



1970
2020

50

*Protecting our
shared water
for fifty years.*

water connects us

2020 ANNUAL REPORT



Okanagan Basin
WATER BOARD

water connects us

Watersheds are about connectivity—tiny headwater streams collecting into creeks and spilling down into lakes and river channels, headed for the ocean.

Water connects our communities from north to south. Anything we do in the headwaters to protect water quality improves the health of downstream waterways. Conversely, any pollution we make flows with the water down to the valley-bottom lakes harming the health of aquatic life and communities downstream. Coming in the other direction, salmon swim upstream, connecting the Okanagan to the Pacific Ocean. Water connects our communities in a mutual responsibility, and shared benefit.

Water also connects us through time. January 2020 marked the 50th anniversary of the founding of the Okanagan Basin Water Board. The Okanagan has changed dramatically over those 50 years, especially with the growth of our communities. In 50 years, we've had great improvements to our water quality—gone is

the widespread nutrient pollution to lakes and streams. Most communities in the valley have residential water metering. Agricultural irrigation systems have far advanced, with widespread use of drip irrigation systems. At the same time, a surprising amount of things have stayed the same. Generations have grown up playing in the lake. Family traditions of camping, fishing, and boating have been passed along from grandparent, to parent, to child. Our love of Okanagan waters connects us through the generations.

Although the COVID-19 pandemic has created a need to physically distance ourselves from each other, our appreciation for water and our joint determination to protect and care for it, keeps us connected.



Water Connects Us

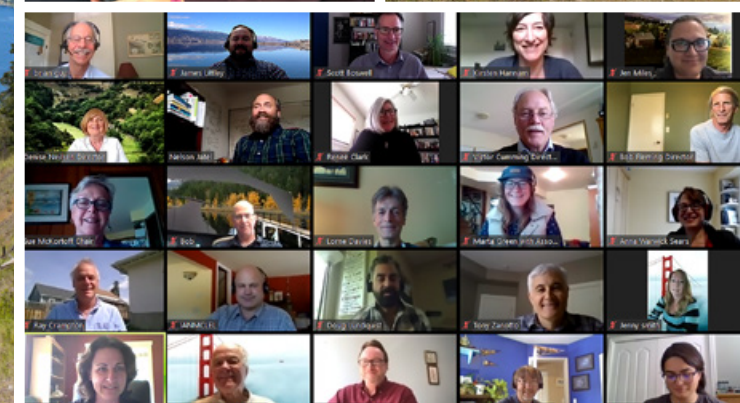
Message from the Chair	2
Message from the Executive Director	3
Organizational Overview	4
Board of Directors	4
Staff	5

Report on Services

Water Management Program	6
2020 AquaHacking Challenge British Columbia	8
Communications and Outreach	10
Okanagan WaterWise	10
Make Water Work	12
Don't Move A Mussel	14
Water Conservation and Quality Improvement Grants	15
Water Stewardship	16
Okanagan Water Stewardship Council	16
Sustainable Water Strategy	16
Water Science and Information	17
Hydrology Modeling	17
Hydrometric monitoring	18
Okanagan Environmental Flow Needs (EFN) Project	19
Floodplain Mapping	20
Okanagan River Bathymetry Project	21
Drought Response	21
Water Supply Status Outreach to Agriculture	22
Wetland Strategy	23
Source Protection Toolkit	24
Milfoil Control	26
Sewerage Facilities Assistance Grants	27

Looking Forward

Financial Overview	31
--------------------------	----





Sue McKortoff
Chair

MESSAGE FROM THE CHAIR

The Okanagan Basin Water Board is celebrating its 50th anniversary this year. Our theme is “Water Connects Us” and looking after our shared water continues to be our main goal. While some of the challenges have taken a higher priority at times, flood and drought response, flood mapping and preventing the influx of invasive species into our lakes have all been of key importance.

Several programs that have been managed by our OBWB staff are becoming household phrases in the media. The Make Water Work challenge this year showcased many of the valley mayors educating the public on ways to use outdoor residential water efficiently, while encouraging their citizens to “take the pledge” and become a Make Water Work Champion. The website www.OkWaterWise.ca is full of resources for residents, visitors, businesses and students to understand and appreciate our precious water.

Another major program is Don’t Move a Mussel, started in 2013. The need to “Spread the message. Not the mussel” is more important than ever, as we see the spread of zebra and quagga mussels across North America attached to travelling

watercraft. The OBWB will push provincial and federal governments to require that anyone bringing watercraft into B.C. must ‘clean, drain and dry’ their vessel before launching in our B.C. waters. We are pleased to welcome Ozero, the first place AquaHacking team for 2020, which is working on a ballast washing system to prevent the spread of invasive mussels.

Another important milestone this year was the completion of the Okanagan floodplain mapping project. This includes topographical data from LiDAR mapping, and resources to help the public understand and reduce flood risk. An interactive public website is now available at www.OkanaganFloodStory.ca.

Due to the COVID-19 crisis, our staff at OBWB has continued to manage events and projects efficiently, and we have been holding our monthly Board meetings online. Our continued determination to protect and manage our water keeps us enthused and ready to take on present and new challenges. We look forward to holding Board meetings in person again soon and celebrating our 50th year with a special anniversary cake!

MESSAGE FROM THE EXECUTIVE DIRECTOR

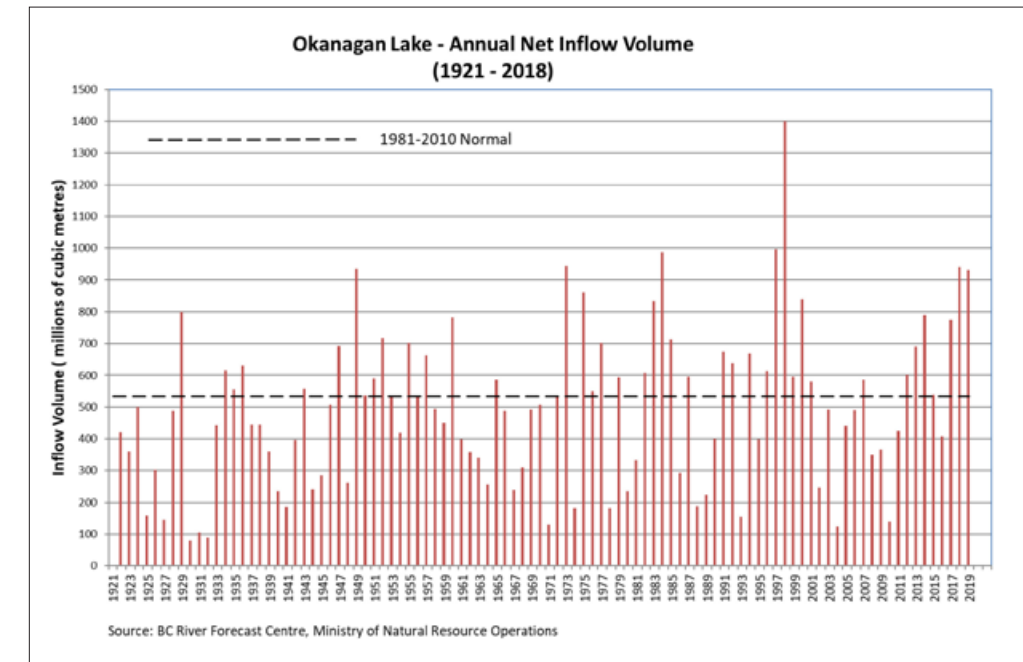
This year was one of the most significant, active and collaborative of any we’ve had at the OBWB. We completed an update of the Okanagan Sustainable Water Strategy. We completed a very large collaborative project to develop flood maps for the valley. We also completed a very detailed study of the hydrology of the Okanagan’s tributaries, which contributed to the quality and accuracy of flood maps. This led to further improvements in our environmental flow estimates for fisheries recovery studies – working with the Okanagan Nation Alliance. We had another year of energetic public outreach for preventing invasive mussels, and promoting outdoor water conservation—along with many community partners. We hosted the first ever BC AquaHacking Challenge, in partnership with Aqua Forum and many other sponsors and supporters, bringing out the best young talent from our post-secondary institutions to solve pressing water issues while competing for entrepreneurial start-up funding.

We were set up to launch an even busier year of public outreach and engagement in Spring 2020, when COVID-19 caused a rapid change of plans. As a result, we’ve spent the last few months learning how to be connected and collaborative while physically distant. With all of our partners, and all of our activities, it is our shared passion for water sustainability that keeps us connected, as this year’s theme suggests. We

can’t shrink away from our responsibilities just because there is a health crisis. Water protection becomes more important than ever. We need to have excellent water quality to reduce the risks of water borne disease outbreaks. We need secure supplies so that we can be more food secure. We need water in the environment to support strong fish populations and riparian areas—to preserve the health of our natural world for better times to come. The world is always changing, and we can be grateful to have such strong, committed, connected partners working together for Okanagan water sustainability.



