

April 17, 2018

FOR IMMEDIATE RELEASE

OKANAGAN WATER PROJECTS GET FUNDS TO MOVE AHEAD

Kelowna, B.C. – The Okanagan Basin Water Board (OBWB) has approved \$300,000 in funding to 18 projects to help conserve and improve the quality of water in the valley. Directors approved the Water Conservation and Quality Improvement (WCQI) grants at their last board meeting, April 3. Recipients were notified last week. In all, there were 23 applications with a total ask of \$435,180.

A wide variety of projects were funded this year, from public outreach for water quality protection, to water conserving irrigation improvements in public parks.

"This program has such value," said OBWB Chair Tracy Gray, noting that the grants are made available to local governments, but also to schools, stewardship groups and others, encouraging broader engagement on valley-wide water issues. "Solutions are not always government driven. This is a tremendous way to engage others, recognizing that we're all part of 'One valley. One water.'"

Another benefit has been the ability for grant recipients to leverage OBWB funding to bring in additional funds for Okanagan water projects, Gray added. Up until the current funding cycle, this has amounted to more than \$27.2 million invested in our valley.

Four projects were funded in the North Okanagan this year, including \$14,730 to the Okanagan Collaborative Conservation Program to build out an Okanagan-based school curriculum on water and work with the Okanagan (syilx) community to include traditional ecological knowledge. "This project represents an important opportunity to broaden water knowledge throughout the valley, by providing a curriculum for teachers to directly educate about water issues and the solutions we are collectively pursuing," added James Littley, OBWB's Operations and Grants Manager.

In the Central Okanagan, 10 projects were funded. These include \$25,000 to the Mission Creek Restoration Initiative to ensure flood protection and wildlife habitat restoration objectives are being met. This multi-year project demonstrates the impact of watercourse restoration and the positive effects it can have on water quality, flood mitigation, sediment control, and habitat enhancement. This project, like similar projects in the valley, help restore ecosystems and create benefits at a fraction of the cost of providing traditional infrastructure. "The Mission Creek Restoration Initiative has been a shining example of best practices, collaboration and project management," Littley added. "Mission Creek accounts for 25 per cent of the water that flows into Okanagan Lake. A healthy, functioning creek is especially critical as we experience droughts and floods. Projects like this can help mitigate the effects of these extreme events."

Another four projects were supported in the South Okanagan. One of these was \$29,000 to the En'owkin Centre for a floodplain re-engagement project. The project involves reconnecting the Penticton portion of the Okanagan River Channel to 4.83 ha of the river's adjacent historic floodplain, allowing for natural backwatering as water levels in the main river channel rise and fall. This will provide numerous benefits, including the creation of a seasonal off-channel rearing habitat for Indigenous fish and refuge for juvenile salmon, specifically for sk'lwist/ntytyix (i.e. Chinook Salmon). It will also support Indigenous biodiversity and recovery of species at-risk, and improve connectivity between rare and endangered floodplain

habitats with upland plant habitats. In addition, the project will provide an opportunity to share local Indigenous cultural and ecological education, awareness and interaction.

"I'm really excited about this project." Littley added. "Reconnecting the river to the floodplain here means so much for the water in terms of conservation and quality improvement, but it is also complementary to the work that the Okanagan Nation and its member bands have been doing to restore salmon and salmon habitat throughout the valley. There are so many positive economic, social and environmental benefits from projects like this, especially when you look at the cumulative impact of similar efforts up and down the Okanagan system."

Since the Water Board began awarding WCQI grants in 2006, it has awarded more than \$4.1 million to 250 projects throughout the Okanagan. The amount available in each region is based on the contribution provided by each Okanagan regional district.

Projects must meet a number of criteria, including the ability to demonstrate water savings or improvements to water quality, collaboration, and valley-wide benefit.

For a full listing of funded projects please see the attached.

