

# How to Use the MLRS Research Map to Look for Surface Mining Operations (Plans and Notices)

This document will cover the specific navigation and layer selections needed to specifically find Surface Mining Operations via the MLRS Research Map. For a general overview of using the map, please view this help article:

<https://mlrs.blm.gov/s/article/How-to-Use-the-Map>

## Jump to sections:

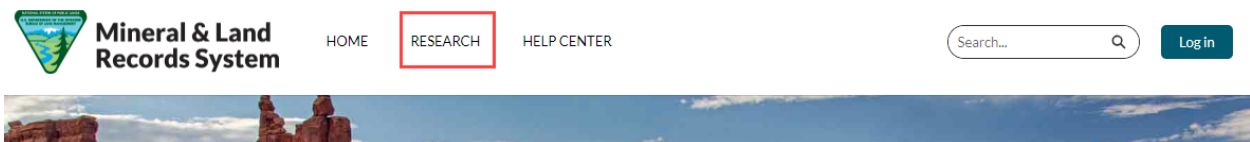
- [What Layer Adjustments do I make to see only Surface Mining Operations?](#)
- [How do I use the Information Icon to see more details and access more links?](#)
- [Where can I view the Map Key/Legend?](#)
- [How do I make certain map layers more visible?](#)
- [How do I save my location & settings for future use?](#)

Go to <https://mlrs.blm.gov/s/>

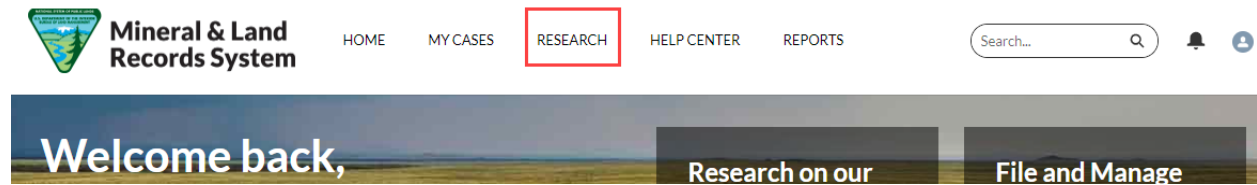
It is advised that users register and 'Log in' to save map settings for future use; however, it is not required.

Click 'Research' in the top center of the screen.