Anna Warwick Sears
Executive Director



This graph shows the total water entering Okanagan Lake each year. This ‘One Water’ must be managed and shared in our ‘One Valley,’ and each year the water changes.

ORGANIZATIONAL OVERVIEW

The Okanagan Basin Water Board was formed as a collaboration of the three Okanagan regional districts to provide leadership on water issues that span the entire valley: sustainable water supplies, clean water for drinking, and healthy

lakes and streams. The Board is a unique form of local government, established under provincial legislation with taxation authority to support its actions. The three Okanagan regional districts appoint three directors each, and the Board also

includes one representative from the Okanagan Nation Alliance, one from the Water Supply Association of BC, and one from the Okanagan Water Stewardship Council.

Board Directors



Sue McKortoff, Chair, RDOS Mayor, Town of Osoyoos



Cindy Fortin, Vice-Chair, RDCO Mayor, District of Peachland



Rick Fairbairn, RDNO Director, Electoral Area "D"



Bob Fleming, RDNO Director, Electoral Area "C"



Victor Cumming, RDNO Mayor, City of Vernon



James Baker, RDCO Mayor, District of Lake Country



Colin Basran, RDCO Mayor, City of Kelowna



Toni Boot, RDOS Mayor, District of Summerland



Rick Knodel, RDOS Director, Electoral Area "C"



Chief Christopher Derickson, Okanagan Nation Alliance



Robert Hrasko, Water Supply Association of BC



Denise Neilsen, Chair, Okanagan Water Stewardship Council

Staff



Anna Warwick Sears, Executive Director



Nelson Jatel, Water Stewardship Director



Corinne Jackson, Communications Director



James Littley, Operations and Grants Manager



Kellie Garcia, Policy and Planning Specialist



Carolina Restrepo, AquaHacking 2020 – B.C. Challenge Coordinator



Pat Field, Milfoil Field Supervisor



David Hoogendoorn, Milfoil Operator



Morgan Douglas, Milfoil Operator

report on services

The Okanagan Basin Water Board provides three core services: Water Management, Milfoil Control and Sewerage Facilities Assistance Grants. Work in each of these programs is summarized in the three corresponding section of this Annual Report, followed by a section on Looking Forward, and finally, our Financial Statements for 2020.

WATER MANAGEMENT PROGRAM

The Water Management Program includes Communications and Outreach, the Water Stewardship Council, Water Conservation and Quality Improvement Grants, and OBWB's Science and Information initiatives. For the first time, in 2020, OBWB hosted the B.C. AquaHacking Challenge, which is also covered in this report under the Water Management Program.



Vaseux Lake – South Okanagan

2020 AQUAHACKING CHALLENGE BRITISH COLUMBIA

Since 2015, the AquaHacking Challenge has engaged with developers, engineers and marketers from various universities and colleges in central Canada to create multidisciplinary teams and develop clean-tech engineering, web and mobile solutions to water issues. This year for the first time, the AquaHacking Challenge was brought to British Columbia, and hosted by the Okanagan Basin Water Board.

As the focus of the Challenge is demand-driven innovation, the water issues that were tackled were designed and submitted by leading water organizations such as the Okanagan Nation Alliance, the Fraser Basin Council, Natural Resources Canada, local municipalities, and the OBWB, among others. Water issue leaders provided expert insights and relevant data to the hacking teams to ensure they better understood the issues.



For the AquaHacking BC Challenge, each team chose one of these water issues.

1. How can we improve water quality in our lakes and by reducing stormwater contamination?
2. How can we reduce the amount of water used outdoors in B.C. homes and businesses?
3. How can we improve access to clean drinking water for indigenous communities in B.C.?
4. How can we reduce damage to homes, businesses and infrastructure and better communicate the risk of flooding to communities?
5. How can we prevent damage from invasive mussels?

The expected results at the end of the challenge are functional, marketable, and demand-driven solutions that have a real and measurable impact on solving critical water issues. Since 2015, 80% of winning teams (that is 16 teams) have continued on to become successful water-tech start-ups with their products at various stages of development and in-market use.

OZERO

1st place

**BC AWARDS
AQUAHACKING
2020 CHALLENGE**

Benjamin Farley, Co-founder and Electrical System Development Manager (Sherbrooke University)

Maxime Guay, Co-founder and Marketing Manager (Sherbrooke University)

Olivier Harpin, Co-founder and R&D Manager (Sherbrooke University)

Olivier Liberge, Co-founder and Communications Manager (Sherbrooke University)

Christophe Morin, Co-founder and Computer programming Manager (Sherbrooke University)

Matys Tessier, Co-founder and Financial Expert (Sherbrooke University)

1st PLACE

\$20,000

An innovative technology to decontaminate ballast water in sport boats to prevent the propagation of zebra and quagga mussels in freshwater.

The top 5 teams won cash seed funding for their businesses and a spot in a local incubator. Thanks to Mitacs, all teams were able to top up their prices applying to different programs based on eligibility for a total prize amount of almost \$160,000.

2nd PLACE

\$15,000



GAPSS

An engineered system that fits beneath existing storm drain basins to remove hydrocarbon compounds, sediment, and particulate matter from the point source.

3rd PLACE

\$10,000



ABOVE ATLANTIS

An online platform that includes comprehensive data cataloging, data collection, flood modelling, and 3D data visualization for communities affected by flooding.

4th PLACE

\$2,500



ELITE

An innovative cost-efficient, sustainable gravity-based filtration system that removes oil, hard metals and petroleum contaminants from stormwater runoffs.

5th PLACE

\$2,500



UNTIE AG

A digital platform dedicated to protecting water quality by establishing a better relationship between farmers and government programs.

COMMUNICATIONS AND OUTREACH

Okanagan WaterWise

This program was initiated recognizing the need for a public outreach and education program to unify valley residents in the understanding that water connects us. Our waters are the reason so many of us were drawn to this place and why so many more people continue to move here. At the same time, we have less water available per person than anywhere in Canada. “We share the valley, the water, and we need to share the responsibility of protecting our water and quality of life.”

In the past year, Okanagan WaterWise attended 28 events, raising awareness for our shared waters, what puts them at risk and how we can all help to keep them clean and abundant. In response to a growing request for Okanagan-related water information, we also delivered 10 classroom presentations as well as presentations at a local library and to Okanagan Master

Gardeners. Through such efforts, we held face-to-face conversations with at least 2,800 people.

We also held our biannual Okanagan WaterWise Youth Challenge. Winning classrooms were awarded a two-hour boat charter on Okanagan Lake for an on-the-water classroom experience to learn more about the water of our valley. OkWaterWise also participated in several initiatives including a rain barrel sale, and the

B.C. AquaHacking Challenge, engaging young tech entrepreneurs to help solve some of our province’s most critical freshwater issues.

Learn more about Okanagan WaterWise and find a growing number of resources for residents and visitors, businesses, educators and students, and for those with a general interest in water at www.OkWaterWise.ca.

STAY WATERWISE



“Like” us on Facebook at www.facebook.com/OkWaterWise.
Follow us on Instagram at www.instagram.com/okanagan_waterwise
and Twitter at www.twitter.com/OkWaterWise.
Plus, check out our YouTube channel at www.youtube.com/user/OKBasinWaterBoard.



Rain barrel sale

Make Water Work

Make Water Work is an initiative of the OBWB's Okanagan WaterWise program, delivered in partnership with water utilities throughout the valley. Its goal is to tackle the valley's second largest use of water – residential outdoor use.

The campaign began in 2011 and has grown each year since. It includes pledges, inviting residents to commit to several actions to Make Water Work best. Pledges are made on the website at www.MakeWaterWork.ca, which also includes additional tips to conserve water, watering restrictions for neighbourhoods, and information on the specially-created *Make Water Work Plant Collection*. There is also a “What’s New” section with background on water use in the Okanagan, the impacts of climate change on water availability, and more.

Make Water Work re-launched in May 2019 with mayors invited to a local Okanagan elementary where they pledged to adopt at least one of six WaterWise outdoor watering behaviours, challenged their residents to do the same, and then partnered up with students to share WaterWise gardening tips. Momentum for the campaign was bolstered throughout the summer with bus, bus shelter, radio, and social media ads, driving people to the Make Water Work website. The website was updated to include an interactive pledge-o-meter to track where pledges were



coming from, encouraging a friendly competition between communities to win the Make Water Work Champion Community title.

