

WATER CONSERVATION AND QUALITY IMPROVEMENT GRANT PROGRAM PROGRESS REPORT

Project: Joe Rich Stream Restoration Project

Applicant: Regional District of Central Okanagan

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Background on the organization

Since 1967, Planning Services Department at the Regional District of Central Okanagan has been providing professional assistance to the Regional Board in order to meet and balance the social, economic, and environmental planning needs of the region's growing and diverse population, in order to maintain and enhance the unique lifestyle and environment of the Central Okanagan.

The Planning Services Department strives to support the high quality of life enjoyed by the residents of the Central Okanagan. We are dedicated to protecting and enhancing natural and environmentally sensitive areas, while achieving sustainable development. We have a commitment to protect and enhance the natural environment including our water resource through land use planning, development regulations, and public education.

Today, the RDCO includes a service area of 2956.3 square kilometers, which is home to approximately 173,000 people.

Project Description

Joe Rich Creek is a major tributary to Mission Creek, located east of the City of Kelowna, upstream of local domestic water supply intakes. The Joe Rich Creek watershed has been affected by development activities on crown and private land, including those associated with Highway 33. Areas of extensive bank erosion, overwidening, riparian clearing, as well as poor water quality (high sediment and coliform counts) and channel dewatering have raised concerns over the health of the system.

This project aims to restore and enhance 1.7 km of Joe Rich Creek through: the establishment of a continuous, riparian forest along the entire length of the channel; erection of livestock exclusion fencing to prevent contamination of the stream channel and to allow natural recovery of the riparian zone, installation of 12 key rock riffle structures to reduce stream energy and control downcutting; installation of rootwad groynes to reduce near bank velocities; and, pull back and revegetation of oversteepened banks using modified brush layers. This will result in improved channel stability, stream shading and long-term improvements to water quality.

The project is a collaborative effort including multiple levels of government and stakeholders including:

- Ministry of Agriculture and Lands
- Ministry of Environment

- The Cattleman's Association (Environmental Farm Plan and Farmland Riparian Interface Stewardship Program)
- Black Mountain Irrigation District
- Fisheries and Oceans Canada
- Private landowners
- Regional District of Central Okanagan
- City of Kelowna
- Ducks Unlimited

Present Achievements

To date, the following has been achieved:

- Installation of approximately 2.7 km of four strand barbed wire fence.
- Installation of approximately 2.0 km of 6 strand high tensile wire fencing. Fencing has been installed along the entire riparian corridor within the project area. This represents the livestock exclusion fencing that was proposed, as well as an additional 1.3 km which was placed on the lower Weddell property and funded through the Environmental Farm Plan.
- Approximately 50 loads of rip-rap rock have been delivered on-site.
- Bank stabilization has begun on the 1.6 km of Joe Rich Creek, with approximately 1/3 being completed.
- 3 of 12 Riffle structures have been installed.
- Educational signage design is underway (attached).
- 3 controlled access stream crossing site for livestock have been established. Completion of the access sites is underway.
- 4 long-term stream monitoring sites have been established to document the recovery of the stream channel.
- RDCO website has been updated with project information.
http://www.regionaldistrict.com/departments/planning/env/env_planning_joerichcr_kwr.aspx

The following activities are still outstanding:

- Riparian planting activities are slated to begin after summer dry season is complete. This will ensure proper moisture levels and success of plant materials.

Timeline of remainder of project

The following describes project timeline information including anticipated time of completion and projected time of completion (as indicated in original proposal). Overall, the project is on schedule.

Activity	Current status	Anticipated completion date	Projected completion date (as per original proposal)
Streambank pull back and stabilization	Ongoing	Sept 15.	Nov. 15
Livestock exclusion fencing	Complete – before schedule.	Complete	Nov. 15
Instream Work (riffles, revetments, placement	Ongoing	October 15	September 15

of LWD)			
Riparian Planting	On-hold (fall planting planned)	October 31	October 31 – possibly include Spring planting
Reporting	Ongoing	Dec. 31	Dec. 31
Signage	Ongoing	Nov. 20	Nov. 20
Monitoring	Complete (Year 1)	Dec. 31	N/A

Obstacles Encountered

Obstacles have included the sale of the property amongst siblings, which has led to increased complexity of the project, especially when addressing budget items for the Environmental Farm Plan. This was overcome by staff of the Cattleman's Association, which have worked diligently to ensure accurate reporting.

In-stream works have been awaiting approval from the Provincial government under Section 9 of the Water Act. The appropriate approvals were received the week of Aug. 20. The in-stream work window for the project is open until October 31, so no problems anticipated due to delay.

No other major obstacles have been identified.

Feedback on the application process

The application process has been timely and realistic. OBWB staff involvement in visiting the project site is particularly appreciated. Their direction has proved to be very helpful.

Attached information

- Photo Plates.
- Preliminary road sign design.
- News release dated August 17, 2007
- Capital News Article dated August 19, 2007
- Daily Courier News Article dated August 26, 2007.

Available on the Internet

- CHBC Newscast dated August 22, 2007
<http://chbc.com/index.php?name=News&file=article&sid=14610>



Photo Plate 1: Joe Rich Media day, August 22, 2007.



Photo Plate 2: In-stream work including installation of rock structures.



Photo Plate 3: Rip Rap Rock to be installed in channel.



Photo Plate 4: Controlled access crossing being prior to completion.



Photo Plate 5: Riparian exclusion fencing.



Photo Plate 6: Riparian exclusion fencing, rock and excavator.



Photo Plate 7: Rip rap stabilization of stream bank.



Photo Plate 9: Installation of 6 strand high tensile wire.



Photo Plate 10: Installation of fencing by joint RDCO / City of Kelowna watershed restoration crew.



Photo Plate 11: Larger eroding bank stabilization prior to grass seeding and planting.

JOE RICH STREAM RESTORATION PROJECT

FALL 2007

Improving:
**Water Quality
& Wildlife Habitat**

For more information visit:
www.regionaldistrict.com



Ducks Unlimited Canada
CANADA'S CONSERVATION COMPANY

Plate 12: Draft signage to be posted adjacent to restoration site on Highway 33.