



CONNECTIONS

The OBWB is a collaboration of Okanagan communities. Our success comes from working across jurisdictions to create watershed-scale solutions, and from linking together the efforts of individual jurisdictions into a mosaic of complementary solutions at the local level. Effective collaborations depend on connections and relationships, and the isolation of the COVID-19 pandemic created challenges to maintaining these links. This year we put extra effort into reaching out, using new platforms and approaches, maintaining old friends and making new ones. Now, in 2022, we've been glad to slowly transition back to in-person events.

The core of our collaborations and relationship building is the relationships within the organization—relationships among staff, board, the Okanagan Water Stewardship Council and the broader community. As each staff member has responsibility for a specific area of focus or expertise, they have responsibility for maintaining a network of connections related to that work—whether it is the network of local government water utility



The OBWB was pleased to work with En'owkin Centre to organize a COVID-safe tour of the k'əmcnitkw Floodplain Re-engagement Project, creating greater awareness for the project and other water-related projects in the valley. This was the first in-person event for many of the attendees since the start of the pandemic.

staff, the network of Okanagan communication specialists, or the network of technical experts in hydrology. In this way, we grow and maintain a network of networks, and remain a hub for Okanagan water information and services with many spokes.

During the long pandemic, now two-plus years and counting, we have missed out on many of the traditional ways of building connections and relationships. Research shows that casual contacts strengthen communities and enhance creativity by mixing up people of different backgrounds and interests. Even with very focused goals and objectives, these sparks of creativity and new perspectives are invaluable—breaking up our fixed ideas about what's possible or impossible. So, it's with new resolve and a fresh appreciation of the value of relationships, we have renewed gratitude for our networks and partnerships, and their loyalty and commitment to Okanagan water sustainability in a time of social fragmentation.

RENEWING CONNECTIONS

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Sue McKortoff
OBWB Chair

Message FROM THE CHAIR

The theme for the Okanagan Basin Water Board 2022 Annual Report is "Renewing Connections." This is a positive step for us after last year's theme of "Waves of Change." While we have continued to conduct business via video conferencing platforms from our homes, we are starting to see some opportunities to hold in-person meetings very soon. Our main focus has always been working to protect our shared Okanagan water. Programs such as milfoil harvesting, flood and drought response, flood mapping and preventing the influx of invasive species into our lakes continue to be of great importance.

Despite our cool wet spring this year, the 12th annual Make Water Work challenge showcased videos of valley mayors educating the public on ways to use outdoor residential water efficiently, while encouraging citizens to "take the pledge" and become Make Water Work champions. The website **www.OkWaterWise.ca** is full of resources for residents, visitors, businesses, and students to understand and appreciate our precious water.

We continue to renew connections with provincial and federal agencies, making sure they understand our concerns about the threat of invasive species in Okanagan lakes. Another major program is Don't Move a Mussel, started in 2013. This year "the biggest threat is actually tiny" is referring to the tiny zebra and quagga mussels attached to travelling watercraft. The OBWB continues to encourage those bringing

watercrafts to B.C. to stop at all inspection stations along their route, clean, drain and dry, (and pull all drain plugs) and clean all related equipment before launching in our provincial waters.

The review of the Okanagan Lake Regulation System will look at updating the infrastructure and management of Okanagan Lake. The interactive public website at www.OkanaganFloodStory.ca continues to be updated as we try to understand and reduce flood risk. A Source Water Protection Toolkit has been prepared for local governments while we ask the province for stronger protection of drinking water sources and watershed security.

OBWB staff continue to manage events and projects efficiently, while we hold our monthly board meetings via Zoom and soon, with some in-person. Our continued determination to protect and manage Okanagan water in conjunction with the indigenous values of the Syilx Nation and B.C.'s commitments under the United Nations Declaration on the Rights of Indigenous People, keeps us enthused and ready to take on current and future challenges. We look forward to renewing connections with many water experts at the fourth edition of the Osoyoos Lake Water Science Forum in October 2022, titled "The Heart of the Watershed- Bridging Indigenous and Western Approaches to Knowledge, Science and Management."



Anna Warwick Sears
OBWB Executive Director

Message from the executive director

During the COVID-19 pandemic, we spent a lot of time in Zoom-rooms and similar digital environments. We worked to build and maintain connections, getting to know each other's pets and learning to be patient with technological problems. Sometimes an embarrassing glitch would have us asking for patience and humour—like when a webinar's video clip is interrupted by an awkward advertisement. If adversity makes us stronger, we all have new super-powers.

Although conditions were difficult, we still accomplished a tremendous amount this year. Thanks to careful pre-planning, and being alerted through our network of a grant opportunity, we were able to successfully apply for major new funding to expand our flood hazard maps. We acquired an important new extension of the maps with digital underwater bathymetry of the Okanagan foreshore, using radar and multispectral beams of light to show how the contours of the lakebed change near shorelines. This will help communities model the likelihood of wave damage to homes and infrastructure. We also worked on a set of flood risk maps, to be finished in 2022, that account for economic and social vulnerabilities from flooding.

Both projects are elements of the Plan of Study for Modernizing the Okanagan Lake Regulation System, and subsequent lake level management operations.

We also completed and launched—with a very well-attended and well-received series of webinars—a Source Protection Toolkit for protecting and restoring watersheds. Originally intended to be solely for Okanagan water utilities and related local professionals, we quickly realized that these tools are useful for watersheds across B.C. and refocused the toolkit to reflect this broader application. The toolkit project and webinar series would not have been possible without our network of source protection experts from many fields of expertise located across Canada.

The fruits of our labours this year were in many ways a result of long-cultivated connections with Okanagan, B.C., and Canadian water professionals. We will never take these relationships for granted, and as society recovers from the pandemic, we plan to cherish, grow, and reinforce these connections for the years ahead.

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Organizational overview

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.

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's strength is in our 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. The board is made up of three directors from each of the Okanagan's three regional districts, one director from the Okanagan Nation Alliance, and one director each from the Water Supply Association of B.C., and 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



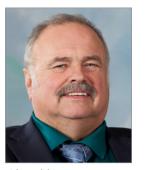
Mayor, District of Lake Country



Colin Basran, RDCO Mayor, City of Kelowna



Doug Holmes, RDOS Councillor, District of Summerland



Rick Knodel, RDOS Director, Electoral Area "C"



Chief Christopher Derickson, Okanagan Nation Alliance



Robert Hrasko, Water Supply Association of BC



Scott Boswell, 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, Special Projects Coordinator



Pat Field, Milfoil Field Supervisor



David Hoogendoorn, Milfoil Operator



Darby Taylor, Milfoil Operator

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ON SERVICES The Okanagan Basin Water Board provides three core programs: Water Management, Milfoil Control and Sewerage Facilities Assistance Grants. Work in each of these programs is summarized in the three corresponding sections of this Annual Report, followed by a section on Looking Forward, and finally, our Financial Statements for Fiscal Year 2021-22. 2022 ANNUAL REPORT 6 OKANAGAN BASIN WATER BOARD

Mater MANAGEMENT PROGRAM

The Water Management Program includes the Okanagan Water Stewardship Council, OBWB's Science and Information initiatives, Water Conservation and Quality Improvement Grants, and Communications and Outreach, including the second year of the B.C./Western AquaHacking Challenge.