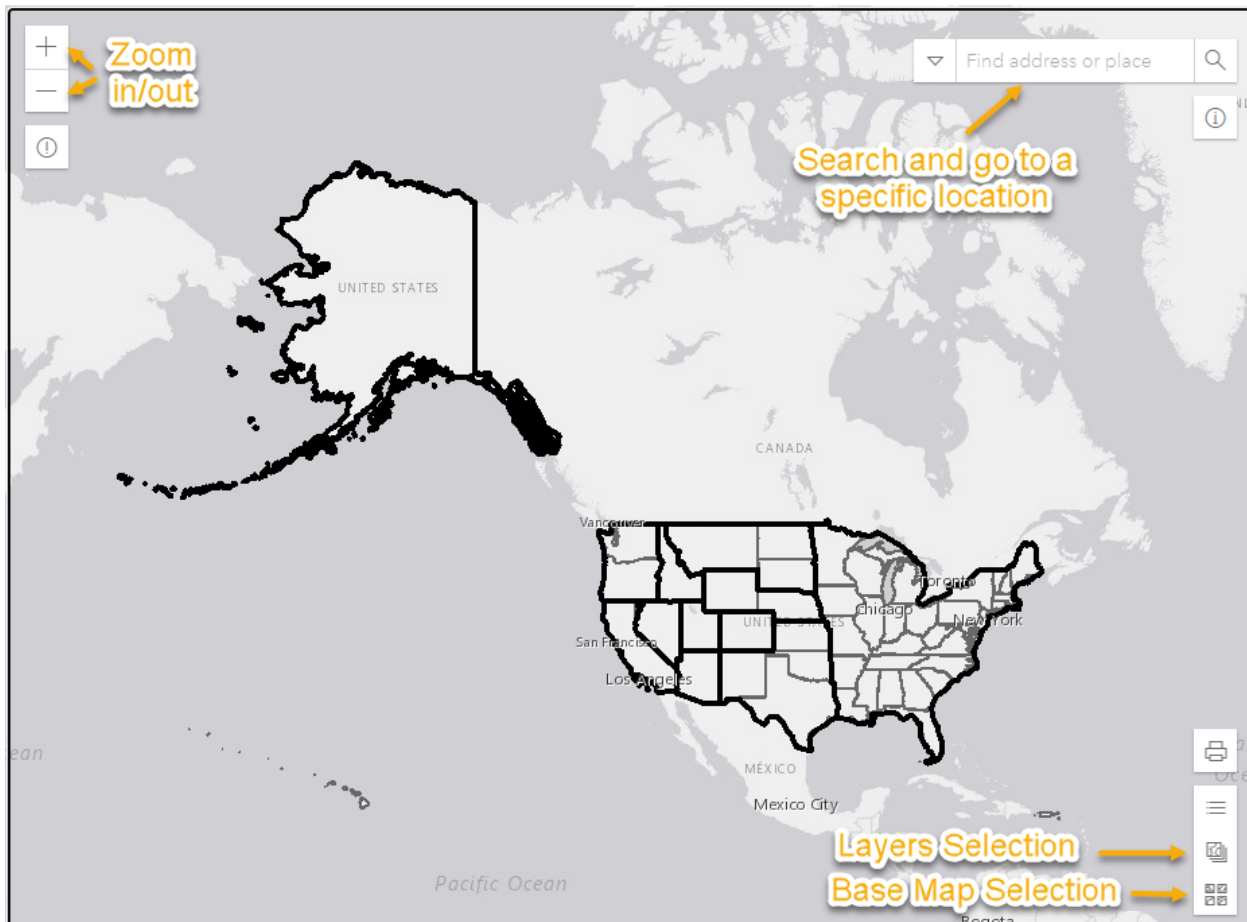
View with unauthenticated use (not logged in):



View for an authenticated (logged in) user:



Scroll and Pan or use the search bar within the map to navigate to an area of interest.



If desired, select a Base Map to your preference.

## Layer Adjustments:

Next, we'll address Layers adjustments which are necessary to focus in on surface mining activities (Plans and Notices).

By Default, the following layers are selected (turned on) when accessing the MLRS Research Map:

- BLM Administrative Areas
- BLM Public Land Survey System
- State and Local Administrative Boundaries (State and Local Admin)

Although the master layers for the different BLM Case Groups are not selected, the sub-layers for all Active/Authorized case dispositions are turned on by default. **It is important to know that surface mining activities falls under the 'Solid Minerals' master layer.**

1. Expand the Solid Minerals master layer by clicking on the arrow on the left side.
2. Expand each sub-layer ending in 'Case Disposition' and deselect/turn off unless you want to see those cases. Repeat for Coal, Non-Energy Leaseables, Saleables Free Use, Saleables Competitive, Saleables Non-Competitive, Saleables Community Pits, Saleables Common Use Areas, Saleables Exploration Permits, Oil Shale. **The sub-layer that should be left on is Locatables – Case Disposition.** Expand this layer and select/check Pending and/or Closed cases if that is of your interest.
3. Expand the 'Locatables – Authorized Operations' sub-layer. Select/check 'Notices' and/or 'Plans' if desired.
4. When finished, check the box next to Solid Minerals to turn on the master layer and all of the sub-layers you left selected.

# Layers



▶  Fluid Minerals ...

Solid Minerals **1. Expand Solid Minerals Master Layer** ...

Coal - Case Disposition **2. Expand any sub-layers ending in 'Case Disposition'** ≡ ...

Authorized/Interim **Uncheck/De-Select those you do not want to see** ...

