, and clearly articulates the roles and responsibilities of the organization. (Other aspects of organizational development are discussed under "Capacity.") Periodic performance reviews via an assessment framework could provide a more concrete measure of accountability – LWA experience with assessment is explored in the section "Assessment and adaptation."

Representation of the full range of water management perspectives in the community is currently the organization's central mechanism for ensuring accountability.

2.2.2 Representation

Although achieving representation of diverse and often conflicting interests is a challenge, it is precisely this representation that ensures that decisions and actions taken by the LWA are appropriately informed and supported.

The Lake Management Committee Terms of Reference dictate that the Board of Directors must endeavour to represent 10 distinct sectors or interest groups, not including local district

advisors.¹ Wide representation means LWA is not steered by any one political agenda; instead it is directed by the goal of advancing overall lake health and community well-being. Balanced perspectives and political neutrality also lend credibility to Lake Management Committee recommendations on referrals.

The LWA Board has shown commitment to the community by expanding the number of positions on the board to encompass different voices, and it actively works to fill gaps. Keeping all sectors engaged is a continuing challenge and high turnover in board membership means recruitment is ongoing.

Efforts to engage a broader range of stakeholders have included setting up one-to-one meetings with sector groups or representatives, hosting workshops and attending meetings of the groups. Various representatives are invited to strategic planning sessions. A key lesson has been that the best way to build relationships and legitimacy is to work with partners or sector-specific stakeholders to develop mutually-beneficial projects.

2.2.3 First Nations

First Nations, as a level of government, don't have a natural niche on the board of a nongovernment organization the way stakeholder groups or organizations do. A formal watershed governance entity ideally would encompass First Nations in a co-management role.

During the formulation of the LWMP, First Nations were supportive but did not adopt the plan officially. The two regional districts have official advisors to the Lake Management Committee, and the First Nations would similarly be welcome to send an appointed representative. The Ambassadors have recently made efforts to approach the Akisqnuk First Nation, and are seeking to make a presentation to the Shuswap Indian Band Council.

The LWA appropriately seeks to engage with First Nations on their own terms – e.g., the relationship might be limited to information-sharing. Possible themes of interest to First Nations noted by the Ambassadors include incorporating First Nations language into the LWMP, collaborating on youth watershed education programs, and incorporating cultural and archeological values in the study of sensitive shorelines.

2.3 Capacity

For a watershed entity to engage in ongoing and new issues it needs monetary, technical and organizational capacity. Sustainable funding is key. Another critical resource is information, including data gathered through regular monitoring. Finally, organizational strength – in leadership, education and planning – is essential.

2.3.1 Sustainable long-term funding

Access to sustainable long-term funding, especially for core activities to maintain the organization, has always been a challenge for non-government organizations, and watershed entities are no exception. Ideally, funding should be based on a number of revenue streams, some

¹ Sectors of representation, as indicated in the Lake Management Committee Terms of Reference, include: Full-time residents, seasonal residents, local business, upland and foreshore recreation, commercial boating operations/marinas, water stewardship, ecological conservation/restoration, youth, Akisqnuk First Nations and Shuswap Band.

of which are ongoing rather than project-specific. Types of sources – some of which can lever other funding – include:

- government funding to support watershed planning and plan implementation;
- project-based grants from funders such as charitable foundations;
- fee-for-service arrangements;
- trust funds and endowments;
- resources from the community through donations and fundraising;
- in-kind support, such as program-specific support or expertise from community organizations;
- payments for ecosystem services;
- municipal levy or local tax revenues;
- resource revenues and rentals/ royalties/surcharges (from permits and licences).

The LWA has mainly been funded by the first three sources on the list. The regional governments have contributed on a regular basis, through a Fee for Service Agreement with District of Invermere (\$8,000 per annum – recently diminished by \$2,000) and an Economic Development Services Tax with RDEK (\$10,000 per year for 5 years as LMC). As well, the LWA has a good relationship and track record with other funders.

