

Meeting Minutes

Similkameen Watershed Stakeholder Advisory Committee Meeting

DATE: June 14, 2012

LOCATION: Snaza'ist Discovery Centre, 161 Snaza'ist Drive Hedley, BC V0X 1K0

IN ATTENDANCE:

SWSAC Members Brian Mennell, George Hanson, Ian Walters, Lee McFadyen, Linda Allison, Lynn Wells, Norm Parkin, Robert Thurston, Roger Mayer, Ron Harkness, Walter Despot

RDOS Staff Stephen Juch
Technical Nancy Allison, Upper Similkameen Indian Band
Tracy Lawlor, Lower Similkameen Indian Band
Ted van der Gulik, BC Ministry of Agriculture

Facilitator Janice Johnson

Recorder Angela Hook

Meeting was called to order at 10:05 am.

JANICE: Review of previous minutes

COMMENT: Appreciate format and transparency

JANICE: Provides summary of TAC meeting

COMMENT: Good to have at least one SAC member at TAC meetings – if any of the four who expressed interest cannot attend, Walter has offered to sit in.

QUESTION: Will the TAC members stay on long term?

The TAC will be asked at the end of this process (drafting of Terms of Reference), if they would like to continue to provide input for drafting of the Plan.

COMMENT: Ensure the Terms of Reference appoints a TAC for next step. In section; 3.8.3 Key Stakeholders

Regarding the name for the Plan... it has been recommended not to call it a Water Management Plan (save confusion as it is a NON-regulatory plan)

Suggestion #1: Watershed Sustainability Plan

Suggestion #2: Watershed Plan – unanimous agreement (amended)

Correction to previous minutes: E. Risk Management

ADD 'quality' to first paragraph (May 15 Minutes amended)

QUESTION: what do we mean by "source water"? Change to "watershed sources" (May 15 Minutes amended)

BRIAN: make sure there's a mechanism for localized force to respond to government acts, add to Terms of Reference (ToR Draft 1: 3.10 Governance objective 3 and 4)

GEORGE: moves to accept May 15 Minutes as amended in substantive form. Seconded by Lynn.

ROGER: Error in Summit report regarding Columbia River Treaty - Summit is in error as the **Similkameen and Okanagan rivers are not part of the Columbia River Treaty**. They are getting the discussions with the International Joint Commission which manages International Water ways mixed up with the Treaty. They are two separate and distinct documents and management regimes. Nowhere in the Treaty is the Okanagan or Similkameen mentioned.

TRACY: there will be an impact on Arrow Lakes (reservoir), which flows into the Columbia, etc okanagan water system... Okanagan River Restoration (ONA) salmon.

BRIAN: may have an impact.

ROGER: water controller says it is not part of Treaty

EMAIL FROM BRIAN:

I think that many of us have concerns about what jurisdictions the USA has over the flow and control over the activities that we as Canadians involve ourselves with the river.

I think that we are all making assumptions that because there is headwater drainage from tributaries into the Similkameen originating in the USA that they have some rights to it.

In the International Boundary Water Treaty Act 1909 it states that it does "not include tributary waters which in their natural channels would flow into such lakes , rivers".

Why is the water flow monitored, is it strictly for information for the IJC and its deliberations concerning the Zozel dam in Osoyoos or are there other reasons? Is there any minimum flow obligation that Canada has when it crosses the border? (Added: Other International Issues and Obligations and an Objective 4 under International Waters 3.6)

From what I can see as a layman, the only important item in the treaty that would affect us would be Article IV concerning building dams or diversions.

Review/revisions to DRAFT TERMS OF REFERENCE (changes are highlighted in yellow on DRAFT 2 copy)

1. INTRODUCTION TO THE SIMILKAMEEN WATERSHED

Paragraph 1 – **REWORD** – International River section and authority (amended)

Paragraph 2 - Official low flow is August 1 to end of October - significant demand for water mid-July to mid-October

Paragraph 2 – **COMMENT:** The Similkameen River, has always experienced low fish productivity due to it being a low nutrient river, and low productivity in other creeks and rivers that are tributaries to the Similkameen is due to ice scouring (amended)

Paragraph 2 – Human activity (not just climate change) having a negative effect on watershed too, such as lose of wetlands (amended)