Mambers of the OWSC meet in person on

Members of the OWSC meet in person on June 15, 2022 for the first time since the start of COVID-19

OKANAGAN WATER STEWARDSHIP COUNCIL

This year marked the 10th term and 15th year of the Okanagan Water Stewardship Council (OWSC). Although nine council meetings were hosted virtually, they continued to be a valuable forum for the discussion of important Okanagan watershed issues. These virtual meetings represent over 800 hours of volunteer service time. Meeting topics ranged from hydrological modeling to agricultural irrigation, to micro-plastics in waterways. In addition to regular monthly meetings, six committees also met virtually throughout the year to discuss: agriculture water, climate change, policy, alluvial fans, water quality health, and wetlands.

A critical feature of the council is to support knowledge transfer and promote the communication of new water science. Speakers from this previous year include Sheena Spencer on Okanagan forestry research, Brian Guy on modelling the Okanagan Lake Regulatory System (OLRS), Marta Green and Dave Mercer on Okanagan groundwater, Francois-Nicolas Robinne on wildfire risks to water supply in Canada, and Graham Watt and Tamsin Lyle on Flood management: lessons and opportunities.

The OWSC was established by the Water Board as an advisory body and communication channel to water stakeholder communities throughout the

Okanagan. It provides independent advice supporting sustainable water management in the Okanagan, using its collective expertise to identify basin-wide water issues and develop workable solutions that reflect the best available science, innovative policy, and consensus approaches. The council recommends only those actions that can be undertaken within the bounds of the OBWB's mandate. In addition to its advisory role, the council helps develop programs that contribute to the local knowledge base and provides stewardship tools for the watershed community.

The council is made up of representatives from federal, First Nations, provincial and local government water-related departments, including Agriculture and Agri-Food Canada, Environment and Climate Change Canada, B.C. Ministry of Forests, Interior Health, local government planners and water utility operators. Additional members include representatives from UBC Okanagan and Okanagan College water programs, and several industry and non-profit groups, including BC Fruit Growers, BC Agriculture Council, BC Cattleman's Association, BC Wildlife Federation, Okanagan Collaborative Conservation Program, and several others. To learn more, visit https://www.OBWB.ca/wsc.

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WATER SCIENCE AND INFORMATION

Hydrometric Monitoring

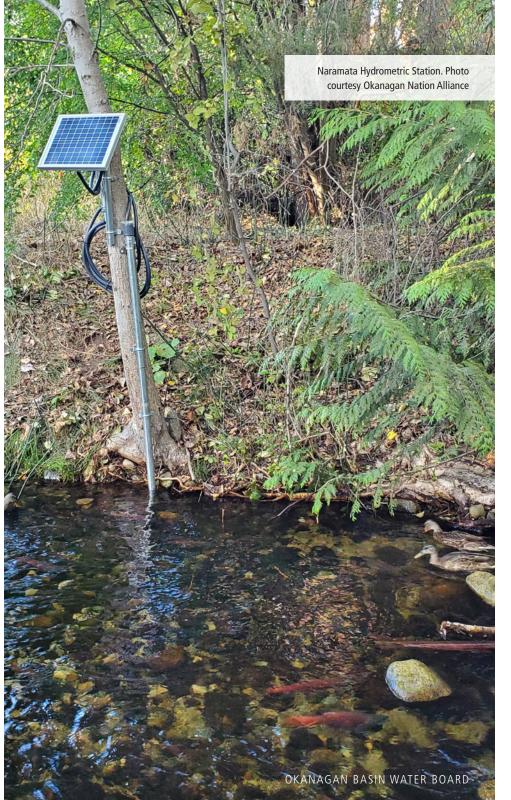
Comprehensive hydrometric information is essential for at least three areas of water management in the Okanagan: (1) local government infrastructure, (2) site-specific environmental flow needs, and (3) hydrologic and hydraulic modelling. The Okanagan's hydrometric network fell from a peak of 156 stations in the early 1980s, to approximately 25 stations in 2007. It is estimated that for optimal water management, the valley needs at least 50 strategically located hydrometric monitoring stations.

In 2020, the board approved the plan for a new service, "The Okanagan Basin Hydrometric Information Network." It was officially launched in April 2021 in collaboration with the Okanagan Nation Alliance (ONA) and Environment and Climate Change Canada (ECCC). The goal is to install 26 stations over five years, and then to ensure they are maintained thereafter.

Three areas of activities were prioritized for 2021-22: (1) adding four new stations to the OBWB/ONA hydrometric network, (2) adding two new ECCC hydrometric stations, and (3) adding third-party hydrometric data to the Government of B.C.'s publicly available data warehouse. In total, five new stations were added to the hydrometric network, including:

- Naramata Creek
- Powers Creek (new station installed at bridge in collaboration with City of West Kelowna)
- Mill Creek
- Pearson Creek
- Trout Creek

We also updated the OBWB hydrometric data management system. These upgrades help partners to update their data online, enhance quality assurance and quality control, and integrate OBWB-collected hydrometric data into B.C.'s hydrometric data warehouse—making the information readily available to local Okanagan governments and their partners.



Okanagan Lake Regulation System Plan of Study

Lake levels in the Okanagan are managed by the Government of B.C. using a series of dams and other structures located on major lakes and the Okanagan River between Penticton and Osoyoos. The system was constructed by the federal and provincial governments in the 1950s to control flooding and to provide water for irrigation. A comprehensive water study in the early 1970s led to the Okanagan Basin Agreement, which recommended target lake levels and river flows to achieve several other benefits in addition to flood control. Those recommendations formed the basis for the lake level operating plan that is still in use today.

As a result of climate change, lake levels are fluctuating more significantly and are impacting more people and structures. The worst flooding in living memory occurred in 2017, and the lake was near the lowest level in its written historical range in 2021. In addition, the dam infrastructure is reaching the end of its operational lifespan. There is no doubt that the Okanagan Lake Regulation System (OLRS) infrastructure and operating plan need to be updated and improved.