Nevertheless, the LWA still lacks adequate ongoing, sustainable funding. Relying on "one-off" funding sources is far from ideal, not only because of future uncertainty, but because narrow contractual arrangements can tie the use of the funds to certain projects, and frequent reporting requirements consume staff time. Inadequate long-term funding makes it difficult for the LWA to commit to hiring staff, to plan into the future and to undertake long-term projects.

The LWA has considered other options, particularly getting a tax-based Service Area Agreement, approved through referendum, to finance the watershed governance organization's administration and projects. The idea is that community support for the special tax would be achieved by increasing community awareness about the watershed's boundaries, health, and vulnerabilities. However, experience elsewhere has shown that it can be difficult to convince the public that such a levy is worth paying. Options the LWA does aim to pursue are endowment funders and corporate sponsorship.

Recent successful initiatives to link with other organizations in the region holds promise for building the capacity of the LWA and for enhanced watershed management generally (discussed further under "Thinking like a watershed"). This option was promoted in the report by Melynchuk et al. (2012 p.6):

"One viable option for enhancing the ability to achieve desired results is sharing or pooling skills and knowledge across organizations. Developing high levels of cooperation, reciprocity and trust among individuals, organizations and the wider community allows an organization to do more with limited financial resources and can lead to mutual learning and capacity building."

2.3.2 Availability of data, information and monitoring

To inform management of land- and water-use activities, while basing decisions on the carrying capacity of the watershed, watershed entities need a good understanding of the state of the hydrology, water quality, actual water use, and health of the watershed. The information must be

up-to-date and show changes over time and cumulative effects – data collected through monitoring fills this need.

Community-Based Monitoring (CBM) has been a central role of the LWA from the outset, and it has performed very well in this endeavor. The CBM program on Lake Windermere follows water quality standards set by the Ministry of Environment, and involves training of citizen scientists during each sampling event. Results are reported out to the public in three media: the *Pulse Check*, a column developed by the local newspaper; social media; and Annual Water Quality Reports made available to the public.

In recent years, the Columbia Valley Local Conservation Fund has supported enhancement of the LWA water monitoring program. The Columbia Lake Stewardship Society's own CBM program closely followed that of Lake Windermere, bolstering coordinated monitoring and data-sharing within the watershed.

Other types of information are also gathered by the LWA through its interactions with public stakeholders and its role as LMC. A valuable part of the Coordinator role is to seek out appropriate information in response to public inquiries or referrals where further background is needed. Development referrals themselves can include highly technical, scientific, or engineering language that requires additional capacity to synthesize in support of group decision-making.

Moving upland beyond the lake to encompass land uses that affect the watershed will require greater capacity and partnership. A clearinghouse of information that provides access to watershed-wide data could strengthen networks of organizations and support whole-watershed decision-making.

2.3.3 Organizational strength

Strong leadership, knowledge transfer and strategic planning are also key building blocks for capacity. Unfortunately, funding for initiatives to build these strengths is hard to come by. Nevertheless the LWA has made some strides.

Strong leadership

A critical foundation for governance is leadership to champion projects and ensure their successful implementation. Strong leaders keep an organization running and act as spokespeople for the cause.

The LWA Board benefits from committed leaders who helped establish the LWA. These leaders are integral members of the community and help promote the goals and purpose of the LWA, generating further support and leadership within the group.

The Ambassadors have also benefitted from a legacy of strong leadership from their Program Coordinators (Kirsten Harma from 2011 to 2014 and Megan Peloso from 2014 to 2017). The Coordinators have been innovative and energetic in pulling information together, in adapting LWA initiatives to changing circumstances, and in building relationships with the Lake Windermere Community and stakeholders as well as other organizations in the region. They have also modeled a proactive learning ethic and have facilitated knowledge transfer to the benefit of the Ambassadors and others (explored below).

