Figures

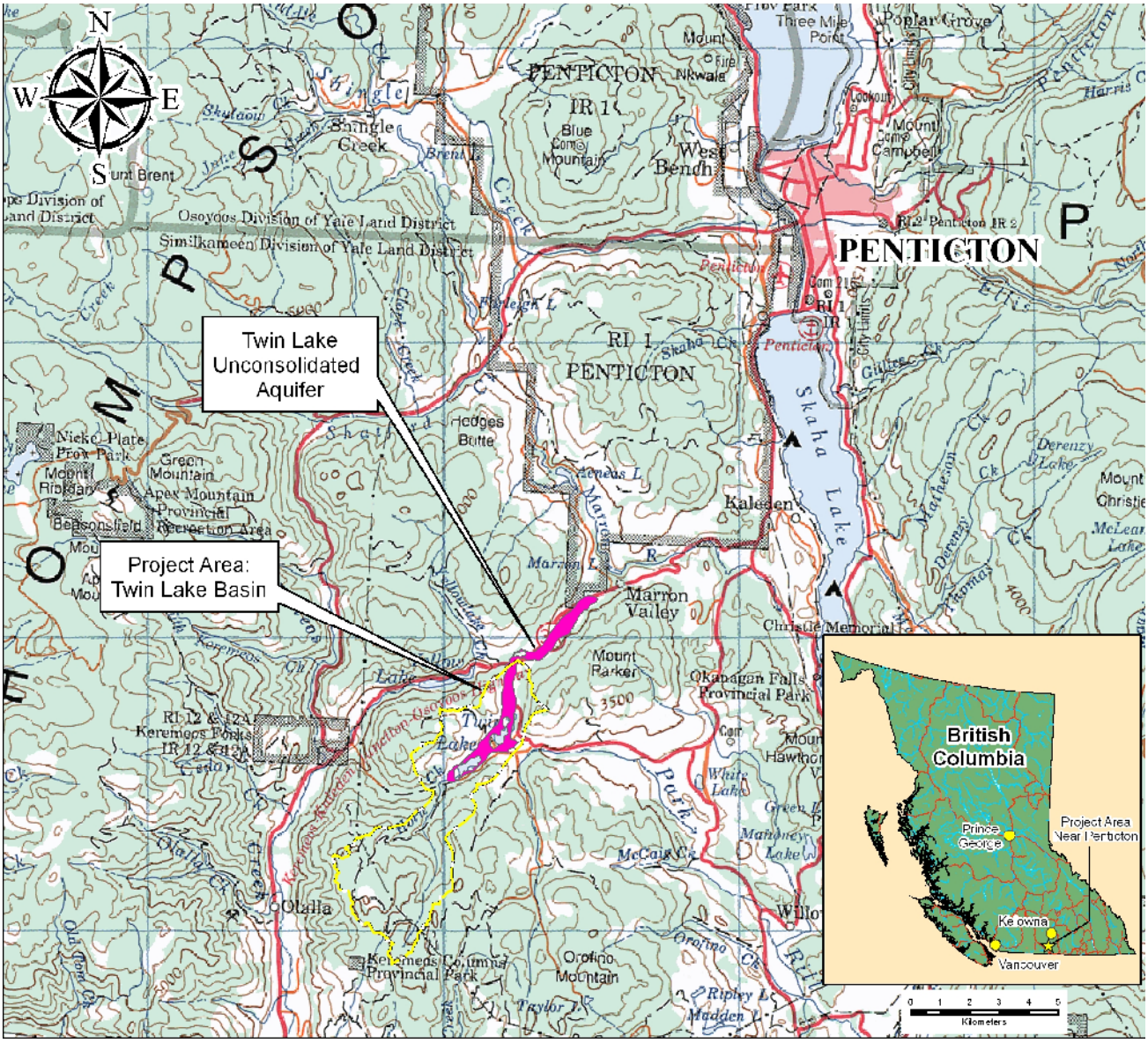


Figure 1. Twin Lakes site location map.