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WATER CONSERVATION AND QUALITY IMPROVEMENT GRANT AWARDS - 2018

	Number of Applications	Total Requested	Total Available
RDNO	6	\$89,930	\$54,119
RDCO	11	\$229,750	\$185,442
RDOS	6	\$115,500	\$60,439
Totals	23	\$435,180	\$300,000

Regional District North Okanagan				
Organization	Project Title	OBWB Funding		
Okanagan Similkameen Stewardship Society	Engaging Private Landowners in Source Water Protection	\$20,000		
Regional District of North Okanagan	Sediment Impact to GVW Kal Lake Intake Study	\$15,000		
Okanagan Collaborative Conservation Program	Our Relationship with Water	\$14,730		
Society for the				
Protection of	Kalavista Lagoon Assessment	\$4,389		
Kalamalka Lake				
Total		\$54,119		

Regional District Central Okanagan				
Organization	Project Title	OBWB Funding		
City of Kelowna	Source Water Protection Plan	\$30,000		
Westbank First Nation	Watershed Health Status and Vulnerability Assessment in Trepanier Creek	\$29,500		
Mission Creek Restoration Initiative	MCRI Demonstration Project Monitoring Program	\$25,000		
Okanagan Collaborative Conservation Program	Lake Management Initiative	\$20,000		
Okanagan Collaborative Conservation Program	Public Outreach for Water Source Protection for Wood and Kalamalka Lake	\$20,000		
Okanagan Nation Alliance	Mission Creek Sediment Study	\$15,250		
Okanagan Indian Band	Mapping Natural Large Woody Debris Infrastructure in Whiteman Creek for Debris Flow Management and Ecosystem Services	\$15,000		
City of Kelowna	Irrigation Connection Point Retrofit Phase 2	\$12,846		

District of Peachland	Law Creek Hazard and Risk Assessment	\$12,846
Regional District of Central Okanagan	Climate Resilient Landscape Outreach Project	\$5,000
Total		\$185,442

Regional District Okanagan Similkameen				
Organization	Project Title	OBWB Funding		
En'owkin Centre	Floodplain Re-engagement Project	\$29,000		
Friends of Summerland	Rethinking the Urban Lawn though			
Research Station	Community Education and Active	\$20,000		
Gardens	Demonstration Models			
Ponticton Indian Band	Water Quality Assurance during	\$7,500		
	Restoration of Ellis Creek Sediment Basin			
Regional District of	Water Management Assessment for	\$3,939		
Okanagan Similkameen	Residential and Commercial Landscapes			
Total		\$60,439		

Regional District North Okanagan

Project Title: Engaging Private Landowners in Source Water Protection

Organization: Okanagan Similkameen Stewardship Society

Project Goals: The goal of this project is to protect and improve source water quality by encouraging riparian setbacks by creekside landowners in the North Okanagan. We will implement targeted landowner contact and follow up with interested landowners and residents. Landowners will be provided with information and assistance in following best management practices aimed to protect source water and improve water quality entering Okanagan Lake and flowing downstream. If the initial assessment completed by OSS staff and consultants suggests that riparian enhancement (fencing, planting native plants) would result in improved water quality, a riparian enhancement plan will be completed for the property. To complement the targeted landowner contact. OSS staff will disseminate "Caring for Your Shoreline" information through community stewardship initiatives In communities where we implement targeted landowner contact parallel with community stewardship initiatives, there tends to be more uptake and action taken by individuals.

WCQI Grant Funding: \$20,000

Project Title: Sediment Impact to Greater Vernon Water Kalamalka Lake Intake Study Organization: Regional District of North Okanagan **Project Goals:** To investigate and better understand contaminate risks to the Greater Vernon Water (GVW) intake, from suspended and re-suspended sediment, based on the recommendations of the 2016 Kalamalka and Wood Lake Boat Impact Study on Water Sources. This work will aid decision-makers in assessing the risk to the drinking water source and developing strategies to address the source of the contaminates.

WCOI Grant Funding: \$15,000

Project Title: Our Relationship with Water Organization: Okanagan Collaborative Conservation Program **Project Goals:** The aim of this project is to enhance water stewardship in the Okanagan by building capacity for teachers to provide more outdoor environmental education. We aim to make outdoor education easier for teachers to deliver by providing them with a curriculum resource kit, and a guide to creating outdoor learning spaces on school grounds. The kit will also incorporate an "Okanagan perspective" for species at risk, ecosystems, and traditional knowledge.

