# Frequently Asked Questions for submitting geospatial files

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# **Data Handling**

#### How does the Forest Operations Map application handle your data?

The Forest Operations Map application simplifies detailed maps that users submit. To save space and speed up processing, the application reduces the number of points in these maps while keeping the map's original shape accurate within about 2.5 meters. This process uses the Douglas-Peucker algorithm.

## **File Requirements**

#### What are the requirements for submitting geospatial files?

Each file must be in GeoJSON or, depending on the GIS software, in some cases in JSON format (sometimes the case with older versions). Shapes must be either polygons for cutblocks and wildlife tree retention areas (WTRA) or line features for road sections. A spatial submission must include at least a cutblock file or a road section file.

- File Format: GeoJSON or JSON
- 2. File Encoding: UTF-8
- 3. Coordinate Systems:
  - BC Albers (EPSG:3005), or
  - WGS 84 (EPSG:4326)
- 4. File Size: Maximum 30MB

#### What is the structure for GeoJSON/JSON files?

Each JSON file should consist of a single GeoJSON FeatureCollection object. The geometry provided for each feature must be of type polygon or linestring depending on the feature type. Ensure your shapes do not contain curves or multipart features, and are in one of the two accepted projections (BC Albers, WGS 84).

# **Attribute Requirements**

#### What information must be included for each shape?

Each shape (GeoJSON feature) must include the following:

Field	Description	Туре	Required?
GEOMETRY	BC Albers (EPSG:3005) or WGS 84 (EPSG:4326) coordinate reference system. Coordinates must be ordered as X, Y.  Latitude and longitude are not accepted	Polygon for Cut Blocks and WTRAs, LineString for Road Sections	Required
DEV_DATE	Development date. Format: YYYY-MM-DD	text	Required for Cut Block and Road Section, optional for WTRA
NAME	Name of the feature. Not required but is recommended in order to make it easier for the public to comment on specific features.	text	Optional

#### How must the attribute table in the shape file be structured?

When using GIS software that provides an attribute table, ensure all attributes provided use the exact titles and formats specified to avoid issues during file submission.

The attribute table in the shapefile must look as follows, with all fields formatted as plain text.

FOM_OBJECT	GEOMETRY	DEV_DATE	NAME
Road Section	LineString	YYYY-MM-DD	NAME
Cut Block	Polygon	YYYY-MM-DD	NAME
WTRA	Polygon	Enter YYYY-MM-DD or leave blank	NAME

## **Property Format**

This table specifies the description and format of required properties. All attribute table fields **must** be formatted as text, including the date field.

Property	Description	Value Format
FOM_OBJECT	Describes the feature (Cutblock, Road, WTRA)	Text
GEOMETRY	Indicates if feature is a polygon or linestring	Text

DEV_DATE	Planned date to start development	Date string in the format "YYYY-MM-DD" (formatted as text)
NAME	Description/identifier for the spatial object	Text, maximum length 50 characters.

## **Replacing Spatial Data**

#### How do I replace old spatial data with a new GeoJSON/JSON file?

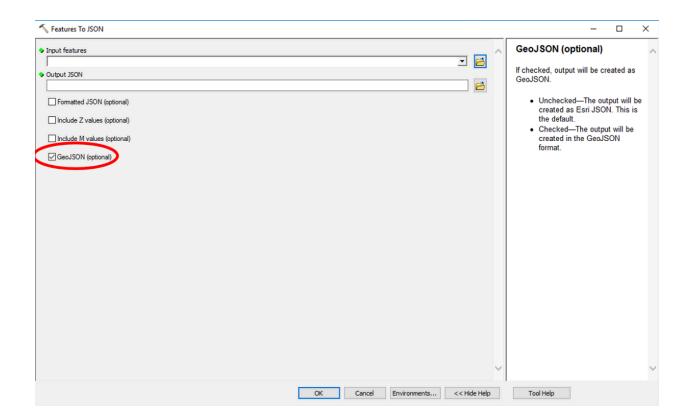
- 1. **Upload new GeoJSON/JSON file.** Follow the regular upload process to replace old data with a new GeoJSON/JSON file.
- 2. **Confirm upload:** Check the "Location" button on the "Summary Screen" to confirm successful upload or replacement.
- 3. **Publication:** Submitted data will be published overnight and will be visible in the public interface the next day.

# **Using ArcGIS**

#### How should I use the "Features To JSON" tool in ArcGIS for geospatial submissions?

Depending on the version of ArcGIS you are using, ensure the "GeoJSON" box is checked prior to running the tool. (check image - next page)

Note that in some versions, this box may need to be left unchecked. Refer to the specific documentation for your version to confirm the correct settings.



# **Handling Curves**

#### What should I do with curves in my dataset?

! Important: The "Features To JSON" tool does not accept curves and does not automatically convert them to lines. Follow these steps to prepare your data:

- 1. Convert curves to lines:
  - Option 1: Convert `.gdb` feature classes to ESRI Shapefiles `.shp`
  - Option 2: Use the "densify" tool in ArcMap to replace curves with lines
- 2. Run the Features To JSON tool:
  - Ensure shapes contain no curves before using the tool
- 3. Alternative tools:
  - Use the <u>Feature Manipulation Engine</u>
  - Use the `qdal` tool

#### What should I do with multipart features in my dataset?

To eliminate multipart features in ArcGIS use the "Explode" tool.

## **Contact Information**

Who can I contact for more information if I still encounter issues?

Contact the team at <a href="mailto:nrsenquiries@gov.bc.ca">nrsenquiries@gov.bc.ca</a>