Pending ...

Closed ...

▶ Coal Authorization Type ≡ ...

Non - Energy Leaseables - Case Disposition ≡ ...

Authorized/Interim **2. repeat process for reviewing/de-selecting other sub-layers ending in 'Case Disposition'** ...

Pending ...

Closed **Continue down the list** ...

# Layers




<input type="checkbox"/> Locatables - Case Disposition	2. Expand the Locatables - Case Disposition sub-layer.	☰ ...
<input checked="" type="checkbox"/> Authorized/Interim	Select the specific case dispositions (statuses) you want to see in regards to surface mining operations	...
<input checked="" type="checkbox"/> Pending		...
<input type="checkbox"/> Closed		...
<input type="checkbox"/> Locatables - Authorized Operations	3. Expand the Locatables - Authorized Operations sub-layer.	☰ ...
<input checked="" type="checkbox"/> Plans	Select the specific types of cases (Plans and/or Notices) that you would like to see.	...
<input checked="" type="checkbox"/> Notices		...
<input type="checkbox"/> Saleables Free Use - Case Disposition		☰ ...
<input type="checkbox"/> Authorized/Interim		...

After making your sub-layer adjustments in steps 2 and 3, turn on the Solid Minerals master layer to make your selections viewable on the map (step 4).

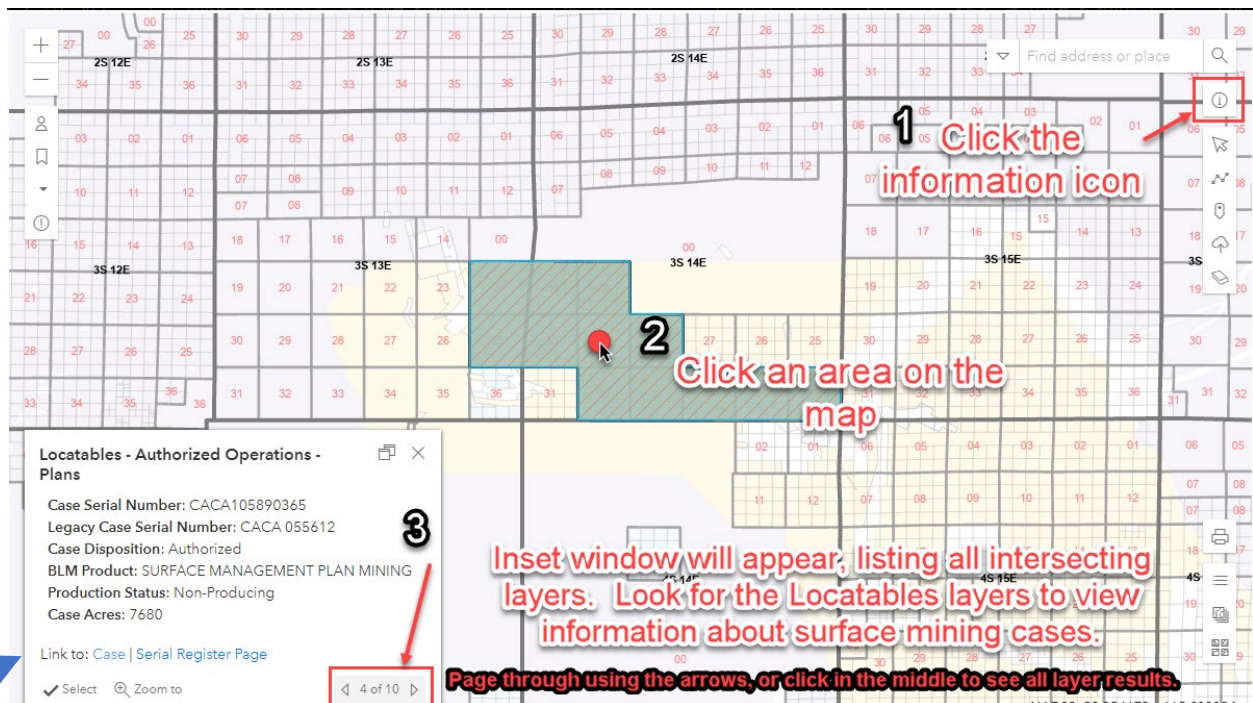
<input checked="" type="checkbox"/> Solid Minerals	...
<input type="checkbox"/> Coal - Case Disposition	☰ ...
<input type="checkbox"/> Coal Authorization Type	☰ ...
<input type="checkbox"/> Non - Energy Leaseables - Case Disposition	☰ ...
<input type="checkbox"/> Non - Energy Leaseables - Phosphate	☰ ...
<input type="checkbox"/> Non - Energy Leaseables - Sodium	☰ ...
<input type="checkbox"/> Non - Energy Leaseables - Potassium	☰ ...
<input type="checkbox"/> Non - Energy Leaseables - Gilsomite	☰ ...
<input type="checkbox"/> Non - Energy Leaseables - Other	☰ ...

