

GIS & GOOGLE EARTH



Kent•Macpherson

BC EXPROPRIATION CONFERENCE
OCTOBER 26, 2018

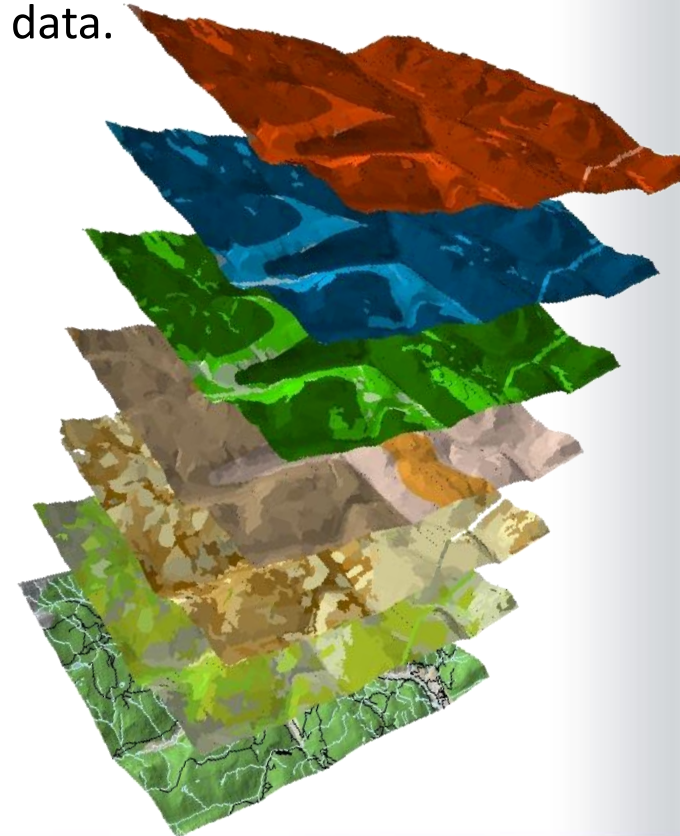
Presentation Overview

- Introduction to GIS
- Introduction to DATA BC Catalogue relevant to BCEA
- Introduction to Spatial Software & Tools
 - Google Earth
 - QGIS
- Typical Outputs and Value Add
- Basic Uses of GE



What is a GIS

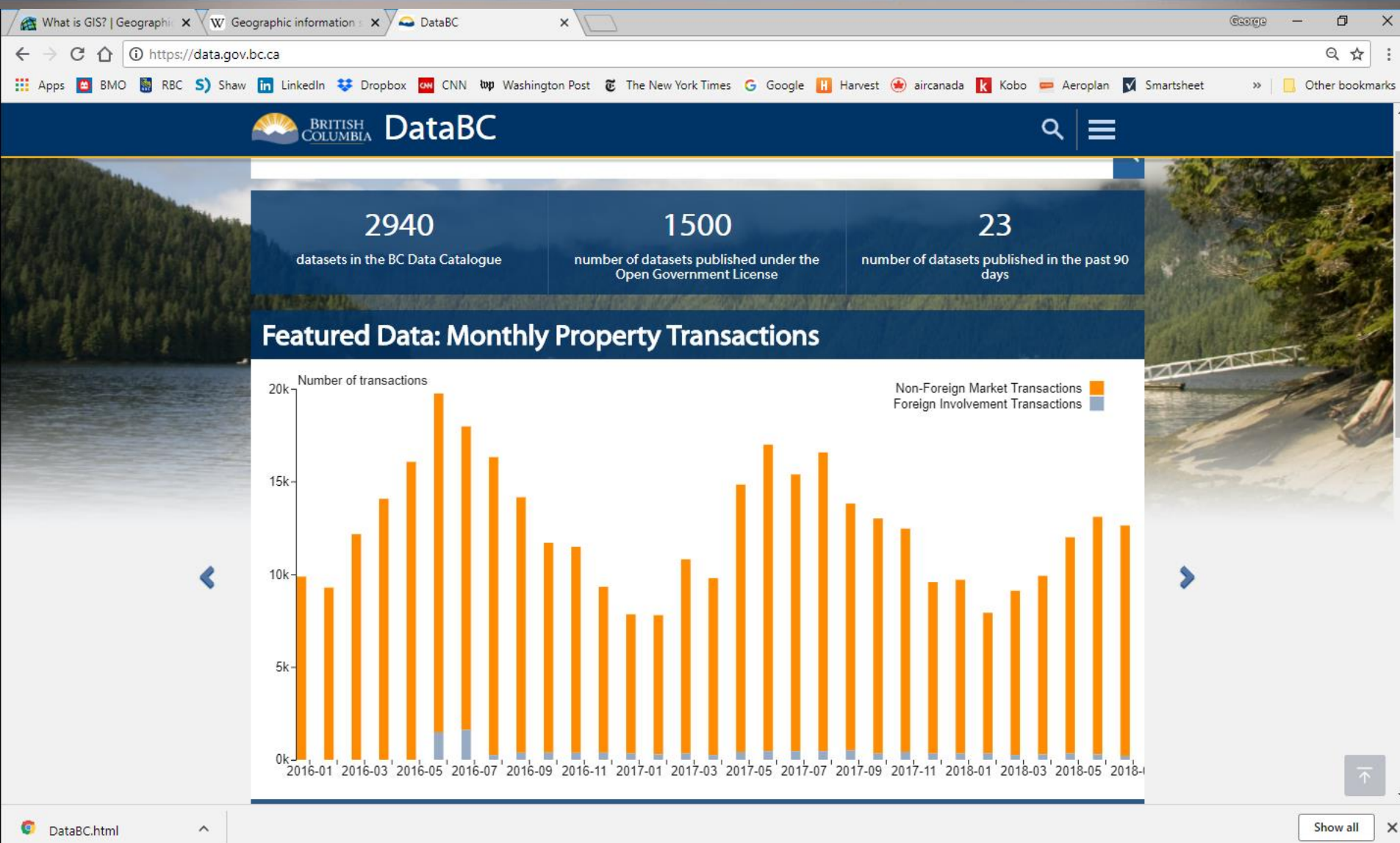
- **Geographic Information Systems** – A geographic information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data.
 - **Computer Systems**
 - Hardware
 - Software
 - **Data**
 - Base data – DATA BC
 - Analytical
 - **People**
 - Trained Professionals



How do you use GIS

- Maps
 - Hardcopy or digital representations of geographic data
- Data
 - Different kinds of data using spatial location
- Analysis
 - Understanding overlapping interests and making informed decisions
- Apps
 - Allowing for end users to better interact with visual data

