BIOS Tools

Slide 1 (00:00): Introduction

Welcome to BIOS Tools, the second part of a three-part training course covering everything you need to know to get started working in the California Department of Fish and Wildlife's (CDFW) web-map viewer. My name is Joel Boros, I am the BIOS Lead and your primary point of contact for questions and comments regarding BIOS. In this session we will cover where to find and how to use several commonly used tools in BIOS.

Slide 2 (00:33): Topics

In this video we will cover the following tools:
- Add Map service,
- Locate Address,
- Point Info,
- Measure,
- Add Label,
- Bookmarks,
- and Print Map.

Slide 3 (00:52): Tool Menus

As we covered in the previous video, BIOS has tools grouped into three menus. Quick Tools, which work with the search box adjacent to it. Map Tools, which work within the map frame. An Advanced Tools which require additional input from the user.

Slide 4 (01:10): Tools Covered

From the Quick Tools menu we will be covering the Add Map Service and Locate Address tools. From the Map Tools menu we will be covering the Point Info, Measure, and Add Label tools. From the Advanced Tools menu we will be covering the Bookmarks, GeoFind, and Print tools.

Slide 5 (01:31): Add Map Service Tool

In addition to the BIOS catalog of data, there is an abundance of data available from outside sources. One of the formats this data is shared in is as an ArcGIS Server REST Map Service, which we will call a map service for short. Each map service is given a unique URL as shown here. The map service URLs are widely available. A good source is the California State Geoportal, which houses public data for many state agencies in California.

Slide 6 (02:08): Map Service Tool Example

Map services are added to a new section on the Layers panel to the left, under Other Layers. The data can be toggled on and off. The functionality of the added map service can vary based on the source. This will affect if the legend is visible and if the Identify Features tool can be used. For example, some will have a visible legend and are available to use with the Identify

Features tool, while others will just draw in the map. Clicking the arrow on the left of the added map service will open a tab in your web browser, displaying any information available about the map service.

Slide 7 (02:51): Locate Address Tool

You can use the Locate Address tool to recenter the map to a specified address, city, or zip code. To begin, enter the address, city, or zip code into the search box adjacent to the tool, then press enter. The map will then pan and zoom to the location and a purple square will appear. If the tool returns a "No address matched" error, this indicates the information you have entered is insufficient and you'll need to be more specific with your location. The tool opens a small window showing the information that matched the enter location and also includes the latitude and longitude. Once you have reviewed the information, you can clear the symbology by pressing the Remove All Highlights button, under the Reference Layers section heading.

Slide 8 (03:46): Point Info Tool

With the Point Info tool active, clicking within the map returns specific locality information. The tool returns coordinate information in various formats, County, quad name, watershed, ecoregion, and CDFW region. If the location is in an urban area, the tool also returns the nearest mapped street address. You will notice the tool places a red circle to indicate the geographic point selected, and also a black cross if there is a nearby mapped street address. If a point outside of California is selected, the tool only returns coordinate information and nearest street address. The information window can be expanded by pressing the box in the upper right corner. The information window can be closed by pressing the X button in the upper right corner. The symbology for this item, under the Graphics and Selection section can be toggled on and off using the checkbox, or removed by clicking the X button.

Slide 9 (5:00): Measure Tool

You can use the Measure tool to calculate linear distance or an area within a specified Polygon. You can choose which measurement units you would like to use. Then select either Draw Line to calculate linear distance or Draw Polygon to measure an area. With the Draw Line option selected, click in the map to begin the line, then click once to place each vertex or point to draw the line, then double-click to place the endpoint. The Draw Polygon option works similarly to Draw Line, click on the map to begin the polygon, then click once to place each vertex or point, then double-click to complete the polygon. Your measurement will be returned in the right-hand panel. To dismiss this result, click the Clear button.

Slide 10 (05:56): Add Label Tool

The Add Label tool can be used to manually add a label to the map. With the tool active, click on the map to create a label at that location. A window will open, allowing you to enter your text, then press Add to create the label, or Cancel to close the tool. Once added, the tool places a yellow diamond on the map and the label to the upper right of the diamond. Using the check-box in the Graphics and Selection section, the labels can be toggled on and off. You

cannot remove individual labels, but you may remove all of the labels using the Remove All Labels button. Any labels you have created will persist in BIOS sessions which have been saved using the Bookmarks tool.

Slide 11 (06:40): Bookmarks Tool

The Bookmarks tool allows you to save your current BIOS session to access at a later date or from a different device. The bookmark retains the current map extent, any added data layers, any selections or filters, and any labels added. To create a bookmark, open the Bookmarks tool, and enter your name, and a brief description of your project, then press the Create New Bookmark button. The tool will then return a URL which you can use to revisit this BIOS session at a later date or share it with others. You can also browse the current bookmarks by pressing the Browse Bookmarks button. This will open a table on the bottom of the map where you can search for your bookmark. You can sort the results by clicking on the field headers, or limit the result using the search box provided. Pressing the load button in the bookmarks table, closes the current BIOS map session, and loads the bookmarked session. Pressing the Add button in the bookmarks table adds the bookmarked session to the current session, merging the two together. If the bookmarked session contains secure data, you will be prompted to log in using either CNDDB or CDFW credentials. If you do not have the credentials to log in, all public data will be loaded, but secure data will not and a note will be displayed to that effect.

Slide 12 (08:20): GeoFind Tool

The GeoFind tool can be used to find specific locations through a variety of methods and then recenter the map on the specified location. Some of the location methods include:
- coordinates,
- Township and Range,
- geographic name search,
- partial or complete address,
- CDFW facilities and owned lands,
- watersheds,
- and ecoregions.

You will notice some of the methods have a help link available, which opens a document with further information.

Slide 13 (08:53): GeoFind Tool Example

To begin, open the tool, choose your location method, enter your search criteria, then press the Find button. The tool will either execute and recenter the map, or return a results table at the bottom of the map if multiple options are found. For example, here I am using the geographic name method and searching for "Carrizo".

Slide 14 (09:18): GeoFind Tool Example Continued

A table with multiple results is returned, you can click on a field header to sort the results. Once you have identified the result you want, in this example Carrizo Plain, press the Go button to recenter the map. Symbology for the GeoFind results is displayed in the map with a purple

outline, which can be toggled on and off or removed in the Graphics and Selection section.

Slide 15 (09:43): Print Tool

To create a PDF of the current map extent, open the Print tool. You can specify a title, author, orientation, and if you would like to include the legend in the print out. If the title or author is indicated, be sure to press the Update Map Text button. The PDF map includes elements such as basemap, added BIOS layers, reference layers displayed in the map, features highlighted through selections, and added labels.

Slide 16 (10:16): Print Tool Example

After clicking print, the button will turn into a "Printout" link, pressing this opens the PDF map.

Slide 17 (10:23): Topic Review

To review in this video, we covered the following tools: Add Map Service, Locate Address, Point Info, Measure, Add Label, Bookmark, GeoFind, and Print.

Slide 18 (10:41): Closing

Thank you for watching the BIOS Tools tutorial. Please look to continue BIOS training in the BIOS Advanced Tools video tutorial.