

Using GIS to Support Land Use Planning and Solid Waste Management

ZOOM Q&A – January 12th, 2022

Q&A

Q: transfer station on reserve? or can u provide support on the provincial crown land?

A: Right now, most of our support services are for reserve lands – but some First Nations are making off reserve landfills. Please contact Stefanie Recollet for further information.

Q: ground well monitoring...how often?

A: Most communities try to monitor the wells once a month. LR

Q: In relation to data and GIS – how are communities inputting their data?

A: Most communities with GIS would download from government sites and add these layers into relational Maps, for example, streams and rivers on a Reserve Map, or all Reserves Map.

Q: Do we need to hire a contractor/engineer to present data to the council and community?

A: That would depend on the types of information you would be sharing with the Chief and Council. Depending on the project type, if engineering and mapping is needed, then yes, the engineer you hire to install a new road or new gas station for example, would also be the one providing the maps and other materials.

Q: What kind of tech (computer) do you suggest having to store the map data on?

A: Each of the software's requirements do list the capacities of space, RAM and Video cards required to run their software. It just depends on which software you are considering and how much data you will be needing. Best to have at least 1 terabyte of space for your digital layers.

- You could store the map data on any pc technically, it's all about having storage
- we have invested into a strong desktop which has the latest processor with at least 1TB of memory with at least 32GB RAM. But we are right now exploring in having an independent server platform because the imagery and lidar info take quite an amount of storage space. And, monitoring project can collect a considerable amount of photos too. Thus, it is important not to hog the computer if you are running analysis or processing of data.
- Having a good backup device is also a good idea, it should hold up to 2 Terabytes as well.
- we purchased a gaming computer to get a faster processor and a better video card. The idea of server is providing a better process of backup. I am not an IT person, but if you have an IT person working with you, they can provide help with how to build one. There are good systems nowadays a good pricing.
- Additional Resources that may be helpful:
Records Management & Data Governance Considerations under Land Code
<https://labrc.com/resource/tmpd-webinarrecords-management-data-governance-considerations-under-land-code/>

Q: SAMA website. Why don't they have property assessments for First Nations parcels or parcels that are still TLE

A: It would all depend on your Provincial Assessment Organization on whether the TLE areas are entered in their provincial Assessment Database. You would need to contact the province of Saskatchewan to access that. Most parcels on reserve aren't assessed yet. If you are interested in land assessment or Taxation here is a link to FNTC which provides more information on how you may be able to do this. <https://fntc.ca/> News & Events WELCOME TO THE FIRST NATIONS TAX COMMISSION The First Nations Tax Commission (the FNTC) is a shared governance First Nation institution established under the First Nations

Q: How current is the CLSS layers? How frequently is this data is revised?

A: All the CLSS data is updated every week.

Q: Where can one get the district survey maps that are located next to the first nation lands?

A: I believe it would be from the provincial land registry

Q: Can I get a link to this program?

A: <https://pro.arcgis.com/en/pro-app/latest/get-started/get-started.htm> I believe there is a free trial, after you buy the program there is an annual licensing fee as well.

- Here's a link to a free course that ESRI is giving in February. I took it last year and it's a particularly good beginner tutorial <https://www.esri.com/training/catalog/596e584bb826875993ba4ebf/cartography/>
- Here's a link to downloading QGIS program for free. <https://www.qgis.org/en/site/forusers/download.html>
- Here's a link to a free course using QGIS <https://www.qgis.org/en/site/forusers/trainingmaterial/index.html>
- Here's a video/YouTube link to a start-up/beginner's course for QGIS <https://www.youtube.com/watch?v=NHolzMgaqwE>

Q: Where can I download the DEM files?

A: <https://open.canada.ca/data/en/dataset/957782bf-847c-4644-a757-e383c0057995>

this may also be a good resource: <https://www.nrcan.gc.ca/science-and-data/science-and-research/earth-sciences/geography/topographic-information/download-directory-documentation/17215>

Q: Can you do an online course on all of this? This is very impressive for a free GIS system

A: In the work plan, we will be working with our Surveys team to develop an online course.

Other Comments:

- You can view GIS shapefiles even if you don't have ESRI product. You can view these on QGIS and on Google Earth Pro it has that capability.
- Here's a link to the ArcGIS Story Maps example: <https://storymaps.arcgis.com/stories/42b1a6fe6a524b578becd12c0bee4b4c?play=true&speed=medium>
- **Demo 1 link:** <https://cls.nrcan-rncan.gc.ca/mb-nc/en/index.html>
You can get the cadastral datasets from here https://cls.nrcan-rncan.gc.ca/data-donnees/sgb_datasets/
- **Demo 2 link:** <https://pro.arcgis.com/en/pro-app/latest/get-started/get-started.htm>

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