



Hydrometric Data Requirements in the Okanagan

Prepared for the Water Stewardship Council

March 12, 2010

Outline

- **The current hydrometric network**
- **The proposed network**
- **Who is operating what?**
- **What needs to be done?**

Active hydrometric stations

Active Stations 2007	
Operated by WSC	25
Operated by others	39
Total	64

Discontinued Stations	
Operated by WSC	156

Okanagan Hydrometric Review

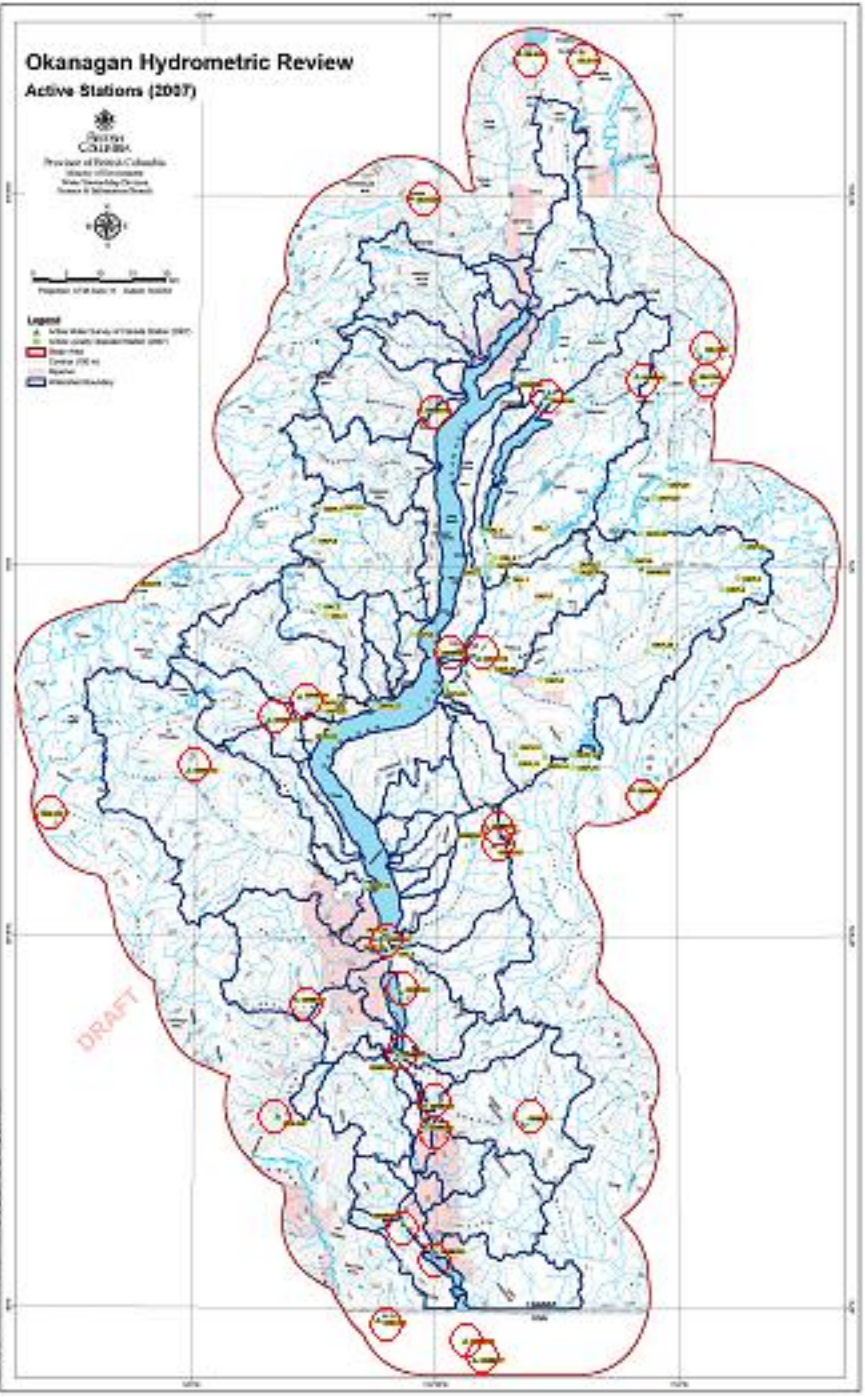
Active Stations (2017)


Province of British Columbia
Ministry of Environment
Water, Ocean and Coastal Sciences
Division of Water Science


Scale: 1:100,000
Projection: UTM Zone 12N, Datum: NAD83

Legend

- Water (blue line)
- Land (light green)
- Urban (yellow)
- Forest (dark green)
- Wetland (light blue)
- Shaded relief (brown)
- Topographic (contour lines)
- Hydrographic (depth contours)
- Hydrologic (watershed boundary)