## Using the Information Icon to get More Details

You can use the information icon  to get more information about layers in an area you click on the map.

Click the information icon, then click an area on the map. An inset window will appear in the bottom left of the map. The inset window will allow you to select or page through all of the layers that intersect the area you clicked.

To view the information specific to surface mining operations, look for 'Locatables – Authorized Operations...' or 'Locatables – Case Disposition...' in the results list. A polygon for the selected result will be highlighted in blue.



1 Click the information icon

2 Click an area on the map

3 Inset window will appear, listing all intersecting layers. Look for the Locatables layers to view information about surface mining cases.

Page through using the arrows, or click in the middle to see all layer results.

If you want more information about a case, copy or note the Case Serial Number. You can then obtain the Serial Register Page for the case using that serial number, at:

<https://reports.blm.gov/report/MLRS/127/CR-Serial-Register-Page-All-Other-Products/>

Or use the links provided in the informational inset to access the case specifically in the MLRS Community, or to be routed to the Serial Register Page for the case.

## Additional tips:

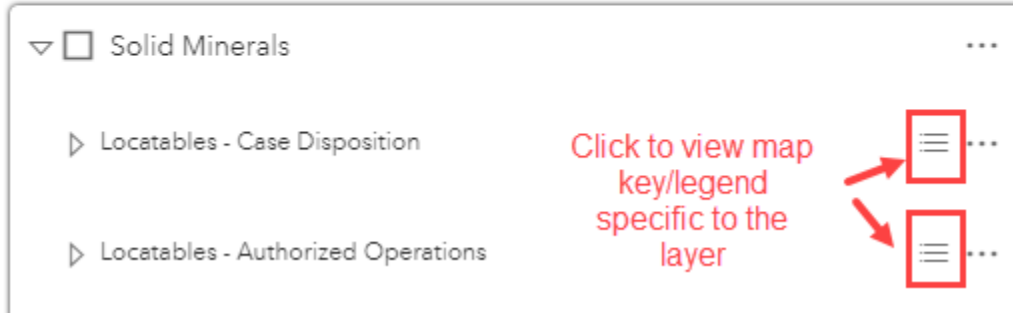
### Viewing Map Key/Legend

To see the key/legend for a specific layer, open up the layers menu on the bottom right, navigate to the sub-layer you would like to see, and click the icon that looks like a bulleted list.