Paragraph 3 – ‘This’ targeted conservation area rather than ‘The’ area (amended)

LEE: one of 3 or 4 endangered ecosystems in Canada – I believe Environment Canada has designated the Lower Similkameen and South Okanagan as one of the four most endangered ecosystems in Canada www.obtwg.ca/reg_description.html

JANICE: need source as Summit did not say endangered, nor in Biodiversity report

TRACY: trans-boundary issues... species and ecology. Americans have a good ecology program

Paragraph 4 –

ROGER: actually, licensing is still available, since the 50s/60s they’ve required backup during low flow to meet licensing requirements. So, as long as you can provide storage... the Similkameen Improvement District was formed to provide back up and storage for those who did not have that capability. (amended)

TED: as far as the Province is concerned, it is fully allocated, and advised against stating differently in ToR. The average user cannot get a license.

Paragraph 5 – **LINDA:** should use 2011 census or at least add it (amended)

DESCRIPTION OF THE WATERSHED

1.1 OVERVIEW OF THE WATERSHED

Objective 1: Include History of Data on the Similkameen Watershed, and add Similkameen Watershed History (amended)

PRESENTATION: Ted van der Gulik, Senior Engineer
Sustainable Agriculture Management Branch
BC Ministry of Agriculture

Noted: Creston Valley has similar interests...

Review of BC Gov publication - Living Water Smart

1. Requires agriculture to be 33% more efficient by year 2020
2. Made commitment to reserve water for agriculture
3. Measure and report all large water users (7+ acres) 250 cubic m/day
(Janice will email – Living Water Smart doc, website, and water bucket site)

Ag Water Strategy

- Irrigation scheduling
- Efficient system

- Uniform system (usually where we fall apart... especially in landscaping)
- Design standards (irrigation industry association of BC) need people trained to do this
- CIT certified irrigation tech, program started about 5 years ago...
- CID certified irrigation designers – higher level (<http://www.irrigationbc.com>)

ONLINE TOOL: irrigation Scheduling calculator...hooks up to a climate station (visit <http://FarmWest.com> to see where they are located).

Reserving Water for Agriculture:

- Ag uses 64% of water
- Golf/backyards 20%
- Irrigation uses 85%

Download Similkameen report (and Okanagan report) at www.waterbucket.ca
Shows farms that are not currently irrigating

Water Reserve: what are principles?

- Need to look at other needs? Environmental, domestic, First Nations, etc.
- Water sources and supply
- 2006, developed a model to determine theoretical requirements, current and future water demand, groundwater demand, etc.
- Based on population growth, institutional needs, etc.

Okanagan Basin Waterboard (www.obwb.ca)... interactive tool to view water use (ie: 3 gallons of water for every gallon of wine produced at Jackson Triggs)

Land use inventories – data collection, farm by farm

Re-survey allows view of change in demographics – useful for Ag Planning
Snapshot of moment in time

- **Ag Plan** – need to do land use inventory first
- Easier to get funding for Water Plan (database is the same)
- Irrigation Water Demand Model – map sheet
- Only capture what we can see from the road for First Nations
- Mapping using aerial photography.
- Do not give out individual farm information
- Public can read reports.
- Students go around to each property... drive by
- Crop, irrigation system, soil, climate... needed to calculate
- Generating a new climate data set/grid... original one did not work.
- (based on Okanagan study...32000 grid cells with daily data over 30 years)
- Generate data, graphs
- For Similkameen, have 1961-2007 data using 500m grid
- Working on future (now-2100)
- Climate change info... coming soon

- Run different scenarios for water demand model.
- \$200,000 funding originally to gather data.

Crop coefficient curves...

- Model will calculate demand out of aquifers
- Results of model vs. measured is pretty good
- Model is helpful for planning
- See reports at <http://www.waterbucket.ca>

Ron Fretwall – our modeler, you will have to put money aside to hire him to generate scenarios for your area.

Okanagan project was \$3M, this part was \$500,000... Summit coordinated the Okanagan project supply data.. they figured a lot of that out. Help from government team was huge (50 people)

DEM model: should we be raising a dam? how much snow pack? etc...?

Okanagan Irrigation Management Tool...