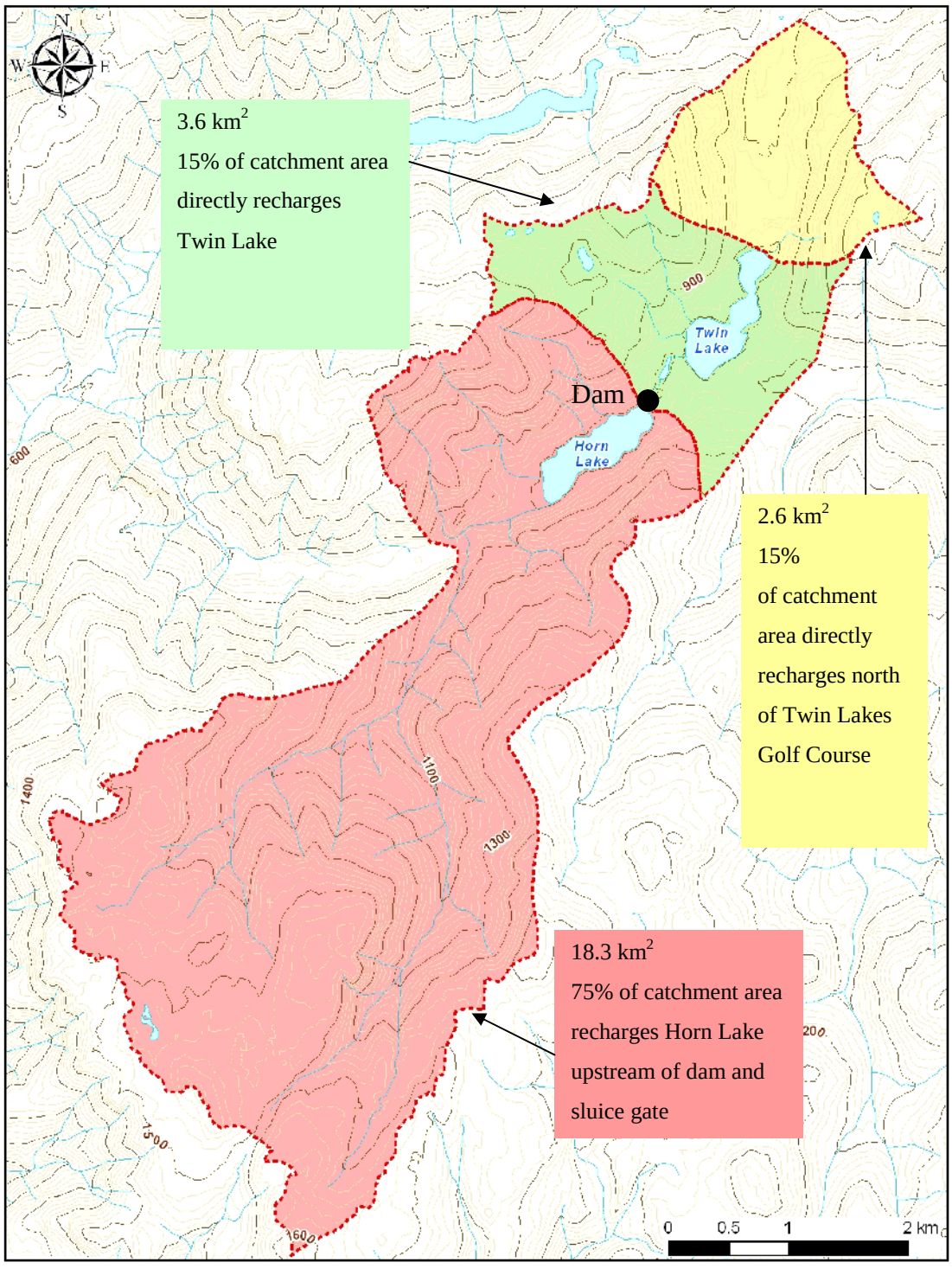


Figure 2. Horn Lake and Twin Lake catchment areas above Highway 3A.

