Okanagan Basin Water Board



Strategic Plan 2014–2019



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Anna Warwick Sears, PhD

OBWB Strategic Plan 2014-19

INTRODUCTION: THE OKANAGAN BASIN WATER BOARD

The Vision of the OBWB is for the valley to have clean and healthy water in perpetuity, meeting the needs of natural ecosystems, residents and agriculture—now and in the future.

The OBWB's mission is to provide leadership to protect and enhance quality of life in the Okanagan Basin through sustainable water management. The OBWB was initiated in 1968, as a collaborative local government agency, to identify and resolve critical water issues in the Okanagan. We connect water initiatives throughout the valley.

The OBWB's strength is in building partnerships: bringing people and resources together, and providing a means for joint strategic action. We advocate for local water concerns to senior governments, and are a public voice for water education. Our financial structure lets us trigger funds from many sources and match them to local dollars—creating new opportunities based on regional collaborations and regional goals. Our administration and project management capacity allows us to deliver complex, multi-partner projects.

The Okanagan is called the "canary in the coal mine" for Canada's water issues. We have among the lowest water availability per person, and many waterdependent industries. With less water available, we must protect water quality, so it can be accessed, used and re-used for many purposes—while preserving environmental flows. Being the canary means that there are few examples to follow and the valley must lead the way with innovations in water policy and practices. This has been our history, and this will be the key to our future.





OBWB PURPOSE OR MANDATE

The OBWB's mandate¹ was established in 1969 through the Municipalities Enabling and Validating Act and Supplementary Letters Patent to the Okanagan regional districts, in order to:

- I. Organize or receive proposals from private interests, organizations or agencies and all levels of governments regarding best practices for water use and management;
- II. Define water problems and priorities, economic feasibility of solutions, responsibility, necessary legislation and required action;
- III. Communicate and coordinate between levels of government and their agencies about water use and management;

- IV. Present proposals and recommendations to local or senior governments, according to jurisdiction and responsibility;
- V. Participate financially or otherwise, in surveys, investigations or projects on behalf of Okanagan local governments;
- VI. Coordinate implementation of the Okanagan Basin Study Plan (1974)—for water management activities that affect the Valley as a whole;
- VII. Advise local or senior government agencies when proposed actions, regulations or bylaws are contrary to the Okanagan Basin Study Plan or the OBWB recommendations; and to
- VIII. Participate in an aquatic weed control program for Okanagan lakes.

¹ See www.obwb.ca/board-of-directors/governance/

OBWB OPERATING PRINCIPLES

- One Valley One Water. All water in the Okanagan is connected, in all its forms and sources, and our actions will recognize this principle, benefiting the entire valley.
- Transparency. The actions and decisions of the OBWB, including those of the Board of Directors, staff, and advisory committees, will be transparent and open.
- Collaboration. We seek collaborative solutions to water concerns, to bridge the interests of all Okanagan citizens and orders of government, and to help resolve water conflicts.
- <u>Informed Action</u>. We will undertake actions that are informed by the best available science and the expertise of the community.

- <u>Credibility</u>. We will be a reliable source of water science and information for the Okanagan, and a hub for water research.
- <u>Balance</u>. We will take a non-partisan approach, and balance environmental, social, and economic interests.
- Sharing. We will share knowledge, data and information, contributing to the creation of resilient community water plans, and educating citizens.
- <u>Innovation</u>. We are committed to innovation, seeking out new ideas and approaches.
- Leaving a Legacy. We will consider the needs of our children and grandchildren, as well as those of the present, looking ahead to protect the valley's water in times of change.





INTRODUCTION TO THE PLAN

The 2014-2019 Strategic Plan is intended to guide the OBWB's work for the next five years. The Plan reflects our priorities, our unique strengths for contributing to water sustainability, and the way we carry out our work. The Plan is a framework for future work plans, programs, partnerships, and decisions.

This Plan focuses on actions that can be undertaken by the OBWB, complementing the 2008 Okanagan Sustainable Water Strategy. The Plan describes our special role and key activities intended to catalyze and support actions by diverse partners and other levels of government.