- Hook realtime climate data to demand model
- Tool to manage info for farmers, water purveyors
- Challenge: changes/new data, data entry/collection cost

Allocation: 5 gallons/minutes
21 inches for the year

TED: New Water Act is going to include groundwater.

If we're going to manage our water properly, need to do consider that.

Little story: Min. of Environment get an email from farmer asking

"I've got a license on Kettle, I've also drilled a well... will I have to license the well?" The answer isn't clear. He got 4 different answers...

TED: confident Province will move ahead in a manner that is positive.

TED: example: we did Workshops on agriculture, how it works, etc. 30 people each.

Changed their perception of agriculture/irrigation. Good understanding... they are the ones who are writing the act.

Important to educate decision makers (non-farmers).

(Ted's slide show will be available on RDOS site – suggests tools get referenced in ToR – communication plan)

BC Water Act Modernization document is also located at this site along with Discussion Papers.
<http://livingwatersmart.ca/water-act/>

Also web links for BC Ministry of Agriculture: Agricultural Irrigation Demand Model:

<http://www.waterbucket.ca/>

<http://bc.waterbalance.ca/water-balance-model/>

Break for lunch

Continue with review of Terms of Reference (Draft 1)

QUESTION: Standardization and coordination of purveyors and suppliers? Where is that dealt with? There are 8 water purveyors (Irrigation Districts) in the Similkameen Valley.

From pg. 11 SAC May 15 Minutes A future goal might be to have all 8 water purveyors (irrigation districts) connected throughout the valley (same governance models, standards, and communication, while still maintaining autonomy

Formation? ... develop a group? ... how to do this? ... roles? ... get them all to meet.

(Added to Terms of Reference under 3.10 Governance Objective 2)

1.3 EXISTING WATERSHED GOVERNANCE

ADD: Other water systems in the Similkameen Watershed (amended)

- The Apex Circle Water System
- Lower & Upper Similkameen Band Water Systems [community wells]
- Missezula Waterworks Authority

Objective 1: **CLARIFY** (amended)

Objective 2: **ADD** Agriculture (amended)

2. WATERSHED DATA & DATA GAPS

Objective 1: **ADD** land use (amended)

Objective 4: **BRIAN:** Historical flows. Identify whether there is a correlation between annual precipitation and flows decreasing... assumption that it is due to consumption. [**ADD** need to determine whether the water table is affected by climate change or consumption] (amended)

Objective 7: Aquifer mapping - **COMMENT:** would be good to divide large aquifer 259 into smaller units for management purposes

COMMENT: ADD to Data Gaps: Proposed National Park Reserve. There is currently a proposal to establish a National Park in the RDOS which would include lands in the lower Similkameen watershed.

(Wording for the new Objective 10: The SWP will research and comment on the potential impact and benefits of a National Park Reserve on the Similkameen watershed)

3.5.1 WATER SUPPLY & DEMAND

Objective 4: **TRACY:** Snohomish County Public Utility District (PUD) is looking at another strategy for Enloe Dam – tunnel, turbines

Objective 5: **COMMENT:** reference Hedley dam.

LYNN: Used to be 2 dams in the Hedley area... one existed until 1972 (flood). Other one was on Similkameen, built by the mine around 1904. Ice jam, caused them to blow it up. Footings are still there. (amended)

BRIAN: ADD “and other water storage options” (amended)

QUESTION: How is Water Storage defined? “change natural state” – **ADD TO GLOSSARY** (amended)

Also look at Metthow Basin report on water hold back

Objective 7: **ADD** (e.g. The Irrigation Model presented by Ted ... describe how this tool can be utilized)

Added as Objective 8: The OBWB has developed an online tool – Streamlined Water Use Reporting Tool (SWURT) that enables large water users to report their water use on a monthly basis to the provincial government (Summit pg 6-5). The tool provides information on current water use and can be used in developing water management strategies. The SWP will consider utilizing this tool for the Similkameen watershed.

