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**FOR IMMEDIATE RELEASE**

## **FUNDING FLOWS TO OKANAGAN PROJECTS THAT WILL PROTECT VALLEY WATER**

**Kelowna, B.C.** – The Okanagan Basin Water Board has approved \$300,000 in funding to 20 projects that will help conserve and improve the quality of water in the valley. Directors approved the Water Conservation and Quality Improvement Grants at their regular board meeting on Tuesday, April 1. In all, there were 26 applications with a total ask of \$592,778.

“Like every year, we had more proposals than funding available and a very strong pool of applications,” noted James Littley, OBWB’s Office and Projects Manager, highlighting some of the projects approved.

In the North Okanagan, Greater Vernon Water will be hiring and training summer students to expand its water auditing program from working with residents to commercial and agricultural property owners as well. The students will also be conducting other outreach to encourage water conservation. “Residential outdoor water use is the 2<sup>nd</sup> largest use of water in the Okanagan with it spiking in the summer. The Water Board sees this as an important project, partnering well with our valley-wide Make Water Work outdoor water conservation initiative,” said Mr. Littley. “We are also pleased to see greater engagement with the agricultural and business community.”

Another issue that has come up in the Okanagan has been the need for updated flood mapping. The Regional District of Central Okanagan was awarded funds to conduct floodplain assessments for flood hazards, helping understand the risks (e.g. to water quality) and opportunities to address them.

“As infrastructure ages and as climate change results in more severe flooding in the Okanagan, the work of RDCO will be important in assisting communities throughout the valley to understand best practices in mitigating future flood risks,” added Littley.

And in the south, the Okanagan Similkameen Stewardship Society and Friends of Park Rill were awarded funds to improve and protect the Park Rill watercourse near Oliver. “We’re very happy to be able to support this project,” Mr. Littley said. The project will identify species at risk and areas that need protection, and will include outreach to area landowners on how to protect the area, and identify areas for restoration and enhancement. “We see this as a great opportunity for the community to get involved in helping protect an important waterway in the Okanagan.”

Since the program began awarding funds in 2006, some \$2.7 million has been provided to 179 projects throughout the Okanagan. For a full listing of funded projects please see the attached.

- 30 -

**MEDIA CONTACT:** Corinne Jackson, OBWB – Communications Director  
Office: 250-469-6271  
Mobile: 250-718-7249  
E-mail: [Corinne.Jackson@obwb.ca](mailto:Corinne.Jackson@obwb.ca)

# WATER CONSERVATION AND QUALITY IMPROVEMENT GRANT AWARDS – 2014

Organization	Project Title	OBWB Funding
Regional District of North Okanagan		
Greater Vernon Water	North Kal Lake IPZ Storm Water Reclamation Project	\$20,000
Greater Vernon Water	Water Ambassador Summer Program	\$8,000
Greater Vernon Water	Water Educational Programming	\$8,000
Greater Vernon Water	Water Quality Monitoring - Cosens Bay	\$9,700
<b>Total</b>		<b>\$45,700</b>
Regional District of Central Okanagan		
District of Peachland	Habitat and Sediment Assessment on Peachland Creek	\$29,800
District of West Kelowna	Water Leak Detection Equipment	\$25,000
RDCO	Biosolids Land Application at Brenda Mines	\$25,000
City of Kelowna	Sand Reinforcement Beach Restoration	\$20,000
RDCO	Regional District Floodplain Assessment and Mapping	\$20,000
Okanagan Xeriscape Association	Fostering Collaboration to Promote a Culture of Landscape Water Conservation	\$18,000
RDCO	Treated Effluent Irrigation at Bylands Nursery	\$16,000
Mission Creek Restoration Initiative	Baseline Biophysical and Ecological Resource Management Plan	\$15,790
District of Lake Country	Road Drainage Assessment: Vernon Creek Watershed	\$10,000
Okanagan Collaborative Conservation Program	Okanagan Habitat Connectivity	\$10,000
<b>Total</b>		<b>\$189,590</b>
Regional District of Okanagan Similkameen		
Town of Oliver	Ground source water assessment and protection plan	\$15,000
RDOS	Regional Water Use and Conservation Bylaw	\$10,525
RDOS	Water Ambassador Program	\$10,525
Kaleden Irrigation District	Source Assessment of Skaha Lake KID Intake	\$10,000
Okanagan Nation Alliance	ORRI - Water Quality Assurance	\$10,000
Okanagan Similkameen Stewardship Society	Park Rill Riparian and Aquatic Assessment	\$8,000
<b>Total</b>		<b>\$64,050</b>

