UDOT PEL Application – 4/28/2014

Link to the UDOT PEL APPLICATION:

http://test.mapserv.utah.gov/pel/

Link to Online PEL User Guide:

The PEL User Guide details the data sources and the tier structure.

http://gis.bio-west.com/uPELguide/index.html

How to create a PEL Report using the UDOT PEL Application:

1. **Login**
    a. Request a user account if you do not already have one. It may take up to two business days to be granted access to the UDOT PEL Application.

2. **Find your project location or area of concern on the map.**
    a. You can use the tools on the bottom left of the homepage: 'Find Address,' 'Find Place Name,' or 'Find City.' Or, you can zoom to your location on the map if you already know its general area.

3. **Select the appropriate PEL Report type.**
    a. Main – This PEL Report type contains all variables and tiers available under the PEL tool.
    b. Categorical Exclusion – This PEL Report type contains a subset of the PEL data and tiers targeted to support the completion of Categorical Exclusion documentation. Categorical Exclusion PEL Reports look at the following systems only: Agricultural Protection Areas, Air Quality, Archeological Sites, Archeological Surveys, Canals, Conservation & Mitigation, Disability Facilities, Floodplains, Hazardous Waste Sites, Historic Districts, Historic Sites, Impaired Waters, Lakes, Paleontological Sensitivity, Parcels, Parks, Prime Farmland, Rare Plants, Solid Waste Sites, Streams, Tribal Land Location, Water Quality, Watersheds, Wetlands, Wildlife Connectivity Across Utah Highways, and Wildlife Conservation Species
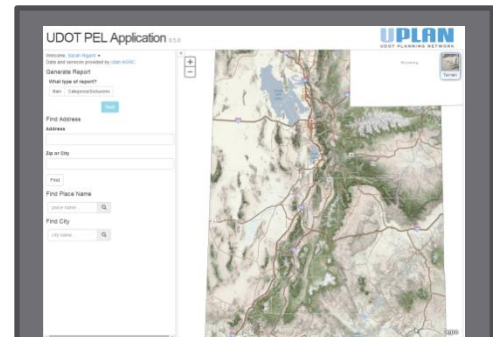

Figure 1: UDOT PEL Application
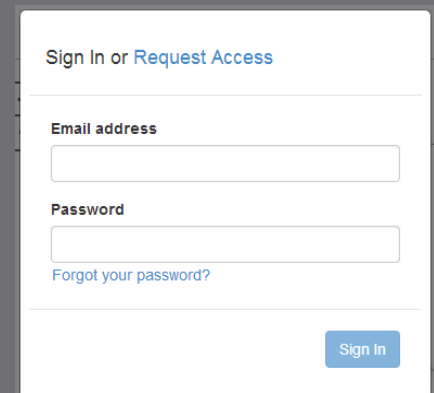

Figure 2: PEL User Guide Website

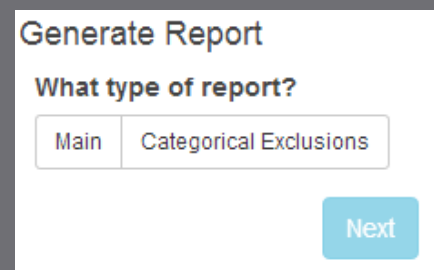**Figure 3: Login Screen**

Figure 4: Report type options

4. **Select 'Next.'**

5. **Define your area of interest through one of four ways.**
   a. "Route and milepost" – select the route from a drop down list and enter the beginning and ending milepost. The LRS route label is displayed in the drop-down menu because the function uses the LRS to develop the line work.
   b. "Shapefile" – you may upload a shapefile from your machine. If you know the exact bounds of your project uploading a polygon shapefile will provide you with the most accurate report. Here are some helpful guidelines for shapefiles:
      i. You may use line or polygon data; however, polygon data is preferred at this time because all shapefile data is buffered by 1 foot automatically regardless of what you enter in the application (see 'Define your Geometry Buffer' for more information).
      ii. The shapefile layers must be in a zipped.
      iii. If there are multiple lines or areas in your shapefile they will be analyzed as one project and summarized in one report. Please create individual shapefiles for each individual project you would like to analyze.
      iv. Please use the following projection: NAD_1983_UTM_Zone_12N.
   c. "Along a line" – simply draw your proposed project corridor on the map. Double-click when you have finished drawing your line. The buffered area is limited to 467 square miles to optimize report production.
   d. "Within a polygon" – draw a polygon on the map if your project cannot be defined as a line such as a building location. Double-click to finish drawing your area. The buffered area is limited to 467 square miles to optimize report production.