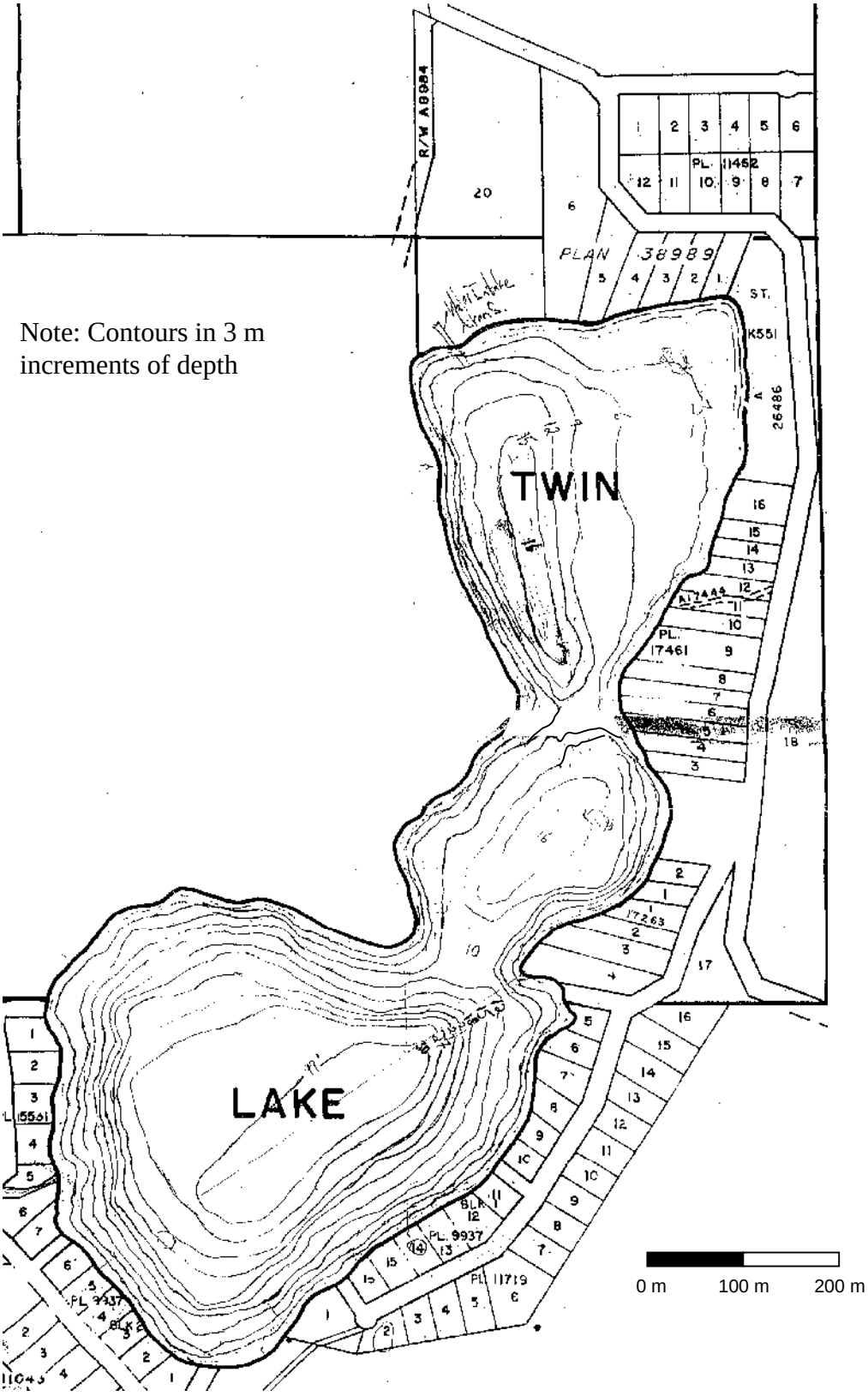


Figure 3. Twin Lake Bathymetric Map (August 2002).