In 2020-21, the OBWB worked with a technical advisory committee of provincial and federal staff, the Okanagan Nation Alliance, and other experts, to develop a "Plan of Study for Modernizing the Okanagan Lake Regulation System." The

report calls for 18 studies to be completed over approximately seven years. At that time, a final plan will be developed to optimize lake level and river flow management, address flood and drought concerns, comprehensive river and floodplain restoration, fisheries management, and provide greater benefits to society. This

year, the OBWB began to implement the plan, working with partners. Five of the studies are now complete or are in process. More information can be found at https://www.OBWB.ca/lakelevelmanagement/.



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Flood Risk Mapping and Related Activities

After high-water events in 2017 and 2018, the OBWB led a valley-wide partnership of local governments and Indigenous communities to update the region's floodplain mapping. The new Okanagan inundation flood mapping project was completed in March 2020 and in 2021 a new flood risk mapping initiative began, with an anticipated completion date in the summer of 2022. The technical reports on the flood mapping, and pdf maps, along with other flood mapping resources are provided on the OBWB flood webpage: www.obwb.ca/flood.

The Okanagan Basin Flood Portal website (www.OkanaganFloodStory.ca) continues to provide an important public portal to flood information. This site complements community flood websites and provides a regional perspective, including photos and stories about

flood history in the Okanagan. The site also includes information on how to reduce flood risk, prepare, and respond, and has a Frequently Asked Questions section.

The OBWB has developed a new data management strategy to share our hydrology

models and associated climate and hydrology datasets. This new multi-platform sharing strategy using Google Cloud and GitHub provided an opportunity to enhance our sharing of two recently completed Okanagan hydrology models: Okanagan hydrology flood model and the Okanagan 18 sub-basin hydrology models.

Tiger dam set up in Kelowna's

City Park during 2017 flooding

Topobathymetric LiDAR Project

In addition to flood inundation mapping, the OBWB also acquired new topobathymetric Light Detection and Ranging (LiDAR) mapping for seven mainstem (valley-bottom) lakes throughout the valley. The mapping, which provides a highly accurate underwater contour map showing depths down to 10 meters, will allow for modelling to show potential wave damage during flood events. This information

can be added to the flood-inundation maps, allowing Okanagan communities to be even better prepared for future floods.

The project also included the acquisition of highdefinition aerial photography, including multispectral imagery over the same target area as the LiDAR. OBWB anticipates being able to use these datasets in many new and innovative ways, from updated foreshore inventory and mapping, to potentially differentiating between native and invasive aquatic plants to enable better milfoil control in the future. OBWB has made this data open and free to all users, and we are tracking the applications which will help inform future similar projects.

Drought Planning and Response

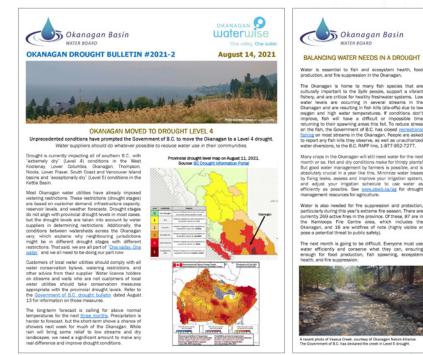
The Thompson Okanagan region experienced a significant drought in 2021. A warm, dry spring, and a heat dome that shattered temperature records in late June, stressed water sources and infrastructure early in the season. Okanagan and Kalamalka lakes did not reach full pool. Low flows and high-water temperatures threatened fish in several creeks in the region.

British Columbia ranks drought levels from 0 to 5, with Drought Level 5 being the most severe with adverse impacts to socioeconomic or ecosystem values being almost certain. Local water suppliers enacted watering restrictions and other response measures based on customer demand, infrastructure capacity, and reservoir levels. Continued extraordinary dry and hot conditions prompted the Government of B.C. to move the Okanagan to Drought Level 3 in mid-July and to Level 4 in mid-August.

OBWB staff attended weekly meetings of the Thompson Okanagan Regional Drought Response Team throughout the summer, providing information about local water supply conditions and watering restriction stages, and assisting with communications. We also prepared two drought bulletins (July 15 and August 14). The bulletins give a valley-wide perspective of drought impacts on water supply, fish, agriculture, firefighting, and domestic use. They are sent to elected officials, First Nations communities, government staff, conservation groups, industry associations, and the media, and are posted on social media for the public.



Low-flows on Mission Creek during 2021 drought





OBWB-OkWaterWise Aug. 14, 2021 Drought Bulletin

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Source Water Protection Toolkit

The OBWB wrapped up the Source Water Protection Toolkit Project in March 2021, after two years of work. The project's aim was to facilitate a more collaborative and consistent approach to source water protection (SWP), providing information and guidance to water suppliers, building awareness about source water protection, and facilitating knowledgesharing between communities.

The project brought together a committee of provincial regulators, health agencies, water suppliers, natural resource managers, and planners to discuss SWP issues, solutions, and priorities and develop a website (https://SourceWaterProtectionToolkit.ca/), a toolkit, and webinar series. Larratt Aquatic Consulting led the research and writing of the toolkit.

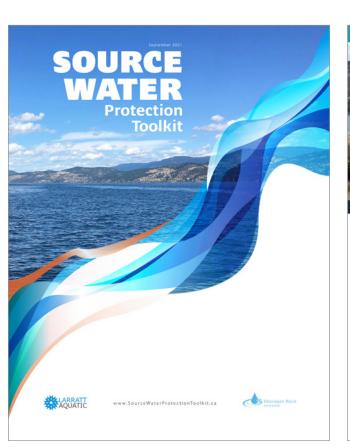
The toolkit provides solutions to typical barriers to source protection, and clarifies the source protection planning process, solutions to save water suppliers time and money, and help them satisfy regulatory requirements. It explains how communities can use their jurisdiction to protect water sources, provides ideas on how to secure long-term funding, talks about how to build awareness and gain support for SWP activities, and describes how to best carry out water monitoring and reporting. About 35 case studies from a variety of B.C. watersheds are included in the toolkit.

The webinar series included nine, one-hour sessions and featured 33 speakers. Webinar recordings are available on our YouTube channel at https://youtu.be/oUlycPatxtU.

In addition, staff provided presentations on the challenges and barriers facing SWP, and how local governments can better protect drinking water quality, to nearly all Okanagan municipal councils and regional boards.

Larratt Aquatic Consulting piloted the toolkit through the City of Penticton's source protection planning process. Their final report describes how the toolkit was applied during the planning process, highlights sections of the toolkit that were most beneficial and what areas could be improved, and summarizes other learnings and recommendations gained through the pilot project.

