Coquille River Basin Resources
Accessing maps, creating maps, and adding your data in ArcGIS.com

ArcGIS.com allows users to view GIS data or load their own GIS data into a web interface for simple sharing with others in a private workgroup or in public. Using basemaps and data hosted by ESRI in the cloud, a user's GIS data can be displayed and saved in map form to create interactive tools for visualization.

Coquille River Basin Map-Based Data Available on the Coquille Workgroup ArcGIS Site (as of Jan 15, 2013)

- Conservation easements
- Diking districts (active and inactive)
- Elevations (multiple scale options)
- Estuarine levees
- Feedlots (current and historic)
- FEMA 100 year flood zone
- 4 predictive 100-year flood maps generated based on the following sea level rise scenarios:
  - +0.13 m (global) / 0.11 m (local) [A1B minimum]
  - +0.69 m (global) / 0.62 m (local) [A1B maximum]
  - +1.5 m (global) / 1.33 m (local)
  - +1.65 m (global) / 1.47 m (local)
- Fish passage barriers (and removed barriers)
- Geology
- Gravel mines
- Historic vegetation
- Land Ownership (Federal, Tribal, State, City/County Ownership)
- Large dams
- Levels of land protection
- National Wetland Inventory classifications
- Omernik Level IV Ecoregions
- Projected mean daily stream flow due to climate change (2040, 2080)
- Projected summer mean stream flow due to climate change (2040, 2080)
- Projected stream center of flow mass due to climate change (2040, 2080)
- Salmon populations and status
- Tide gates
- Tsunami flood zones
- Waterways (various scales)

Accessing and using ArcGIS.com

Step 1: Download Google Chrome (or Mozilla Firefox).
This free download is an important first step, because we have found that ArcGIS.com does not function properly in browsers such as Internet Explorer.

Step 2: Create an ESRI Global account at https://webaccounts.esri.com//CAS/
This is free, and an ESRI Global login and password are mandatory for ultimately accessing ArcGIS.com, sharing your work and seeing the work of others in your group.

Step 3: Create an ArcGIS.com account

- To do this, log into www.arcgis.com with your ESRI Global login and password.
- At ArcGIS.com, click the button that reads "Register your ESRI Global Account", and make sure your account setting is set to public, not private. Setting it to public is important, because it allows people in your workgroup to find you and share map content with you.

Step 4: Contact Chris Swenson to request an invitation to the Coquille workgroup—and **let Chris know your ESRI Global account name**: Chris_Swenson@fws.gov (The Fish and Wildlife Service is supporting the site—Chris is the Coastal Program Regional Coordinator).

Step 5: Accept the invitation; join the group. After notification from Chris or Rich Young via email, go to www.arcgis.com and log in. See the notification (top right portion of the screen), or go to the Groups tab to accept the invitation to join the "Lower Coquille Climate Change Vulnerability Visualization Tool."

If you are uploading GIS data and creating maps, go to steps 7-9.
If you are viewing data and maps created by others, proceed to Step 6.

Step 6. Access maps in ArcGIS.com

- Once you are logged in to ArcGIS.com, sign in with your username and password and click on the word "Groups" on the menu bar. You will see that you are part of the "**Coquille River watershed climate change vulnerability" group**.
- Click on the link for the group, and you will be taken to a page where you can access the interactive map, known as the "Coquille CCVA Web Map Visualization Tool".
- Click on the link for visualization tool and then click the "Open" button. It will give you a small dropdown of choices for opening. **Choose "Open with ArcGIS Explorer Online"**. Now you have access to the map and all of its data layers.
- **To navigate and interact with the map**, you follow many of the practices that you use with other mapping programs, such as Google Maps or Bing Maps. To pan, click and hold the mouse. To zoom in, double click an area or use the draw rectangle tool over the area of your focus. To zoom out, hover your mouse over the directional arrows in the bottom left corner, which will activate a slider bar for zooming in or out. The mouse pointer works as an "identify" tool. Clicking on a feature will bring up a popup of attribute data related to that feature.
- **To access data layers**, go to the Layers panel in the upper left corner. The initial screen view provides all the data in a table of contents format. Click the box of one or more layers to display and your chosen data will appear on the map. To the right of the panel, note the "Add Features" button for creating brand-new layers, and a button to display the map Legend, which lists which Layers are turned on and what their symbology means.
- Other controls include:
  - Buttons in the top left for Saving, Printing, Adding a Basemap and Adding Content. When you click Add Content, you have the choice of searching for data hosted in the ESRI cloud (Search), for adding content that you created and stored elsewhere in ArcGIS.com (My Content) or adding your own zipped shapefiles, .csv data tables, or .gpx data points (Import). The author has used Search and Import frequently, but not the middle option.