Our *goals* reflect priorities for water sustainability, science-based decision-making, the transfer of knowledge, and making needed changes. We will

reach these goals through *strategies* that involve collaboration, advocacy, education, funding, science, data collection and policy development. We work with many partners, and benefit from the expertise and community perspectives of the Okanagan Water Stewardship Council.

The OBWB will *measure success* in a variety of ways, tracking the work of the Board and Council, and our contributions to other's efforts. Real success is progress toward a sustainable water future for the valley. Healthy water depends on healthy partnerships: communities and stakeholders working together to increase capacity and understanding, improving water quality and conservation, and adapting to changing environmental, social and economic conditions.

WHY A STRATEGIC PLAN?

The world is changing rapidly. The global economy is bringing unexpected stresses, global climate change is creating unpredictable weather swings, and within the next 30 years the global population will grow from seven to nine billion people. Although these are worldwide processes, their effects on water are local. We enjoy healthy water locally—from the drinking water in our taps to the clear blue waters of our lakes. We also experience water problems locally—from pollution and shortages, to flooding—and the solutions are local. Okanagan communities are strongly committed to water sustainability, but given the number of issues, and limited time and resource budgets, we must focus efforts on areas of highest strategic impact and importance without duplicating the work of other levels of government. This Plan will also create clarity for our partners. *The biggest risk we face as an organization is becoming spread thin on many small projects, and missing opportunities for major progress.*



FIGURE 1: Annual Flows into Okanagan Lake



CURRENT SITUATION

The Okanagan's big blue lakes ringed with dry grass and sage brush hillsides tell a complex story about our water supply. The valley is semi-arid, and includes Canada's only desert—surrounding Osoyoos Lake. The apparent abundance of lake water has slowly accumulated over many decades. To sustainably manage the water, we can only use what flows in every year. *Figure 1* shows that the amount available each year fluctuates wildly. Average years (dashed line) are rare. Instead, we must plan for recurring dry years and wet years, and changing conditions. **Figure 2** illustrates that the vast majority of Okanagan water is used for irrigation—for farms, residential landscaping (domestic outdoor), golf courses, and parks. Indoor water use, whether for domestic, commercial, or industrial, is mostly cleaned and returned to the system, while irrigation water is fully consumed by crops or evaporated from plants and soils. To make room for a growing population, while protecting food security and shielding our industries from drought, we'll need to improve irrigation efficiency—especially on the home front.



FIGURE 2: How is our water used?

KEY STRATEGIES

Each of the long term goals in this Plan has specific strategies and success measures. However, the following key strategies bridge many different goals:

- Engaging with local government leaders and staff about their water concerns, and presenting information on current projects, findings and new opportunities;
- Improving access to water data and information for staff, planners and engineers of local communities, as well as senior government, and researchers;
- Coordinating water planning and policy-making among Okanagan communities, supporting development of common plans and standards;
- Advocating to senior governments on Water Act modernization and other key laws and policies;

- Informing the public about Okanagan water issues and engaging them in solutions;
- Working with the Okanagan Water Stewardship Council to identify critical information gaps and strategic solutions;
- Collaborating with researchers to improve technology and practices for water monitoring and management;
- Facilitating information-sharing and conflict resolution among diverse groups in the water sector;
- Connecting with provincial and national groups to gain leading information and trends for water and water systems; and
- Diversifying funding sources and strategies, and reducing costs through partnerships.

DESIRED OUTCOMES

- The Okanagan has a secure, sustainable water supply for human and environmental needs, supporting healthy communities and a robust economy into the future.
- Okanagan communities work together to create common approaches and reduce fragmentation in water management.
- Each jurisdiction has plans in place to reduce risks of drought and flooding, improve water efficiency and protect water quality. These plans are coordinated and reflect links between water supplies valley-wide.
- The public knows the value of water; they are meaningfully engaged in decisions and solutions, and support initiatives for water sustainability.
- Water management in the Okanagan is not limited by funding or capacity, and costs are minimized through partnerships, leveraging, and advance planning.
- Strong partnerships with First Nations, water stakeholders, and the governments of B.C. and Canada create strong, harmonized, and proactive plans and policies.