We also expanded the *Make Water Work Plant Collection* partners to include additional garden centres in Armstrong, Vernon and Lake Country, bringing total partners to eight, plus one irrigation partner. As part of the partnership, staff conducted outreach events at five of the stores. Staff also attended 20 community events to promote MWW.

By the time the campaign wrapped up in mid-October it had drawn 13,163 visits to the MWW website (10,120 unique visitors) and 526 unique pledge entries.

We were also pleased to have MWW chosen to be part of a University of Waterloo study of five water conservation programs across Canada using Community Based Social Marketing. The study included helpful insights to make improvements for MWW 2020.



LEFT AND MIDDLE (Top): Okanagan Mayors officially Launch the Make Water Work campaign with the help of local elementary students.
MIDDLE (Bottom): Young girl at Osoyoos Cherry Fiesta Event.
RIGHT: Garden Centre partners help spread the word about the expanded Make Water Work Plant Collection.

Don't Move A Mussel

The OBWB's Okanagan WaterWise program launched Don't Move A Mussel (DMM) in response to growing evidence of the threat invasive zebra and quagga mussels posed to local waters. A 2013 study determined that the cost to the Okanagan could be more than \$40 mill. per year. DMM is aimed at raising awareness among valley residents and enlisting their support to prevent the mussels from reaching our waters. Annual surveys indicate a high level of public awareness, and water sampling as recently as spring 2020 suggests we are invasive mussel-free.

The campaign ran from May to September 2019, at the height of water recreation season, and included updates to its website (www.DontMoveAMussel.ca). In addition to information about the mussels, the risks and prevention tips, visitors were invited to download a "Have the Talk" kit with materials to post and share with family and friends to help 'Spread the message, not the mussel.' Additional updates included inspection station and fine information, and related news articles.

The campaign's message was further supported with billboards, bus, radio and social media ads. We attended numerous events, handing out our popular mussel-muscle shirts, phone wallets, floating keychains and postcards "Sending love from the Okanagan," encouraging people to



LEFT: Bell Media outreach RIGHT (Top): OASISS outreach
RIGHT (Bottom): OkWaterWise community outreach



stop at inspection stations before launching their watercraft in our waters. We partnered with Bell Media's outreach program in the valley and provided funds to the Okanagan Similkameen Invasive Species Society (OASISS) to extend outreach efforts. Funds to OASISS also went to monitor valley waterways for the mussels and launch a citizen science effort, recruiting residents to help monitor from their private docks.

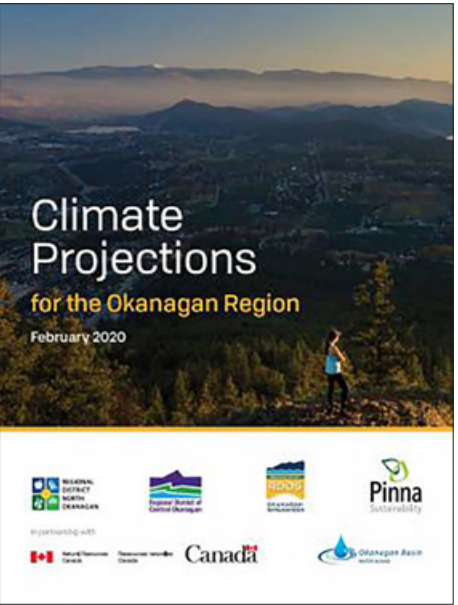
Between the Okanagan WaterWise outreach coordinator and OASISS, the DMM message was delivered at 65 events, 18 boat launches and nine campgrounds, and reached 6,632 people. Bell Media attended another 51 events, reaching many more people. As well, RCMP auxiliary members in Vernon and West Kelowna conducted additional outreach. The DMM website attracted 4,199 unique visitors.

WATER CONSERVATION AND QUALITY IMPROVEMENT GRANTS

Each year, organizations throughout the valley take direct action to address water conservation and water quality improvement. Projects range from restoring streams and wetlands, to improving municipal irrigation systems in parks, and providing public education on planting more water efficient residential landscapes. The Okanagan Basin Water Board provides small grants – up to \$30,000 per project per year – to support these actions through our Water Conservation and Quality Improvement (WCQI) grant program.

New this year, the Board approved an increase in the total amount of WCQI funding available to \$350,000 – an increase of \$50,000. This increase compensates for the inflation that has happened since the first grants were awarded in 2006. The new funding will mean that more projects can go forward, conserving water and improving water quality throughout the Okanagan.

Okanagan Climate Projection
report, February 2020



IN FOCUS: VALLEY-WIDE CLIMATE PROJECTIONS REPORT

Climate change is challenging ecosystems, communities, and the economy. Wildfires, flooding, and drought have already overwhelmed local infrastructure, caused economic losses, and posed health risks to communities. Significant effort to reduce the reliance on fossil fuels as quickly as possible will slow, and has the potential to curb, climate change by the late century, making greenhouse gas emissions reductions a central part of any long-term adaptation strategy.

Designing to current and future climate parameters is markedly more cost effective than reacting to climate shocks and stresses over time. This report is intended to support a local understanding of how climate across the Okanagan is projected to change, and inform regional planning on how to prepare for future climate events. This work is critical to maintaining wellbeing, including robust ecosystems, a thriving community, and a vibrant economy. Early efforts to prepare infrastructure and communities to climate change will reduce regional reliance on continued emergency management activations and support the ability of the region to thrive over time.

Excerpt taken from Executive Summary. The full report can be accessed here: http://www.rdosmaps.bc.ca/min_bylaws/planning/ClimateActionPlan/ClimateProjections_forOkanaganRegion_Feb2020.pdf

WATER STEWARDSHIP

Okanagan Water Stewardship Council

The OBWB’s Water Stewardship Council is a technical advisory body to the Okanagan Basin Water Board. It plays a unique role, enhancing collaboration between local and senior governments, and water leaders from a broad range of backgrounds. Monthly Council meetings provide the opportunity to share experiences, discuss emerging water issues, and develop recommendations for improved water policy and governance. Council members, representing 32 board approved organizations, have traditionally served an 18-month term. Starting in 2021, future Councils will meet for 24 months to better align with the Water Management Program mandate and election cycle.

During 2019, the Council addressed a number of Okanagan water topics including:

- Source protection and valley lake intakes: managing risk
- Water quality stressors in multi-use watersheds
- Agriculture water reserve
- Okanagan climate projections report: Climate change impacts on the Okanagan watershed
- Okanagan wetlands: protection, preservation and mapping



To support increased engagement on strategic issues, six committees were active this year including: reservoirs and dams, flood and drought, source protection, agriculture and irrigation, and policy. The policy committee generated a number of important communications to the Board for consideration and action including: groundwater licensing, environmental flow needs and improvements to the BC Water Sustainability Act and other regulatory issues.

Sustainable Water Strategy

In October 2019, the Water Stewardship Council released the Okanagan Sustainable Water Strategy: Action Plan 2.0. The Strategy builds on Action Plan 1.0, released in 2008, expanding on topics such as climate change adaptation;