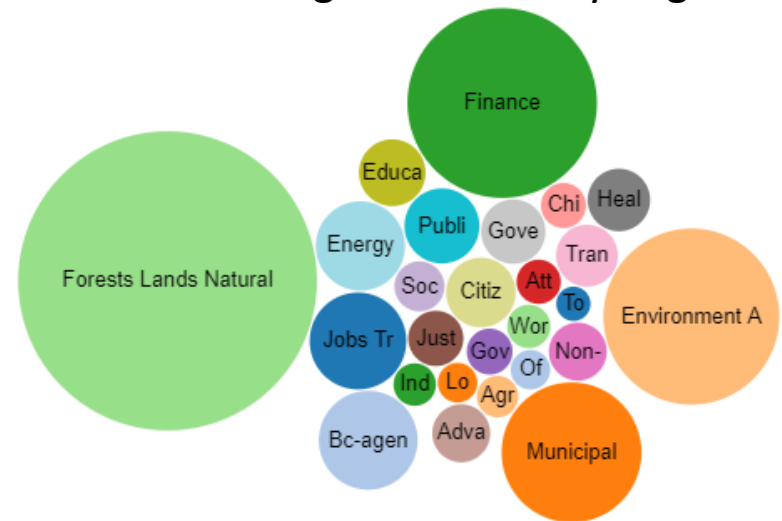
DATA - BC Data Catalog - DATA BC



Cadastral Fabric

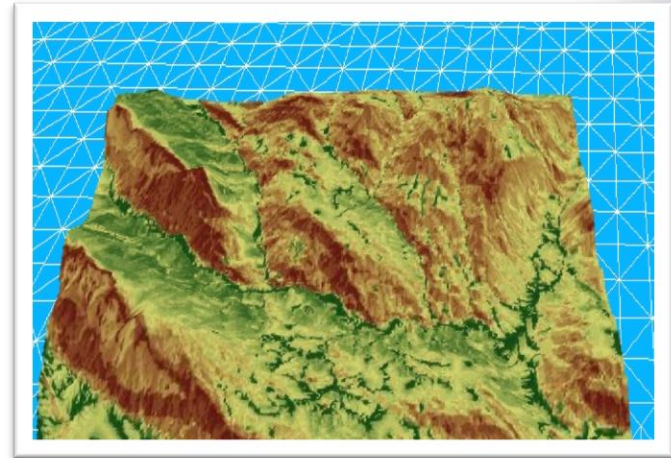
- Integrated Cadastral Fabric
 - What is it?
 - Why is it important?
 - How do I use it?
 - Where do I find it?
 - How much does it cost?

BC Data Catalogue Records by Organization



Other Data Analysis

- BC Vegetated Resource Inventory (VRI)
 - What is it? / Why is it important? / How do I use it? / Where do I find it? / How much does it cost?
 - Slope
 - Soil
 - Aggregate
 - Grazing Licenses & Leases
 - Water Licenses



Typical Outputs & Value Add

- Maps
- App Data – KML/Georeferenced PDFs
- Charts and Tables
- Trend Analysis

Back to Main Menu

Number of people in the household for each of these age groups:

18<21	29<35	54<65
21<29	35<44	65+

Section A: Demographic

1. Age: 2. Sex:

3. What is your social marital status:

4. How many family generations live in your house:

5. What is your household type:

6. Within your household, what is the relationship with the children:

7. How many people live in your house:

8. How many adults (18 yrs or older) live in your house:

9. How many children (17 yrs and younger) live in your house:

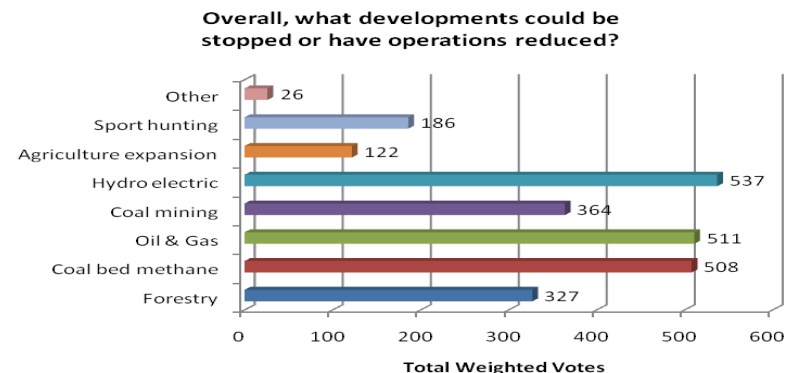
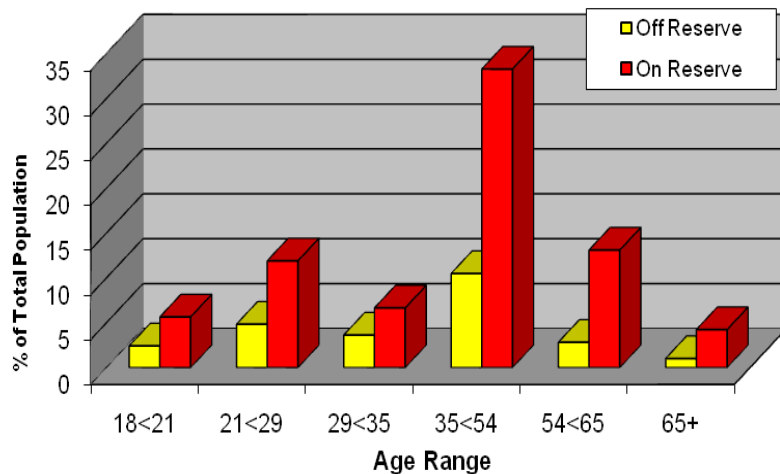
10. What band are you a member of:

11. Besides English, what is the main language household members are using/speaking:

12. What is your comfort level for speaking English:

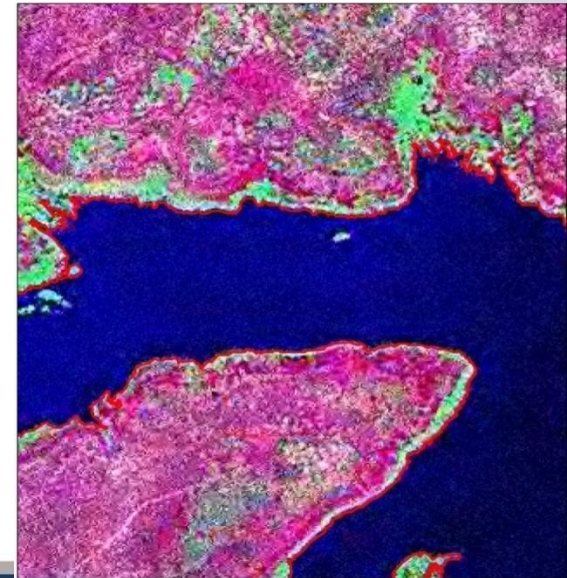
13. What is your comfort level for writing English:

Records: 1 of 1 | No Filter | Search



ArcGIS/QGIS Tools

- ArcGIS Desktop
- ArcGIS
Analytical tools
- QGIS Desktop
- QGIS Analytical
tools