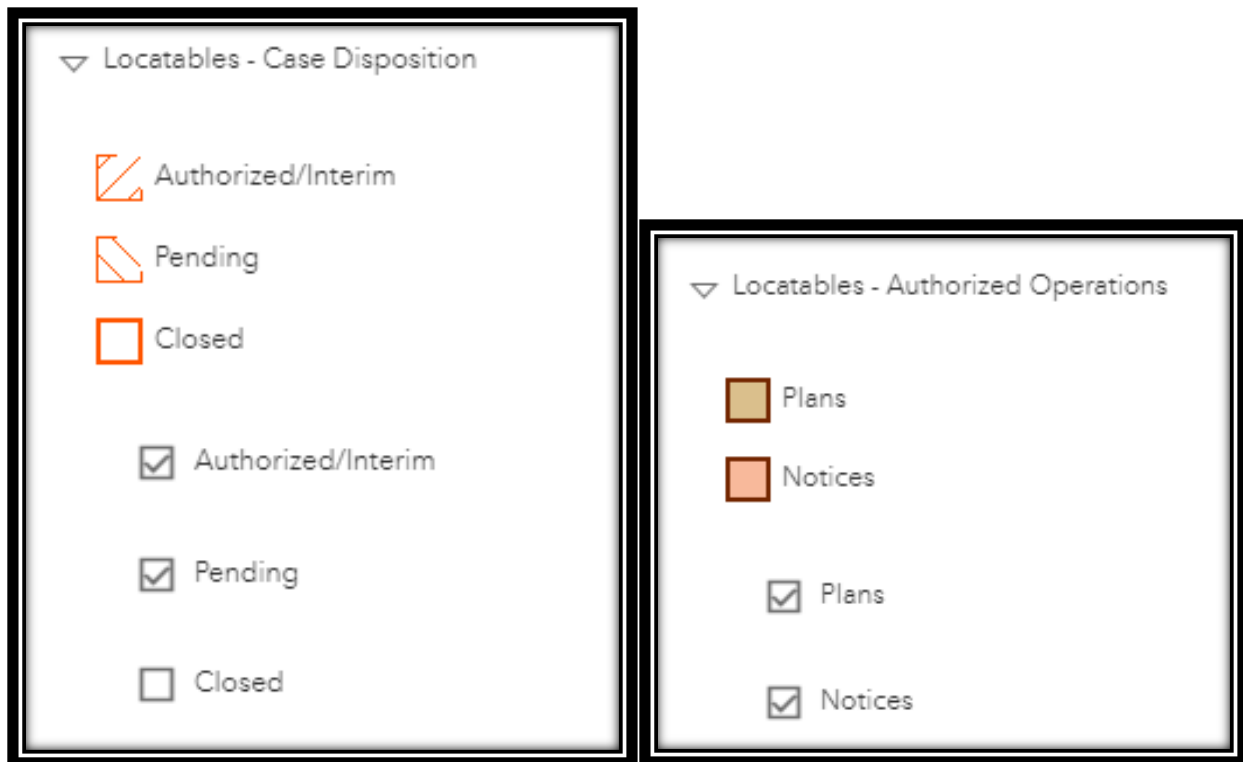
# Layers



Toggle visibility of each data layer.  
Click, drag and drop layers to reorder.



Key/Legend for layers related surface mining activities (for reference):



## **Making Layers More Visible (adjusting opacity):**

Because so many layers are available within the MLRS Research Map, many layers are very opaque or transparent by default. To make a layer more obviously visible (a good example is the Surface Management Agency Layer) click the three dots next to the

master layer name, then increase the opacity. This can be done with any master layer or at a sub-layer level.