Figure 5: Define area or corridor options.

Figure 6: Define impact area by its radius in feet.

6. **Define your Geometry Buffer.**
   a. This defines your project's impact area and is the radius of the impact corridor in feet. For road corridors you should choose a width that accounts for the existing paved surface and any additional disturbance or expansion beyond the existing paved area. UDOT's standard lane width is 12 feet for estimating purposes. For example, if your project will be adding a passing lane to a two-lane road, creating a three lane road your overall project width will be at least 36 feet and you will enter 18 feet as your buffer.
   b. At the present time, polygons are buffered as well. This may be updated in the future. You cannot enter a value less than 1 foot at this time.
   c. If you have uploaded a shapefile the geometry (line or polygon) in the shapefile will automatically be buffered by 1 foot. Even though you are able to change the buffer distance in the application, the measure entered will not be applied. Therefore, if you are uploading shapefiles it is in your best interest to upload a polygon at this time.
   d. The overall buffered area is limited to 467 square miles to optimize report production.

7. **Select 'Next.'**

8. **Name your report.**
   a. Enter a simple name. Spaces are OK. You can rename the report PDF once it's downloaded.
   b. When creating multiple reports in the same login instance use unique names for each report or you may get an error in processing.

9. **Select 'Process.'**
   a. If you get an error in processing try renaming your report and select 'process' again.

10. **Download your report to your machine.**
   a. After some time you will be provided two options to download your report. You will receive an email with a download link and you will have the option to download the report from the application. For now, reports are stored indefinitely on AGRC's server; however, that may not be the case in the future. It would be good practice to download your report locally to your machine within 24 hours.

PEL Data on UPLAN

A copy of the PEL data is available on UPLAN within the 'Environmental Data Map (PEL).' The map has been made public; you do not need a UPLAN account to view the map.

If you are interested in exploring the data around your project area and do not necessarily want to produce a report please visit the map on UPLAN. This map is not updated as frequently as the data used by the tool, but it's largely the same. Most PEL datasets do not change much over time. Some sensitive location datasets, such as archaeological sites, are not displayed on UPLAN and others such as rare plants and wildlife species are generalized for display on UPLAN. The original location data are used in the PEL tool to produce reports.
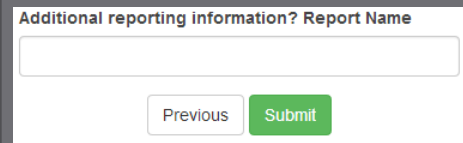
UPLAN can be accessed through this link:
http://uplan.maps.arcgis.com/home/index.html
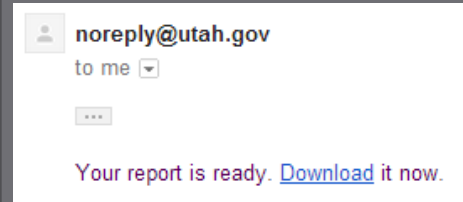

Figure 7: Name your report.
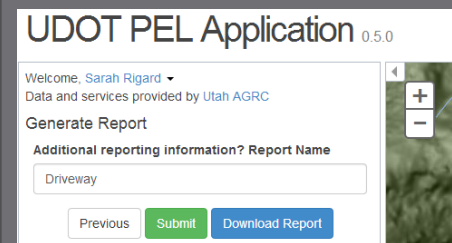

Figure 8: Download link in an email.

Figure 9: Download button (blue button) on application.

Figure 10: PEL Map thumbnail on UPLAN.

Questions? Contact:

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