

WATER CONSERVATION AND QUALITY IMPROVEMENT GRANT AWARDS – 2012

Organization	Project Title	Funding Received
Regional District North Okanagan		
Steele Springs Waterworks District	Wireless Control of Reservoir Level Using Solar Power	\$15,000
City of Armstrong	Residential Water Metering	\$16,300
Okanagan College - Vernon	Demonstration Garden	\$4,000
Greater Vernon Water	Coldstream Creek Restoration (SHIM site #3 & 4)	\$10,000
Greater Vernon Water	Landscape Irrigation Auditing Program	\$8,000
Greater Vernon Water	Make Your Own Rainbarrel Workshop	\$4,600
		\$57,900
Regional District Central Okanagan		
GEID	Limiting the Spread of Aquatic Invasive Species (AIS)	\$9,940
Okanagan Xeriscape Association	Promoting Xeriscapes to Reduce Water Consumption	\$10,000
RDCO	Westshore Estates/Killiney Beach Leak Detection	\$11,574
OCCP	Kalamalka Lake & Wood Lake Aquatic Habitat Index	\$24,400
City of Kelowna	Drought Tolerant Sod Replacement Program	\$20,000
City of Kelowna	Reducing Water Used for Irrigation by Active Management	\$20,000
Mission Creek Restoration	Website Development for Education and Outreach	\$5,000
Mission Creek Restoration	Ecological Goods & Services Assessment	\$25,000
University of BC - Okanagan	Contaminant Intrusion in Water Distribution Systems	\$15,000
District of West Kelowna	Water Utilities Master Plan - expanded scope	\$15,000
Westbank and District Chamber of Commerce	Sustainable Water Strategy for Business	\$6,000
District of Lake Country	Landslide Mapping, Risk Assessment & Restoration Plans for Vernon Creek	\$10,300
District of Peachland	Improved Water Management Using WEAP	\$25,000
		\$197,214
Regional District Okanagan Similkameen		
Town of Osoyoos	Pilot Testing of Biological Manganese Removal	\$15,000
Okanagan Nation Alliance	Water Intake Feasibility Study for Okanagan River's Connected Oxbow Lakes	\$12,018
Okanagan Nation Alliance	ORRI Phase 2 - 2012 Water Quality Monitoring	\$4,000
City of Penticton	Source to Tap Watershed Assess of Penticton Creek	\$16,022
RDOS	Water Ambassador Program	\$12,000
Friends of Summerland Ornamental Gardens	Best Practices for Sustainable Landscaping in the Okanagan	\$25,000
Regional District Okanagan Similkameen (cont'd)		
		\$84,040

Regional District North Okanagan

Available funds: \$57,900 Total Ask: \$120,986

Project Title: **Wireless Control of Reservoir Level Using Solar Power**
Organization: **Steele Springs Waterworks District**
Description: Steele Springs Waterworks District will use wireless radio communication between reservoir and pumphouse to eliminate overflow of the reservoir. This will keep more water in the ecosystem, as water will follow its course from the springs to Deep Creek, and into Okanagan Lake, rather than diverted to a reservoir.
Staff Notes: The project fits well with the OBWB's recent work with tracking and reporting reservoir levels in the SWURT (Streamline Water Use Reporting Tool) project.
Project Budget: \$18,000 **Recommended Funding:** \$15,000

Project Title: **Residential Water Metering**
Organization: **City of Armstrong**
Description: The City of Armstrong is installing residential water meters. Commercial users have been metered for several years and the new residential meters will use the same software and technology. A consumption based rate structure has been developed.
Staff Notes: This project both addresses residential water conservation and completion of valley wide efforts as most communities are now metered.
Project Budget: \$850,000 **Recommended Funding:** \$16,300

Project Title: **Demonstration Garden**
Organization: **Okanagan College – Vernon Campus**
Description: The project will create two vegetated swale pathways as a demonstration of techniques that can filter and slow water run-off, decrease erosion and increase absorption on the landscape. The increased water retention on site will decrease the water needs of the garden.
Staff Notes: This project highlights the "Slow It, Spread It, Sink It!" guidebook and develops a community resource that focuses on sustainable agriculture.
Project Budget: \$25,330 **Recommended Funding:** \$4,000