Going forward, the OBWB will continue to support the toolkit's use by local governments, help cultivate relationships between organizations involved in SWP, and support science, research and policy that leads to better protection of source waters in the valley.





Source Water Protection Toolkit cover and screenshot of toolkit website homepage

Wetland Strategy

Wetlands are known as biodiversity hotspots due to their unique habitat for a wide variety of wildlife and the critical ecological services they provide in biological productivity, hydrological functions, and other socio-economic benefits. Over 84% of valley bottom wetlands have been lost to development since European settlement in the valley. The predominant threats facing Okanagan wetlands include filling and draining during urban and agricultural development, grazing, forestry activities, encroachment of invasive species, and climate change.

Mapping and monitoring wetlands throughout the region are critical to conserving what remains of this vital ecosystem. The Okanagan Water Stewardship Council made wetlands a priority this year and struck a committee to work on strategic planning and wetland research initiatives. Work has now begun on enhancing Okanagan wetland mapping and researching the benefits of wetlands on carbon sequestration.

This year's activities included using the OBWB's new Light Detection and Ranging (LiDAR) topographical data to improve wetland maps. This two-year project was led by UBC Okanagan graduate student Tina Deenik, under the supervision of Mathieu Bourbonnais. A collaborative project is also underway, working with partners in the North Okanagan to map and protect valley-bottom wetlands. As part

of our efforts, the wetland leadership team initiated hands-on projects, including fencing to exclude cattle in the South Okanagan, Mill Creek restoration initiatives, and invasive species removal (like Russian olive) in wetlands.

The OBWB promotes a value statement encouraging local governments in the Okanagan to (1) adopt best practices aimed at wetlands conservation and protection, ephemeral

wetlands in particular; and (2) implement best practices through bylaws for wetland conservation to provide numerous benefits to communities and increase communities' resilience in the face of future climate trends. The Okanagan Wetlands Action Plan (www. OBWB.ca/wetlands) is a valuable resource for local governments and the public.









WATER CONSERVATION AND QUALITY IMPROVEMENT GRANTS

The OBWB's Water Conservation and Quality Improvement (WCQI) Program awards a total of \$350,000 in funding annually to local and Indigenous governments, improvement districts, and non-profit organizations in the Okanagan for projects that conserve and/or protect water, and provide valley-wide benefit. Applicants are eligible to receive up to \$30,000 for their project and each year the program attracts innovative and action-oriented submissions. The annual theme for this intake (April 2021–March 2022) was water security. OBWB awarded WCQI grants to 15 projects throughout the valley. Two of these projects are highlighted below.

FreshWater Life Assessing Microplastics in the Okanagan

The goals of this project were to determine 1) if microplastics are present in Okanagan Lake; 2) if wastewater is a potential source of contamination; and 3) if microplastics are present, recommending achievable and community-oriented local solutions to mitigate microplastics entering waterways. There are no published data on microplastics in Okanagan Lake, and this project initiated a sampling program with a focus to confirm the presence or absence of microplastics. This project was a scoping study, to determine if additional study or expanded monitoring is warranted.

The Okanagan Indian Education Resources Society (OIERS/En'owkin Centre)

K'amcnitkw Floodplain Re-engagement Project—2021 Experiential Educational Opportunities (Habitat Revegetation Phase)

The k'əmcənitkw (pronounced kem-chuh-neet-kwah, and meaning "Alongside the Water") Floodplain Re-engagement Project advanced aquatic and terrestrial habitat restoration, recovery and perpetuation of Indigenous biodiversity. It also focused on restoration of the natural ecological processes and functions of riparian and wetland habitats in a portion of the historic floodplain of the Okanagan River, under Indigenous caretakership protocols and practice.

TOP: Water sampling on Okanagan Lake for microplastics, Photo courtesy Jan Vozenilek - Copper Sky Productions MIDDLE: Lab testing for microplastics in Okanagan Lake water sample at Okanagan College's Water Engineering Technology Program. Photo courtesy Jan Vozenilek - Copper Sky Productions BOTTOM: Before and after photos of the K'əmcnitk^w Floodplain. Photos courtesy A.Michael Bezener / En'owkin Centre

COMMUNICATIONS AND OUTREACH

Okanagan WaterWise

Connecting with the public is a cornerstone of the Okanagan WaterWise program—the Water Board's outreach and education program. April 2021, the start of this past fiscal year, still required much of our outreach to be conducted online or with precautions in place.

For the third year in a row, we hosted our UN World Water Day event online. Despite being unable to gather in-person, we had an excellent turnout to the screening of "CBC The Fifth Estate's Come Hell... B.C. Under Water" and follow-up panel discussion. (View event on our YouTube channel at https://youtu.be/PHXGw_GPmn0.)

This year, we also focused on distribution of, and creating awareness for, our education guides, "Our Relationship with Water in the Okanagan—Explorations in Outdoor Education to Support the B.C. Curriculum." Last winter, copies of the three-guide series were printed and distributed to schools throughout the valley, and follow-up presentations were delivered online at teacher Professional Development Days in Vernon, Kelowna and Penticton. We also entered into a partnership agreement with Okanagan Nation Alliance to develop a



A few of the people involved in the "Our Relationship with Water in the Okanagan" project. Front (I to r): Syilx elders Grouse and Pamela Barnes, biologist Darryl Arsenault, Desiree Marshall-Peer education consultant and professor at UBC Okanagan's Faculty of Education. Back (I to r) SD23 Deputy Supt. Terry Beaudry, graphic designer Karen Christensen, OBWB Communications Director Corinne Jackson, and Tanis Gieselman, formerly with Okanagan Collaborative Conservation Program. In front, Arsenault's fluffy sidekick, Harper. A full list of those involved can be found on page 2 here: https://okwaterwise.ca/resources/Our-Relationship-with-Water-Introduction.pdf

fourth guide, focusing on $Syilx siwłk^w$ (Water) Knowledge and Perspectives. We were also honoured to be invited to participate as a contributor to a UBC Okanagan School of Education project aimed at de-colonizing and indigenizing education. This is a five-year project with a strong focus on water and our relationship with water.

Given last year's drought and intense interest from the media in the issue of climate change and how local utilities and the public could help, our websites, news releases, and social media channels continued to be an integral part of our outreach efforts.

Learn more about Okanagan WaterWise and find a growing number of resources for residents, businesses, educators and students, and those with a general interest in water, at https://okwaterwise.ca/.

STAY WATERWISE!

- "Like" us on Okanagan WaterWise Facebook,
- follow us on Okanagan WaterWise Instagram
- and on Okanagan WaterWise Twitter.
- Plus, check out our **Okanagan WaterWise YouTube** channel.



