

Exercise 2: Exploring Change Agent and Conservation Element Datasets Using the Landscape Approach Data Portal

Purpose

- To learn how to use the Landscape Approach Data Portal (LADP) to find and download REA products

The LADP is public-facing so you can share all products with your collaborators and stakeholders!

Non-GIS User Option

See the Handout on using the LADP and explore the LADP and data using searches and filters. Go to the LADP: <https://landscape.blm.gov/geoportal/catalog/REAs/REAs.page> or Google Search “BLM LADP”.

What is your resource of interest? What REA products does the LADP have to help you? (Unfortunately, CYR is not published due to delays with the WO.) What will you tell a GIS person who is working with you? What about the other AK REAs? What other Initiatives are stored in LADP?

Part 1 –Download Data from the LADP and add to ArcMap

1. Go to the LADP: <https://landscape.blm.gov/geoportal/catalog/REAs/REAs.page> or Google Search “BLM LADP”.
2. Click on North Slope (NOS) on the AK inset map
3. You will be directed to the Search page
 - a. You will see all the products that are available for NOS (369 data sets, map services, reports, etc.)
 - b. In the **Filter Content Type** drop down box, select **Downloadable Data**, and click **Search**.
This will filter the search results to include only data in the form of layer packages.
 - c. What other types of content are available? Hint:

See the Landscape Approach User's Guide for more details on content types and how to search.



4. Expand the results boxes if necessary by checking the box above the results
5. On any result, click the following links within the results box:
 - a. **Zoom To** – to see the spatial extent of the data in the map on the lower left

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- b. **Metadata** – to see the raw metadata
 - c. **Details** – to see the stylized metadata
6. Download 2 data sets to your laptop c:\tmp\ or if you prefer, download to your Citrix location (Citrix: \\blm\dfs\ak\gis\GIS_Workspace\username\...)

Note: if you download to the laptop, you will need to use the local install of ArcCatalog and ArcMap

 - a. Click the **Open** or **Download** link in the results box
 - b. Navigate to your intended data location and click **Save As** the layer pack (.lpx) file.
 - c. Repeat to download a second layer pack.
7. Open ArcCatalog and navigate to the folder that contains the layer packs.
 - a. Open ArcMap from ArcCatalog (this ensures that your ArcCatalog and ArcMap are on the same Citrix server).
 - b. Click and drag the first layer pack into ArcMap; the cursor will change to a **+** symbol as you hover over ArcMap.
8. In ArcCatalog, right click on the second layer pack, select **Unpack**. This will add the data to the ArcMap session that you already have open so that you can see both data layers together in one map.

Part 2 – Create a Shapefile from the Layer Package

9. In the ArcMap table of contents, right click on a data set, click Data\Export Data.
10. Right click either data layer, select **Data > Export Data >**
 - a. Click the folder button and navigate to the folder where you saved the layer packages
 - b. In the **Save as Type:** drop-down box select **Shapefile**.
 - c. Click Save and the layer package will be saved as a shapefile.
 - d. When prompted, select **Add** data to map. You will see the same data set but without the symbology that is defined by the layer file.
11. Explore the data sets
 - a. You can change the symbology, perform queries, change the overlay order, etc.
12. What else can you do with it?

- Shapefiles are required for certain geospatial tools/software and they are a fairly universal format.
- Shapefiles do not have pre-determined symbology as layer files have.

Part 3 - Explore a Layer Package in ArcMap

13. In ArcMap, in the top menu bar, click on **Customize > ArcMap Options**
 - a. Click on the **Metadata tab**
 - b. In the drop-down box under **Metadata Style**, select **FGDC CSDGM Metadata**
 - i. This will allow you to see the full metadata for the layer package (otherwise you will see a very abbreviated version)

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- c. Click **Apply** > **OK** and close the window
14. Explore the data:
 - a. View the metadata –
 - i. Right click the layer and select **Data > View Item Description**
 - ii. Scroll down to the bottom and click on the grey FGDC Metadata (read-only) text
 1. This will display the full metadata
 - iii. Close the metadata window
 - b. Opening the attribute table
 - i. Right click the layer and select **Open Attribute Table**
15. Save ArcMap if you'd like. No need to close ArcMap, we will use it later.

Part 4 – Explore the Data

16. Using your knowledge of LADP, select some data sets that are relevant for your work. What is available? How is it useful? What data are missing?
17. Ask your instructors any questions that you might have about the data set or how to use it
18. Share your findings with us!

Notes about Layer Packages (.lpk)

What is a Layer Package?

- A layer package contains a data set and a layer file which defines its symbology (how the data are displayed in the map). The data is a **feature class** stored in a file geodatabase (it is **not a shapefile**). Keeping the layer file and the data set together help to ensure that users will interpret and use the data correctly.
- **You can create a shapefile** by exporting the layer package in ArcMap or ArcCatalog (we do this in Exercise 3).

Adding Layer Packages to ArcMap

- You CANNOT use the **Add data button** in ArcMap to add a layer package to an ArcMap session as you would with all other data types (you will not be able to see the .lpk file in your directory). This is an ESRI “feature”; it’s not a bug.
- You can add layer packages to an ArcMap session using one of two methods:
 - double-clicking on the .lpk file (in ArcCatalog or in Windows Explore), or
 - by “unpacking” the .lpk file in ArcCatalog (right click the file and select Unpack);
- Either method this will launch ArcMap and add the layer to the table of contents.

BLM Resources

GeoSpatialGateway: <https://blmspace.blm.doi.net/oc/intra/drs/Pages/GeoSpatialGateway.aspx>

Landscape Approach Data Portal: <https://landscape.blm.gov/geoportal/catalog/main/home.page>

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