Project Title: **Coldstream Creek Restoration – SHIM site #3 & 4**
Organization: **Greater Vernon Water**
Description: Restoration works will be completed on Coldstream Creek: reinforced cattle crossing structure, increased fencing and riparian restoration.
Staff Notes: Coldstream Creek is the largest tributary to Kalamalka Lake and highly affected by agriculture and urban activities; this is a priority area for restoration works, with significant water quality improvements.
Project Budget: \$12,000 **Recommended Funding:** \$10,000

Project Title: **Landscape Irrigation Auditing Program**
Organization: **Greater Vernon Water**
Description: An irrigation auditing program focused on high water use residential customers. This project will also develop educational resources on landscape planning, irrigation timer setting, sprinkler troubleshooting and others.
Staff Notes: This project promotes best practices in outdoor water conservation, one of the Okanagan's highest water uses. OBWB staff will ask that templates of education resources be made available to WaterWise and other local governments.
Project Budget: \$18,000 **Recommended Funding:** \$8,000

Project Title: **Make Your Own Rain Barrel Workshop**
Organization: **Greater Vernon Water**
Description: A workshop will be hosted where participants will construct a rain barrel. The construction information will be shared among valley.
Staff Notes: The most valuable portion of this project will be creating and sharing the rain barrel construction information. Funding will be contingent on RDNO providing a resource (step-by-step picture brochure or "how to" video) for rain barrel construction.
Project Budget: \$7,600 **Recommended Funding:** \$4,600

Regional District Central Okanagan

Available funds: \$197,214 Total Ask: \$342,258

Project Title: **Limiting the Spread of Aquatic Invasive Species (AIS)**
Organization: **Glenmore Ellison Improvement District**
Description: The focus of this project is on zebra and quagga mussels and will determine presence/absence in Okanagan Lake (by sampling), most probable vectors of infestation and decontamination protocols to limit the impact on water suppliers in the Okanagan.

Staff Notes: It is predicted that the devastating zebra and quagga mussels will reach the Okanagan in the next 3 to 5 years. Strategies to limit impact on water suppliers (and other lake users) need to be developed now. Funding will be contingent on communication of results with senior government agencies and the Invasive Species Council, and outreach initiatives coordinated with Water Wise.

Project Budget: \$15,890 **Recommended Funding:** \$9,940

Project Title: **Promoting Xeriscapes to Reduce Water Consumption**
Organization: **Okanagan Xeriscape Association (OXA)**
Description: OXA will continue to enhance its strong offerings in Xeriscape education and outreach, strengthening the message around Xeriscape and low water plant options for Okanagan residents.

Staff Notes: Funding will be directed to Xeriscape classes (to reach a broad audience), 2012 garden contest and to enhance the online plant database with listings of local nurseries supplying specific plants. This will allow residents to easily source the plants they want.

Project Budget: \$56,250 **Recommended Funding:** \$10,000

Project Title: **Westshore Estates/Killiney Beach Leak Detection**
Organization: **Regional District Central Okanagan**
Description: RDCO will conduct leak detection on Westshore and Killiney Beach water systems so that volume of water supplied more closely matches volume of water consumed – currently the volume supplied is four times the consumption.

Staff Notes: This project supports water conservation goals, thus keeping more water in the Okanagan Lake system.

Project Budget: \$50,000 **Recommended Funding:** \$11,574

Project Title: **Kalamalka Lake & Wood Lake Aquatic Habitat Index**
Organization: **Okanagan Collaborative Conservation Program (OCCP)**
Description: OCCP will use FIM data to create an Aquatic Habitat Index (AHI) for Kalamalka and Wood Lake, adding to other AHI work across the valley. The index provides an easily understood visual ranking system (colour coded) of shoreline habitat for local government planning and development.