## **Regional District North Okanagan**

Available funds: \$57,000 Total Requested: \$45,700 Recommended Funding: \$45,700

**Project Title:** North Kalamalka Lake Intake Protection Zone Storm Water Reclamation Project  
**Organization:** Greater Vernon Water  
**Project Goals:** Kalamalka Lake is a major domestic water source for Greater Vernon, providing about 40% of water to customers. In 2011, Greater Vernon Water received an OBWB WCQI grant to identify, map, monitor, and rank storm water outfalls that discharged into the north arm of Kalamalka Lake. The resulting report identified three outfalls (#13, 14 and 18) ranked as "high risk" to the water quality entering the intake. This project will be the second phase in order to mitigate water quality risks.  
**Staff Notes:** Direct impact on drinking water quality, building on previously funded work. Focussed on action.  
**Project Budget:** \$40,000 **Recommended Funding:** \$20,000

**Project Title:** Water Ambassador Summer Program  
**Organization:** Greater Vernon Water  
**Project Goals:** This project is phase two of the 2013 Landscape Irrigation Auditing Program. The aim of this project is to continue with residential water audits while expanding the program to cover commercial and agricultural assessments. This program will train two summer staff to become Ambassadors for water sustainability in the North Okanagan. These staff will also participate in Farmers' Markets, community events, and public demonstrations where they will deliver material on making water work.  
**Staff Notes:** Builds on work done previously in the North Okanagan, and mimics a successful program from RDOS. Focussed on action and education.  
**Project Budget:** \$16,000 **Recommended Funding:** \$8,000

**Project Title:** Water Educational Programming  
**Organization:** Greater Vernon Water  
**Project Goals:** The aim of this project is to develop youth educational programs on the topics of water sustainability, quality, and conservation as they relate to our local watershed. RDNO will partner with an educational organization that has experience in creating and presenting programs. This project aims to connect youth with community resources and inspire students to take action in water sustainability. All programs will be linked to the BC curriculum.  
**Staff Notes:** Complements current OBWB programs and objectives through the education of youth.  
**Project Budget:** \$10,000 **Recommended Funding:** \$8,000

**Project Title:** Water Quality Monitoring – Cosens Bay  
**Organization:** Regional District of North Okanagan  
**Project Goals:** The proposed study involves a water quality sampling program in Cosens Bay to determine if there is any influence or impact from septic systems on water quality in this area. Cosens Bay was homesteaded in 1893 and has evolved into a seasonal community over the last 100 years.

Currently, Cosens Bay consists of a mixture of modern homes and older cottages stretching along 3 km of Kalamalka Lake shoreline with approximately 100 lots that are directly adjacent to the Lake. These lots have soils of variable drainage and rockiness, which result in challenges for on-site septic disposal. This proposed study would examine potential Kalamalka Lake water quality impacts from previous and current septic disposal methods within the Cosens Bay area.

The proposed sampling would contrast water quality and periphyton growth between the summer months, when most residents are residing in Cosens Bay, and autumn, when few residents will be in the community. The methodology will be designed to determine if there is a correlation between an observed seasonal peak in septic system use and any detectable impacts on water quality in the Cosens Bay area of Kalamalka Lake.

Staff Notes: Directly assesses the impact of older septic systems on water quality in the Bay. Lends itself to future action to improve sewage infrastructure in the area.