Map source: BC Lake Stewardship and Monitoring Program

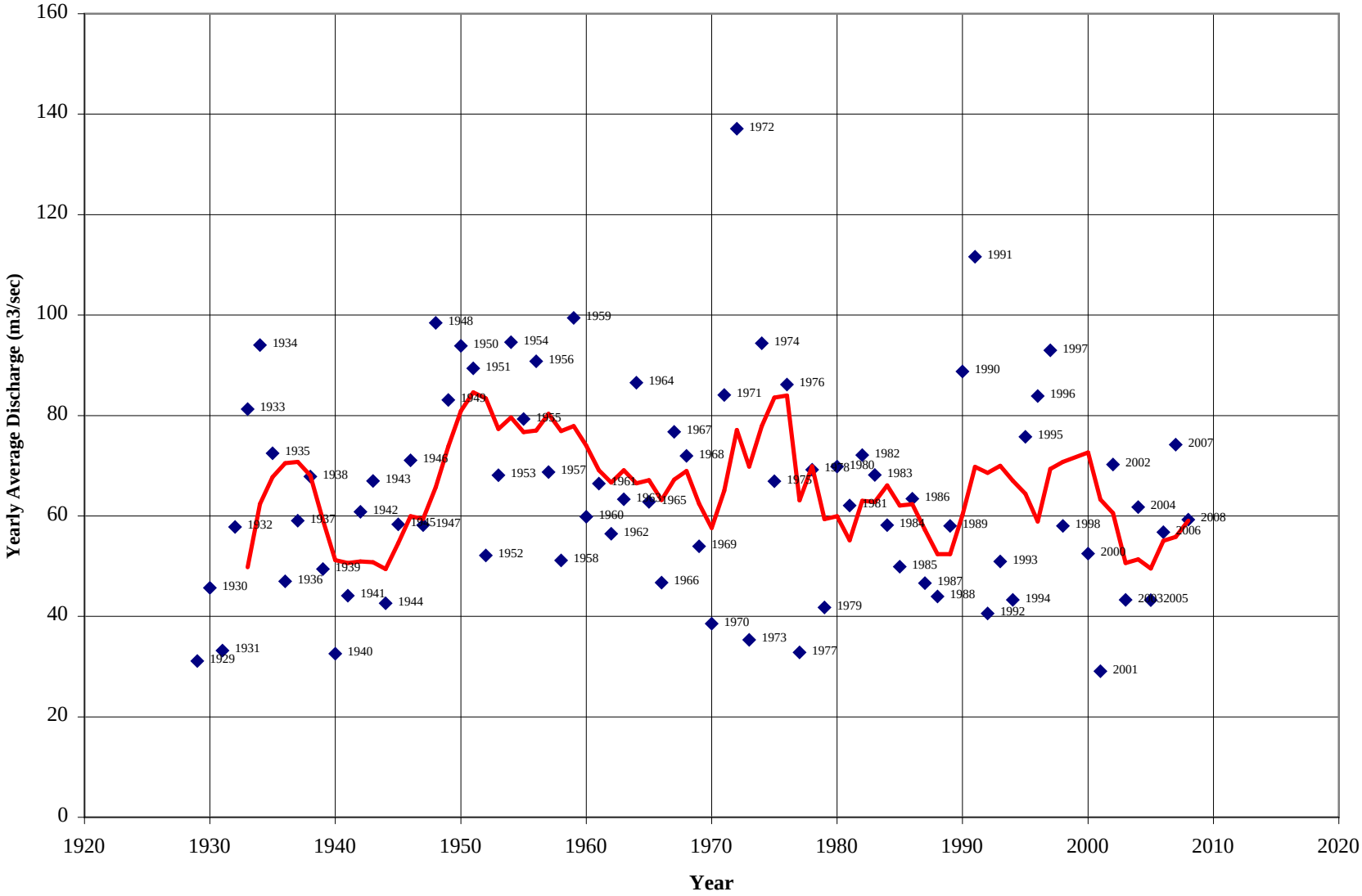