Staff Notes: Synthesizing the complex information from the Foreshore Inventory Mapping process means sensitive habitat information can be easily conveyed to a wide variety of audiences. This project adds to valley wide work on foreshore areas.

Project Budget: \$32,900 **Recommended Funding:** \$24,400

Project Title: **Drought Tolerant Sod Replacement Program**
Organization: **City of Kelowna**
Description: This project will replace turf grass in residential (volunteer homeowners) and municipal settings with drought tolerant sod.

Staff Notes: A strong emphasis of the OBWB and WaterWise program is to reduce outdoor water use in the Okanagan.

Project Budget: \$60,000 **Recommended Funding:** \$20,000

Project Title: **Reducing Water Used for Irrigation by Active Management**
Organization: **City of Kelowna**
Description: The City of Kelowna will incorporate existing infrastructure such as weather station and flow meter data in municipally controlled outdoor irrigation systems to reduce manual program overrides, reduce water leaks and overall consumption.

Staff Notes: Residents look to municipalities for leadership in outdoor water use; through this program the City of Kelowna will conserve water in public outdoor spaces, again aligning well with the WaterWise program.

Project Budget: \$30,000 **Recommended Funding:** \$20,000

Project Title:	Website Development for Education and Outreach	
Organization:	Mission Creek Restoration Working Group	
Description:	This project will create a website to create awareness and broadcast information about the goals to restore sections of Mission Creek through eventual property purchase and dike set-back. Public education and outreach are critical for such a large and long term project.	
Staff Notes:	Funding is contingent on contacting Okanagan WaterWise to share networks and make best use of social media tools for outreach.	
Project Budget:	\$10,000	Recommended Funding: \$5,000
Project Title:	Ecological Goods & Services Assessment	
Organization:	Mission Creek Restoration Working Group	
Description:	The ecological goods and services assessment will evaluate the ecological value of Mission Creek, in its current state and once restored. The assessment will include water quality, ecological disturbance resiliency, air quality, and other attributes.	
Staff Notes:	The OBWB is very interested in the methodology for completing an ecological goods and services assessment for an ecosystem and will look to this project to provide a template for other areas in the basin.	
Project Budget:	\$35,000	Recommended Funding: \$25,000
Project Title:	Contaminant Intrusion in Water Distribution Systems	
Organization:	University of BC - Okanagan	
Description:	This research will develop a special model to determine the volume inflow rate of a potential contaminant to a Water Distribution system.	
Staff Notes:	The results of this project will be shared with water utilities throughout the valley, providing benefit to all.	
Project Budget:	\$20,000	Recommended Funding: \$15,000
Project Title:	Water Utilities Master Plan - expanded scope	
Organization:	District of West Kelowna	
Description:	The District of West Kelowna is broadening the scope of the Water Master Plan to account for significant expansion of sanitary sewers, address stronger water conservation measures and adaptation to climate change.	
Staff Notes:	OBWB awarded the District of West Kelowna funding toward the initial phase of this planning; the current award will help support the expansion of the plan in newly-sewered areas.	
Project Budget:	\$300,000	Recommended Funding: \$15,000
Project Title:	Sustainable Water Strategy for Business	
Organization:	Westbank and District Chamber of Commerce	
Description:	This project will provide water conservation information and strategies for the business community. The Westbank and District Chamber of Commerce will involve as many Okanagan Chamber of Commerce branches as possible.	
Staff Notes:	Staff welcomes the opportunity to partner with valley wide Chamber of Commerce branches and engage the business sector in water conservation. Coordination with WaterWise will take place over the course of this project.	
Project Budget:	\$27,168	Recommended Funding: \$6,000
Project Title:	Landslide Mapping, Risk Assessment & Restoration Plans for Vernon Creek	
Organization:	District of Lake Country	
Description:	This project will characterize and map landslide areas in the Vernon Creek watershed with linkages to upslope land use. From this landslide and drainage restoration plans will be prepared. Landslide activity was identified as a very high risk to water quality and infrastructure through the 2010 Source Assessment of Vernon Creek.	
Staff Notes:	Often source water protection initiatives struggle to completion, but can have a big impact on water quality. Source protection is a priority for the OBWB.	
Project Budget:	\$20,300	Recommended Funding: \$10,300
Project Title:	Improved Water Management Using WEAP	
Organization:	District of Peachland	
Description:	District of Peachland will use the WEAP model to manage water supplies, provide visual model results and	