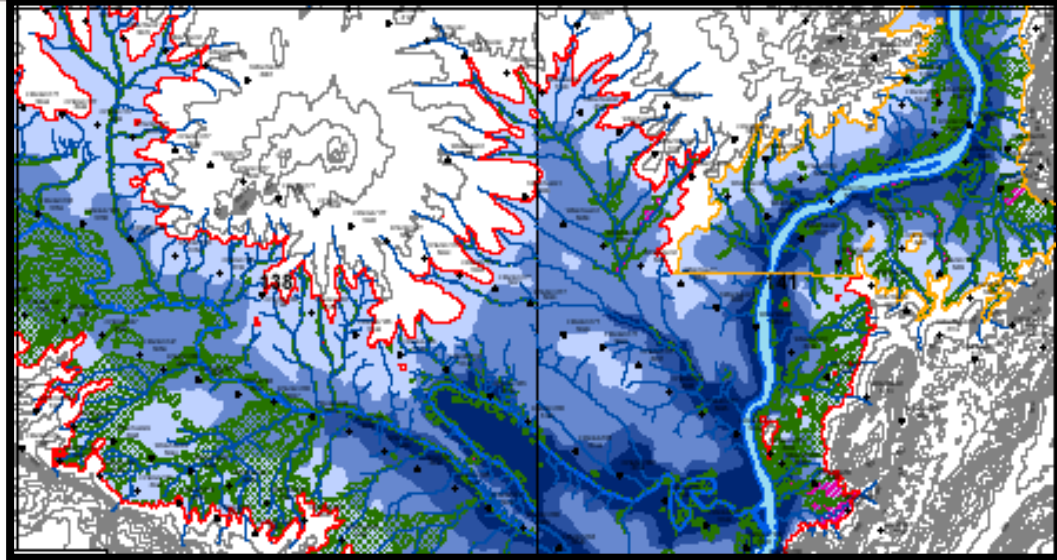
Spatial Tools

- Google Earth
 - What is it?
 - Where do I get it?
 - How much is it?
- Avenza (PDF Maps)
- ArcGIS
- QGIS



Overlay and Analysis

- Cadastre
- Slope
- Timber
- Aggregate
- Water
 - Volume
- Environmental Concerns
- Deeded vs Leased by Location
- Economic change analysis

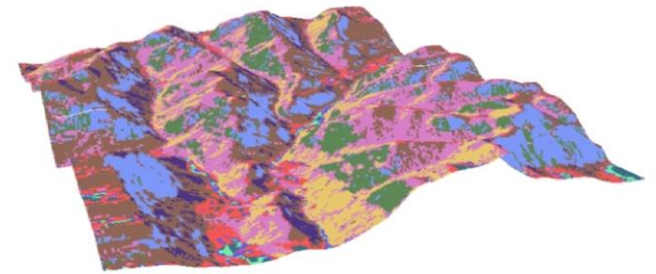


Common Issues with Data

- Incomplete or inaccurate datasets
- Not enough information to support the level of analysis
- Do decision makers understand the data intricacies that generated the results
- Quality control – Do results make sense
- Data is never constant

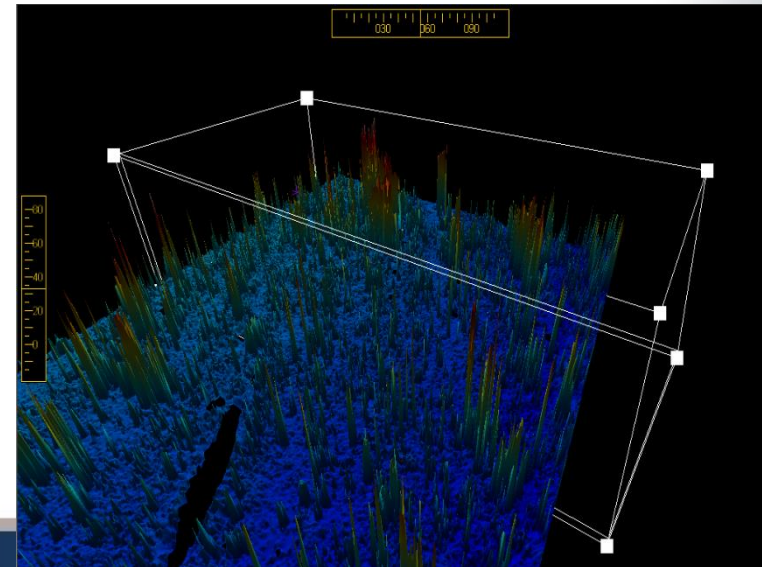
Basic Uses

- Property Analysis
 - Area calculations
 - Density Calculations
 - Before & After analysis
 - (historic photos)
 - Absorption analysis
 - Slope analysis
 - VRI – Timber Values



Landform Position

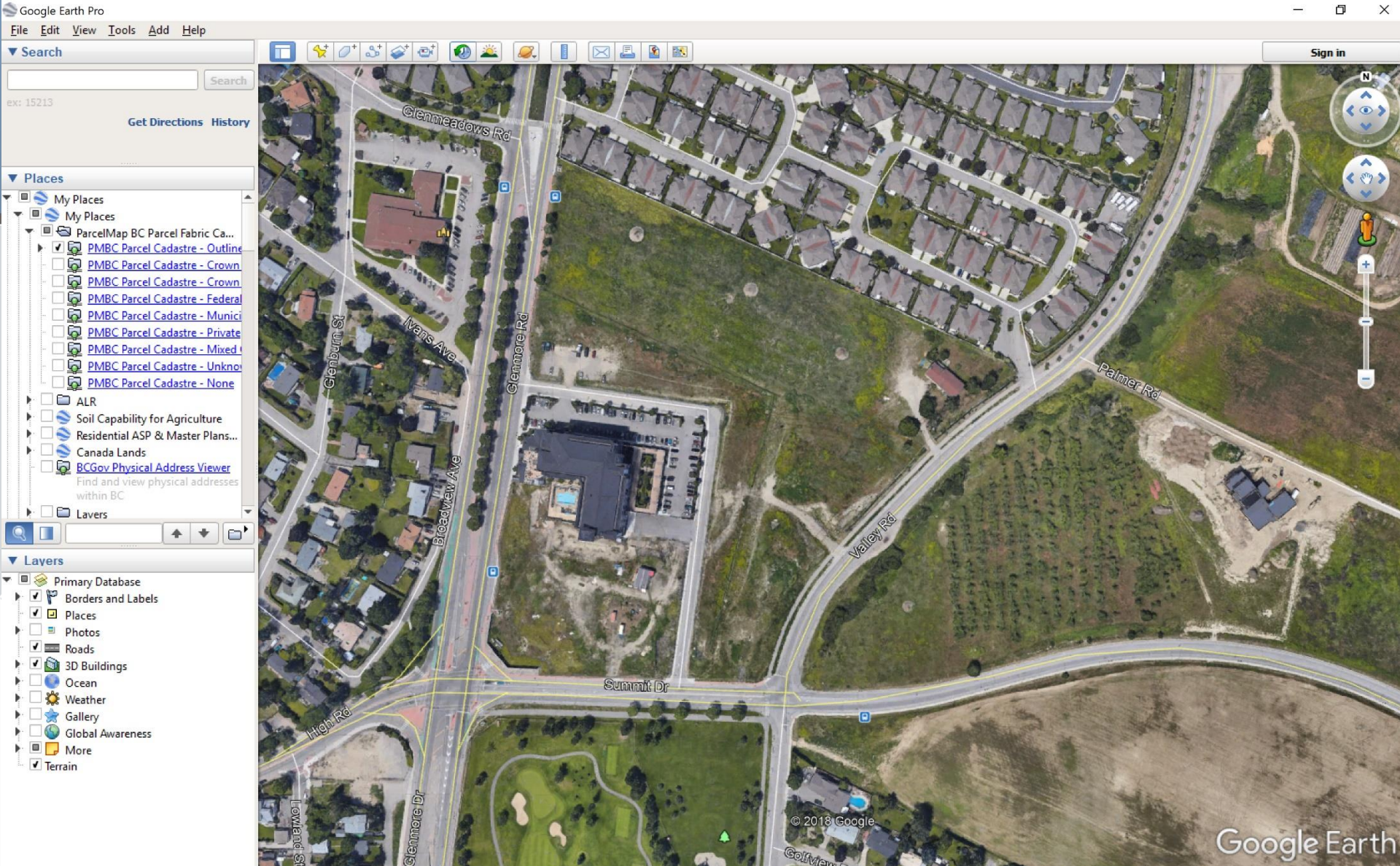
Landform position is defined by slope position, slope steepness and relative moisture gradient.