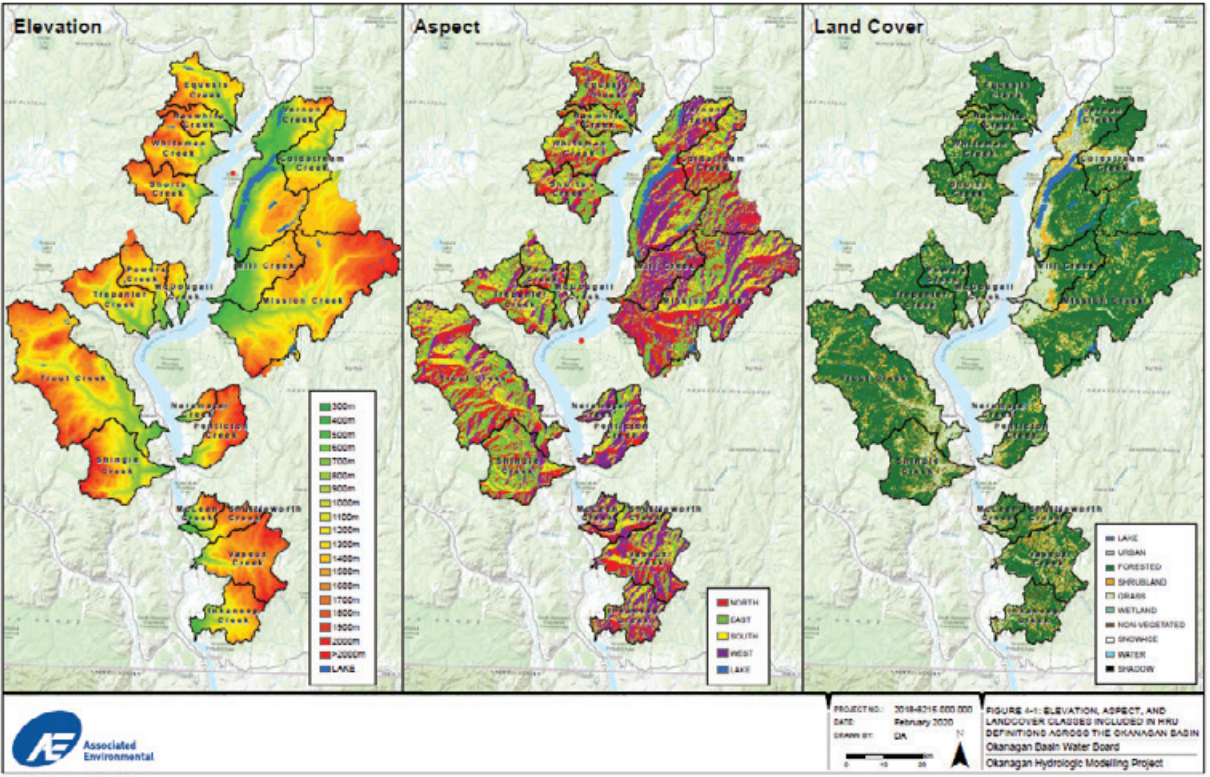
highlighting new issues such as the threat of invasive zebra and quagga mussels; and discussing policy and legislation changes that impact water today. Action Plan 2.0 also reports on progress made and insights gained over the last decade and showcases recent projects and case studies. It includes 50 actions designed to protect water at its source, plan for flooding and drought, manage water demand, collect and share data, and collaborate and build partnerships. More than 70 people contributed to the substantial effort to update the Strategy, providing input and expertise. The result is a collaboratively developed, modern, comprehensive strategy intended to safeguard clean and healthy water in the Okanagan now and in the future.

WATER SCIENCE AND INFORMATION

Hydrology Modeling

Hydrology studies the movement, distribution, and quality of water, and hydrologic models are simplified, conceptual representations of a part of the water cycle. Improving Okanagan hydrologic models increases our knowledge about hydrologic processes, and provides sustainable solutions for integrated watershed management. A major update for Okanagan hydrology models was completed this year.

The new Okanagan Raven hydrology model builds on previous supply and demand modelling efforts and focuses on 19 sub-basins, using spatially-distributed, high-resolution computer accounting models that balance water supply and demand. The *Okanagan Basin Hydrology modeling* project supports water allocation and infrastructure planning at the sub-basin level (for example, Mission Creek). Some of the considerations in this modelling include: climate data, upland reservoir operations, surface return flows including municipal wastewater discharge, groundwater, environmental flows, updated agriculture use data, water extraction, and groundwater.



Okanagan Raven hydrology model data layer inputs.

Hydrometric Monitoring

A hydrometric station is a data collection tool on a river, lake, estuary, or reservoir where water quantity (and sometimes quality) is collected and recorded.

In partnership with the Okanagan Nation Alliance and others, the OBWB has been involved in establishing or re-establishing hydrometric stations to support a number of ongoing projects including the Mission Creek surface-groundwater interaction project, upper-Vernon creek kokanee spawning initiative and the Okanagan Environmental Flow Needs Project. As OBWB’s external grant funding wraps up, we will be working with our partners to determine which stations should remain active.

Although water availability has long been a problem in the Okanagan and supply problems are predicted to worsen, the basic network of hydrometric stations has been declining for several years. Only 15 of the 79 drainages in the Okanagan Basin are now being monitored by the Water Survey of Canada. Reliable data are needed for water management planning by local governments, water purveyors, and the agricultural community. These data are used for land-use and transportation planning; flood forecasting; drought management planning; protecting in-stream flows for fish; and tracking changes in streamflow, water temperature and other indicators in relation to population growth and climate change.



Historical Hydrometric Station being refurbished on Pearson Creek (Photo courtesy of BMID)



Kokanee at Hardy Falls (Photo courtesy of RDCO)

Okanagan Environmental Flow Needs (EFN) Project

Okanagan specific methods for establishing Okanagan EFNs have recently been developed, beginning in 2015. The development of these methods included extensive collaboration with stakeholders and experts, as well as a thorough literature review of EFN setting approaches used locally and elsewhere in North America. The goal of the Okanagan EFN Project is to produce defensible, transparent and robust flow need values for Okanagan streams. While the scope of this project was limited to providing technical recommendations, the specific objectives were to:

1. establish hydrometric stations, where applicable, to gather adequate hydrometric data to inform the EFN development,
2. assess previously collected data from parallel studies that may be applicable to the study,
3. determine the level of field intensity required and delineate study sites to be sampled for the streams chosen,
4. collect field data on fish habitat characteristics over a range of flows; and
5. set recommended EFNs and critical flows for each species and life-stage of concern in selected tributaries.

A draft of the EFN report is now complete and the final document is available online at: www.obwb.ca/EFN.

Floodplain Mapping

The Okanagan’s rapid population growth, increasing variability of stream flows, limitations on water infrastructure, the exceptional 2017 and 2018 floods, and projected climate change make accurate flood plain mapping and new flood management options critically important to reduce flood risk and flood damage. This year the OBWB completed of the Okanagan lakeshore flood mapping project begun in 2018.

Project goals:

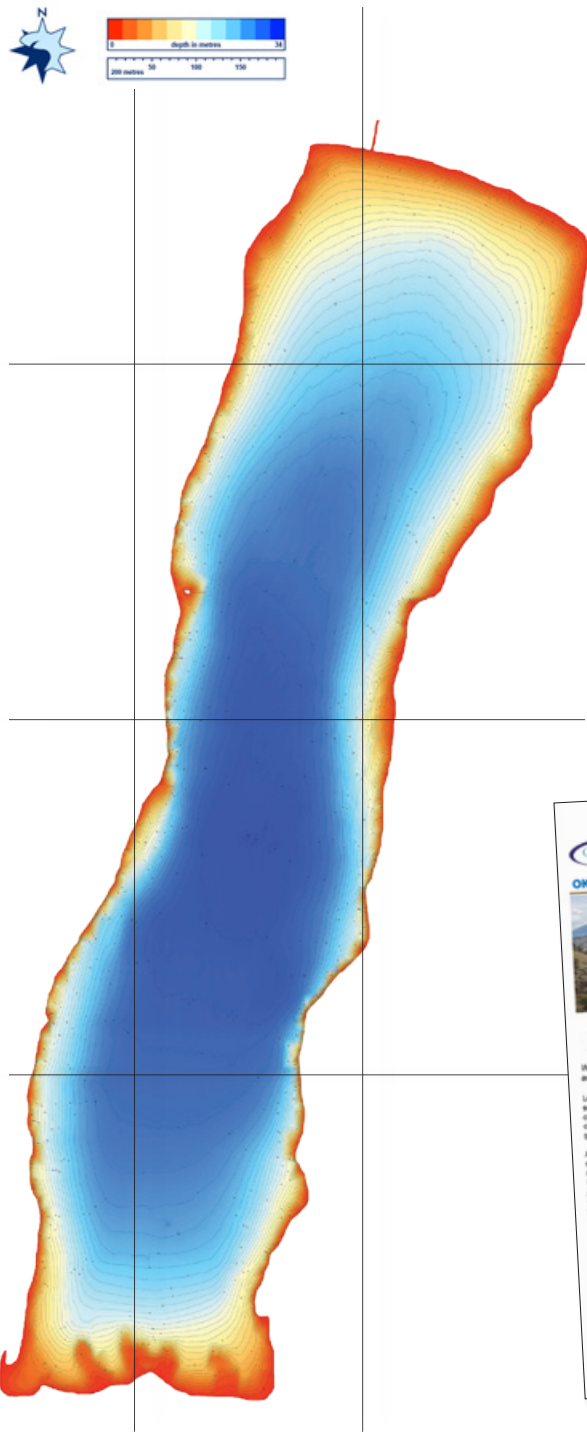
- 1. Develop floodplain maps for the Okanagan Lakes and River system, based on historic observations, and looking at future effects of climate change;
- 2. Improve understanding of flood management options available to Okanagan water managers and operators, in the face of climate variability and change.