The need for stable operational funding is relevant to leadership capacity, since attracting and retaining knowledgeable, skilled staff is essential to effectiveness. Training and transferring

knowledge as Coordinators change is imperative to maintain momentum and institutional memory. LWA has learned that strong individual leadership, while valuable, should be coupled with a formal procedure (including a succession plan) to transition important institutional knowledge and social capital.

Strengthened Board capacity is critical to maintaining momentum in the organization. LWA values board development and provides learning opportunities through webinars, workshops and presentations. Periodic high turnover in board membership makes such initiatives to improve performance and capacity even more important for the LWA/LMC.

Knowledge transfer

The POLIS Blueprint for watershed governance includes Continuous Peer-To-Peer Learning and Capacity-Building in its winning conditions: "Strong networks and interpersonal trust can facilitate rapid uptake of new practices or lessons learned from other jurisdictions." The LWA has excelled in this area by regularly sharing experiences with others either studying or engaged in water stewardship and governance within the region, the province and the country.

Interest from experts outside of the Basin in the LWA's work is a compliment. The organization's exploration of new approaches to stewardship and governance has drawn in a network of professionals. It has received support from university researchers at the University of Waterloo, the POLIS Project on Ecological Governance at the University of Victoria, and has strengthened or built new partnerships with Canadian Freshwater Alliance, Waterlution and Living Lakes Canada.

LWA supports research and co-learning on water governance in BC by providing case study information and participating in workshops. LWA support for the formation of the Columbia Lake Stewardship Society in 2014 involved sharing knowledge and experiences, and helped the Ambassadors achieve their own objectives of building greater interest in watershed protection.

A strategic plan

A completed and actionable strategic plan with well-defined organizational goals would help the LWA take a more purposeful approach to collaborative governance. Strategic planning can also help build accountability and legitimacy, while providing a solid foundation for organizational development.

In 2015 and 2016 the LWA hosted facilitated Strategic Planning Sessions to review progress and challenges and solicit input from key stakeholder groups. The sessions helped to solidify support for the LWA's work plan objectives, with input from an expanded range of interests. Following through on strategic planning will be of great benefit to the organization. The LMC is also producing a living Work Plan which sets objectives for supporting LWMP implementation over the next five years.

2.4 Assessment and adaptation

"Evaluation of governance approaches and outcomes, grounded in appropriate criteria and indicators, allows problems to be addressed and successes to be highlighted." (Melynchuk et al. 2012) Assessment is a foundation for accountability and a means of learning how to improve performance. LWA assessment has focused on project reporting, evaluating implementation and impacts of the LWMP, and reviewing LMC effectiveness. The LWMP calls for methods for monitoring compliance and effectiveness in meeting its objectives through performance measures. The Lake Management Committee has been deliberating how to measure its achievements in plan implementation. Tools and mechanisms for assessment under consideration include:

- integrate strategic engagement with partners through the evaluation,
- compile a "State of the Lake" report and scale up to "watershed" report in future,
- conduct public surveys,
- use Water Quality Objectives as a framework to assess whether or not goals are being reached,
- produce a performance-based report card for LWMP (in progress).

Adaptation is an organizational strength of the LWA: the LWA has established itself as a respected community organization by being responsive to opportunities that arise and attuned to community receptiveness. More systematic evaluation could help the LWA maintain its flexible management style through purposeful reflection on what's worked and what hasn't. An approach to evaluation could be developed parallel with the LMC Work Plan, and some progress has been made in this direction.

2.5 Thinking like a watershed

At the beginning of this report, the story of the LWA's governance framework development articulated an evolution in core thinking that can be summed up as *building a watershed ethic*. Many of the challenges and successes LWA encountered in areas of accountability, legitimacy and representation; capacity; and assessment and adaptation, are indeed influenced by this aim to "think like a watershed."

The value of this factor in watershed governance is illuminated by LWA's own experience while it is not explicit in frameworks such as the POLIS Blueprint. The Ambassadors have discovered that the future of Lake Windermere and the Upper Columbia Basin depends on residents, stakeholders and decision-makers adjusting their view of lake health to encompass all activities and values within a watershed. These values are inseparable from the future health and economy of the Basin. Essential tools for building this ethic include collaborating with non-government organizations, building watershed knowledge and playing the role of ambassador.