The heat in B.C. this summer brought drought, and even cooked fruit still on the trees.

@mattgallowaycbc visited the Okanagan Valley, at 9:35am we hear from cherry-grower Sukhpal Bal, and Corinne Jackson of the Okanagan Basin Water Board @OKWaterwise cbc.ca/listen



5:17 AM · Sep 20, 2021 · TweetDeck

CBC Radio: The Current tweet promoting special feature on B.C. Interior drought. Show host, Matt Galloway, and his team made a trip to the interior to talk to people about the wildfires, extreme weather and climate change. (Listen here: https://bit.ly/3QnXIrV_CBC_TheCurrent_how-scorching-temperatures-water-shortages-affecting-okanagan-valley)





Make Water Work

Given last summer's drought, its impact on water supplies and its effects on fish and agriculture, much time and effort was focussed on the Make Water Work (MWW) campaign. MWW is delivered by the OBWB's Okanagan WaterWise program in partnership with local governments and utilities to help tackle the second largest use of all water in the Okanagan—residential outdoor use in summer.

This year's campaign included Okanagan mayors posting pledge videos on their social media channels, sharing <u>who</u> they were pledging for and which of the six pledges they were committing to follow to make water work better (Find videos at https://bit.ly/MakeWaterWork2021_pledgevideos.)

We updated the https://www.makewaterwork.ca/ website, put out a news release and ran digital and social media ads, and ads on Global Okanagan and Castanet. We further amplified the message using billboards, bus shelters, transit shelters and sandwich boards throughout the valley. Partners received MWW bookmarks that included the pledges, MWW Plant Collection and contest information, buttons to be worn and that could be personalized with who/what one was making water work for, and MWW social media images and copy for their use. They also received MWW branded garden kneeler boards to give away. Business partners received MWW bookmarks, copies of the MWW Plant Collection List, buttons, and MWW-branded plant stakes and banners.

For the second year, with no face-to-face outreach, the campaign relied on social media, advertising, and our partners, to get the message out. Between May and October, the MWW website had over 16,000 visits (22% more than the previous year) with more than 11,200 first time visitors. While on the website, 520 people pledged to conserve. Visitors also looked at tips to conserve water, learned about the Plant Collection, found water restrictions, and more. Tens of thousands more people heard and saw the messaging numerous times on social media, TV, and more.

TOP: GardenWorks Penticton staff, Jodi Smith (left) and Dominika Nowak (right), present Make Water Work prize-winner Lindsey Craig with \$750 WaterWise yard gift certificate

BOTTOM: District of Summerland staff with a Make Water Work sandwich board

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Don't Move A Mussel

Last year, the Okanagan, and communities across Canada and the U.S. got a wake-up call when invasive mussel-infested aquarium moss balls were imported from Ukraine, shipped to pet stores on both sides of the border and in people's possession. No one had seen this threat coming. A massive effort was launched to raise awareness and for federal and provincial officials to find and destroy all the balls. We used our social media channels and the Don't Move A Mussel (DMM) campaign to assist in the outreach effort.

From there, our campaign pivoted to the

most common way invasive zebra and guagga mussels have been finding their way into Canadian and U.S. waterways—attaching to water-recreation equipment used in infested waters and hitchhiking to new water bodies. We created a new look for the campaign while maintaining effective and well-known branding. We updated the https://dontmoveamussel. ca/ website, developed new handouts, posters, and mussel muscle shirts. We also gave out postcards for locals to send to visiting family and friends who were bringing watercraft, urging them to stop at inspection stations and clean, drain, dry before launching in local waters. We had billboards on the highways, and provided sandwich boards to tourist information centres. We ran social, digital and Spotify ads, and held a contest, encouraging people to post photos of them cleaning, draining or drying their water toys for a chance at a DMM prize pack.





LEFT: Okanagan Falls Visitor Centre joined a growing number of organizations, helping promote the Don't Move A Mussel message RIGHT: OASISS staff conducting boater outreach, extending the "Don't Move A Mussel" message

OBWB-OkWaterWise once again funded the Okanagan and Similkameen Invasive Species Society to extend DMM outreach efforts and provided them with a digital package to share with water recreation-related businesses and organizations. Some 102 of these received the package. We also provided materials and support to the Regional District of North Okanagan and Vernon RCMP volunteers who conducted limited outreach as well. In all, the three groups conducted 1,226 watercraft surveys.

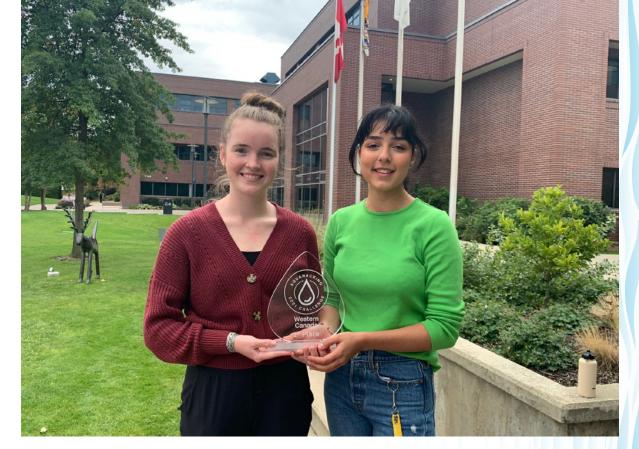
In addition to the DMM campaign, the OBWB sent letters to senior governments calling for stronger mussel prevention efforts. Find our letters at https://DontMoveAMussel.ca/in-the-news/.

Despite less face-to-face outreach due to COVID-19, between May and October the DMM website had 20,935 visitors (a 214% increase from 2020), with 10,487 first time visitors.

AquaHacking

For the second year in a row, the OBWB and AquaForum (now AquaAction), partnered to host an AquaHacking Challenge. Whereas the first year it was a B.C. challenge, this time we expanded to include all of Western Canada. Given COVID-19 restrictions this year's challenge was 100% virtual.

The Western Canada AquaHacking Challenge was launched in January 2021, tackling the following water issues: optimization of drinking water/wastewater treatment plants, on-farm nutrient capture and recycling, toxic algal blooms and innovative 'social' technologies for water information. A total of 27 teams and 50 participants registered. The judges and participants voted Sept. 14, 2021, for final placement and awarded \$45,000 in seed funding, helping teams take their water solutions to market.



Elana Wood and Yosamin Esanullah, members of team SIP, winner of the Western Canada AquaHacking Challenge

THE 2021 WINNERS WERE:

1st PLACE \$20,000

The **SIP PROJECT** from **UBC OKANAGAN**, taking on drinking water contamination with a mobile filtration station in the form of a gravity filter backpack. The team won \$20,000 to help get their project off the ground.