The project resulted in a series of useful tools, including a new hydrology model, and new hydraulic model, a bathymetric survey of the Okanagan River channel, a comprehensive report with detailed flood maps, and a public facing website. With flood maps in hand, local communities are in a far better position to develop robust plans to design more flood-



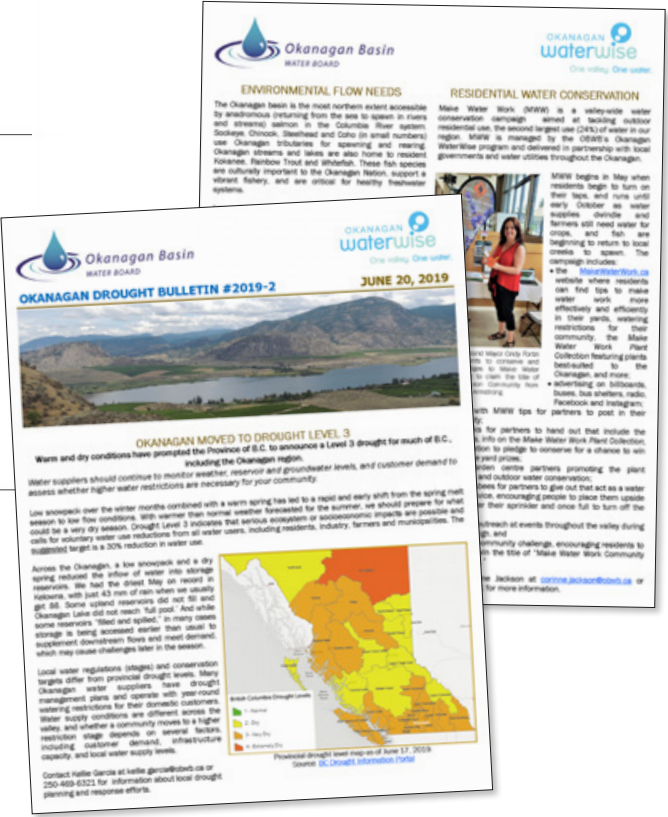
resilient communities, and to flood-proof existing homes and infrastructure before the next flood event. The Okanagan flood story website, www.okanaganfloodstory.ca, provides

information on a range of important flood topics including: flood maps, land use regulations, our flood history, reducing flood risk, how to prepare, and our changing climate.



Okanagan River Bathymetry Project

As part of the Flood Mapping project, the OBWB did a technical river bathymetric (static GNSS – river-bottom mapping) survey of the Okanagan River from Okanagan Lake to Osoyoos Lake. The bathymetric survey data determined cross section profiles at 274 locations. The newly acquired dataset updates historical cross sections surveyed in 1980 and 1998. This provides a way to evaluate changes in river bed, dikes, and resulting hydraulics.



Drought Response

The OBWB had to activate its drought response strategy again in 2019. Low snowpack combined with a warm and dry spring led to a rapid and early shift from the spring melt season to low flow conditions. Some upland reservoirs did not fill and Okanagan Lake did not reach full pool. By mid-June, the province had moved the Okanagan to a Level 3 drought. The OBWB sent out bulletins to notify water suppliers, elected officials, and others about the provincial drought levels, clarify water conservation expectations, and provide information about local water supply and fisheries conditions. Water suppliers were asked to monitor reservoir and groundwater levels, weather conditions, and customer demand to assess whether higher water restrictions were necessary for their communities. Some communities increased water restrictions, but were able to go back to normal in July when the weather luckily turned cool and wet and reservoirs and streams rebounded.

LEFT:Wood Lake bathymetry image
RIGHT: Okanagan Drought Bulletin, June 20, 2019

Water Supply Status
Outreach to Agriculture

This three-year project is helping Okanagan water suppliers provide source-specific, timely and accurate water supply information to their agricultural water customers. Customized communications materials and mechanisms are used by the water suppliers, including a key messages document, water supply status graphics, and access to an e-alert system centrally hosted by the OBWB. The Town of Oliver and the District of Lake Country are new to the project this year, joining the Regional District of Okanagan-Similkameen, Kaleden Irrigation District, City of Penticton, District of Summerland, City of West Kelowna, City of Kelowna, Glenmore Ellison Improvement District, and Greater Vernon Water. Approximately 980 agricultural customers are now registered to receive e-alerts. Water suppliers have been sending messages centred on local water restriction stages and water supply status, tips for water conservation, and broader information about drought, weather forecasts and more. The project is a joint effort between the OBWB and the BC Agriculture & Food Climate Action Initiative.



Wetland Strategy

The OBWB, working with community partners, developed an important wetland guidebook (www.obwb.ca/wetlands) addressing strategic challenges associated with maintaining, protecting and preserving Okanagan wetlands. This toolkit describes wetlands in three main themes: Understanding Importance, Understanding Governance, and Actions for Improvement. When implemented, the five strategic directions described in this guide will increase awareness and knowledge about the importance of wetlands, help build effective wetland policy, encourage secure partnerships, increase effective communication and cooperation between government and community, help to increase conservation and restoration of wetlands, and slow the loss of existing wetlands.

VISION FOR ACTION
ON WETLANDS

Citizens of the Okanagan – together with respective local, regional and federal governments, organizations and businesses – work cooperatively to eliminate further loss and support wetland protection, governance, stewardship, science, and restoration.

Okanagan wetlands are critical ecosystem habitats throughout the Okanagan and continue to be under threat.

Source Protection Toolkit

Source water protection, broadly defined as watershed management to minimize or prevent contamination of waterbodies and aquifers, is critical to the provision of safe drinking water. In the Okanagan, watersheds are open to forestry, recreation, mining, livestock grazing, farming, urban development and other activities that can pose a risk to water. Many local, provincial and federal government agencies have a role in minimizing potential impacts on watersheds through legislation, policy and best practices that govern the activities and industries they regulate. Indigenous communities also have specific land use and water management objectives for Okanagan watersheds – their unceded, traditional territory. Ultimately, local water suppliers are legally accountable for providing potable water to their customers. Given the number of players involved and the complex legislative landscape, source protection in the Okanagan requires collaboration and partnerships, long-term source protection plans, committed funding and political support, public education, and regulation and enforcement.

At the recommendation of the Water Stewardship Council, the OBWB began work on a toolkit in early 2020 to help water suppliers and their partners navigate the complex subject of source protection. The toolkit will provide case studies and best practices on collaborative processes, public education campaigns, funding programs, and governance frameworks that lead to improved source protection. It will also include sample local government bylaws and policies to regulate activities that may impact source water and templates to help communities develop source protection plans. The project is being led by a 40-member Technical Advisory Committee of local water suppliers and planners, provincial water, forestry, range and recreation staff, First Nations and provincial health agencies, and Indigenous organizations. It is funded by OBWB, the Ministry of Municipal Affairs and Housing, the cities of West Kelowna and Kelowna, and Interior Health.



MILFOIL CONTROL

The milfoil control program provides year-round treatment for the invasive plant, Eurasian Watermilfoil. This invasive species, introduced to the Okanagan in the 1960's, causes a significant reduction in water quality, habitat quality and recreation opportunities. While the OBWB control program has serviced the valley for five decades, we continue to see new challenges caused by increasing populations, shoreline development and poor riparian area management. Operationally, this means that our program has less viable options to transfer weeds to shore for pickup, and less areas to launch our machines. From an ecological perspective, continued use of near-shore fertilizers and nutrients washing into the lakes from storm sewers, causes the milfoil to grow more densely and rapidly. On-water development like dock-building, changes the flow of the water, often encouraging new milfoil infestations in previously clear areas. The on-water structures also block milfoil control efforts in the area, creating an uncontrollable weed problem at those sites.

While the program has faced recent challenges and increasing pressures, we have also made great advances. Recognizing that water connects

us, we work to reconcile the need to control an invasive species, with the need to protect the environment and the need to be accountable to regulators and taxpayers. In recent years, we have introduced new technologies for safety,

equipment maintenance, tracking our operations and communicating. All of these changes mean that our operations are more efficient and that we continue to provide a high level of service, even as conditions change.



SEWAGE FACILITIES ASSISTANCE GRANTS

The SFA program is the longest running program of the OBWB. Started in 1970, the SFA program has provided more than \$66.5 million in grants to Okanagan local governments to provide enhanced sewer treatment, significantly reducing the amount of pollutants and nutrients that are discharged into our lakes. The biggest reductions have been in nitrogen and phosphorus, both of which have negative effects on water quality and aquatic habitat. Many areas in the Okanagan still rely on old technologies like septic systems for dealing with their sewage. As the valley continues to develop, welcoming more people, the SFA program includes policies to protect the progress we've made by preventing small-lot development that is not connected to a community sewer. This one policy prevents the perpetuation of the same issues that historically led to poor water quality in the valley – untreated sewage entering our lakes and streams, and failing septic systems.