> WCQI Grant Funding: \$14,730

Project Title: Kalavista Lagoon Assessment Organization: Society for the Protection of Kalamalka Lake **Project Goals:** The goal of this project is to provide a baseline assessment of water quality and factors that contribute to water quality within the Kalavista Lagoon. This data will serve as the basis of an adaptive management process for restoration to improve lagoon water quality, with a commitment to assessment, action, monitoring and plan improvement as necessary, as per the adaptive management framework. Factors which likely contribute to poor water quality of the Kalavista Lagoon are Common Carp and Canada Geese as explained. Therefore, baseline assessment of Common Carp and Canada Goose populations are also part of this proposed project. Factors related to improved water quality such as the presence of certain macro-invertebrate taxa and aquatic plants will also be monitored because of the ease and efficiency with which they provide valuable information about ecosystem function. WCQI Grant Funding: \$4.389

Regional District Central Okanagan

Project Title: Source Water Protection Plan

Organization: Citv of Kelowna

Project Goals: To establish a source water protection plan for the City of Kelowna that establishes best practices and policies aimed at preserving and protecting water sources from water quality and supply threats. A formalized plan will be developed and submitted to Interior Health that outlines a number of action items and timelines that need to be completed in order to preserve or enhance water quality for the residents of Kelowna. As this will be a on-going "living" document, success will be measured on an annual basis as to level of compliance or targets reached and re-evaluated for modifications or additions as needed.

WCOI Grant Funding: \$30.000

Project Title: Watershed Health Status and Vulnerability Assessment in Trepanier Creek

Organization: Westbank First Nation

Project Goals: The purpose of the Trepanier Watershed Health (the Assessment) is to identify healthy sub-catchments and characterize relative watershed health across the watershed to guide future protection initiatives. A healthy watershed has the structure and function in place to support healthy aquatic ecosystems. It is characterized as having either in its entirety, or as key components: intact and functioning headwaters, wetlands, floodplains, riparian corridors, biotic refugia, instream and lake habitat, and biotic communities; natural vegetation in the landscape; natural hydrology (e.g., range of instream flows and lake levels); sediment transport and fluvial geomorphology; and natural disturbance regimes expected for its location. The Trepanier Landscape unit is a priority watershed flagged for anadromous salmon restoration, while facing land pressures as one of the fastest growing populations in British Columbia.

> WCQI Grant Funding: \$29,500

Project Title: MCRI Demonstration Project Monitoring Project

Organization: Mission Creek Restoration Initiative

Project Goals: Mission Creek Restoration Initiative (MCRI) is a multi-disciplinary, multi-stakeholder partnership formed in 2008 to restore the natural function of the lower reaches of Mission Creek in Kelowna, from East Kelowna Road Bridge to Okanagan Lake. The primary goal is to restore the fish and wildlife stocks and habitat. Complimentary objectives are to conserve and expand biodiversity and species at risk, to improve flood protection, to educate the public, and to inspire and support community stewardship. This 2018/19 OBWB funding application is focused on implementation of strategies to ensure the demonstration project is achieving fish and wildlife habitat restoration objectives and flood protection requirements. This is being achieved through implementation of ongoing effectiveness monitoring and adaptive management programs.

WCQI Grant Funding: \$25,000

Project Title: Okanagan Lake Management Initiative

Organization: Okanagan Collaborative Conservation Program

Project Goals: The aim of this project is to identify policies, regulations and processes to enhance shoreline management for water source protection of Okanagan Lake. This project will create a working group of professionals to explore current and best practices in environmental and land use planning, develop recommendations for effective multijurisdictional shoreline management, and identify approaches for implementing the recommendations. This project will also prepare a framework that sets out the need for, and potential approaches for developing a Lake Management Plan that would set standards for shoreline management around Okanagan Lake. The recommendations for multijurisdictional shoreline management, and the development of a Lake Management Plan was first identified in the 2005 Okanagan Lake Foreshore Inventory and Mapping (FIM) report. The 2016 (FIM) report also recommended increased collaboration for shoreline management, and noted the scale of loss of natural areas is negatively impacting ecosystems and their ability to provide clean, safe drinking water, and habitat for rare and endangered species. WCQI Grant Funding: \$20,000