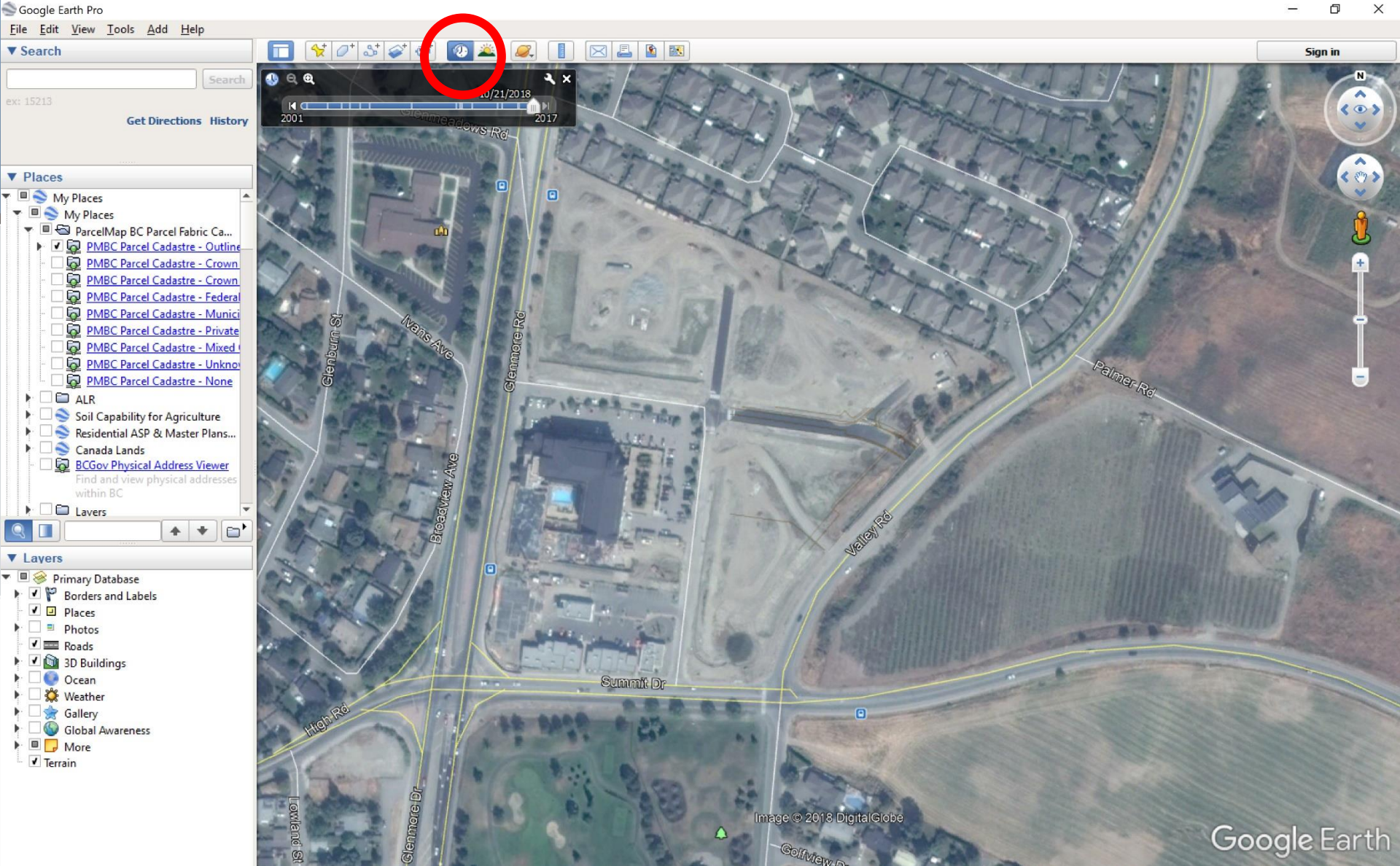


Google Earth - TIPS & TRICKS

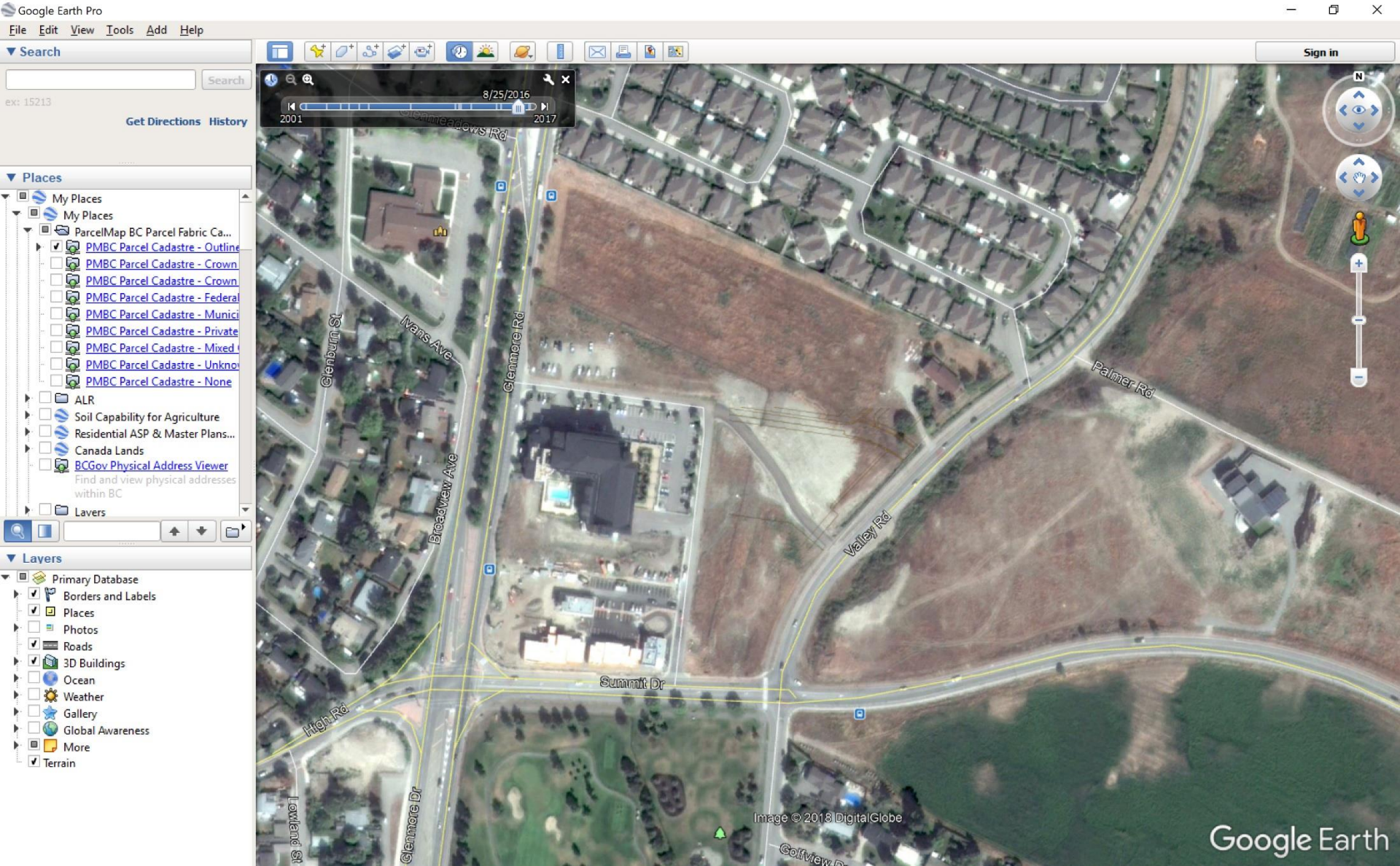
- Easy to print, save & email.
- Be aware of Aerial Images
 - GE Automatically selects the “best”, not necessarily the most recent.
- Like all good technology, it crashes when overloaded, or just randomly. Save your data!