DRAFT

Discontinued Water Survey of Canada stations

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Discontinued Stations



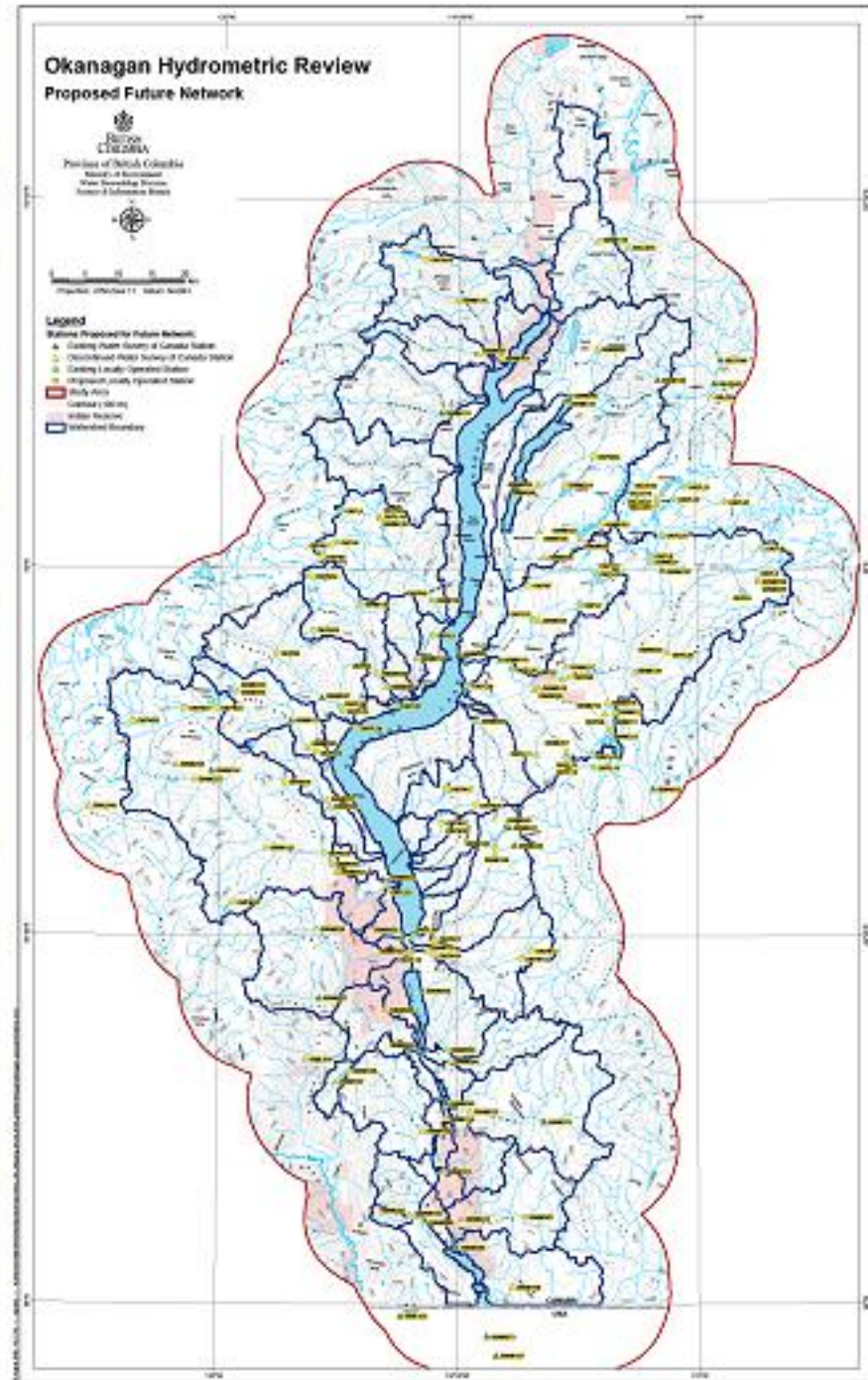
The proposed network

Proposed Network	
Currently active WSC	25
Active operated by others	32
Sub-total	57
Discontinued WSC	65
New (never existed)	28
Sub-total	93
Total Proposed	150

Okanagan Hydrometric Review Proposed Future Network



- Legend**
- Station Proposed for Future Network
 - Existing Water Quality or Current Station
 - Discontinued Water Survey of Canada Station
 - Existing Locally Operated Station
 - Impoundment Locally Operated Station
 - Study Area
 - Boundary (100 m)
 - Water Feature
 - Intersected Boundary



Recommended Network

- Proposed network of 150 stations
- 122 of the 150 to be water management stations that are either currently being operated by others or would be new stations operated by others.
- The remaining 38 stations would be operated by Water Survey of Canada, an increase of 13 stations.

What needs to be done?

What needs to be done?

Costs

- Construction
 - WSC all-year station - \$10,000 - \$20,000 per station.
 - Locally operated station - \$3,000 - \$6,000 per station.
 - WSC - \$195,000, Local- \$315,000, Total \$510,000.00.
- Annual operating costs
 - WSC all-year station - \$9,000 - \$12,000 per year.
 - Locally operated station - \$3,000 – \$6,000 per year.
 - WSC – \$399,000 Local - \$366,000, Total \$765,000.00.

Hydrometric Data

- Standards
 - WSC stations to be operated to the National Standards.
 - Locally operated stations to be operated to the RISC standards.
- Data archiving
 - WSC data archived in national hydrometric archive.
 - Data from all other stations be archived by the province.

Summary

- The current WSC hydrometric network of 25 stations in the basin is not adequate for the existing and future water management needs and regional hydrology needs in the Okanagan basin.
- To meet the long-term requirements for hydrometric data in the Okanagan basin, the network should be expanded to include most, if not all the stations 150 stations identified as Proposed Future Stations.
- The timeline for completing the network should be coordinated between the OBWB, the ministry and the water suppliers with the expanded network in full operation by 2013.

- The Okanagan Hydrometric Network should be expanded to the 150 stations +/-proposed in this report as expeditiously as possible.
- The OBWB should consider scheduling a workshop for all stakeholders, and the interested public to review the recommendations and develop an implementation plan.
- The province should implement a hydrometric standards system for data collection and archiving.
- The MoE and/or the OBWB should establish a permanent, managed data warehouse to archive all locally collected data.
- In addition to the hydrometric stations, six new climate stations are required on each side of the Okanagan valley at medium to high elevations to collect climate parameters that impact runoff.
- Water temperature data collection may also be considered in connection with fisheries and water quality concerns.



Thank You