Project Title:Public Outreach for Water Source Protection for Wood and Kalamalka LakesOrganization:Okanagan Collaborative Conservation Program

Project Goals: The aim of this project is to follow through on research undertaken in 2016 -17 that examined the threats of boating activity on lake water source protection for the municipal intakes on Kalamalka Lake and the domestics intakes on Wood Lake. The research identified the re-suspension of sediment and contaminates (hydrocarbons, bacteria and heavy metals), erosion to property and shorelines, and damage to spawning habitat and bird nesting areas. The report was received by the District of Lake Country, the District of Coldstream, and the Regional District of North Okanagan, all of whom have directed staff to further investigate the implications of the recommendations put forward by the study. This project will develop and undertake a public engagement program to build awareness for source water protection, and assess the community support for the study's recommendations that included non-motorized areas, no wake zones, spill management plans and the protection for critical shoreline habitat. The input gathered through the public engagement process will allow planners and decision makers to better understand the types of changes that could be implemented to mitigate the impacts from boating activities.

WCQI Grant Funding: \$20,000

Organization: **Okanagan Nation Alliance Project Goals:** Mission Creek, a major tributary to Okanagan Lake, has multiple issues of sediment degradation and deposition throughout the creek due to channelization in the 1950s. These sediment conditions present a variety of problems affecting the area including sediment management, water quality, sediment transport and fish and wildlife habitat. This project will develop a sediment budget to identify the erosion and deposition areas, their controls and estimation of their rates within the creek. The information obtained can then be used to help address the above issues within the creek. An additional goal of this project is to assist the Mission Creek Restoration Initiative (MCRI) committee with selecting sites of restoration, guiding the design process and protecting existing habitats and restored areas. WCQI Grant Funding: \$15.250 **Project Title:** Mapping Natural Large Woody Debris Infrastructure in Whiteman Creek for Debris Flow Management and Ecosystem Services Okanagan Indian Band **Organization: Project Goals:** This project will build on previous work by Okanagan Nation Alliance (ONA) and Okanagan Indian Band (OKIB) in the Browns Creek area (Whiteman and Nashwito creeks) to help manage and conserve aquatic resources for future generations. The project will produce high value stream mapping of the focal watersheds with spatial representation of existing aquatic resources in addition to the location and function of existing Large Woody Debris (LWD) clusters. LWD naturally performs and recruits many processes important to a healthy stream ecosystem. Additionally, they introduce resiliency within a watershed to persist during drought and/or flood by creating complexity in the stream channel. However, their presence can introduce risks when there's a dynamic response to high flows with their mobilization or alterations to stream flow during flooding which can cause lateral channel movements, sediment release or damage to infrastructure. WCQI Grant Funding: \$15,000 **Project Title: Irrigation Connection Point Retrofit Phase 2** Organization: Citv of Kelowna **Project Goals:** Provide accurate flow monitoring for irrigation optimization. Phase 2 is dealing with the communication infrastructure component that is currently unreliable. Phase 2 trial work with field communication components will help to solidify the flow sensing component of irrigation central control system. Alarm readings will now be reliable and allow staff to better prioritize daily tasks. WCQI Grant Funding: \$12,846 **Project Title:** Law Creek Hazard and Risk Assessment Organization: **District of Peachland Project Goals:** In early Spring of 2017, a major flow event occurred on Law Creek. The event originated in the watershed above Highway 97C during a rapid snow melt. The event developed into a major debris flow as it moved rapidly downstream surcharging the existing drainage courses to the McKinnon Road area, ultimately washing out the roadway. There is a strong potential that another event of this nature could occur again in the Law Creek channel, however, the District would need to complete a hazard and risk assessment to further understand characteristics and morphology of the Creek. The assessment will allow the District to better estimate the likelihood that potentially damaging events will occur, identify the elements at risk, and asses the severity of consequences.