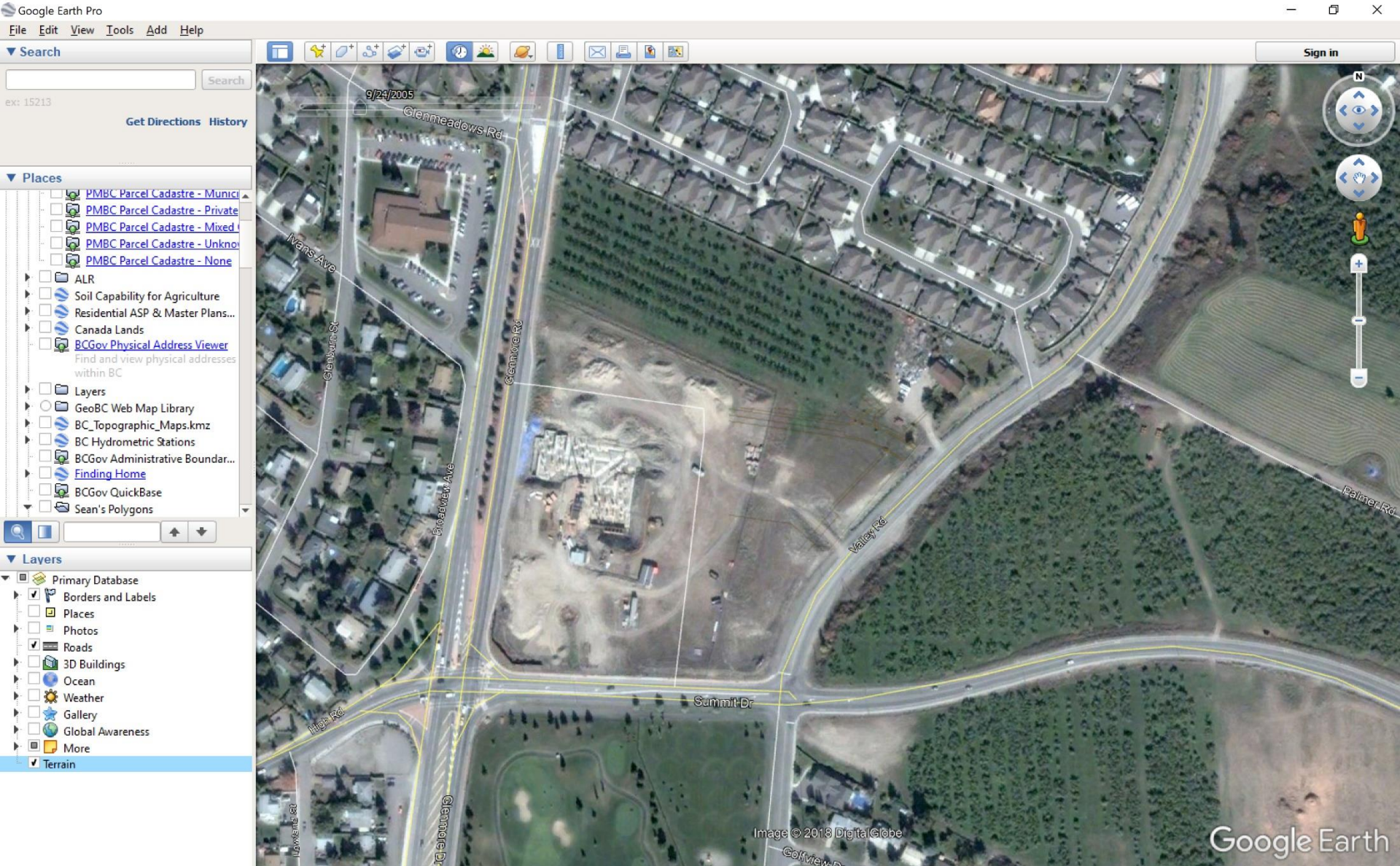
Default aerial image



2018 Aerial image



2016 Aerial image

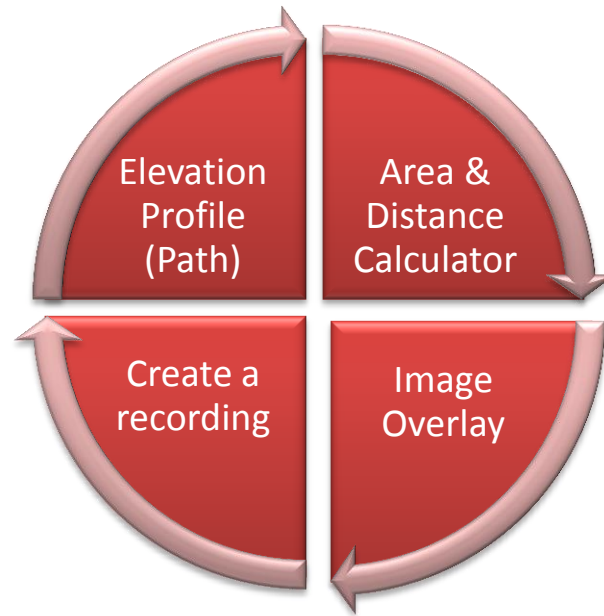


2005 Aerial image



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Google Earth Tools



File Edit View Tools Add Help

▼ Search

Search

ex: pizza near NYC

[Get Directions](#) [History](#)