Project Budget: \$11,080 Recommended Funding: \$9,700

**Regional District Central Okanagan**

Available funds: \$178,920 Total Requested: \$235,598 Recommended funding: \$189,590

Project Title: **Habitat and Sediment Assessment on Peachland Creek**  
Organization: **District of Peachland**  
Project Goals: The District's 2007 Water Master Plan has identified Peachland Creek as the primary source of drinking water for Peachland. The plan is to interconnect the three existing water systems to the Peachland Creek source and construct a water treatment plant near the Peachland Creek intake in 2017. The water quality data for Peachland Creek that has been collected for the past several years near the Peachland Creek intake is indicating a significant increase in turbidity during the spring freshet. As a result, Peachland has been issuing a boil water advisory every year during this period. Inspections by District staff have confirmed that it is not related to the zip line operation or any other activities near the intake. Peachland's Watershed Assessment for Drinking Water Source Protection Plan, 2010, also recommended that Peachland undertake an assessment of the current habitat and sediment sources on Peachland Creek. It is proposed to complete a channel assessment of the creek channel from the Peachland Reservoir Dam downstream to the intake after the spring freshet in 2014. The purpose of the assessment is to document the channel conditions, slopes, identify (and GPS) active and potential sources of sediment in the channel and any disturbances that could affect water quality and identify sensitive habitat, and estimate sediment loads. The assessment would allow for prioritization of risk reduction efforts and include recommendations for remedial actions to reduce the sediment load in the channel with estimated costs for those sites that can be addressed. The overall intent of the assessment is to reduce the sediment/turbidity in the creek at the District intake that will result in improved water quality and reduced operational costs for the District.

Staff Notes: Directly addresses a drinking water quality problem and advances the District's Master Water Plan.

Project Budget: \$39,400 Recommended Funding: \$29,800

Project Title: **Water Leak Detection Equipment**  
Organization: **District of West Kelowna**  
Project Goals: The District of West Kelowna's soon to be adopted Water Master Plan indicates that 21% of the annual volumes used in the municipality go unaccounted for due to leaks in the distribution network. The plan calls for "focused identification of the leaks" to ensure the long term sustainability of the system. The District of West Kelowna's will prioritize leak reduction investigations, taking into account the age of infrastructure, system pressure losses and statistical information provided in the Water Master Plan. The equipment will be given to qualified water operators who will conduct investigations and report back with their findings to the Utilities Supervisor. The Utilities Department will prioritize leak repairs in relation to the maintenance and operational needs of the water system as a whole. Over the long term, consistently faulty and aging pipes will be replaced. The plan proposes a high priority be placed on a renewal and replacement program at a cost of \$1.8 million per year.

Staff Notes: This type of equipment was used in a similar project at RDCO last grant cycle, with great success. Leak detection leads to large savings in electricity costs for pumping.

Project Budget: \$45,000 Recommended Funding: \$25,000

Project Title: **Biosolids Land Application at Brenda Mines**  
Organization: **Regional District of Central Okanagan**  
Project Goals: The project aims at studying the impacts to water quality in Okanagan Lake and Trepanier Creek basin associated with the land application of biosolids and revegetation of the Brenda Mines site. Biosolids from the Westside Regional Wastewater Treatment Plant will be applied

to the tailings dam at the Brenda Mines site to provide a source of organic material and nutrients required to reforest the site from its current sparsely vegetated state.

Staff Notes: This project has the potential to increase natural water filtration through reforestation. The proposal for the first year is to collect baseline data and establishing monitoring sites and sampling procedures.

Project Budget: \$190,000 Recommended Funding: \$25,000

Project Title: **Sand Reinforcement Beach Restoration**

Organization: **City of Kelowna**

Project Goals: To use a sustainable approach to protect an 120m long section of Okanagan Lake foreshore from storm events in order to prevent further upland erosion of public land; to mimic natural appearances and processes, i.e., long shore sediment transport; to add potential fish rearing substrate; to maintain habitat connectivity between the land and the lake, (i.e., to introduce no barriers to wildlife movement); to add riparian plantings to help stabilize the shoreline and add habitat benefit; and to limit impacts and disturbance to existing property and to adjacent beach front property owners.

