

North Kootenay Lake Water Monitoring Project Annual Report 2016/17

North Kootenay Lake Water Monitoring Project completed a transition from Kaslo and District Community Forest Society contract management to North Kootenay Lake Water Monitoring Project (a name change from Area D Water Management Board) in mid 2016. During 2016, the Scientific and Technical Advisory Group (STAG) supported increasing the number of streams being monitored to seven by adding Gar Creek in Johnson's Landing and nearby Kootenay Joe Creek, which in effect is a partnership with the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) who monitor the Johnson's Landing landslide area, and in addition supplied us with equipment for that stream monitoring.

In the fall of 2015, snow depth measurements were initiated on Kootenay Joe Ridge, above Johnson's Landing, at 2,060 meters elevation, and five were taken during this reporting period. A second site, with STAG approval, was added at Lost Ledge on the west side of Kootenay Lake at 2,035 meters in the fall of 2016, with two measurements taken in the reporting period. Several members of the Management Committee worked with our senior hydrologist, Martin Carver, to raise funds for new equipment and to expand the number of financial partners for ongoing multi-year operations. As a result, we revised our budget and management structure to include a permanent project/fundraiser/volunteer coordinator contract for 2017/18.



Sarah Crookshanks & Laurence Chaput-Desrochers undertaking a calibration exercise at the Bjerkness hydrometric station (Martin Carver Photographer)

Simultaneously we recruited two new volunteers to monitor Davis Creek (734m elevation) and are now establishing similar volunteers for each of the other creeks we are monitoring, as we try to find the right balance between what can be undertaken by citizen scientist volunteers and what needs to be undertaken by professional scientists on contract to the project. The other creeks being monitored are Bjerkness 629m, McDonald 734m, Carlyle 1,517m, and Ben Hur 1,574 meters.



Rob White and Isabelle Desmarais at Kootenay Joe Ridge snow course (Greg Utzig photographer)

We are extremely grateful to the Columbia Basin Trust, and now to the Kootenay Lake Local Conservation Fund, for helping us maintain the ongoing field monitoring work of our senior hydrologist and seasonal technicians, and for funding the creation in 2017/18 of a permanent part-time project/fundraiser coordinator position. A big thanks goes to Selkirk College for loaning us a snow core sampler and to Peter Jordan for helping us with equipment loans from FLNRO.



Peter Jordan measuring snow depth Lost Ledge snow course (Osa Thatcher photographer)

Further thanks for ongoing financial support goes to FLNRO, Kootenay Country Store Co-Op, Kootenay Savings Credit Union, and the Nelson and District Credit Union for enabling us to purchase and install water monitoring equipment and weather station equipment specifically for Johnson's Landing. We anticipate emplacing two seasonal weather stations this summer alongside each of the snow courses. Finally, in early January, Columbia Power Corporation funded a contract with the Selkirk Geospatial Research Centre

to review the standards of our data set parameters and advise on potential storage and dissemination options in keeping with our mandate.

Simultaneously we expanded our base of support with letters of support from Fletcher Creek Improvement District, Mirror Lake Water Users Community, the Ministry of Transportation and Infrastructure Subdivision Approving Officer, the Board of the Regional District Central Kootenay, Interior Health Authority and a local geotechnician. These are on top of initial letters of support received from the Village of Kaslo, Aimee Watson (Electoral Area Director for D, RDCK), Robert Sandford (EPCOR Chair, Water & Climate Security, United Nations University, Institute for Water, Environment and Health) Kaslo and District Community Forest Society, Ministry of Transportation and Infrastructure, and FLNRO, Columbia Basin Watershed Network and Kootenay Conservation Program.



*New weather station Johnson's Landing
(Greg Utzig photographer)*

We also want to say a huge vote of thanks to our Executive Committee, Management Committee, Scientific and Technical Advisory Group, Selkirk College, Kaslo and District Community Forest Society, Lost Ledge and Kootenay Joe Cabin Groups and Johnson's Landing Community Association for in kind contributions totalling \$46,305 in volunteer hours and use of equipment, without which our project would not have been possible to implement.

In 2016 we took Columbia Mountain Institute AGM attendees on a field trip to our Davis Creek monitoring site, and in 2017 the Kootenay Conservation Program advisory committee to the Kootenay Lake Local Conservation Fund visited the same site. In 2017/18 I hope to introduce our first newsletter for the general public.

As anthropologist Margaret Mead so aptly said:

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed it is all that ever has.”

Thank you to our financial sponsors, partners and friends. We are extremely grateful for your ongoing support for this project.

Below please find our financial report for the 2016/17 year to April 30th:

2016/17 Income

Columbia Basin Trust \$40,000

Kootenay Savings Credit Union \$5,000

Columbia Power Corporation \$2,500

Nelson & District Credit Union \$1,000

Kootenay Country Store Co-op \$416

Total Income \$48,916

Expenditures

Senior Hydrologist Contractor \$23,600

Junior Hydrologist Technician Contractor \$6,890

Equipment Purchase \$6,716

Project Coordinator Contractor \$3,475

Field Travel (Contractor/Volunteers) \$2,740

Data Distribution Study \$2,500

Kootenay Centre for Forestry Alternatives Administration Fee \$2,000

Field Office Expense \$995

Total Expenditures \$48,916

In Kind Contributions

Administrative/Fundraising Volunteer Hours (includes hours donated by contractors) \$17,010

Snow Course Professional/Technician Volunteer Hours \$9,635

Stream Monitoring Professional/Technical Volunteer Hours \$8,160

Forest Lands & Natural Resource Operations Equipment and Lab \$7,000

Kaslo & District Community Forest Society Equipment \$3,000

Selkirk College Equipment use \$500

Lost Ledge Cabin Group use \$500

Johnson's Landing Community Association Kootenay Joe Ridge Cabin use \$500

Total In-Kind Contributions \$46,305

Management Committee for 2016/17:

Tara Clapp, Mirror Lake

Greg Utzig, Nelson

Charles Cuell, Kaslo

Andy Shadrack, Kaslo

Bill Wells, Kaslo

Don Scarlett, Fletcher Creek

Marlene Johnston, Lardeau

Martin Carver, Nelson

Mel Reasoner, North Shore (Nelson)

Ross Lake Murphy Creek (Kootenay Lake)

STAG

Greg Utzig, Nelson

Bill Wells, Kaslo

Martin Carver, Nelson

Marlene Johnston, Lardeau

Peter Jordan, Nelson

Robert Macrae, Castlegar

Peter Golden, Rossland

Sarah Crookshanks, Nelson

2017/18 Contractors

Martin Carver - Nelson - Senior Hydrologist

Chris Hiebert - Crescent Valley - Project Coordinator

Paul Saso - Nelson - Junior Hydrologist

Laurence Chaput-Desrochers - Cranbrook/Nelson - Junior Hydrologist

Cheryl Hillier - Howser - Field Technician

All of which is respectfully submitted,

Andy Shadrack

Co-Chair North Kootenay Lake Water Monitoring Project