2nd PLACE \$15,000

ELEDIGM from **UBC OKANAGAN**,

tackling contamination of drinking water in cisterns by developing a hydraulic coupling for water delivery hoses and cistern lid, took home \$15,000 in seed funding.

3rd PLACE \$10,000

ECO-WATER from **UNIVERSITY OF SASKATCHEWAN**, won \$10,000
for their project which optimizes
wastewater treatment plants, removing
pollutants, including pharmaceuticals,
from wastewater before it's released
back to the environment.

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Osoyoos Lake—a transboundary waterway



Osoyoos Lake Water Science Forum

The Osoyoos Lake Water Science Forum 2022 will take place Oct. 27 -29 in Osoyoos, B.C. This will be the 4th forum that has taken place with previous events held in 2007, 2011 and 2015. The forum has been postponed twice since October 2021 due to the COVID-19 pandemic.

The 2022 forum is titled, "Osoyoos Lake - the Heart of the Watershed," with the theme: "Bridging Indigenous and western approaches to knowledge, science and management." It will build upon the knowledge and relationships formed in previous Osoyoos water science forums. The goal of the 2022 forum is to provide a communication bridge for all levels of government, First Nations and the public, aimed at learning, sharing and developing strategies to work together to improve Osoyoos Lake and promote its future sustainability.

For the first time, the three-day forum will be formally hosted by the Osoyoos Indian Band, with Syilx/Okanagan facilitation. Together, we are using this opportunity to reach a larger and more diverse audience—broadening the conversation about water and land use decisions across borders and cultures, and educating the public about Syilx/Okanagan culture, history, knowledge, and values, and the extraordinary work being done to restoring Pacific salmon runs. Information about the event can be found at: https://www.obwb.ca/olwsf/.

Milfoil CONTROL

Since the early 1970's the Okanagan Basin Water Board has been tackling the challenge of invasive Eurasian watermilfoil throughout the Okanagan. This effort began with prevention and education of boat owners, but as the plants were introduced and spread through all Okanagan lakes, the effort shifted to methods for long-term control of a problem that was not going away. Now the milfoil control program faces new pressures as environmental concerns grow, as development continues into new areas, and as the invasive plant thrives from a warmer, longer-lasting growing season due to climate change.

While the program has maintained a status quo of de-rooting in the winter and harvesting in the summer for more than 40 years, it is time to renew the connection between milfoil control and water health. The healthy, clean water we see through much of the valley now is partly due to the removal of milfoil. Most visitors, residents, and even decision makers are unaware of the past harms caused by widespread and uncontrolled milfoil in the Okanagan, as well as its continued harmful ecological and economic effects.

OBWB continues to benefit through working with researchers at UBC Okanagan on finding new and innovative ways to maintain a high level of service for Okanagan water and our quality of life. This year, students with the School



a visual mess for tourists in an area that is inaccessible for milfoil control

of Engineering designed a new way to reduce the volume of harvested weeds to store them on a barge or boat without requiring nearby transfer sites on shore. Next year we will put the design into action with a proof of concept. This innovation also led to new plans to establish a research and development budget for future years to improve milfoil control, despite increasing pressures and increasing demand.

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The OBWB was pleased to provide the City of Kelowna with grant funding to update its wastewater treatment plant. Photo courtesy City of Kelowna

Gewage Facilities ASSISTANCE GRANTS

Between 2016 and 2021, Kelowna was the fastest growing census metropolitan area in Canada. Throughout the Okanagan, new housing developments spread along hillsides, requiring new infrastructure to keep pace. While this new infrastructure is built to the latest standards, older lots and subdivisions continue to rely on septic fields which can cause serious pollution to ground and surface waters. To address this historic problem, OBWB provides grants to Okanagan communities to replace septic fields by hooking older homes onto new community sewers, and by upgrading sewer treatment plants to keep pace with new technologies.

Since 1976, OBWB has paid more than \$70 million in sewerage facility grants, helping reduce municipal phosphorus entering Okanagan Lake by more than 90%. While this program has contributed to cleaning up our lakes, policies related to the program have also prevented the problem from getting worse. Eligibility for sewer grants requires that communities prevent new small-lot subdivision unless it is connected to community sewer. In this way, we prevent new failure-prone septic systems from polluting our shared waters, and we ensure that water leaving a treatment plant creates no further pollution downstream.

LOORING FORWARD

The Okanagan climate is marked by variability. Every year is predictably different from the one before.

Part of the work of the Water Board is to help communities adapt to this fluctuation—to have plans in place to respond to drought, to flood, and to all the related water issues, from quality to supply. We will be continuing to push forward with our work to review and update the Okanagan Lake Regulation System, hoping that better lake level management will reduce the impact of climate change on communities.

2022 is a municipal election year, and the OBWB will welcome new board directors bringing new ideas about water issues and potential solutions for their communities and the valley as a whole. We welcome these new ideas, and at the same time we recognize that change comes through long-term commitments and consistent approaches. The OBWB's milfoil control program is one of our oldest initiatives, and managing these aquatic weeds is critically important to public enjoyment of the beaches. This year, we continue with our consistent program of rototilling in the winter and harvesting



in the summer, and we are also working with UBC Okanagan engineering students to explore how we can improve the efficiency and efficacy of our weed control equipment.

Another of our oldest programs is also being reviewed. For forty years, the OBWB has been making grants to help communities upgrade their sewage treatment facilities and install community sewer. This program has contributed to a significant reduction in nutrient pollution and algae blooms, as well as a reduction in *E. coli* and other pathogens in lake waters. This coming year we are working with staff from local water utilities and planning departments, as well as provincial partners, to review our policies and see how the program can be more effective.

We will continue to undertake our new initiative of reinstating the Okanagan hydrometric network—the streamflow monitoring stations that are essential for water management planning at all levels of government: water

utilities, local jurisdictions, Indigenous communities, provincial water management, and federal forecasting. This work is a long-term partnership with the Okanagan Nation Alliance, Environment and Climate Change Canada, and provincial water ministries.

We will also continue with our many publicfacing initiatives, including our Okanagan WaterWise program, the "Don't Move a Mussel" campaign to prevent invasive zebra and guagga mussels, the "Make Water Work" summer water conservation campaign, and updating our websites to make information more accessible for community members. We will be co-hosting the Osovoos Lake Water Science Forum, along with the International Joint Commission and the Osoyoos Indian Band, to raise awareness about the transboundary water issues in the southern part of our watershed. There is much to do, and we are always grateful for our many partners that help us—whether they are new connections or renewed connections.