Looking forward, emerging sewer technologies will continue to be developed to address new contaminants like microplastics, manufactured chemical residuals, hormones and pharmaceuticals. The OBWB SFA program will continue to support the best sewer treatment options to enhance and protect water in the Okanagan, recognizing that we all share the benefits of improved water quality.



Looking forward

If 2019-20 was a year of activity, and completing a series of large initiatives, the coming year is a year of renewal.

Our social structures have been shaken by the COVID-19 pandemic, and there are many unknowns for how the next year will unfold. Much of our progress over the last decade has come about through convening workshops and meetings of technical experts, people from all levels of government and stakeholders – working on different ideas and issues, sparked by a meeting of minds. This is still the way forward, and we are taking the challenge to find ways to connect, build relationships and exchange information. Collaboration lets us learn from each other, so that our actions, collectively, are greater than the sum of their parts.

While the OBWB has a small budget each year to support water management projects, we rely also on senior government grants for big initiatives. The grant programs supporting some of our recent large projects have not posted dates for new grant application intakes. However, with COVID-19 and the economic crunch that

followed, it's widely anticipated that there will be a big round of grant-based stimulus funding for water. The best projects happen when we can work with our local partners, collaborating to take on shared problems. For now, in this interim period between external funding opportunities, we are in a project development phase – convening online and over the phone with our partners to identify what the most important next steps are to promote water sustainability in the valley.

And we carry on. One of the primary reasons that the OBWB has been successful over our 50-year history, is our persistent, steady approach. When times are good and there is abundant funding and lots of capacity in our partnerships we are expansive, when conditions are tight, we focus on the basics and look to what we can do to prepare for the next window of opportunity. We persist and look to the future.





financial overview

In 2019-20, the OBWB received \$1,254,950 in grants, primarily for flood mapping and also for an ongoing hydrology modeling project. Among these grants, we received \$306,650 funding from the B.C. 2020 AquaHacking initiative, thanks to the generous local sponsorship of the Real Estate Foundation of B.C., Teck Resources, and Telus as well as Aqua Forum, IBM and RBC. The “Make Water Work” and “Don’t Move a Mussel” campaigns attracted in-kind contributions from media and other partners together totaling more than \$47,800.

As a grantmaker, in 2019-20 the OBWB awarded more than \$1.27 million in infrastructure grants to improve wastewater treatment, and \$318,846 in Water Conservation and Quality Improvement (WCQI) Grants to local governments and community groups. While our WCQI budget was only \$300,000, we had funds remaining from two other projects that were appropriate to award to grantees through this program. In the fall of 2019, the board approved an increase to the overall grants budget, bringing it to \$350,000 for the 2020-21 fiscal year.

Another aspect to our grantmaking role is to be active participants in both Environmental Funders Canada (EFC), and the B.C. Water Funders Collaborative. By building relationships with other funders, we can raise awareness

about Okanagan water issues, and perform a matchmaking role with grantees in the valley. We were on track this year to host the national EFC conference, bringing funders from across the U.S. and Canada to Kelowna. Because of COVID-19, this conference has been postponed to Spring 2020, and will be hosted as an online event.

Many university researchers have their own funding, and simply need a community partner to support their work. The OBWB helps by providing access to data, and making introductions to establish community-based research programs. In this way, we can leverage the talents and resources of our post-secondary institutions to take on water issues – often with no need for local funds. As an example, this year we partnered with the UBC Okanagan Engineering Department to undertake

a benchmarking project for Okanagan municipal water systems. With an annual contribution of \$5,000, the OBWB helped the university secure matching funds of \$76,800/year for four years.

This was the eighth year in a row that OBWB did not have a budget increase. We are slowly spending down accumulated reserve funds in the Sewerage Facilities Assistance Grants Program. It’s a balancing act, maintaining or expanding projects and programs, and maintaining equipment, while keeping costs down. We are able to continue our high productivity and excellent service delivery because of our strong partnerships and ability to stretch and leverage every dollar.

Kalamalka Lake



Okanagan Basin Water Board
Financial Statements
For the year ended March 31, 2020

	Contents
Management's Responsibility for Financial Reporting	3
Independent Auditor's Report	4-5
Financial Statements	
Statement of Financial Position	6
Statement of Financial Operations	7
Statement of Change in Net Financial Assets	8
Statement of Cash Flows	9
Summary of Significant Accounting Policies	10-11
Notes to Financial Statements	12-21

Management's Responsibility for Financial Reporting

The accompanying financial statements of the Okanagan Basin Water Board are the responsibility of management and have been approved by the Chairperson on behalf of the Board.

The financial statements have been prepared by management in accordance with Canadian public sector accounting standards. Certain amounts used in the preparation of the financial statements are based on management's best estimates and judgements. Actual results could differ as additional information becomes available in the future. When alternative accounting methods exist, management has chosen those it deems most appropriate in the circumstances, in order to ensure that the financial statements are presented fairly, in all material respects.

The Okanagan Basin Water Board maintains systems of internal accounting and administrative controls of high quality, consistent with reasonable cost. Such systems are designed to provide reasonable assurance that the financial information is relevant, reliable and accurate and the Board's assets are appropriately accounted for and adequately safeguarded.

The Board is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the financial statements.

The Board meets periodically with management, as well as the external auditors, to discuss internal controls over the financial reporting process, auditing matters and financial reporting issues, to satisfy themselves that each party is properly discharging their responsibilities, and to review the annual report, the financial statements and the external auditor's report.

The financial statements have been audited by BDO Canada LLP Chartered Professional Accountants in accordance with Canadian generally accepted auditing standards on behalf of the Board. The independent auditor's report expresses their opinion on these financial statements. The auditors have full and free access to the accounting records and to the Board of the Okanagan Basin Water Board.

S. McKortoff

Board of Directors Chairperson

Anna L. Warwick Sears

Executive Director
July 7, 2020



Tel: 250 763 6700
Fax: 250 763 4457
www.bdo.ca

BDO Canada LLP
1631 Dickson Avenue, Suite 400
Kelowna BC V1Y 0B5 Canada

Independent Auditor's Report

To the Directors of Okanagan Basin Water Board

Opinion

We have audited the financial statements of the Okanagan Basin Water Board (the "Board"), which comprise the statement of financial position as at March 31, 2020, and the statements of financial operations, change in net financial assets and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Okanagan Basin Water Board as at March 31, 2020, and its financial operations, change in net financial assets and cash flows for the year then ended in accordance with public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Board in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Unaudited Information

We have not audited, reviewed or otherwise attempted to verify the accuracy or completeness of the information included elsewhere in the annual report.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Board's financial reporting process.

BDO Canada LLP, a Canadian limited liability partnership, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.



Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Board's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Board to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

BDO Canada LLP

Chartered Professional Accountants

Kelowna, British Columbia
July 7, 2020

Okanagan Basin Water Board			
Statement of Financial Position			
March 31	2020		2019
Financial assets			
Cash (Note 1)	\$	3,389,778	\$ 269,260
Portfolio investments (Note 2)		-	2,915,874
Accounts receivable		435,580	793,396
		<u>3,825,358</u>	<u>3,978,530</u>
Financial liabilities			
Accounts payable and accrued liabilities		211,211	411,337
Grants payable (Note 3)		421,972	405,104
Holdback payable		146,363	139,480
		<u>779,546</u>	<u>955,921</u>
Net financial assets		<u>3,045,812</u>	<u>3,022,609</u>
Non-financial assets			
Tangible capital assets (Note 4)		<u>387,553</u>	<u>462,412</u>
Accumulated Surplus (Note 5)	\$	3,433,365	\$ 3,485,021
Approved on behalf of the Board:			
S. McKortoff	Chairperson		
The accompanying summary of significant accounting policies and notes are an integral part of these financial statements			
			6

Okanagan Basin Water Board Statement of Financial Operations			
For the year ended March 31	2020 Actual	2020 Budget	2019 Actual
Revenue (Note 12)			
Levies from member Regional Districts (Note 6)	\$ 3,449,170	\$ 3,449,170	\$ 3,450,733
Grants	1,254,950	-	2,068,075
Interest and other income	72,107	29,000	82,762
	<u>4,776,227</u>	<u>3,478,170</u>	<u>5,601,570</u>
Expenses (Note 12)			
Aquatic weed control	664,949	829,900	696,848
Sewerage facilities assistance	1,270,368	1,481,320	1,600,375
Water management	2,892,566	1,266,950	2,445,731
	<u>4,827,883</u>	<u>3,578,170</u>	<u>4,742,954</u>
Annual (Deficit) Surplus (Note 12)	(51,656)	(100,000)	858,616
Accumulated Surplus, beginning of year	3,485,021	3,485,021	2,626,405
Accumulated Surplus, end of year	\$ 3,433,365	\$ 3,385,021	\$ 3,485,021
The accompanying summary of significant accounting policies and notes are an integral part of these financial statements			
		7	