GOAL 1:

ADEQUATE SUPPLIES OF WATER FOR ALL HUMAN AND ENVIRONMENTAL USES

Water shortages are common in dry years. Under extreme conditions, with high environmental needs, high irrigation demands, and reduced snow pack (expected in the future), we risk mining our lakes—drawing them down during multiyear droughts. Many conflicts can be avoided with careful management, planning and efficient water use.

SUB GOALS

a) The Okanagan has sufficient, accessible, water science and data to plan for changing conditions in climate, economy, and population growth

We can't manage what we don't measure. To ensure water security, and equitable water sharing between sectors, we must understand how much water enters the valley, in what location, where it is needed, and how these factors change from year to year. This information forms the backbone of future planning.

Information gathering and sharing is a core OBWB activity, and there is no other agency or level of government performing these functions.

b) Water licence allocations support the environment, agriculture, and urban growth over the long term

Water licensing is under provincial jurisdiction. The actual amount of water available for allocation depends on environmental data, and the frequency we accept for water shortages. Local communities and stakeholders have a role in advising what risk levels are acceptable for water utilities, agriculture, and the environment.

OBWB has models and data that can inform risk assessments, and can help update standards and practices for water allocation policy in the valley.

c) Groundwater and surface water are regulated as one source

For more than 100 years, B.C. has licensed surface water, but we do not yet have effective groundwater regulation. Surface and groundwater are tightly linked, and groundwater pumping can deplete licensed surface sources. To protect existing water rights, environmental needs, and availability for future users, all water should be regulated through the same system.

OBWB has a role to support groundwater monitoring, planning by local communities, and to work with the province to ensure the future regulations meet local needs.

d) Water efficiency in all sectors

The least costly way of expanding water availability is to reduce demands by reducing waste. In this way, improving water efficiency is insurance against harm caused by shortages. Reducing demand also saves the costs and energy required to pump, treat, and deliver water.

OBWB can help water utilities, local governments, agriculture and other industries secure funding and improve systems, and support planning by sharing data and information.

THE OKANAGAN HAS EXCELLENT SOURCE WATER QUALITY-DRINKABLE, SWIMMABLE, FISHABLE

Water quality is difficult to manage because small sources of pollution can add up to big problems. Source protection falls into three areas: upper-watersheds around reservoir lakes and streams (mostly Crown land); agricultural runoff; and developed areas, where it's called "stormwater." Different actions are needed for each. Healthy riparian areas protect water quality, and reduce runoff from roads, agriculture and development. Aquatic invasive species are a special kind of water pollution.

SUB GOALS

a) That we understand risks to source waters and how to manage them

Source protection is one of the most complex issues facing the Okanagan. We rely on healthy lakes and streams for the health of our drinking water, but we have multi-use watersheds under provincial jurisdiction, and our main valley lakes and most productive aquifers are surrounded by urban development and agriculture. Risk assessment, planning and response are ongoing challenges, as our population increases.

OBWB's main role in source protection assessments is to support water utilities in their efforts, facilitating collaboration and coordinated planning.

b) Government policy promotes appropriate land use in upper watersheds to protect water quality

Many source protection conflicts can be reduced by good provincial policy and management in upper watersheds. OBWB has a mandate and history making recommendations to government that balance resource development and recreation with healthy drinking water sources.

OBWB coordinates and reinforces the collective voice of local governments, water utilities, and First Nations, advocating to senior government for water-friendly policies.

c) Pollution is reduced in developed areas through infrastructure improvement and policies limiting contamination of surface and ground waters

OBWB was founded as a way to take action on water pollution. As wastewater treatment has reduced sewage pollution overall, the population has grown—increasing the need to reduce pollution from stormwater, and to better understand emerging contaminants. Infrastructure improvement and best planning practices are essential, supported with good policies by local and provincial governments.

OBWB's role is to share information, to help coordinate planning and policies to protect water quality, and to help secure new funding for infrastructure improvement.

d) Harmful new invasive aquatic species, including zebra mussels, are kept out of the Okanagan, and Eurasian watermilfoil continues to be controlled

As we found with watermilfoil, it is impossible to eradicate harmful invasive aquatic species if they enter the lake system. Only the provincial and federal governments have authority to inspect boats and equipment at B.C.'s borders. The province is coordinating efforts to educate boaters and recreational users who can unknowingly spread invasive species.