## Layers

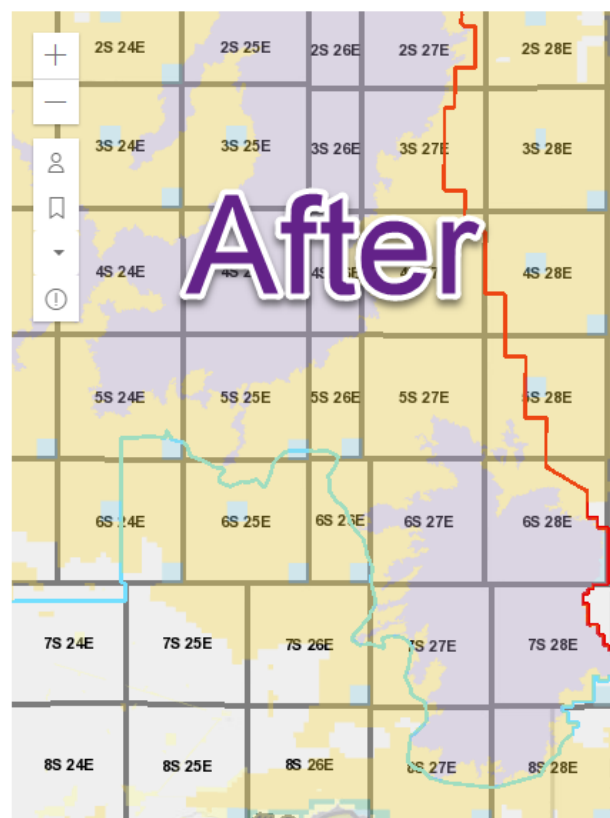
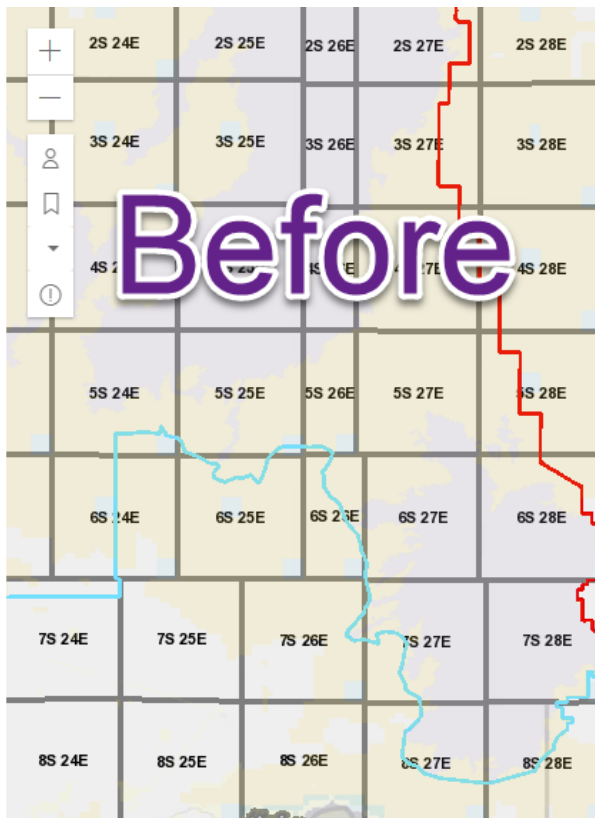