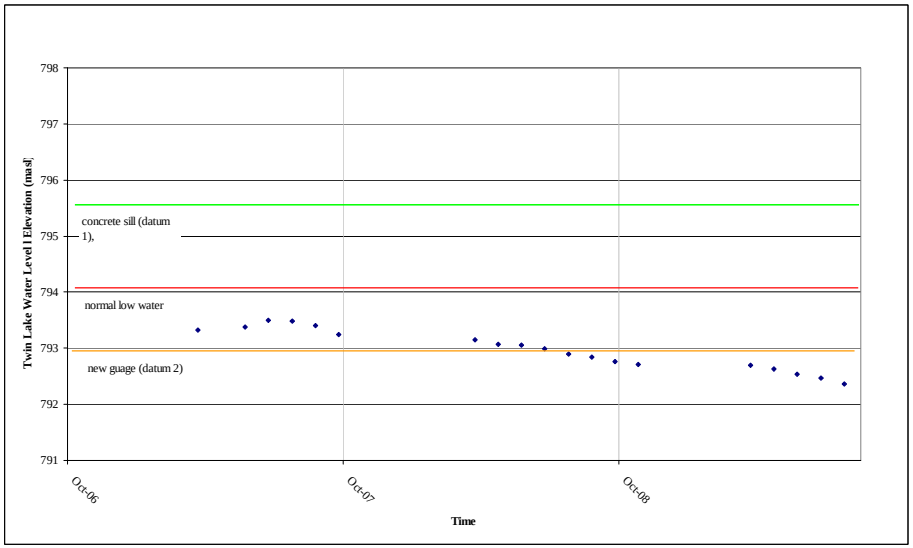
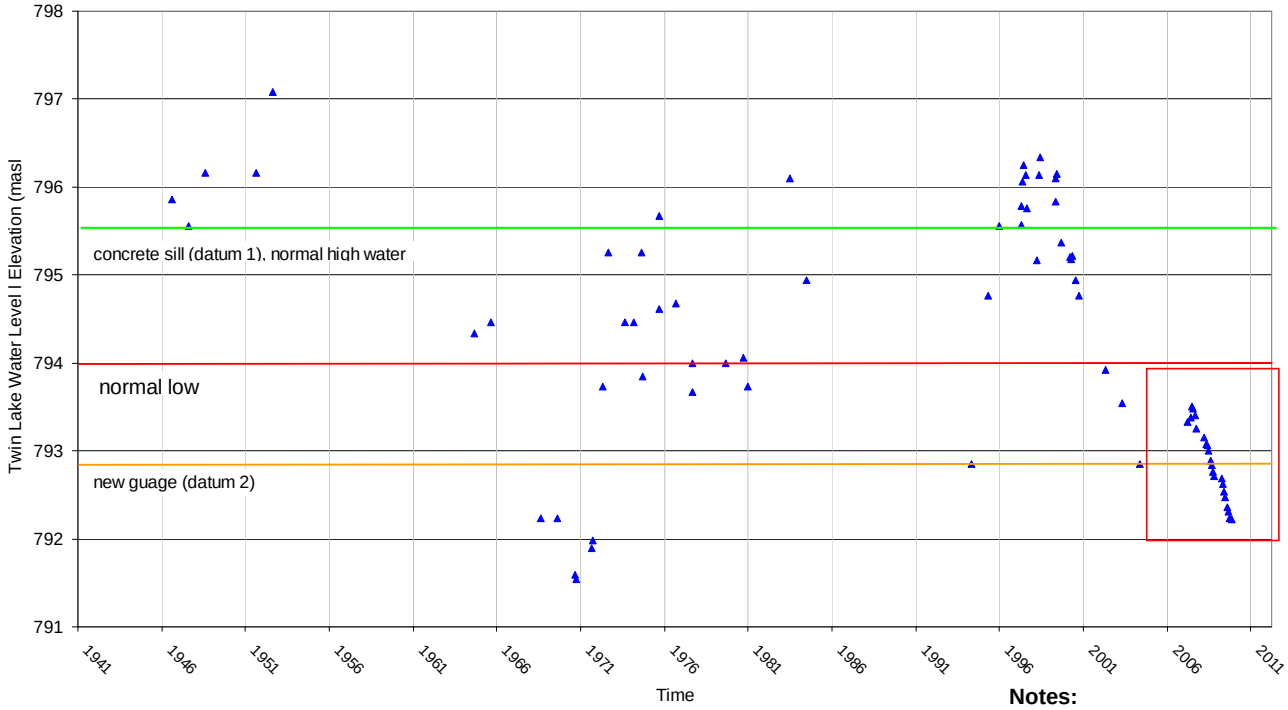