▼ Places

My Places

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Layers

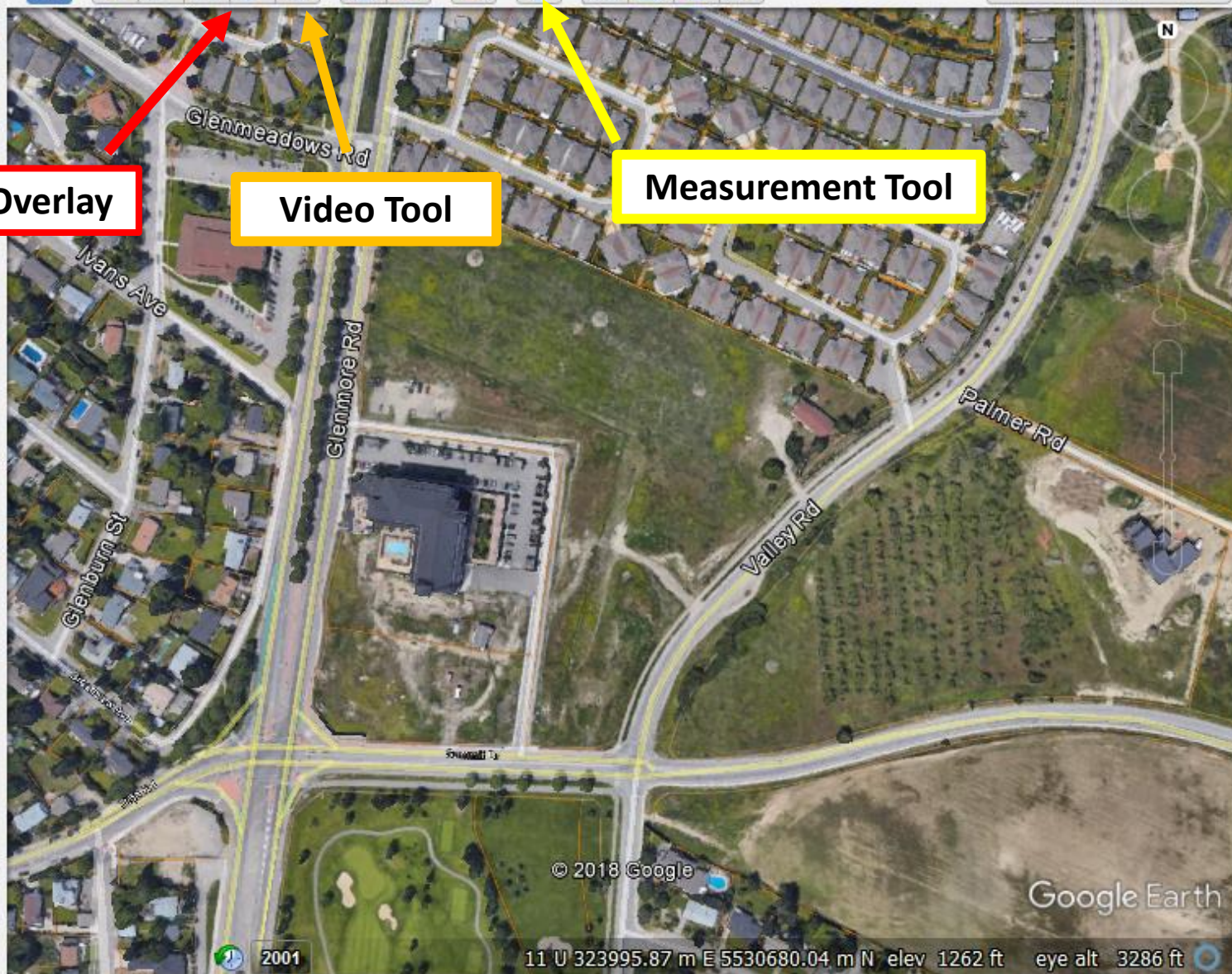


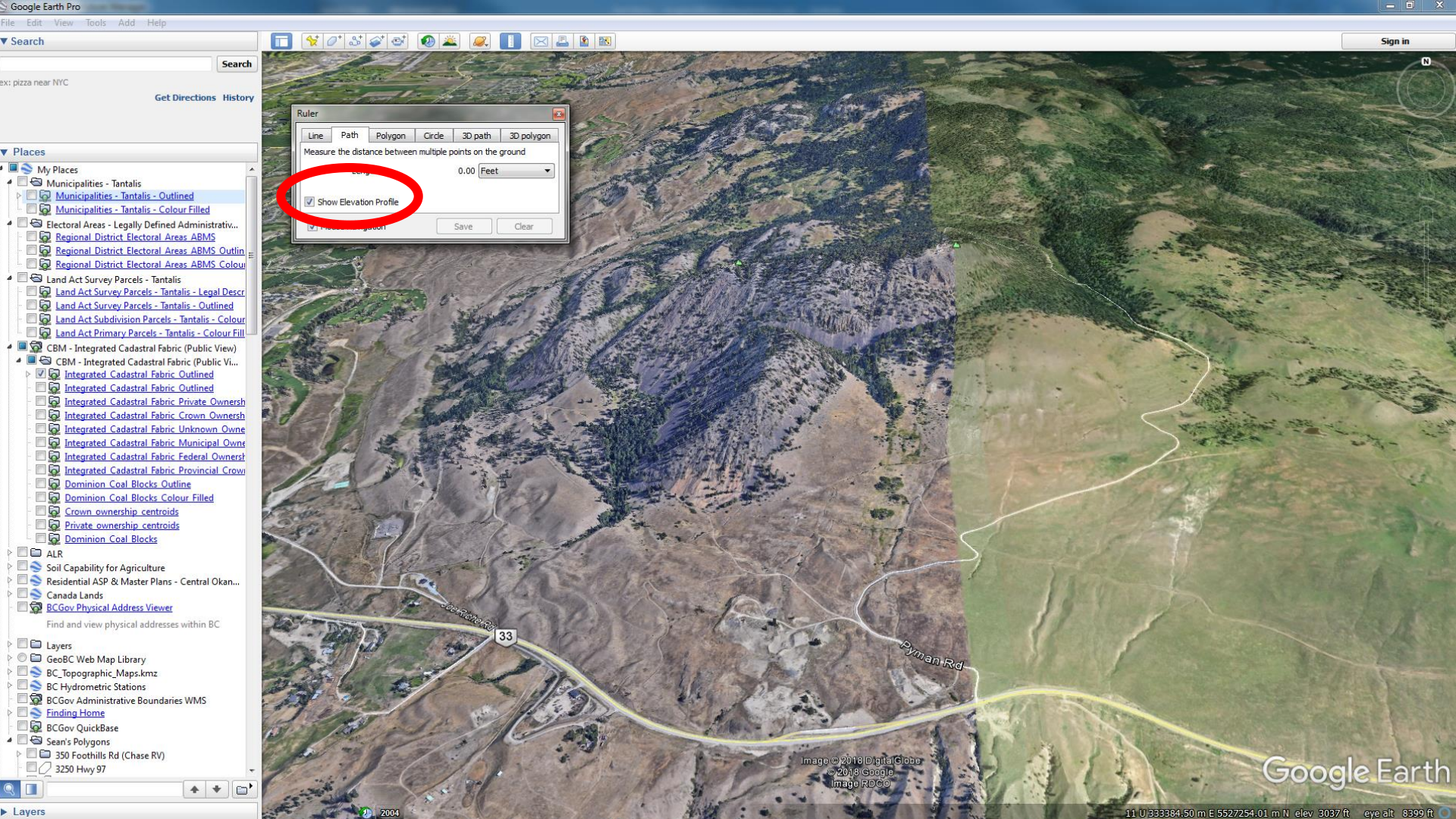
Sign in

Image Overlay

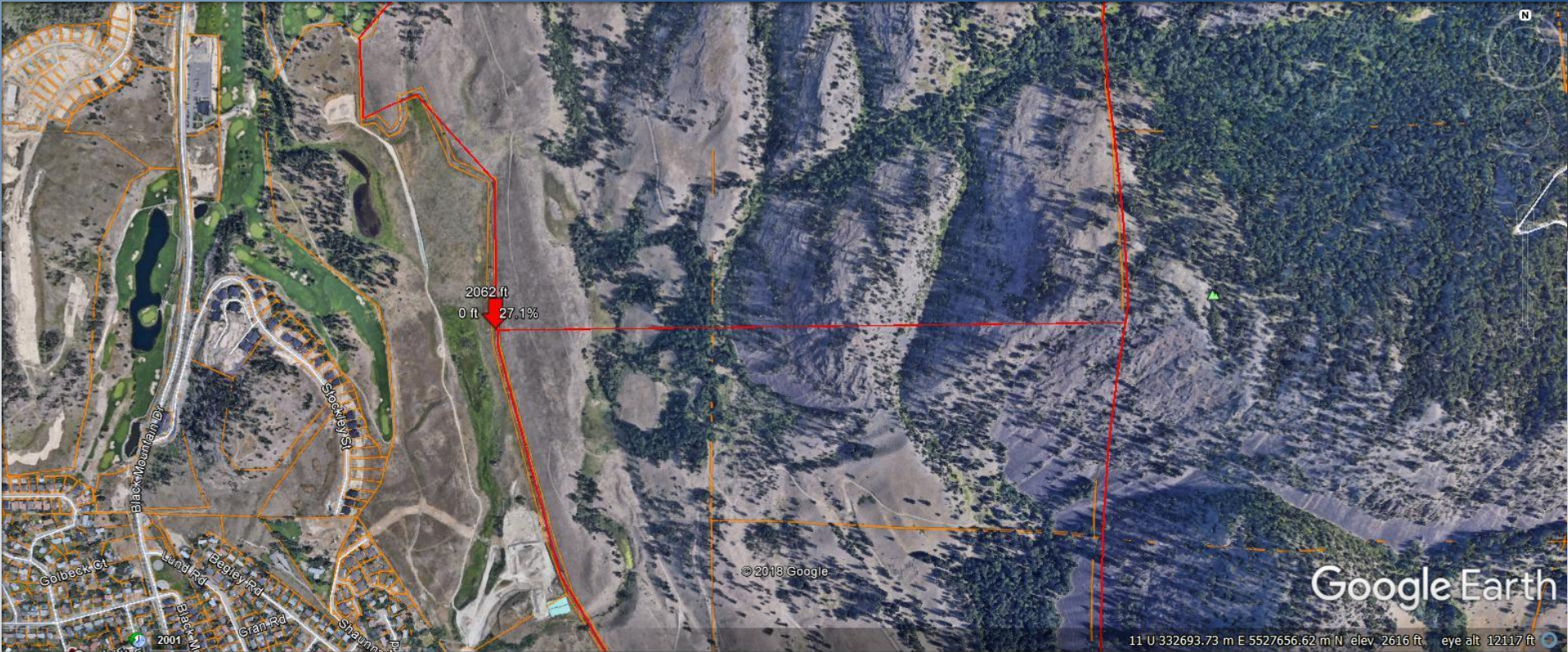
Video Tool