Staff Notes: An innovative approach to shoreline erosion, which has the potential to improve water quality.

Project Budget: \$192,000 Recommended Funding: \$20,000

Project Title: **Regional District Floodplain Assessment and Mapping**

Organization: **Regional District of Central Okanagan**

Project Goals: Due to changes in flood hazards over time, (e.g., changes in forest cover, watershed hydrology, riverbed geomorphology) flooding poses high risks to the region's water quality, economic vitality, infrastructure, environment, safety, property owners and communities. The aim of the project is to review and assess floodplains in the regional district to include the creation of a spatial database of flood hazard prone watercourses, identification of flood risks, the main sources, areas liable to flood and identification of flood zones along the watercourses (areas for the probability of flooding). Floodplain management will assist in protecting water resources from contamination and maintain or enhance water quality.

Staff Notes: This project directly supports improvement of a critical issue. Methods developed through this project may be used valley-wide to mitigate the risk of future flood damage in our communities.

Project Budget: \$40,000 Recommended Funding: \$20,000

Project Title: **Fostering Collaboration to Promote a Culture of Landscape Water Conservation**

Organization: **Okanagan Xeriscape Association**

Project Goals: The project aims to reduce outdoor residential water use using educational and marketing strategies that envision the valley's watershed as a shared whole. By strengthening OXA's connections with stakeholders in the North and South Okanagan, a larger audience of homeowners and landscape professionals can be reached with OXA's education program and on-line resources that are designed to shift landscape perceptions and increase water conservation practices. Because valley-wide collaboration is important to developing shared cultural standards of landscaping, the OXA is also initiating an innovative pilot project with multi-jurisdictional partners to promote the sale of Okanagan-appropriate plants at the retail level.

Staff Notes: OXA has been a strong partner, developing a number of education and practical tools to assist in reducing outdoor water consumption throughout the valley. Focussed on collaboration and valley-wide benefit.

Project Budget: \$54,510 Recommended Funding: \$18,000

Project Title: **Treated Effluent Irrigation at Bylands Nursery**

Organization: **Regional District of Central Okanagan**

Project Goals: The project aims at assessing and testing the feasibility of using treated effluent from the

Westside Regional Wastewater Treatment Plant as a source of irrigation water for the neighbouring Bylands Nursery property. The ultimate goal of this project would be to eliminate the need for Bylands to pump water from Okanagan Lake to irrigate its nursery on Gellatly Road.

Staff Notes: This project has the potential to reduce water consumption and treatment costs, as well as innovatively using treated effluent in a responsible manner. Good partnership between local government and industry.

Project Budget: \$50,000 Recommended Funding: \$16,000

Project Title: **Baseline Biophysical and Ecological Resource Management Plan**

Organization: **Mission Creek Restoration Initiative**

Project Goals: MCRI is a multi-phase, multi-stakeholder project to restore lower sections of Mission Creek. The primary goal is to restore fish and wildlife stocks and habitat. Complementary objectives are to conserve and expand biodiversity and species at risk, improve flood protection, and enable and encourage community stewardship. During this phase of the project, MCRI will work with a consultant to conduct a detailed baseline biophysical inventory (BBI) along Mission Creek from Gordon Drive to Casorso Road. Information gathered will guide the preparation of an ecological resources management plan before dike setback and habitat restoration commence at a recently acquired property adjacent to Mission Creek (3830 Swamp Road).

Staff Notes: This portion of the project will help ensure that the restoration is done in an environmentally safe manner. This will help protect the ecological resources currently offered by the creek, while restoring other resources such as flood mitigation, water filtration and fish habitat.