Okanagan Basin Water Board Statement of Change in Net Financial Assets			
For the year ended March 31	2020 Actual	2020 Budget	2019 Actual
Annual (deficit) surplus	\$ (51,656)	\$ (100,000)	\$ 858,616
Acquisition of tangible capital assets	(3,993)	-	(232,833)
Amortization of tangible capital assets	78,852	-	79,909
Net change in net financial assets	23,203	(100,000)	705,692
Net financial assets, beginning of year	3,022,609	3,022,609	2,316,917
Net financial assets, end of year	\$ 3,045,812	\$ 2,922,609	\$ 3,022,609
The accompanying summary of significant accounting policies and notes are an integral part of these financial statements			
		8	

Okanagan Basin Water Board Statement of Cash Flows		
For the year ended March 31	2020	2019
Operating activities		
Annual (deficit) surplus	\$ (51,656)	\$ 858,616
Items not involving cash:		
Amortization	78,852	79,909
Gain on disposal of tangible capital assets	-	(800)
	<u>27,196</u>	<u>937,725</u>
Changes in working capital:		
Accounts receivable	357,816	(766,858)
Accounts payable and accrued liabilities	(200,126)	145,601
Grants payable	16,868	118,256
Holdback payable	6,883	139,480
	<u>181,441</u>	<u>(363,521)</u>
Cash from operations	208,637	574,204
Investing Activities		
Net change in investments	2,915,874	(2,900,000)
Accrued interest	-	(15,874)
	<u>2,915,874</u>	<u>(2,915,874)</u>
Capital Activities		
Purchase of tangible capital assets	(3,993)	(232,833)
Proceeds from disposal of tangible capital asset	-	800
	<u>(3,993)</u>	<u>(232,033)</u>
Change in cash during the year	3,120,518	(2,573,703)
Cash, beginning of year	269,260	2,842,963
Cash, end of year	\$ 3,389,778	\$ 269,260
The accompanying summary of significant accounting policies and notes are an integral part of these financial statements		
		9

Okanagan Basin Water Board
Summary of Significant Accounting Policies

March 31, 2020

Nature of Business	The Okanagan Basin Water Board ("The Board") is established under Section 138 of the Municipalities Enabling and Validating Act (Province of British Columbia) and administers and operates the aquatic weed control program, the sewerage facilities assistance fund, and a water management program as an agent of the three participating regional districts. The participating regional districts are: Regional District of Central Okanagan (R.D.C.O.); Regional District of Okanagan-Similkameen (R.D.O.S.); and Regional District of North Okanagan (R.D.N.O.).
Basis of Presentation	It is the Board's policy to follow accounting principles generally accepted for municipalities in the Province of British Columbia and to apply such principles consistently. The financial statements include the account of all funds for the Board. All inter-fund transfers have been eliminated. They have been prepared using guidelines issued by the Public Sector Accounting Board (PSAB) of the Chartered Professional Accountants of Canada.
Use of Estimates	The preparation of financial statements in conformity with generally accepted accounting principles for British Columbia Regional Districts require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the year. Actual results could differ from those estimates.
Portfolio Investments	Portfolio investments are recorded at the lower of cost and market value.
Financial Instruments	The Board's financial instruments consist of cash, portfolio investments, accounts receivable, accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that the Board is not exposed to significant interest, currency, or credit risks arising from these financial instruments. The fair values of these financial instruments approximate their carrying values, unless otherwise noted.

10

Okanagan Basin Water Board
Summary of Significant Accounting Policies

March 31, 2020

Tangible Capital Assets	Tangible capital assets are recorded at cost less accumulated amortization. Cost includes all costs directly attributable to acquisition or construction of the tangible capital asset including transportation costs, installation costs, design and engineering fees, legal fees, and site preparation costs. Contributed tangible capital assets are recorded at fair value at the time of the donation, with a corresponding amount recorded as revenue. Amortization is recorded on a straight-line basis over the estimated life of the tangible capital asset commencing once the asset is available for productive use as follows:	
	Buildings	25 years
	Equipment	4-10 years
	Vehicles	5-7 years
	Office Furniture & Equipment	10 years
	Computers	4 years
Revenue Recognition	The levies from member Regional Districts are recognized when the levies for the fiscal year are approved by the Board and requisitioned.	
	Grants, interest and other income are recognized in the period in which they are earned.	
Government Transfers	Government transfers, which include grants and funding agreements are recognized in the financial statements in the period in which events giving rise to the transfers occur, providing the transfers are authorized, any eligibility criteria have been met, and reasonable estimate of the amount can be made.	

11

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

1. Cash	The Board's bank account is held at one financial institution. The bank account earns interest at bank prime minus 2.25%.	
2. Temporary Investments	2020	2019
	Bank of Montreal GIC, matured during the year	\$ - \$ 2,900,000
	Accrued Interest	- \$ 15,874
	\$ -	\$ 2,915,874
3. Grants Payable	The sewerage facilities grants program provides funds for municipalities to upgrade their waste water treatment system, the Board's grants provide partial funding for debt repayment on 20 - 25 year MFA notes. The process for the sewerage facilities grants program involves municipalities requesting an approximate grant amount early in their funding process, then verifying the final grant amount once municipalities have secured MFA notes and begin making payments. Once the grants are awarded, the Board will only issue the grants based on the proper documentation submitted by individual municipalities, such as formal invoice to the Board.	
	The Water Conservation and Quality Improvement grant program provides funds to Okanagan local governments, improvement districts, and non-government organizations to support innovative, tangible, on the ground, water initiatives. The program takes a collaborative approach to water management issues and promotes more uniform standards and best practices throughout the valley. Up to \$319,000 per year is made available for Okanagan projects. Grants will be expensed in the year of approval as per the budget.	

12

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

4. Tangible Capital Assets		Office Furniture & Equipment					Computers	Work in Progress	2020 Total
		Buildings	Equipment	Vehicles					
Cost									
Balance, beginning of year	\$	118,352	\$ 1,233,201	\$ 166,022	\$ 3,773	\$	27,181	\$ -	\$ 1,548,529
Additions		-	-	-	-	-	3,993	-	3,993
Reallocation of assets		-	-	-	-	-	(5,632)	-	(5,632)
Balance, end of year		118,352	1,233,201	166,022	3,773		25,542	-	1,546,890
Accumulated amortization									
Balance, beginning of year		56,697	883,258	121,028	2,707		22,427	-	1,086,117
Amortization		4,742	51,519	18,236	152		4,203	-	78,852
Disposals		-	-	-	-		(5,632)	-	(5,632)
Balance, end of year		61,439	934,777	139,264	2,859		20,998	-	1,159,337
Net book value	\$	56,913	\$ 298,424	\$ 26,758	\$ 914	\$	4,544	\$ -	\$ 387,553

13

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2019												
4. Tangible Capital Assets (continued) Prior year comparative information:												

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

5. Accumulated Surplus

The Board maintains a reserve for future expenditures. Canadian public sector accounting standards require that non-statutory reserves be included with operating surplus. The reserve and changes therein are included in the operating surplus as follows:

	2020	2019
Aquatic Weed Control Equipment Reserve		
Balance, beginning of year	\$ 417,468	\$ 357,364
Proceeds from sale of tangible capital assets	-	800
Net surplus	174,740	218,262
Transfer of amortization	70,647	72,162
Transfer for acquisition of tangible capital assets	-	(231,120)
Balance, end of year	662,855	417,468
Invested in Tangible Capital Assets		
Balance, beginning of year	462,412	309,488
Transfer for acquisition of tangible capital assets	3,993	232,833
Transfer of amortization	(78,852)	(79,909)
Balance, end of year	387,553	462,412
Sewerage Facilities Assistance Reserve Fund		
Balance, beginning of year	1,264,966	1,445,581
Net deficit	120,894	(180,615)
Balance, end of year	1,385,860	1,264,966
Water Management Accumulated Surplus		
Balance, beginning of year	1,340,175	513,972
Net surplus	(347,290)	820,169
Transfer of amortization	8,205	7,747
Transfer for acquisition of tangible capital assets	(3,993)	(1,713)
Balance, end of year	997,097	1,340,175
	\$ 3,433,365	\$ 3,485,021

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

6. Levies from Member Regional Districts

	2020 Actual	2020 Budget	2019 Actual
North Okanagan	\$ 602,570	\$ 602,570	\$ 622,503
Central Okanagan	2,153,662	2,153,662	2,133,036
Okanagan Similkameen	692,938	692,938	695,194
	\$ 3,449,170	\$ 3,449,170	\$ 3,450,733

7. Sewerage Facility Grants to Member Local Governments

Included in Sewerage Facilities Assistance are the following grants to member local governments:

	2020	2019
City of Kelowna	\$ 182,882	\$ 186,597
City of Penticton	170,336	215,822
City of Vernon	87,748	93,784
City of West Kelowna	43,317	42,788
District of Coldstream	11,340	12,008
District of Lake Country	153,850	287,269
District of Peachland	130,889	174,089
District of Summerland	269,880	367,080
Town of Osoyoos	11,278	11,278
Regional District of North Okanagan	4,679	4,679
Regional District of Okanagan Similkameen	119,665	119,665
Westbank First Nation	44,503	45,316
	\$ 1,230,367	\$ 1,560,375

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

8. Budget Information

The budget adopted by the Board was not prepared on a basis consistent with that used to report actual results based on current Canadian public sector accounting standards ("PSAB"). The budget was prepared on a modified accrual basis while PSAB now require a full accrual basis. The following reconciles the difference.