OBWB has a role to advocate for inspections, regulations and controls.; and also to educate the public and raise awareness of the potential threats and future costs of new invasive species. We have a long-standing mandate to manage watermilfoil. GOAL 3:

OKANAGAN LOCAL GOVERNMENTS, FIRST NATIONS, WATER PURVEYORS AND STAKEHOLDERS HAVE UP-TO-DATE COORDINATED PLANS AND POLICIES TO PROTECT WATER QUALITY AND WATER SUPPLY, AND PREPARE FOR EXTREME EVENTS

Most of the risk for water problems in the Okanagan—from droughts to floods to pollution—can be well managed with solid plans, based on up-to-date information. The OBWB has been focused on gathering the science for better water plans, and it is time to place new effort on linking and strengthening local government plans into a truly regional approach.

SUB GOALS

a) Local government have capacity to prepare and respond to population and climate change By coordinating local efforts, securing external funding, and sharing information and best practices ,we can help local governments create better plans at lower cost. The Okanagan Water Stewardship Council has been preparing a framework for an Okanagan-wide water plan, linking regional growth strategies and other plans to enhance water security without duplicating activities of local governments.

The OBWB has a key role to coordinate individual plans by local government, First Nations and utilities, and to be a leader in valley-wide planning efforts.

b) Diversifying funding sources, and securing new external funding partners to support Okanagan water initiatives by local governments

As both a grant maker and recipient of senior government funding, and by tapping the expertise of the Okanagan Water Stewardship Council, the OBWB has accelerated funding for water in the valley. Seed funding and in-kind contributions to our partners—local governments, universities, improvement districts and other organizations—triggers funds from many sources.

Leveraging funding is a unique strength of the OBWB. The OBWB also has a role to identify and advocate for new funding policies to support water initiatives by local government and utilities.

c) A knowledgeable public, with widespread commitment to science-based planning, water conservation and reducing pollution

The general public is an essential partner for all of our work. By bridging the water communications of local utilities, the OBWB can reduce costs and increase the impact of our partner's work. Giving information to our citizens helps reduce waste, and builds support for water system protection and improvements.

The OBWB has a key role to create a common understanding of Okanagan water challenges, countering the myth of abundance.

OBWB HAS EXCELLENT RELATIONSHIPS, A DEFINED ROLE, AND CLEAR COMMUNICATIONS WITH STAKEHOLDERS AND OTHER LEVELS OF GOVERNMENT

The OBWB is a unique water agency in Canada, without rule-making authority, but with a special capacity for forming partnerships, communicating with all levels of government, and aligning resources to meet shared goals and priorities. We are effective because we focus on equity, and on outcomes with valley-wide benefit, and by being a trusted broker of information. Strong relationships and trust are our greatest assets and allow us to serve the valley's needs.

SUB GOALS

a) The OBWB is respected as an advocate for Okanagan water concerns

The OBWB has a mandate to make recommendations to local and senior governments, to improve water management in the Okanagan. To be effective in this role, the OBWB seeks to provide information of the highest quality, maintaining a balanced approach and professional standards.

Advocacy is a central role of the OBWB, and it is critical to maintain close communication with all levels of government—to understand needs and challenges; and with our network of water experts—continuously developing the quality of information we provide.

b) The OBWB has a strong working relationship with Okanagan First Nations communities

It is essential to have strong relationships and shared planning processes with the Okanagan Nation. We are 19 communities sharing a narrow valley, each affecting the others. Although the structures, resources, and responsibilities differ between forms of government, we have shared interests in protecting Okanagan water sustainability. We can learn from each other, and build on each other's strengths.

The OBWB has a unique opportunity to support the integration of water planning and management of all Okanagan communities.

c) The OBWB, working with the Okanagan Water Stewardship Council, maintains excellent communication with local stakeholders

The national award-winning Okanagan Water Stewardship Council is an essential partner for the OBWB. Members share expertise across a wide-range of water issues. As each member represents a different organization, they reach all corners of the water sector. These experts and industry groups provide strategic information, and share information back to a much wider network.

The Okanagan Water Stewardship Council improves the quality of the OBWB's proposals, diversifies our partnerships, and increases credibility with the community at large.



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