Project Budget: \$40,000 Recommended Funding: \$15,790

Project Title: **Road Drainage Assessment for Vernon Creek Watershed**

Organization: **District of Lake Country**

Project Goals: To address the priority Risk Management Actions identified in the Source Water Assessment. Traverse the Beaver Lake Main Road and other non-status roads upstream of the intake and below Beaver Lake to inspect drainage features and to provide an assessment of potential hydrologic connection to downslope landslide features. The condition of existing culverts and road maintenance recommendations would be provided. Traverse the top of ravine bank above the north side (right bank) of Vernon Creek upstream of the DLC intake using GPS to accurately map and to correlate with potential drainage concerns originating upslope. Incorporate GPS data, including spatially accurate photographs, into a GIS based database; and complete a summary report of the findings, including spatially accurate mapping.

Staff Notes: This project builds on previous watershed assessment and landslide mitigation work in this watershed.

Project Budget: \$10,398 Recommended Funding: \$10,000

Project Title: **Okanagan Habitat Connectivity**

Organization: **Okanagan Collaborative Conservation Program**

Project Goals: Improving Okanagan Habitat Connectivity "How do we get from here to there" is an educational outreach initiative that will provide the tools to understand and take action on the results and recommendations from the Biodiversity Conservation Strategy project and also to help the general public to understand why connected ecosystems and wildlife habitat corridors are an essential part of maintaining biodiversity and ecosystem services such as water in the Okanagan region. Both the SOSCP and the OCCP are working on a Biodiversity Conservation Strategy for the Okanagan region. The strategy promotes a "big-picture" landscape view of the region and provides a framework for considering conservation options for entire ecosystems and watersheds that go beyond municipal or rural boundaries and includes all land-tenures. The two year project we are presenting here is part of the implementation of the Biodiversity Conservation Strategy. Year 1 will take place in the Central Okanagan and Years 2 in the North and South Okanagan Regional Districts.

Staff Notes: This multi-year project has done much to improve collaboration and information gathering for



conservation values throughout the valley. It is one of the programs with the most basin-wide focus.

Project Budget: \$172,380

Recommended Funding: \$10,000

**Regional District of Okanagan Similkameen**

Available funds: \$64,050 Total Requested: \$191,350 Recommended funding: \$64,050

Project Title: **Ground Source Water Assessment and Protection Plan**

Organization: **Town of Oliver**

Project Goals: Oliver operates the second-largest supply of groundwater in the Okanagan Valley. Many of the wells are relatively shallow and located in developed areas. Development of a long-term groundwater protection strategy has been a goal for the community for many years and preliminary steps to realizing this goal began several years ago. Interior Health supports development of protection plans following the "Comprehensive Source to Tap Assessment Guideline" and it is the objective of this project to use community engagement combined with science to complete Modules 1, 2, 7 and 8 of the Guide.

Staff Notes: This project will directly improve the ability to protect ground source drinking water. This is similar to many Source-to-tap assessments that have been funded.

Project Budget: \$35,000

Recommended Funding: \$15,000

Project Title: **Regional Water Use and Conservation Bylaw**

Organization: **Regional District of Okanagan Similkameen**

Project Goals: The creation of a Region-Wide Water Use and Conservation Regulation Bylaw is intended to unify water use standards within the Regional District operated water systems, helping ensure that there is a sufficient quantity of clean and healthy quality water available now and in the future for all user sectors and environmental needs within the Regional District of Okanagan-Similkameen, which will support healthy communities and a robust economy. This will protect and enhance the quality of life for our residents through water conservation/efficiency and sustainable water management, integration of drought management recommendations, inclusion of Cross Connection Control (CCC) requirements and consistent interpretation of the regulations.

Staff Notes: This project has the potential to be a leap forward in water protection in the Okanagan. It is timely given the Water Sustainability Act, and may assist in the development of a valley-wide Water Sustainability Plan in the future. It is innovative, and could inform other local governments wishing to adopt similar policies.