2.5.1 Collaborating with watershed organizations

One of the LWA's greatest strengths is its recognition of the enormous value of assembling people and groups already "thinking like a watershed" and involved in water protection work.

Experts emphasise the benefits of strong networking among practitioners and horizontal integration across organizations operating at the same scale. (Brandes et al. 2014 p.41) (Melynchuk et al. 2012 p.17) They report that networking and integration can help:

- accelerate learning from a diversity of experiences,
- encourage sharing resources to help increase economic efficiency, and
- create democratic legitimacy through increased representation of interest groups from other non-profits.

Under "Sustainable long-term funding," the value of recent successes in linking with other organizations in the region was emphasized, as the sharing or pooling of resources allows the

LWA to do more with limited funding. It can also contribute to mutual learning, furthering the aims of watershed stewardship.

Networking is also a prerequisite for reaching LWA's goal of a holistic watershed management approach that takes into account cumulative effects of multiple developments distributed through the watershed. Through experience, the LWA has affirmed that to meet the goal of protecting the Lake Windermere watershed, programs need to focus on: increased collaboration with partner watershed stewardship groups, diversified stakeholder engagement with other industry sectors, and enhanced overall understanding of watershed dynamics in the Upper Columbia Basin. Practically, this entailed assembling people and groups who were already "thinking like a watershed" and involved in water protection work.

Two main endeavors epitomize the LWAs initiative in this area. First, the 2014 Strategic Planning workshop, which engaged stakeholder groups, launched discussions of leadership roles for water stewardship groups in setting up collaborative watershed governance. The success of this session was reflected in a unanimous agreement that "greater voice and legitimacy would be attained if we more constructively united in our common interests to maintain the integrity of lakes and wetlands in the Upper Columbia."

Second, the LWA has been actively exploring opportunities to identify and engage with others in the watershed, particularly with water-oriented groups in the Upper Columbia. The Ambassadors have successfully brought together groups in the Upper Columbia through:

- tours of the Upper Columbia Watershed,
- invitations to groups to make presentations at events,
- sharing its website to promote partner information sharing,
- supporting expert presentations on watershed-wide topics,
- sustaining membership in regional and broader organizations.

The extensive partnership-building initiatives of the LWA have drawn new opportunities from regional assets and expertise in water stewardship. Collaboration will also help increase engagement of a broader group of stakeholders. Even more fundamentally, in partnership, the LWA and other organizations can help set the direction of community-based water stewardship in the Upper Columbia Basin. Recognizing this potential, the LWA aims to adapt its organizational mandate to reflect watershed thinking, aware that the treasured values of Lake Windermere cannot be sustained by a narrower vision.

2.5.2 Building watershed knowledge

Thinking like a watershed depends on knowing the watershed. It is part of the LWA's mission and mandate, through the LMC, to engage and educate residents and visitors of the Invermere and Lake Windermere areas about the watershed. The importance of this was highlighted when the LWA learned from its efforts to create a multi-stakeholder watershed group that there is still work to be done to solidify basic watershed knowledge.

The LWA is highly energetic and productive in delivering on this knowledge-building mandate. Related activities have included:

- regular educational media articles about the functions, values and vulnerabilities of the Columbia Headwaters watershed;
- hosted water expert presentations;

- lake and watershed tours;
- publication of guides such as a green boating guide and watershed friendly tips for golf courses;
- distribution of watershed brochures at meetings, presentations, education booths and other venues;
- partnering with invasive species expert groups and demonstrating boat washing and mussel inspections;
- engaging community members in restoration and maintenance projects;
- working with local schools to develop projects aimed at educating the broader community about our watershed's geography, functions, values and vulnerabilities;
- organizing events like the Summer Splash to increase awareness of the Lake Windermere values, and bring people together to see how they are all stakeholders invested in the entire watershed.