Figure 4. Similkameen River hydrograph at Nighthawk, Washington between 1929 and 2008, with five point moving average.

Source: Environment Canada





See expanded inset above

Notes:

1. 1998 was the last year that water was pumped from Twin Lake for flood control.
2. Lake stage has been declining since 2004.
3. Water level data provided by LNID.

Figure 5. Twin Lake stage between 1946 and 2009.

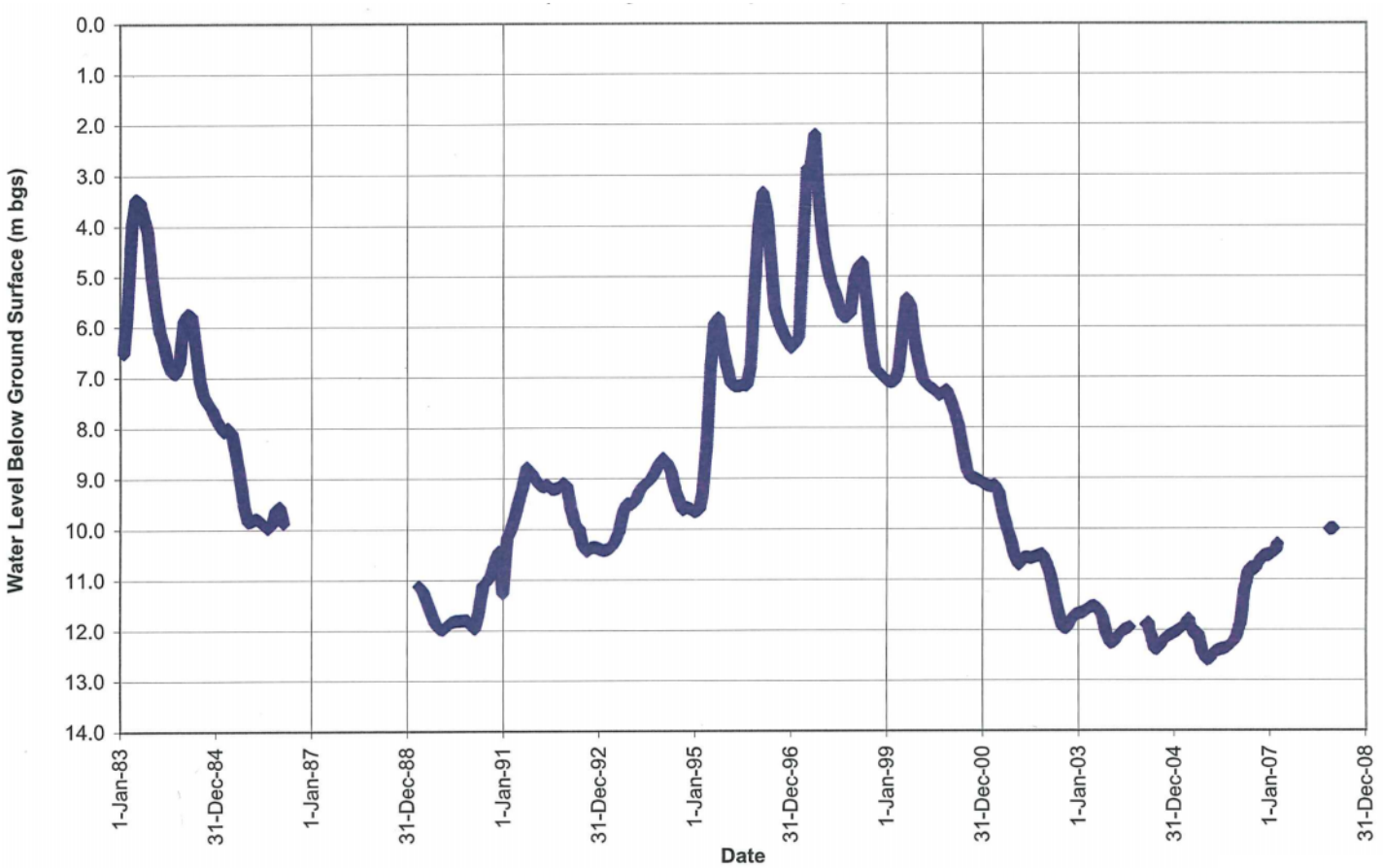
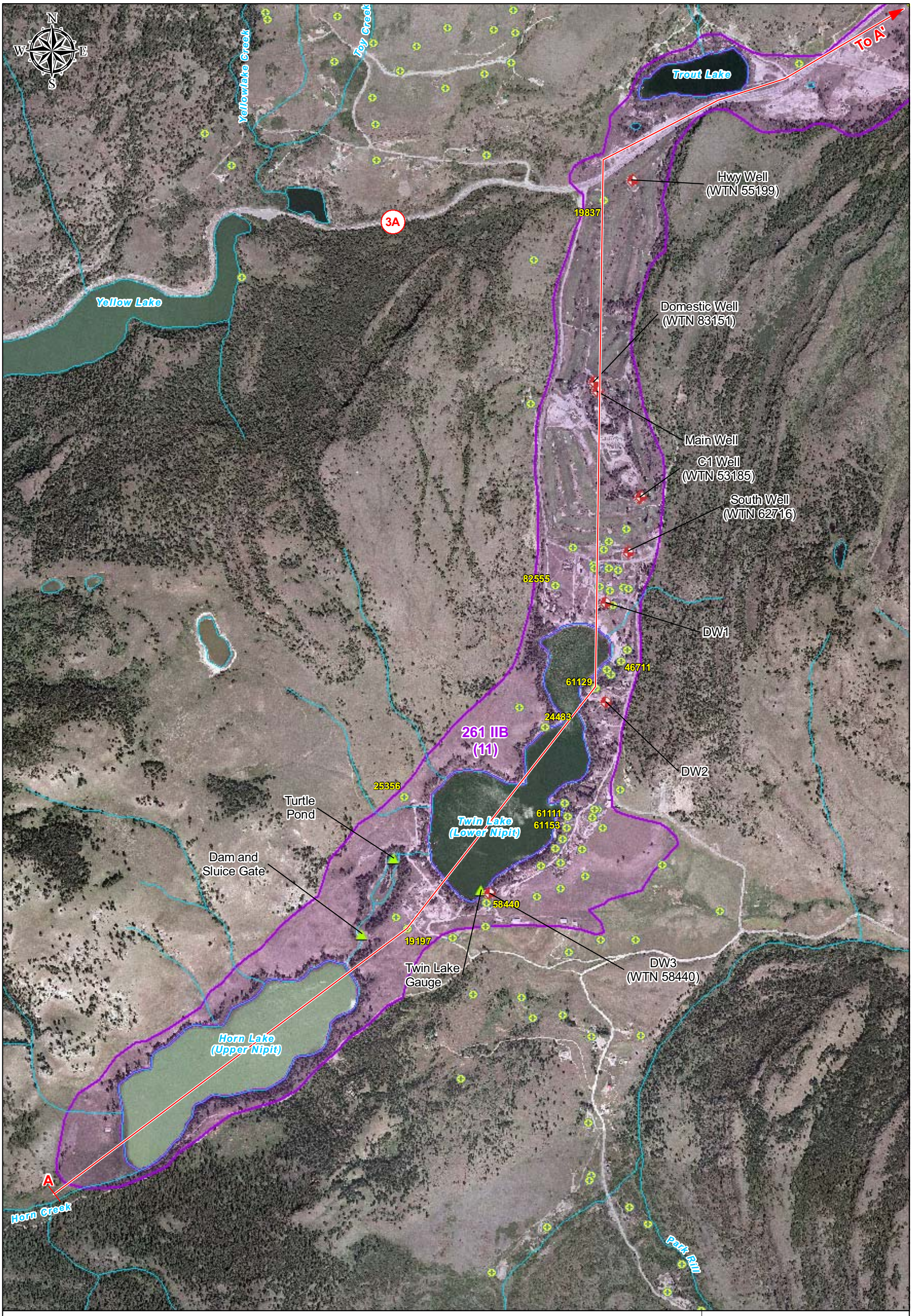