Project Budget: \$40,000

Recommended Funding: \$10,525

Project Title: **Water Ambassador Program**

Organization: **Regional District of Okanagan Similkameen**

Project Goals: The Water Ambassador program that the RDOS has developed over the past several years has been a huge success benefiting communities within the Okanagan Basin Watershed. The program focuses on water conservation using a community-based education oriented model, addressing residents on the local sprinkling restrictions, engaging the agricultural sector in discussing water use, augmenting and participating in workshops with partners such as the Friends of Summerland Gardens and the Naramata Community Association and addressing emerging conservation and quality issues with water sources. In the communities, with 'on the ground patrolling', the Water Ambassador has been able to observe first hand behaviors, assist in modifying behaviors and look at what steps could be taken in the future to continue water conservation habits. In 2014 the RDOS would like to continue and expand upon the momentum already gathered by this extremely successful program within the regional communities of the Okanagan Basin Watershed.

Staff Notes: This successful multi-year program shows a high degree of collaboration, and has complemented OBWB programs such as MakeWaterWork and OKWaterWise.

Project Budget: \$30,000

Recommended Funding: \$10,525

Project Title: **Source Assessment of Skaha Lake KID Intake**  
 Organization: **Kaleden Irrigation District**  
 Project Goals: To complete a comprehensive Source Water Assessment and Protection Plan of the KID's intake on Skaha Lake, to meet requirements of Interior Health Authority that mandates the assessment of risks and recommends protective measures for the water system source.  
 Staff Notes: This project will directly improve lake-source drinking water. This is similar to many source-to-tap assessments that have been funded.  
 Project Budget: \$20,000 Recommended Funding: \$10,000

Project Title: **Okanagan River Restoration Initiative – Water Quality Assurance**  
 Organization: **Okanagan Nation Alliance**  
 Project Goals: The overall goal of the ORRI restoration work is to regain some of the Okanagan River habitat quality and quantity that has been lost, returning channelized river portions back to more natural conditions. ORRI works involve relocating the dikes, lengthening the channel, re-establishing meanders and pool/riffle sequences, creating nature-like features, reconnecting historic floodplains and replanting riparian vegetation. The ORRI long term purpose is to improve water quality; to create self-sustainable, complex and diverse habitat for fish and wildlife; and to enhance the human relation with the river ecosystem. ORRI-Penticton Channel spawning.  
 This fourth Phase of ORRI focuses on the creation of naturally-like fish spawning features in the Penticton channel area because fish spawning habitat is very limited in this portion of the Okanagan Basin. This project aims the construction of two spawning platforms which will create high quality fish habitat; provide public viewing opportunities of salmon and trout spawning; and reduce the abundance of introduced exotic species, such as the Eurasian watermilfoil.  
 Water Quality Assurance during Construction Work (portion of the project involving potential OBWB funding):  
 During construction, the project aims to limit as much as possible the risks for potential immediate negative perturbations on water quality and the surrounding environment. The goal is to assure the preservation of water quality in the Okanagan River and Skaha Lake during all works.  
 Staff Notes: This very important multi-year project focusses on direct action to restore large sections of the Okanagan River. Funding from the OBWB will be used to leverage funding from the U.S. bringing new money into the Okanagan.  
 Project Budget: \$362,220 Recommended Funding: \$10,000

Project Title: **Park Rill Riparian and Aquatic Assessment**  
 Organization: **Okanagan Similkameen Stewardship Society**  
 Project Goals: The proposed project will increase an understanding and build community support for habitat-based ecological values along the Park Rill watercourse near Oliver, BC. Immediate and long-term results of this project include identification and mitigation of threats to riparian and aquatic species, water quality concerns will be identified and addressed, restoration opportunities are identified, prioritized and some addressed immediately, threats to riparian and aquatic species and/or their habitat are identified, ceased, removed or mitigated and the Friends of Park Rill are engaged and conserving habitats and water in their community.  
 Staff Notes: The Friends of Park Rill and OSSS are community based organizations that have been successful in the past at improving the source protection around their waterway. This type of project demonstrate the ability of community groups to enhance the quality of water in the valley.  
 Project Budget: \$44,150 Recommended Funding: \$8,000