- In the top center, there are six tools you can use to explore your map more deeply: Measure, Query, Dashboard (which allows you to compare data in the map), Edit Features, Select Features, and Zoom to Rectangle. The author has not used these extensively.
- In the upper right corner, there are three additional tools. The first allows you to change the appearance, or symbology, of data in your map. The second allows you to create navigational bookmarks if there are certain locations or extents that you prefer to use frequently. And the third is a search window that can take you to a location within the map.

NOTE: You should not be able to save any edits you make to the map if you are not its creator, but if you do make changes that you need to keep, in order to avoid altering the master file, never hit Save, only Save As. You are free, however, to Print as you wish.

Step 7. Create a map.

- Click on My Content along the top menu bar.
- Click on the button that reads "Create Map".
- A new map will open with brief instructions on the left side. You have the option of choosing an area first, but if you upload a georeferenced data layer from your own server, the map will automatically navigate to its extent.
- Early on in your map creation, you also should choose an appropriate basemap. ESRI offers a large suite of basemaps on its cloud-based servers that will remain in your map for as long as you choose. If you plan to add numerous data layers of your own, you might want to choose a subdued but utilitarian basemap such as ESRI's grey canvas basemap.

Step 8. Upload your data to your newly created map.

ArcGIS.com has the capability of storing and displaying your GIS data for an interactive functionality that is similar to what is found in the powerful ArcGIS software package. However, ArcGIS.com demands that data be in a zipped vector shapefile with 1,000 or fewer individual features. We are fortunate in the Coquille sub-basin that one of the most intricate and integral data sets in the project – the stream linework – has approximately 970 features and thus is within the online upload limits. To upload follow these steps:

- Wherever you are storing the majority of the data that you plan to transfer to your web map, create a new folder called "Zipped_shapefiles_for_web".
- Select the shapefile that you plan to add to ArcGIS.com and zip it, saving it to your folder of zipped shapefiles.
- Return to your ArcGIS.com window and click the button that says, "Add". A small dropdown will offer you a series of choices – Search for Layers, Create Editable Layer, Add Layer from File, or Add Layer from Web. You might use each of these options at different times, but in this case, you should choose "Add Layer from File".
- A window will pop up allowing you to navigate to your zipped file. Choose it, ignore the option to generalize features, and click Import Layer. The layer will then be added to the table of contents on the left side of the map.
- Adjust symbology, transparency, visible scale range and other parameters as you wish.
- Click "Save" or "Save As" to save your changes or save your map.

NOTE: If you need to add raster data to your web map, it can be done, but you will need to use ArcToolbox tools to (likely) reclassify your raster to a simpler data set and then convert your

raster data to a vector shapefile. Then follow the instructions at the beginning of Step 5 to load the data set into ArcGIS.com.

Step 9: Sharing your map

When your web map is ready to be shared with your private working group, you need to invite the group to access it. We will use the Coquille climate change vulnerability assessment work group as an example for this part of the tutorial.

Any member of the work group, also known as stakeholders, must have completed Steps 1-3 above in order to receive access to the map.

To give them access, click the button on the top of the screen that reads "Groups".

You will see a button that reads, "Invite Users". When you click it, a new window will pop up that allows you to search for members of your group. Do not search on the group name, search on the individual's name. When their user name appears in the "Click a name to invite." box, highlight the name and select "Send Invitation".

When all invitations have been sent, the project leader should notify the group via email that they have been granted access to the map. ESRI does not notify users that they have been invited. They will need to log in to ArcGIS.com to find it in their Groups space.

End Notes

ArcGIS.com is constantly evolving and can be a useful resource for groups and individuals who want a free web-based visualization tool to help make decisions about projects. For more information about its capabilities and building your ArcGIS Desktop data into web maps, search the Help, Forums or Blog at ArcGIS.com.