Figure 6. MoE observation well No. 282 at Meyers Flat (January 1983 to April 2008).

Plates



Well of Interest - Water Level Measured by Summit 2009

Features of Interest - GPS Located by Summit

MOE Registered Groundwater Wells (with well tag number)*

111 Groundwater Aquifer (with aquifer number)

20 and 100m Contour Lines

A-A' - Conceptual Hydrogeological Cross Section**

* Current MOE database may not include more recently installed wells **Wells 34033, 34516, 36306 used in A - A' do not appear on Plate 1

Image Date: March, 2004

Plate 1: Twin Lake Study Area

DATA SOURCES:
Imagery -BC WMS, 2009; Hydrography, Aquifers, GW Wells - LRDW, 2008

0 100 200 300 400 500
Meters

DATE: **May 2010**

PROJECT: **2009-8300.010**

DRAWN BY: **DA**

PREPARED FOR:
Regional District of Okanagan-Similkameen

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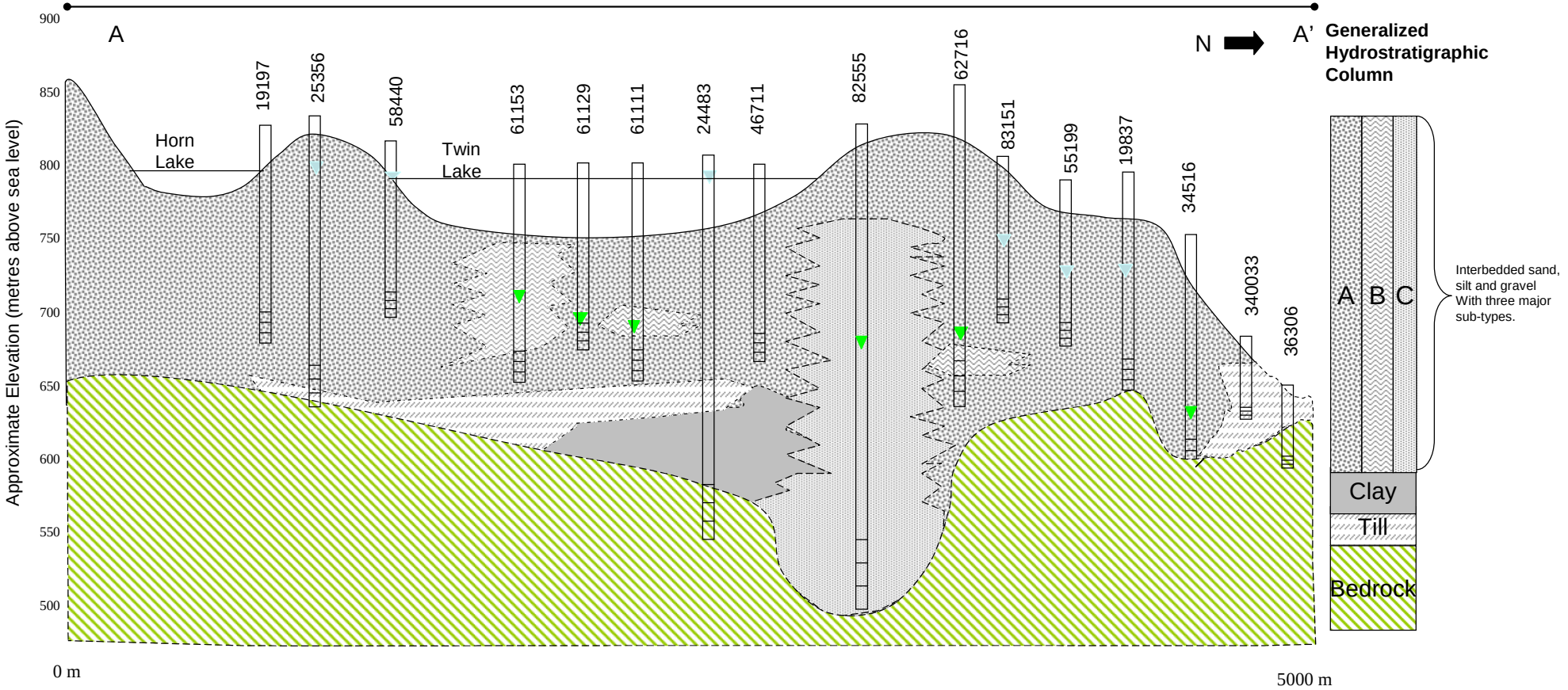

Notes:

1. Well Tag Number (WTN) are shown about the well.
2. Hydrostratigraphic description is based on mapped bedrock geology and interpreted MoE well reports
3. 3 X vertical exaggeration.
4. Refer to Plate 1 for location cross section transect, note wells have been projected into the A-A' transect.
5. **Not to scale.** Plate 2 is intended to facilitate development of the conceptual model of hydrostratigraphy within the Twin Lakes aquifer.
6. Water levels indicated are from driller's logs, measured at the time of drilling. Refer to Appendix B: Well Logs for lithology and water levels.
7. Note WTN 24483 is completed in bedrock and the water level indicates flowing artesian conditions

▼ Deeper water levels ▼ Shallower water levels

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Plate 2 - Conceptual cross-section(A-A') through Twin Lakes study area

PROJECT NO: 20098300.0101
DATE: May 2010
DRAWN BY: BRM
PROJECT: Twin Lakse Aquifer Capacity Study
PREPARED FOR: Regional District of Okanagan Similkameen

Twin Lakes Aquifer layers A, B and C
Interbedded sand, silt and gravel sub-types:
A = Interbedded sand and gravel with minor silt layers. Generally, shallow static water levels.
B = Laterally discontinuous interbedded sand and gravel, partially cemented. Little to no silt. Generally, deeper static water levels.
C = Interbedded fine to coarse sand and silty sand. Little to no gravel. Generally, deeper static water levels.