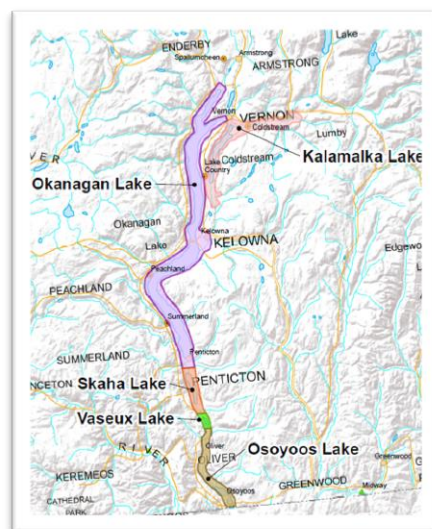




## What Is The Purpose And Scope Of This Project?

The purpose of the project was originally to capture the water level of the lakes in the Okanagan basin at their highest water levels during the 2017 spring freshet. The project was altered to follow standard BC NDMP data acquisition and derived mapping products. Thus, essentially making available topographic data based on LiDAR as well as corresponding orthoimagery to support flood mapping and flood management. This particular project covers the Okanagan basin from the northern limit of Okanagan Lake to the 49<sup>th</sup> parallel, including Kalamalka Lake and the Coldstream Creek basin to Lumby.



## What Are The Phases And Timelines Of The Project?

Phase 1 – Data Acquisition and Processing

- LiDAR Data Acquisition and Processing (May 2017 – July 2017)
- Aerial image acquisition and orthophoto production (May 2017 – July 2017)

Phase 2 – Access and Application

- River and Floodplain Modelling and Mapping (Sept 2017 - TBD)
- Other Local and Regional Applications (Sept 2017 - TBD)

## When Was The Data Acquired?

Data acquisition (flying) started May 29, 2017 and was completed by June 6, 2017. Aerial Imagery and LiDAR was acquired during the same period with a focus on highest water level for the lakes.

## What Are The Data Specifications?

LiDAR Data:

- 4 points/m<sup>2</sup> (ground returns)
- LiDAR point cloud (unclassified) accuracy

- Vertical +/- 10cm RMS
- Horizontal +/-35cm RMS

**Orthoimagery:**

- Standard orthoimagery - 20cm GSD

**What Data Products & Formats Will Be Available And When?****LiDAR Data & Products:**

- LiDAR point cloud data (unclassified or classified) is not a standard delivered data set
- Distribution of the LiDAR-derived products are provided in industry-standard data formats:
  - 1:2,500 BC Geographic System (BCGS) tile file naming, hydrologic enforced, hydro flattened
  - Gridded ESRI ASCII in NAD83/CGVD2013/UTM-Zone11
- Digital Elevation Model (DEM) & Digital Surface Model (DSM):
  - DEM - 1m gridded bare earth - August 15, 2017
- Georeferenced Hillshade in TIF format

**Imagery Data & Products**

- Raw imagery files and stereo models are not a standard delivered data set
- Distribution of the Orthoimagery is provided in industry standard data formats – for example:
  - 1:2,500 BC Geographic System (BCGS) map tile file naming, georeferenced to NAD83/CGVD2013/UTM-Zone11
  - TIF and/or MrSID format available
- Orthoimagery - 20cm color orthoimagery - August 15, 2017
- Delineated shore line vector data – August 15, 2017

**Who Can Access The Data?**

Data can be accessed by all levels of government (Provincial, Regional and Local Governments) and potentially other agencies that have the mandate to improve hazard mapping in particular flood plain mapping to support the planning, mitigation, response and recovery pillars of emergency management.

**How Can I Access The Data?**

Data is currently organised by 1:2500 BC Geographic System (BCGS) map tiles that cover the area of interest. Maximum file sizes should not exceed 2Gb to allow for multi-platform GIS analysis (i.e. ESRI, Global Mapper etc.). Further details of data formats, tiling, etc. are available upon request of the data.

Data can be accessed through a few mechanisms:

- Large areas: For example, full dataset, will be packaged on USB3 compatible hard drives and distributed (via courier)
- Smaller areas: A secure/password-protected web-based data storage/distribution system is currently being developed with individual files being compressed. Expected availability – September 2017.

**Are There Any Restrictions On Distribution And Use Of The Data?**

Yes. A Data Use Agreement will be required between the Province and agency or organization requesting the data. The agreement spells out terms and conditions attached to use of the data. This agreement and the corresponding procedures to facilitate data-sharing are currently being reviewed / redeveloped.

**For More Information Contact:**

GeoBC

Ministry of Forests, Lands & Natural Resource Operations and Rural Development

Email: [geobcinfo@gov.bc.ca](mailto:geobcinfo@gov.bc.ca)

- Please include the subject line "Request - EMBC LiDAR/Ortho Data"