3.5.2 WATER QUALITY

2nd paragraph

COMMENT: what measurements (identify) and what water quality objectives (amended)

BRIAN: there’s a high coliform and E. coli count - Keremeos.. correlation report (amended)

QUESTION: Who is EPA and what does EPA’s arsenic criteria mean (amended)

BRIAN: Arsenic shows up high on Palmer Lake... accumulating

Arsenic also from natural sources (amended)

TRACY: Band tested fresh water trout... no levels of arsenic in fish

Objective 2:

LINDA: also the coal mine in Princeton who is monitoring on Tulameen and Associated Creeks Huldra Silver Mine on the Tulameen River, Hedley Mine, Nickel Plate Mine (amended)

LEE: Interior Heath, records of sub division potable water

BRIAN: another place to access information is Agriculture – under the FoodSafe program, they have to perform potable water checks. Certified Organic growers also have to. (amended)

RON: paper article – had something about Princeton – 4 monitoring sites – will look for article

Objective 3:

COMMENT: reclamation status on old mines (amended)

COMMENT: What about monitoring of old, abandoned mines? (amended)

COMMENT: parabens and mercury (added mercury)

COMMENT: Wolf Creek, Apex, (amended: waste water treatment plants)

COMMENT: composting facilities (amended)

ROBERT: 80,000 gallon septic tank?

COMMENT: good to get data on contamination from decommissioned mines, current mining and on mining claims (amended)

DELETE: (amended)

- Old small placer mines near Princeton & The Tulameen River
- Waste water treatment plants (Allison Lake, Princeton, Keremeos)
- Industrial Landfill site (one near Princeton – identify others)
- Copper Mountain Mine with seepage from tailing impoundments
- Arsenic & Cyanide near Hedley

REPLACE WITH:

- Mining operations – (see page from tailing impoundments)
- Mining operations – reclamation status on old mines, and on abandoned mines
- Waste water treatment plants
- Industrial Landfill sites
- Composting facilities

Objective 4:

COMMENT: ADD Highways - salt (amended)

Objective 5:

COMMENT: Risk 'Assessment' – rather than Management. Don't want to be responsible for 'managing risk'. We want to have the authority to assess and recommend. (amended)

QUESTION: What is "an ongoing process" as an end? Will people continue to use/follow the Plan? (Deleted 'ongoing')

Objective 6

GEORGE: Need to incorporate 'land use' (amended)... to be sure there's not high density development near the river, etc in the future. OCP's should to line up with objectives in SWP.

3.5.3 ECOSYSTEM PROTECTION & RESTORATION

COMMENT: 1st paragraph and 1st line: Remove "land, air quality and biodiversity" (wording from the SVPS Sustainable Strategy) (amended)

Objective 3:

GEORGE: ADD OCPs that do not recognize densification along rivers (amended)

TRACY: suggests good resource – cowsandfish.org

Riparian areas/protection is big right now... (part of 3.5.3 Objective 5)

3.5.4 IMPACTS OF CLIMATE & CLIMATE CHANGE AND LONG TERM SUSTAINABILITY

LEE: less snow pack, more summer rain, due to Cascades. Also El Nino/Al Ninja...

GEORGE: Maybe also mention these effects get magnified by forestry practices.

LINDA: has a hard time including this, pointing finger without a scientific study to refer to.

LINDA: Maybe "increased harvest because of pine beetle"?

IAN: present forest practices "MAY" exacerbate our climate change model.

LEE: Don't want to zero in on one thing... there are other factors

WALTER: Forestry industry is not doing anything wrong...

Other things that contribute that may appear to be 'climate' related.

LINDA: please **ADD** pine beetle as a factor (under biodiversity) (added, 3.5.3 Objective 3)

Min of Forest has some pine beetle modeling on watersheds.

LINDA: 2011 overview of forest health, will provide web link (for scientific reference)

Objective 1:

COMMENT: regarding first sentence – Take under advisement, the models indicate trends – remember they are trends – don't want it to be a catch all. Climate change is a component, land use activity going on too. ('trend' added)

QUESTION: what period is the modeling being done for? (Modeling experts to determine period, along with TAC)

Many factors: Decrease snow, increased rain, less snow, more snow.. what other things occurring? Be careful not to blame all on climate change... what factors on land are contributing to what can be 'perceived as' climate change (ie: pine beetle etc.)

COMMENT: **ADD** potential expansion of available agricultural lands (amended)

Continue with 3.6 INTERNATIONAL WATERS next meeting.