2.5.3 Ambassador role

The POLIS Blueprint asserts that an ambassadorial role is a "key activity" of a watershed entity. Credible community watershed ambassadors who are convened, educated, and nurtured by watershed entities can:

- provide community-based oversight and engagement;
- engender a "sustainable water culture" at the community level;
- build a sense of watershed-level awareness and trust through informing, negotiating and communicating;
- act as a buffer between stakeholder groups and formal water management organizations;
- reflect the broader public interest and community intent in the context of the local watershed.

The LWA is well on its way to establishing a coordinated network of people playing various roles according to their familiarity with local water issues, history, culture, and their standing in the community. The Board of Directors, the Program Coordinators, and the organizations that have become partners with the Ambassadors are delivering the benefits listed above.

3 SUMMARY OF LESSONS FROM THE LWA'S EXPERIENCE

Essentially a community-based, lake-oriented stewardship group, the LWA extends its reach and its role in good governance in a number of ways. While it has put the ambition of catalysing a basin-level, formalized watershed governance entity on the backburner, the organization has been truly ambassadorial in expanding the role of community in local water management and in launching a shift in perspective towards holistic watershed governance.

Following is a summary of lessons drawn from the challenges and successes experienced by the LWA in the realm of the five governance factors.

3.1 Governance framework lessons

• LWA has come to realize that a legal foundation and formal governance entity are not appropriate for the Lake Windermere watershed just yet. Insufficient direction provided in the available legislation (*WSA*), governments and stakeholders in the region not being

ready to join together in watershed governance, and the significant capacity requirements to convene a formal governance entity are factors contributing to this recognition. The collaborative nature of this enterprise is such that one group cannot set directions on its own, and effective watershed governance in the Upper Columbia Basin must be informed by perspectives and values beyond those of the Ambassadors, for example from the Province and First Nations. For a formal watershed governance group to be sustainable, it must also be different in structure and in funding from LWA.

- The LWA has some formal status in its role as LMC which is mandated by a regional government via an agreed-upon Lake Management Plan. While the (referrals) role is only advisory, it can influence decisions in the direction of sustainability.
- Lacking a legal foundation, there is less leverage to get key interests to the table, and less of a platform on which to build an argument for sustainable, long-term funding. Yet this has not perceptibly affected the legitimacy of the LWA. It is well-respected for its science-based approach to lake stewardship and call for balanced management.
- The LWA has been laying a foundation for strong governance by building relationships and trust among the players involved in the watershed community, encouraging watershed-scale thinking. In adapting its orientation from establishing a governance entity to building awareness and encouraging broader participation, the LWA has started to cultivate an appetite in the community and amongst stakeholders for proactive watershed management.

3.2 Accountability and legitimacy lessons

- The LWA's shift from establishing a governance entity towards awareness raising and relationship building is also an exercise in building legitimacy.
- The LWA realizes that it needs a balanced Board of Directors to maintain legitimacy in the community, and the Lake Management Committee Terms of Reference dictate a diversity of representation. Work to flesh out representation to include underrepresented interests and address turnover continues.
- The main way that the LWA maintains legitimacy, in addition to representation, is by ensuring regular contact and engagement with the broader community through outreach and engagement in stewardship activities.
- Strengthening organization tools such as a communication strategy and a strategic plan could further build legitimacy.

3.3 Capacity lessons

- While the LWA has been successful in tapping a diverse range of funding sources particularly from regional governments and charitable foundations the organization still lacks adequate ongoing, sustainable funding. Other options being explored include endowment funding.
- The LWA has good capacity in the area of information monitoring has been a central role of the LWA from the outset, and it has performed this responsibility very well. Linkages with like-minded watershed groups have augmented monitoring by the LWA. A

dedicated Program Coordinator works to fill information gaps relevant to the LWA's role as an advisor on development proposals.

