Cowichan Water Use Plan
Public Advisory Group Meeting #2
Meeting Notes – February 1, 2018

Meeting Highlights

- The Public Advisory Group (PAG) was provided a progress update on the WUP planning process since PAG Meeting #1 on November 22. A Lakefront Technical Sub-Group was formed to support the PAG and has held two meetings to date. The Aquatic and Riparian Technical Sub-Group has met twice since the last PAG meeting.
- The PAG reviewed and discussed a preliminary scoping assessment of the issues and interests and how they would be incorporated into the Cowichan WUP process. As well, the PAG reviewed a preliminary organization of issues into different planning objective categories.
- The PAG reviewed the hydrological modeling that was undertaken for a number of illustrative "bookend" water use alternatives. The modeling showed how lake levels and river flows would be impacted based on future climate change predictions in combination with modifications to the weir, or through the installation of permanent pumps to be used when needed, or through changes to the rule curve in Cowichan Lake. Some insights gained through this assessment included:
    - Lake levels in the future will be slightly higher in the early winter period as precipitation will more often be rain rather than snow at higher elevations;
    - Spring and summer inflows into the lake will be significantly less in the future. A cursory assessment shows that historical spring/summer droughts (that occured about once every 10 years) will be the new normal by the 2050s (i.e., occurring on average every other year). The reduction of spring/summer lake inflows will in turn have potentially severe consequences on most water uses that have come to rely on the current lake levels and river flows in the summer without considerably more storage.
    - Based on the illustrative 'bookend' alternatives: a) while raising the weir provides for additional storage in wetter years, there is not enough water in the system during dryer future springs / summers to maintain the current rule curve (in 4 out of 10 years lake levels do not reach the top of the existing weir, let alone any increases in height); b) pumping bookend alternatives were the best at maintaining target river flows into the late summer and fall periods, however they resulted in lake levels dropping by as much as 1.4m below historical low lake levels (i.e., below the "0" storage level); and releasing the current higher flows in the spring (of 25cms and 15cms) to the Cowichan River will make it increasingly difficult to store enough water to maintain target river flows through the summer and early fall in general.
- The PAG reviewed a preliminary set of draft performance measures (PMs) that were developed to better characterize potential impacts on specific water uses (e.g., fisheries, recreation, culture, lakefront properties, industry, municipal water supply and wastewater dilution, agriculture, etc.).
- The PAG discussed the results from the hydrological modeling and preliminary PM values and came up with new and creative (hybrid) water use alternatives that considered different combinations of weir modifications, pumping options, and changing the timing and target flows down the Cowichan River. These alternatives will serve as the basis of a full options assessment at PAG meeting 3 scheduled in March.

Meeting Objectives

- To review and provide an update since the last meeting
- To finalize the PAG Terms of Reference
- To review and discuss issues and the preliminary drafting of some preliminary objectives
- To review and ground truth a preliminary set of draft performance measures
- To review a partial assessment of the preliminary bookend alternatives that were modeled
- To discuss and agree to new alternatives (or strategies) to be modeled for PAG Mtg 3
- To review the next steps of the planning process

Meeting Agenda

8:30 am	Welcome and Update
9:00 am	Issues Scoping, Objectives & Performance Measures (PMs)
10:15 am	Preliminary Bookend Alternatives
10:45 am	Break – *15mins*
11:00 am	Assessing the Bookend Alternatives – Hydrology
12:00 am	Lunch
12:45 pm	Assessing the Bookend Alternatives – Draft Performance Measures
2:30 pm	Break – *15mins*
2:45 pm	Break-Out Groups: Creating New Alternatives
4:00 pm	Next Steps
4:30 pm	Adjourn

Meeting Materials

- Pre-Reading Package – Public Advisory Group Meeting 2
- Handouts
    - Updated Meeting Agenda
    - Bookend Alternatives Reference Sheet