	2020
Budget surplus (deficit) for the year as per board budget	\$ -
Less:	
Transfer from previous years surplus in revenues	(100,000)
Budget deficit per statement of financial operations	\$ (100,000)

9. Commitments

The Board has exercised its right to renew their lease with the Regional District of North Okanagan for another five year term, which will end March 31, 2024 for the lease of land, on which the Board's machine shop building resides. The original agreement provided for an annual lease payment of \$14,560, with increases in 2014 and 2019 indexed to the annual CPA for British Columbia. At the conclusion of the lease term, ownership of the Board's building will be transferred to the Regional District of North Okanagan.

The Board is also currently in a five year lease agreement, which expires December 31, 2023, with the option to renew for one additional term of five years, with the Regional District of Central Okanagan for office rent and operating and overhead costs as well as financial, administrative and technology services. The agreement provides for a monthly payment of \$9,303.

10. Subsequent Event

In March 2020, the COVID-19 outbreak has caused governments worldwide to enact emergency measures to combat the spread of the coronavirus. These measures, which include the implementation of facility closures, travel restrictions, self-isolation periods, and social and physical distancing, will have a significant impact on local and global economies.

At this time it is not possible to reliably estimate the length and severity of the COVID-19 outbreak and how it may impact the Board's financial results.

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

11. Employee Benefits

Retirement Benefits

The Board and its employees contribute to the Municipal Pension Plan (a jointly trustee pension plan). The board of trustees, representing plan members and employers, is responsible for administering the plan, including investment of assets and administration of benefits. The plan is a multi-employer defined benefit pension plan. Basic pension benefits are based on a formula. As at December 31, 2018, the plan has about 205,000 active members and approximately 101,000 retired members. Active members include approximately 40,000 contributors from local governments.

Every three years, an actuarial valuation is performed to assess the financial position of the plan and adequacy of plan funding. The actuary determines an appropriate combined employer and member contribution rate to fund the plan. The actuary's calculated contribution rate is based on the entry-age normal cost method, which produces the long-term rate of member and employer contributions sufficient to provide benefits for average future entrants to the plan. This rate may be adjusted for the amortization of any actuarial funding surplus and will be adjusted for the amortization of any unfunded actuarial liability.

The most recent valuation for the Municipal Pension Plan as at December 31, 2018, indicated a \$2,866 million funding surplus for basic pension benefits on a going concern basis.

The Board paid \$62,541 (2019 - \$59,626) for employer contributions to the plan in fiscal 2020.

The next valuation will be as at December 31, 2021, with results available in 2022.

Employers participating in the plan record their pension expense as the amount of employer contributions made during the fiscal year (defined contribution pension plan accounting). This is because the plan records accrued liabilities and accrued assets for the plan in aggregate, resulting in no consistent and reliable basis for allocating the obligation, assets and cost to individual employers participating in the plan.

Okanagan Basin Water Board
Notes to Financial Statements

March 31, 2020

12. Segment Disclosures

Aquatic Weed Control

This program controls the growth of Eurasian watermilfoil in the shallow waters around Okanagan beaches and boating areas. This is a year-round program managing weed growth with rototillers in the winter and harvesters in the summer. The goal of the program is to keep public areas clear of weed, but when time allows operators and equipment will also contract work on a cost-recovery basis.

Sewerage Facilities Assistance

This program reduces the discharge of polluted water to Okanagan lakes and streams by supporting upgrades of sewage treatment plants and community sewers. Grants go to Okanagan municipalities as a local match for senior government infrastructure funding. It is one of the Board's longest-running programs, and has led to great improvements in water quality.

Water Management

This initiative undertakes projects and programs that support water sustainability in the Okanagan. It supports the original mandate of the board, providing leadership and coordinating water management activities in the interests of Okanagan citizens. The initiative includes the Water Conservation and Quality Improvement grant program, water education and outreach, advocacy to senior government for Okanagan water concerns, and establishing the science and monitoring systems required for informed decision making. Many of the projects are conducted as multi-year partnerships with other funding agencies, and operating surplus balances are specifically designated for project commitments through funding agreements with senior government, or targeted to planned projects in development. The Water Management Accumulated Surplus includes \$879,743 (2019 - \$1,254,856) for previously committed projects.

Okanagan Basin Water Board
Notes to Financial Statements

For the year ended March 31, 2020

12. Segment Disclosures and Expense by Object (continued)

	Aquatic Weed Control	Sewerage Facilities Assistance	Water Management	2020 Total
Revenues				
Levies	\$ 824,900	\$ 1,363,320	\$ 1,260,950	\$ 3,449,170
Grant income	-	-	1,254,950	1,254,950
Interest income	14,789	27,942	29,376	72,107
Gain on disposal of assets	-	-	-	-
	839,689	1,391,262	2,545,276	4,776,227
Expenses				
Assistance grants	-	1,230,368	318,746	1,549,114
Amortization	70,647	-	8,205	78,852
Contract services	12,689	-	1,774,789	1,787,478
Director's remuneration and expenses	12,872	-	12,872	25,744
Equipment costs	82,208	-	2,825	85,033
Insurance	32,484	-	1,556	34,040
Interest charge	25	-	641	666
Office	13,028	-	29,144	42,172
Outreach and publicity	19	-	151,110	151,129
Overhead allocation	(20,000)	40,000	(20,000)	75,746
Professional fees	37,873	-	37,873	32,365
Rental costs	23,462	-	8,903	3,610
Safety	3,410	-	200	4,731
Stewardship council expenses	-	-	4,731	54,970
Travel, conferences and meetings	2,181	-	52,789	19,190
Utilities, yard supplies and maintenance	18,236	-	954	883,043
Wages and benefits	375,815	-	507,228	2,892,566
	664,949	1,270,368	2,892,566	4,837,883
Annual surplus (deficit)	\$ 174,740	\$ 120,894	\$ (847,290)	\$ (51,656)

Okanagan Basin Water Board
Notes to Financial Statements

For the year ended March 31, 2020 (Prior year comparative information)

12. Segment Disclosures and Expense by Object (continued)

	Aquatic Weed Control	Sewerage Facilities Assistance	Water Management	2019 Total
Revenues				
Levies	\$ 889,757	\$ 1,377,726	\$ 1,188,250	\$ 3,450,733
Grant income	7,148	-	2,060,927	2,068,075
Interest income	18,205	47,034	16,723	81,962
Gain on disposal of assets	800	-	-	800
	915,910	1,419,760	3,265,900	5,601,570
Expenses				
Assistance grants	-	1,560,375	294,965	1,855,340
Amortization	72,162	-	7,747	79,909
Contract services	7,824	-	1,343,695	1,351,519
Director's remuneration and expenses	11,105	-	11,105	22,210
Equipment costs	88,028	-	1,469	89,497
Insurance	29,671	-	1,563	31,234
Interest charge	15	-	59	74
Office	12,744	-	32,247	44,991
Outreach and publicity	46	-	143,632	143,678
Overhead allocation	(20,000)	40,000	(20,000)	-
Professional fees	39,365	-	36,757	76,122
Rental costs	36,520	-	10,843	47,363
Safety	8,570	-	-	8,570
Stewardship council expenses	-	-	8,194	8,194
Travel, conferences and meetings	4,017	-	82,802	86,819
Utilities, yard supplies and maintenance	16,208	-	-	16,208
Wages and benefits	390,573	-	490,653	881,226
	696,848	1,600,375	2,445,731	4,742,954
Annual surplus (deficit)	\$ 219,062	\$ (180,615)	\$ 820,169	\$ 858,616



250-469-6270 | www.OBWB.ca | 1450 KLO Rd. Kelowna BC V1W 3Z4