- Looking upland from the lake to encompass land uses that affect the whole watershed will require renewed information-gathering efforts. Compiling information from various sources into a clearinghouse could strengthen networks of organizations that could all benefit from access to watershed-wide data.
- Program Coordinators have provided strong leadership central to organizational capacity. The organization would benefit from a formal procedure to transition important institutional knowledge and social capital in the event of a transfer in leadership.
- Effort is appropriately being devoted to Board development, critical to maintaining momentum in the organization.
- A completed strategic plan with well-defined organizational goals would help the LWA take a more purposeful approach to collaborative governance.
- Knowledge transfer is an exceptional strength of the LWA. Investment in the pursuit of learning opportunities and peer-to-peer learning is ongoing and two-way also benefitting other organizations dedicated to aspects of watershed governance.
- Recent initiatives to link with other organizations in the region hold promise for building the capacity of the LWA through pooling skills and knowledge, and through reciprocity in program delivery.

3.4 Assessment and adaptation

- Adaptation is a strength of the LWA: an adaptive style has allowed the organization to establish itself as a respected community water stewardship and water quality monitoring organization.
- More systematic evaluation could help the LWA maintain its flexible management style through purposeful reflection on what's worked and what hasn't.

3.5 Thinking like a watershed lessons

- LWA experience on all governance factors points to the core value of thinking like a watershed. Challenges and successes in the areas of accountability, legitimacy and representation; capacity; and assessment and adaptation, are all influenced by this factor.
- The Ambassadors have discovered that the future of Lake Windermere and the broader Upper Columbia Basin depends on networking, shared learning and a holistic perspective on watershed management. Driven by this learning, the Ambassadors have worked to assemble people and groups already "thinking like a watershed" and involved in water protection work.
- To encourage thinking like a watershed in the broader community, the LWA has continued to deliver on its mandate to engage and educate residents and visitors of the Lake Windermere area about the watershed.

• The origin of the organization, in the keyword "ambassadors," couldn't describe the central work of the LWA any better. The ambassadors who are convened, educated, and nurtured by the LWA are gradually getting the people of the Upper Columbia Basin to think like a watershed. In time, this has the potential to engender a culture of sustainability.

4 KEY FACTORS AFFECTING WATERSHED GOVERNANCE FOR THE LWA

The five governance factors explored in this report are based in two previous studies, from the 2014 POLIS Water Sustainability Project at the University of Victoria, and from a 2012 report led by Natalya Melynchuk and others at the University of Waterloo Water Policy and Governance Group. Figure 1 below shows how the POLIS and Melynchuk et al. factors nest into the five factors (and sub-topics) followed in this report.

The experience of the LWA to date has essentially confirmed the relevance of the various factors thought to be pivotal in watershed governance. Differences in weighting of the factors are, however significant. The LWA has achieved legitimacy and effectiveness in its work without an enabling legal framework. These qualities could be enhanced through more systematic strategic planning and evaluation, but attention to organizational development and an adaptive attitude have served the organization well in lieu of more rigorous performance assessment (the execution of which can drain organizational resources).

Most fundamental to the recent and future effectiveness of the LWA is its powerful learning attitude, which is going beyond local, lake-oriented education and outreach, to watershed-level collaboration. While the LWA didn't coin the term "thinking like a watershed," the experience of the LWA elevates this ethic to a pivotal factor in watershed governance.

Over 15 years ago a governance expert proposed a "new framework" for collaborative watershed governance (Wilkes 2010 p.8-9). The features of this framework de-emphasize formal structures and value sharing experience to create synergy for watershed sustainability. Figure 2 suggests that the orientation of the LWA leans heavily towards the "new", or less formal, framework.