Measurement Tool





3D Image line

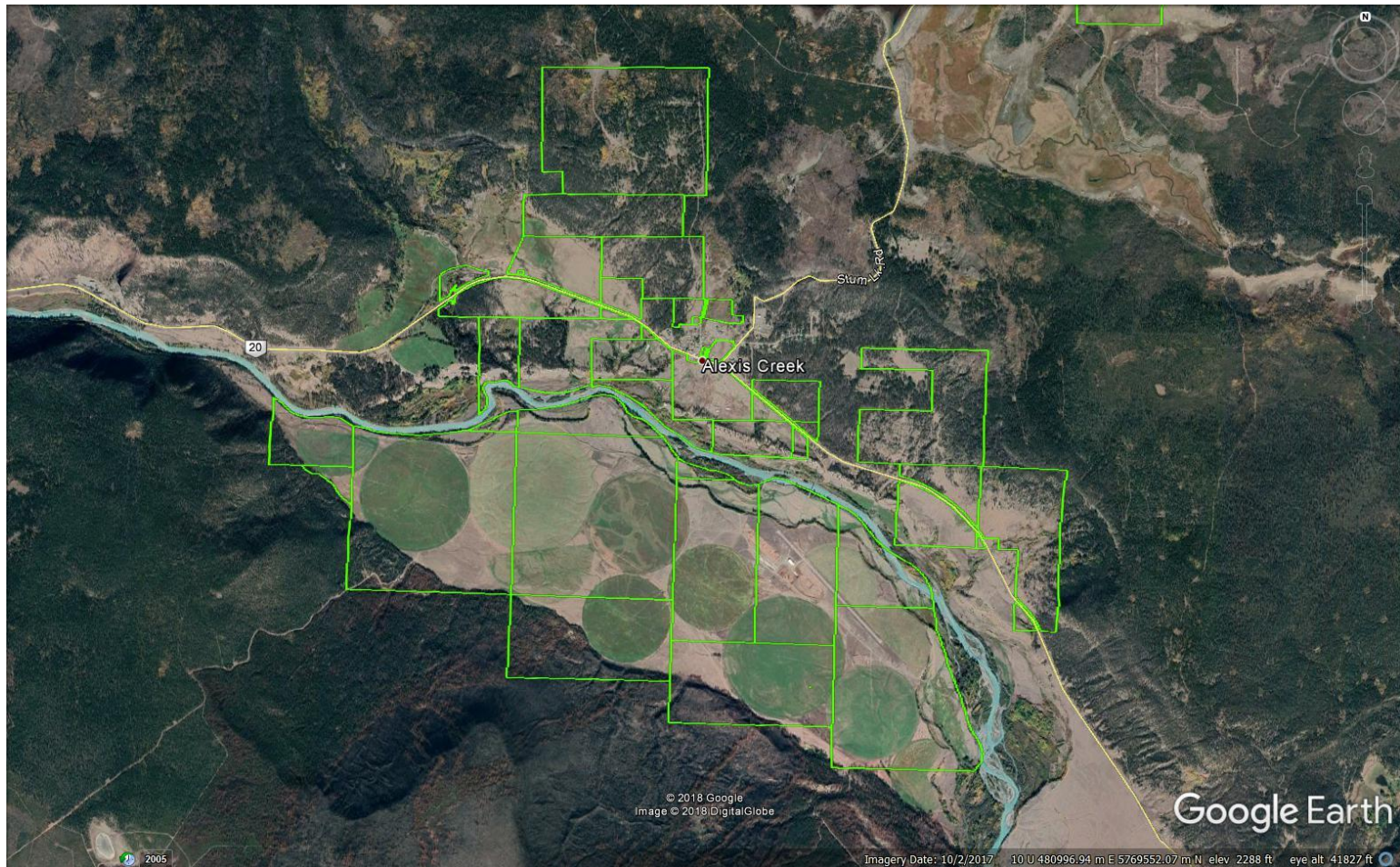


Elevation Profile

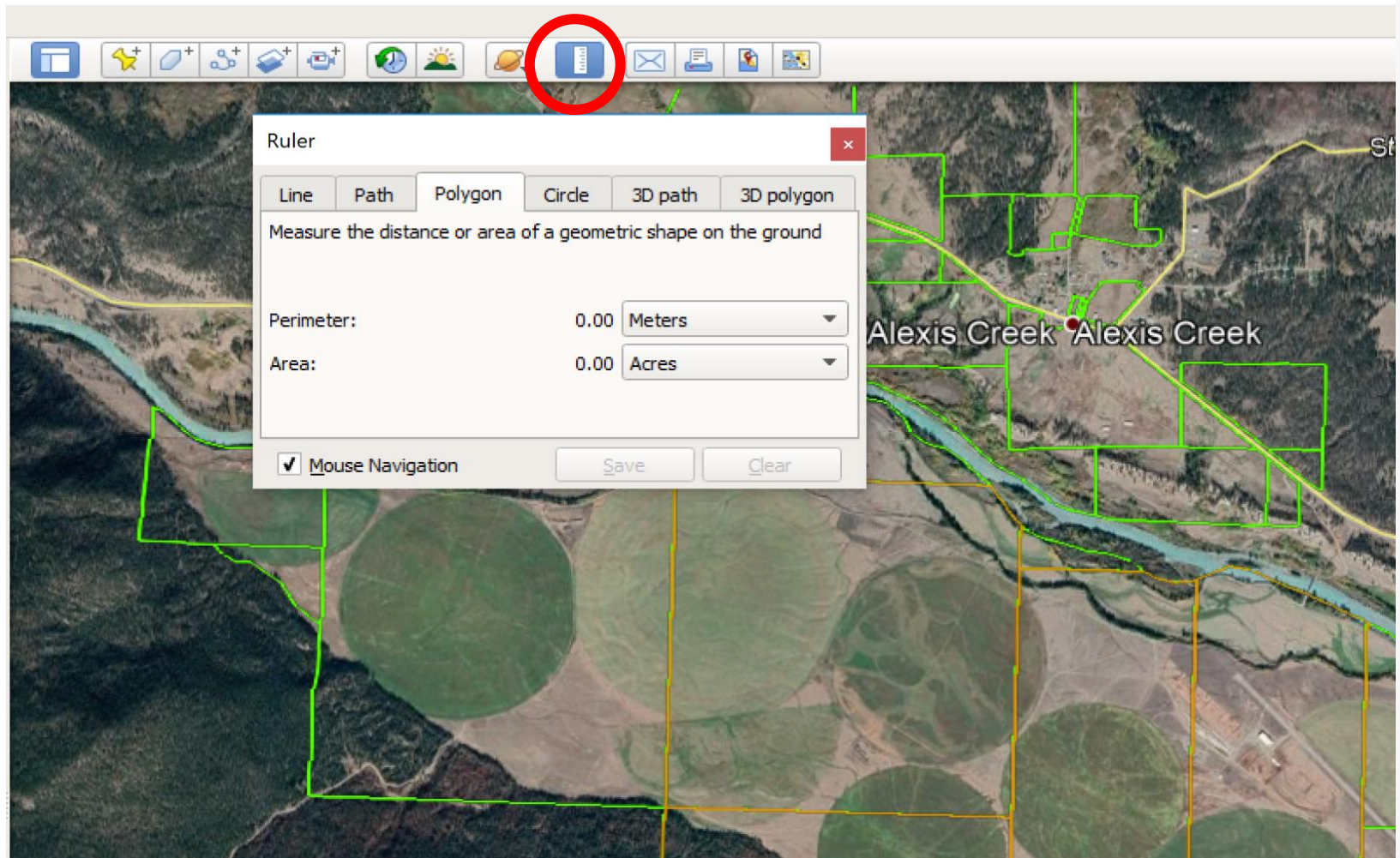


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C-1 Ranch, Alexis Creek



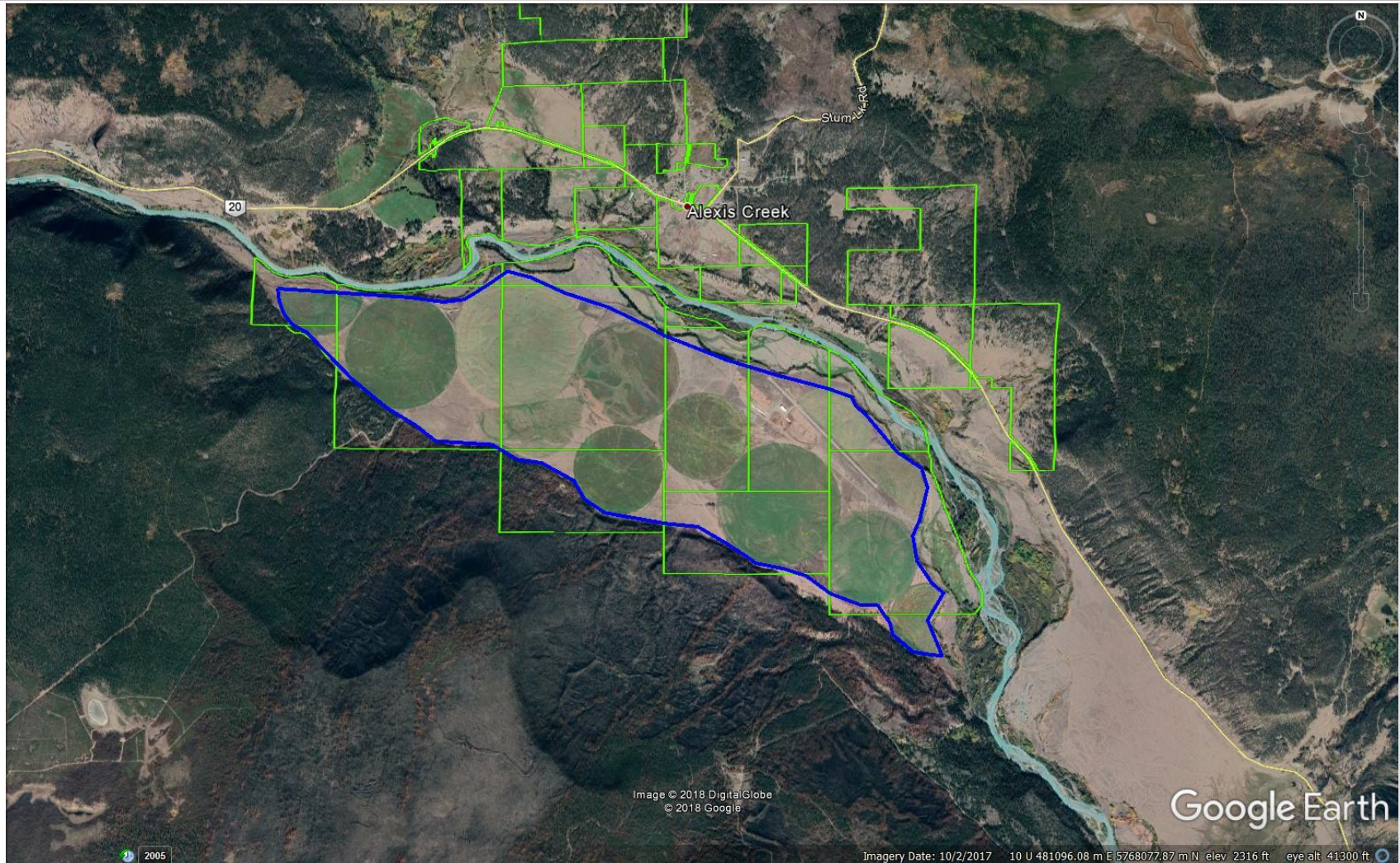
Measurement Tool





Kent Macpherson

2,000 acres cultivated





Kent Macpherson

5,000 foot long runway





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Questions

Contact Info

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