water management options to the District council and public.
Staff Notes: This project complements recent OBWB work well; the use of the WEAP model and Water Supply and Demand data are intended to improve water management by Okanagan local governments.
Project Budget: \$40,000 Recommended Funding: \$25,000

Regional District Okanagan Similkameen

Available funds: \$84,040 Total Ask: \$209,236

Project Title: **Pilot Testing of Biological Manganese Removal**
Organization: **Town of Osoyoos**
Description: Manganese is a common groundwater quality issue for in the Okanagan. The Town of Osoyoos will pilot test an innovative biological removal technology and assess performance, operating costs and design criteria to implement it permanently if successful. All project results will be shared among groundwater users in the valley.
Staff Notes: This project has basin wide significance, as all groundwater users can benefit from the results.
Project Budget: \$40,000 Recommended Funding: \$15,000

Project Title: **Water Intake Feasibility Study for Okanagan River's Connected Oxbow Lakes**
Organization: **Okanagan Nation Alliance**
Description: Climate change is increasing the frequency of low flows in Okanagan River; this project will assess the feasibility of changing water intake levels on the Oxbow Lakes of Okanagan River for operation at a lower flow. Ultimately conserving water through Okanagan River (lower flows) will improve Osoyoos Lake habitat for sockeye salmon.
Staff Notes: This project addresses adaptation to climate change and protects salmon habitat, which are high priorities.
Project Budget: \$12,018 Recommended Funding: \$12,018

Project Title: **ORRI Phase 2 - 2012 Water Quality Monitoring**
Organization: **Okanagan Nation Alliance (ONA)**
Description: Recent funding announcements mean that construction work on the Okanagan River Restoration Initiative (ORRI) will re-commence in 2012, including connecting a side channel to the main river channel. ONA will monitor water quality in the river during the course of this work, ensuring all water quality objectives are met.
Staff Notes: This project has valley wide benefit. The ONA can use funds remaining from previous water quality monitoring grant to assist with this phase.
Project Budget: \$792,000 Recommended Funding: \$4,000

Project Title: **Source to Tap Watershed Assess of Penticton Creek**
Organization: **City of Penticton**
Description: The City of Penticton will complete a Source Assessment of Penticton Creek in the same manner as many other water utilities throughout the valley. Risks to water supply/quality throughout the watershed will be assessed.
Staff Notes: Source Assessments are important planning tools for source protection and contribute to valley wide efforts.
Project Budget: \$60,000 Recommended Funding: \$16,022

Project Title: **Water Ambassador Program**
Organization: **Regional District Okanagan Similkameen**
Description: The overall goal of the Water Ambassador Program is to reduce outdoor water consumption in Naramata, West Bench and Sage Mesa areas of the RDOS through outreach and education.
Staff Notes: Funding is contingent on continuing to broaden the geographic scope of the Water Ambassador beyond Naramata while building on previous years successes.
Project Budget: \$15,000 Recommended Funding: \$12,000

Project Title: **Best Practices for Sustainable Water Conservation Landscaping in the Okanagan**
Organization: **Friends of Summerland Ornamental Gardens (FSOG)**
Description: The FSOG will implement a large scale water conservation pilot project on the Okanagan's largest ornamental gardens to reduce water use in landscaping, enhance habitat and engage the public in water stewardship. This project uses a variety of ways to reduce water use in a traditional garden setting (high water needs).
Staff Notes: This project shows strong collaboration with a number of water experts and community support.
Project Budget: \$146,545 Recommended Funding: \$25,000