Factors in Governance framing Winning Conditions (POLIS) Water Governance					
analysis in this report		Challenges (Melynchuk)			
Enabling governance framework:					
Legal foundation	A Functional Legal Framework for Sustainable Water & Watershed Management				
Engaging with local government in watershed planning	Support from & Partnership with Local Government				
A formal watershed governance entity	Enabling Powers in Legislation for Watershed Entities	Integrating Institutions			
Legitimacy:					
Accountability and legitimacy	Independent oversight & public reporting	Legitimacy Accountability			
Representation	Representation [a "key feature" of a watershed entity]				
First Nations	Co-Governance with First Nations				
Capacity:		Resources and Capacity			
Sustainable long-term funding	Sustainable Long-Term Funding				
Availability of data, information and monitoring	Availability of Data, Information & Monitoring				
	Assessing Cumulative Impact				
Organizational strength (Strong leadership, Knowledge transfer, A strategic plan)		Leadership and Commitment Learning			
Assessment and adaptation		Evaluation, Adaptation			
Thinking like a watershed:					
Collaborating with watershed organizations		Actors, Roles and Relationships			
Building watershed knowledge	Continuous Peer-To-Peer Learning & Capacity-Building	Knowledge			
Ambassador role	Ambassadors [a "key aspect" of watershed entity activity]				

Figure 1. Comparison of three frameworks organizing the factors in collaborative watershed governance

Figure 2. The Present vs the New Framework required for collaborative watershed governance (Wilkes 2010 p.8-9)

Present Framework	New Framework		
Involves people assembling; inclusive and structured	People come to the table as usual, but what is different is who comes and what they do when they get there.		
Come to the table representing agencies, industry, NGOs, interest groups	Come to the table bringing certain experiences and knowledge		
Explain positions and interests (May or may not develop unified understanding of the watershed problems) Focus is activity-based, such as on logging or road building. Negotiate among positions/interests to find a consensus on vision, goals or actions Turn to government for financial support	Try to understand the problems in the watershed, assemble facts that can be mutually agreed on, and where factual gaps are. Focus is place-based, such as on where flooding or erosion occurs. Tell stories, engage in activities and field trips that build trust Support the process primarily themselves		
Try to resolve problems from the standpoint of agency mandates and stakeholder interests	Develop vision and goals, address problems from the standpoint of personal or technical knowledge and anecdotal experience.		
Agencies explain the limitations and obligations imposed by their legislation and budget.	Understand what needs to be done. Ensure decision-makers share this understanding. Promote policy change. Agencies agree to be receptive to creative approaches		
Turn to government for implementation	Focus on implementation plan without reliance on government support; build local and other supports to sustain long term plan implementation.		
May or may not monitor success	Develop and apply methods for monitoring implementation and impact. Learn and apply new knowledge.		

5 WHAT'S NEXT FOR THE AMBASSADORS?

Lake Windermere is highly valued by the public for its healthy environment, clean water, diverse year-round recreation opportunities, sense of community, spiritual values, and as a primary economic conduit for the Columbia Valley. Increasingly, and significantly as a result of LWA efforts, people are beginning to realize that protecting the Lake requires "thinking like a watershed." This core value will continue to drive much of the LWA's work.

Future LWA board members may or may not strive to catalyze a formal watershed governance entity, but it is likely that this will not be a near-term priority. Instead, over the coming years, LWA will focus on strengthening public engagement to promote water leadership, participative decision-making and whole-watershed planning. Initiatives will include:

- Facilitate community participation in the *Lake Windermere Management Plan* and *BC Water Sustainability Act* where these tools provide opportunities for LWA to gather and share information and hold public dialogues in service of a healthy Lake Windermere.
- Improve public awareness of the Upper Columbia Basin watershed functions, values, health and vulnerabilities.
- Develop partnerships across stakeholder groups that promote whole watershed thinking and collaborative watershed stewardship;
- Evaluate status of, and setting strategic priorities for, the non-regulatory implementation of the Lake Windermere Management Plan.

- Recruit new watershed leaders and enhancing capacity of experienced watershed leaders.
- Enhance capacity of water stewardship groups and water governance research by communicating successes and challenges of the LWA (i.e. through this report, and by participating in workshops, dialogues and presentations).

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