▷  Surface Management Agency ⋮

Labels on/off

^ Increase opacity

∨ Decrease opacity



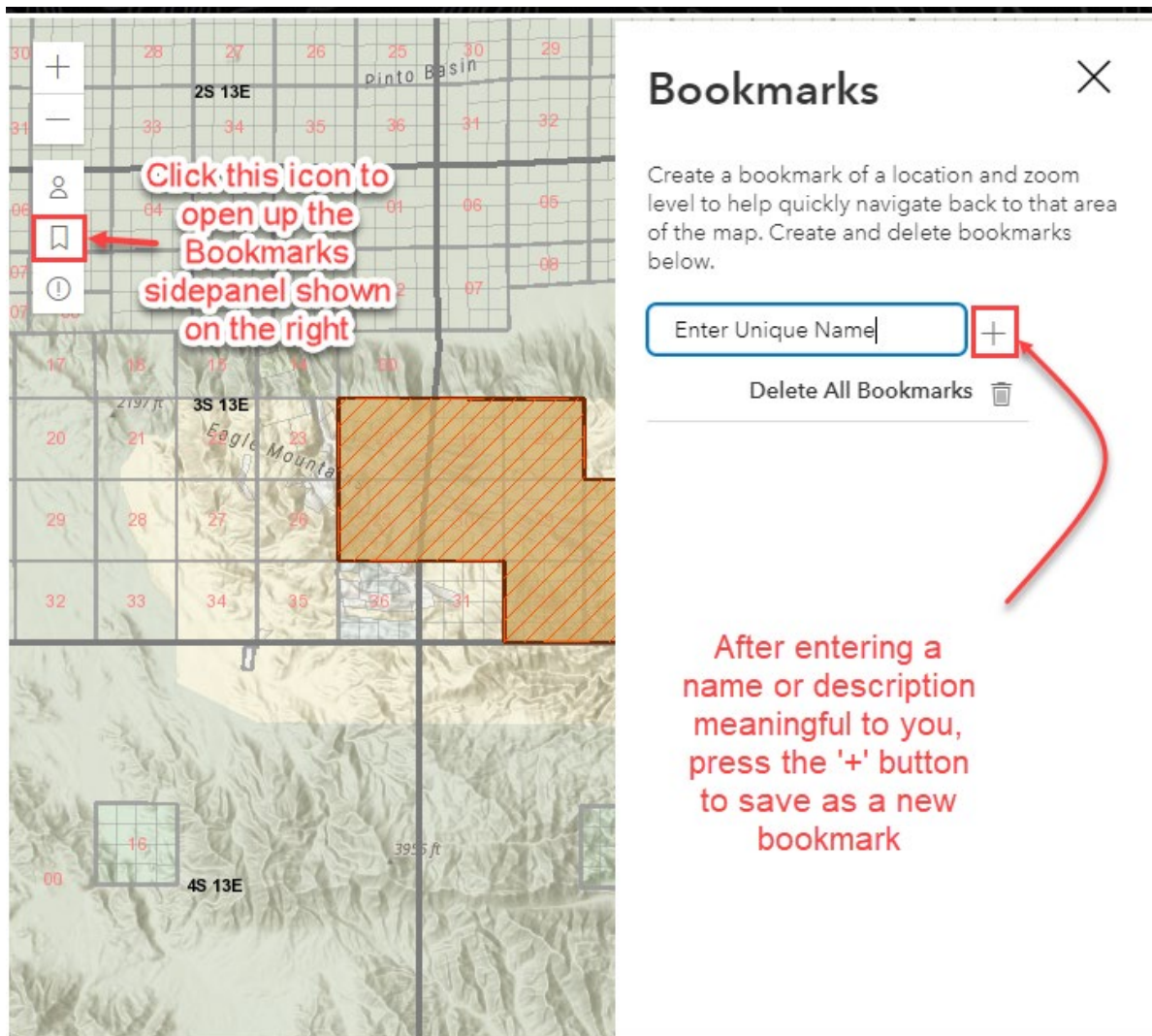


## Saving your map view/settings by bookmarking

*(Only available with an authenticated/logged in account)*

If you wish to periodically revisit and review similar information, having an authenticated account (what we call someone who has registered and is able to log in) can save a lot of time in having to make the layer adjustments in the future.

With an authenticated account, you can save Bookmarks in the Research Map which will preserve your layer selection and location. You can save multiple bookmarks and give them a custom name.



The image shows a screenshot of the Research Map interface. On the left, a map is displayed with a grid overlay. The grid cells are numbered from 00 to 32. A red box highlights the bookmark icon in the left sidebar. A red arrow points from the text "Click this icon to open up the Bookmarks sidepanel shown on the right" to the bookmark icon. The map shows a topographic view with labels like "pinto Basin", "Eagle Mounta", and "3955 ft".

On the right, the "Bookmarks" sidepanel is open. It has a title "Bookmarks" and a close button (X). Below the title, there is a text input field labeled "Enter Unique Name" and a red box around the "+" button. A red arrow points from the text "After entering a name or description meaningful to you, press the '+' button to save as a new bookmark" to the "+" button. Below the input field, there is a "Delete All Bookmarks" button with a trash icon.

Repeat to save additional bookmarks.

After at least one bookmark has been saved, a down arrow appears below the bookmarks icon. Click this arrow to access your previously saved bookmarks.