Project Title:

Mission Creek Sediment Study

Project Title: Climate Resilient Landscape Outreach Project

Organization: Regional District of Central Okanagan

Project Goals: The project has three main goals: 1. To assist property owners on implementing water conservation techniques and practices through on-site landscaping, irrigation and water system assessments, as well as aid in plant selection, resiliency, and suitability of the regions landscape to the Okanagan climate. 2. To reduce outdoor water use in residential and commercial landscaping by building resiliency to drought. 3. To continue to develop a region-wide approach to climate change adaptation and the need for water conservation.

WCQI Grant Funding: \$5,000

Regional District of Okanagan Similkameen

Project Title: Floodplain Re-engagement Project **Organization:** En'owkin Centre **Project Goals:** The aim of this project is to initiate habitat restoration and enhancement of the Okanagan River Channel floodplain in Penticton at the EPLL project site. Project objectives include: Re-connecting the Penticton portion of the Okanagan River Channel to 4.83 ha of the river's adjacent historic floodplain, allowing for natural backwatering as water levels in the main river channel rise and fall (i.e. no direct inline river flow). Create seasonal off-channel rearing habitat for Indigenous fish species, especially refuge for juvenile salmon stages, specifically for sk'lwist/ntytyix (i.e. Chinook Salmon). Restoring a diversity of fish-free wetland habitats and riparian habitats that support Indigenous biodiversity and recovery of species at-risk populations. Improving connectivity between rare and endangered riparian and wetland floodplain habitats and upland terrestrial habitats. Providing opportunities for local Indigenous cultural and ecological education, awareness and interaction. WCOI Grant Funding: \$30,000 **Project Title:** Rethinking the Urban Lawn through Community Education and Active **Demonstration Models Organization:** Friends of the Summerland Research Station Gardens **Project Goals:** The specific project goals of this project are: GOAL 1. Building the capacity of residents to better understand climate trends, projections, impacts and demonstrating opportunities to increase resilience. GOAL 2. Meeting a critical information gap by delivering educational water conservation programming and building new water conservation demonstration models related to the "urban lawn" GOAL 3. Work alongside strategic partners to coordinate coherent and consistent messaging related to drought management planning and improving water use efficiency to encourage resilient landscaping best practices through educational programming.

WCQI Grant Funding: \$20,000

Project Title:Water Quality Assurance During Restoration of Ellis Creek Sediment BasinOrganization:Penticton Indian BandProject Goals:The project site is located on Ellis Creek, Penticton BC, at the sediment catchment
basin located 90m upstream from the creek's confluence with Okanagan River. The
150 m long sediment catchment basin, managed by the FLNRORD for flood

protection and safety purposes, was constructed in the 1950's, along with river

channelization works, to retain transported sediment and prevent it from entering Okanagan River. However, the sediment basin is bordered on the downstream end by a rock weir that is not passable by fish species year round (partial migration barrier). In low flow conditions, the weir prevents indigenous salmonids to access the creek to spawn. In addition, each time the sediments are cleaned out, the area is drastically altered, disturbing the water quality, the equilibrium of the creek and adjacent riparian vegetation. With time, fish populations and habitat diversity decline, negatively affecting the neighbouring ecosystems.

The Okanagan Nation Alliance and Penticton Indian Band are working in collaboration with FLNRORD and other stakeholders to re-design the current sediment catchment basin creating fish passage year round. This will improve the overall creek habitat and allow the creek to function more naturally. The project will also allow the Ministry to improve their routine sediment extraction removal procedures and site access (easier process), reducing the impacted footprint on adjacent riparian vegetation and maintaining river water quality during extraction works.

WCQI Grant Funding: \$7500

Project Title:Water Management Assessments for Residential and Commercial LandscapesOrganization:Regional District of Okanagan Similkameen

Project Goals: To assist property owners to implement water conservation techniques through an on-site assessment of their landscapes; irrigation or water system, plant selections, and overall suitability to the climate. Reductions in outdoor water use and building resiliency to drought. To continue to strengthen the valley-wide approach to adaptation to climate change (drought preparedness). To target the need for widespread behavioral modification to conserve and manage water.

WCQI Grant Funding: \$3,939