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TUMUCIAL OVERVIEW

In 2021-22, the OBWB received \$1,140,709 in grants for water management projects, including two large grants from the National Disaster Mitigation Program totaling \$900,000 for flood risk mapping and near-shore topobathymetric LiDAR.

We also successfully supported a \$40,000 grant application to the International Joint Commission by the International Osoyoos Lake Board of Control to fund a linked topobathymetric LiDAR project in the U.S. portion of the Okanagan Basin, which will help understand flood risk going into the future.

As well as direct grants, we had a number of financial partnerships supporting our work on the 2022 Western Canada AquaHacking Challenge, and generous sponsorships of the 2022 Osoyoos Lake Water Science Forum. And, the "Make Water Work" and "Don't Move a Mussel" campaigns attracted in-kind contributions from media and other partners together totaling more than \$100,000.

As a grantmaker, in 2020-21 the OBWB awarded more than \$1.27 million in infrastructure

grants to improve wastewater treatment, and \$350,000 in Water Conservation and Quality Improvement (WCQI) Grants to local governments and community groups.

Another aspect of our grantmaking 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. This year, OBWB staff helped organize the inperson conference held in May 2022.

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 leverage the talents and resources of our postsecondary institutions to take on water issues. This year, we continued our partnership with the UBC Okanagan Engineering Department, supporting their work on a benchmarking project for Okanagan municipal water systems.

It is a balancing act, to maintain or expand projects and programs, and maintain 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.

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Okanagan Basin Water Board Financial Statements For the year ended March 31, 2022

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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.

Suc Micketoff

Board of Director's Chairperson

Docustiqued by:

Aura Warwick Scars

Executive Director's

June 7th, 2022

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Tel: 250 763 Fax: 250 763 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, 2022, 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, 2022, 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 Informatior

OKANAGAN BASIN WATER BOARD

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.

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.

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.



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 June 7, 2022

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Okanagan Basin Water Board Statement of Financial Position

March 31	2022	2021
Financial assets		
Cash (Note 1)	\$ 2,939,940 \$	3,153,460
Accounts receivable	544,167	237,547
	3,484,107	3,391,007
Financial liabilities		
Accounts payable and accrued liabilities	221,434	225,276
Grants payable (Note 2)	302,854	319,009
	524,288	544,285
Net financial assets	2,959,819	2,846,723
Non-financial assets		
Prepaid expenses	-	53,571
Tangible capital assets (Note 3)	675,612	324,460
Accumulated Surplus (Note 4)	\$ 3,635,431 \$	3,224,753

Approved on behalf of the Board:



The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

Okanagan Basin Water Board Statement of Financial Operations

For the year ended March 31	2022	2022	2021
	Actual	Budget	Actual
Revenue (Note 10)			
Levies from member Regional Districts (Note 5)	\$ 3,635,327	\$ 3,635,326	\$ 3,451,929
Grants	1,140,709	-	265,608
Interest and other income	20,403	9,400	15,094
Other income	22,376	-	-
	 4,818,815	3,644,726	3,732,631
Expenses (Note 10)			
Aquatic weed control	778,869	809,100	670,962
Sewerage facilities assistance	1,314,702	1,314,476	1,330,077
Water management	 2,314,565	1,701,950	1,940,204
	 4,408,136	3,825,526	3,941,243
Annual (Deficit) Surplus (Note 10)	410,678	(180,800)	(208,612)
Accumulated Surplus, beginning of year	 3,224,753	3,224,753	3,433,365
Accumulated Surplus, end of year	\$ 3,635,431	\$ 3,043,953	\$ 3,224,753

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

Okanagan Basin Water Board Statement of Change in Net Financial Assets

For the year ended March 31	2022	2022	202:
	Actual	Budget	Actua
Annual (deficit) surplus	\$ 410,678 \$	(180,800) \$	(208,612
Acquisition of tangible capital assets	(439,999)	-	(6,898
Amortization of tangible capital assets	83,747	-	69,990
Disposal of tangible capital assets	5,100	-	-
Prepaid expenses	53,568		(53,570
Net change in net financial assets	 113,094	(180,800)	(199,090
Net financial assets, beginning of year	 2,846,723	2,846,722	3,045,813
Net financial assets, end of year	\$ 2,959,817 \$	2,665,922 \$	2,846,723

Okanagan Basin Water Board Statement of Cash Flows

Operating activities			
Annual (deficit) surplus	\$ 410,6	78 \$	(208,612
Amortization	83,7	47	69,990
Gain on disposal of tangible capital assets	5,1	00	-
	499,5	25	(138,622
Changes in working capital:			
Accounts receivable	(306,6	20)	198,033
Accounts payable and accrued liabilities	(3,8	42)	14,065
Grants payable	(16,1	55)	(102,963
Holdback payable	-		(146,363
Prepaid Expenses	53,5	70	(53,570
	(273,0	47)	(90,798
Cash from operations	226,4	78	(229,420
Purchase of tangible capital assets	(439,9	99)	(6,898
	(439,9	99)	(6,898
Change in cash during the year	(213,5	21)	(236,318
Cash, beginning of year	3,153,4	60	3,389,778
Cash, end of year	\$ 2,939,9	40 \$	3,153,460

For the year ended March 31

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

Okanagan Basin Water Board **Summary of Significant Accounting Policies**

March 31, 2022

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

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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.

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Okanagan Basin Water Board **Summary of Significant Accounting Policies**

March 31, 2022

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 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.

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OKANAGAN BASIN WATER BOARD

Okanagan Basin Water Board **Notes to Financial Statements**

March 31, 2022

Cash

The Board's bank account is held at one financial institution. The bank account earns interest at bank prime minus 2.25%.

2. Grants Payable

OKANAGAN BASIN WATER BOARD

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 \$350,000 per year is made available for Okanagan projects. Grants will be expensed in the year of approval as per the budget.

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ssets											
		Buildings		Equipment	Vehicles	Office Furniture & Equipment	ıre int	Computers	Work In Progress		7 2
of year	ş	118,352 \$	Ş	1,233,201 \$	\$ 166,022 \$		3,773 \$	32,440 \$,	ş	1,553,7
				311,599	128,400	'		,	,		439,5
				,	(54,674)	(2,255)	(2)	(6,789)	ı		(99)
ar		118,352		1,544,800	239,748	1,518	81	22,651			1,927,0
rtization											
of year		66,182		977,793	157,499	3,012	12	24,841	,		1,229,3
		4,743		56,228	19,901	152	25	2,723	,		83,7
					(50,002)	(2,255)	92)	(9,361)			(61,6
ar		70,925		1,034,021	127,398	96	606	18,203			1,251,4

7022 7022 7788 7788 7789 7747 747 747 7456

	\$ 118			118			99	4		70
Cost	Balance, beginning of year	Additions	Disposals	Balance, end of year	I	Accumulated amortization	Balance, beginning of year	Amortization	Disposals	Balance, end of year

Okanagan Basin Water Board **Notes to Financial Statements**

March 31, 2022

4. 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:

	 2022	202
Aquatic Weed Control Equipment Reserve		
Balance, beginning of year	\$ 878,297 \$	662,853
Proceeds from sale of tangible capital assets	5,100	-
Net surplus	43,365	153,454
Transfer of amortization	77,021	61,990
Transfer for acquisition of tangible capital assets	 (439,999)	
Balance, end of year	 563,784	878,297
Invested in Tangible Capital Assets		
Balance, beginning of year	324,460	387,552
Transfer for acquisition of tangible capital assets	439,999	6,898
Disposal of unamortized assets	(5,100)	-
Transfer of amortization	 (83,747)	(69,990
Balance, end of year	 675,612	324,460
Sewerage Facilities Assistance Reserve Fund		
Balance, beginning of year	1,336,433	1,385,860
Net deficit	 (176,060)	(49,427
Balance, end of year	 1,160,373	1,336,433
Water Management Accumulated Surplus		
Balance, beginning of year	685,563	997,098
Net surplus	543,373	(312,637
Transfer of amortization	 6,726	1,102
Balance, end of year	 1,235,662	685,563
	\$ 3,635,431 \$	3,224,753

Okanagan Basin Water Board **Notes to Financial Statements**

March 31, 2022

5. Levies from Member Regional Districts

· ·	2022	2022	2021
	 Actual	Budget	Actual
North Okanagan	\$ 646,724 \$	646,724	\$ 600,290
Central Okanagan	2,263,718	2,263,717	2,158,147
Okanagan Similkameen	724,885	724,885	693,492
	\$ 3,635,327 \$	3,635,326	\$ 3,451,929
		·	

6. Sewerage Facility Grants to Member Local Governments

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

2021	2	2022	
.82,882	\$ 182,8	165,782	\$ City of Kelowna
.52,338	152,3	152,338	City of Penticton
91,131	91,1	143,078	City of Vernon
43,317	43,3	27,174	City of West Kelowna
11,339	11,3	11,114	District of Coldstream
05,330	205,3	194,526	District of Lake Country
45,289	145,7	135,511	District of Peachland
62,516	262,5	261,412	District of Summerland
27,922	27,9	16,790	Town of Osoyoos
4,679	4,6	4,679	Regional District of North Okanagan
19,665	119,6	119,665	Regional District of Okanagan Similkameen
43,669	43,6	42,634	Westbank First Nation
90,077	\$ 1,290,0	1,274,703	\$
4 19 43	4 119 43	4,679 119,665 42,634	\$ Regional District of North Okanagan Regional District of Okanagan Similkameen

Okanagan Basin Water Board **Notes to Financial Statements**

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7. 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.

	 2022
Budget surplus (deficit) for the year as per board budget	\$ -
Less: Transfer from previous years surplus in revenues	 (180,800)
Budget deficit per statement of financial operations	\$ (180,800)

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.

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9. Employee Benefits

Retirement Benefits

The Board and its employees contribute to the Municipal Pension Plan (a jointly trusteed 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, 2019, the plan has about 213,000 active members and approximately 106,000 retired members. Active members include approximately 41,000 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 \$68,322 (2021 - \$61,293) for employer contributions to the plan in fiscal 2022.

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.

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10. 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 \$1,083,714 (2021 - \$545,964) for previously committed projects.

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Aquatic Weed Control	Weed	Sewerage Assis	Sewerage Facilities Assistance	Σ	Water Management	2022 Total
\$	807,000	\$	1,129,176	Ş	1,699,151	\$ 3,635,327
			,		1,140,709	1,140,709
	5,187		9,468		5,748	20,403
	10,047				12,330	22,376
	822,233		1,138,644		2,857,938	4,818,815
			1 274 704		350 000	1 624 702
	77.021		,		6.726	83.747
	,		,		1.355,356	1,355,356
	8,573		,		8,573	17,146
	108,018		,		229	108,247
	41,841				3,584	45,425
	220		,		366	936
	13,130		,		36,010	49,140
	347		,		26,185	26,532
	(20,000)		40,000		(20,000)	
	38,242		,		38,287	76,529
	23,462		,		8,903	32,365
	5,812		,		1,050	6,861
	,		,			
	2,014		,		29,957	31,972
	16,972		,			16,972
	402,867		,		529,339	932,207
	000'09				(60,000)	
	778,869		1,314,704		2,314,565	4,408,137
\$	43,365	\$	(176,060)	\$	543,373	\$ 410,678

	>	200,
Grant income		
Interest income		5,187
Other Income		10,047
		822,233
Expenses		
Assistance grants		•
Amortization		77,021
Contract services		,
Director's remuneration and expenses		8,573
Equipment costs		108,018
Insurance		41,841
Interest charge		570
Office		13,130
Outreach and publicity		347
Overhead allocation		(20,000)
Professional fees		38,242
Rental costs		23,462
Safety		5,812
Stewardship council expenses		
Travel, conferences and meetings		2,014
Utilities, yard supplies and maintenance		16,972
Wages and benefits		402,867
Transfer from Aquatic Weed Control to Water Management		60,000
		778,869
Annual surplus (deficit)	ş	43.365

Okanagan Basin Water Bo

	Aguati	Aguatic Weed	Sewerag	Sewerage Facilities	Water	
	Cor	Control	Assis	Assistance	Management	
Revenues						
Levies	\$	\$11,500 \$	\$	1,276,580	\$ 1,363,849	\$
Grant income		,		,	265,608	
Interest income		4,914		4,070	6,110	
Gain on disposal of assets		,		,		
		816,414		1,280,650	1,635,567	
Expenses						
Assistance grants		•		1,290,077	350,000	
Amortization		61,990		,	8,000	
Contract services		6,650		,	096'206	
Director's remuneration and expenses		9,572		,	9,572	
Equipment costs		83,767		,	396	
Insurance		34,049		,	(1,555)	
Interest charge		13		,	426	
Offlice		13,976		,	33,545	
Outreach and publicity		•		,	24,96	
Overhead allocation		(20,000)		40,000	(20,000)	
Professional fees		39,013		,	37,996	
Rental costs		23,462			8,903	
Safety		3,291		,	225	
Stewardship council expenses		•		,	791	
		0				





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