North Carolina Natural Heritage Data Explorer (NHDE)

Help Document

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www.ncnhp.org

The NHDE provides interactive access to maps and data representing Natural Heritage resources and other conservation values in North Carolina.

You can navigate through this PDF by clicking on any link in the menu above, or by enabling bookmarks in Adobe Reader by clicking the bookmark icon in the left panel. Additionally, you can click any of the hyperlinks in the document (blue underlined text).

You can download a PDF version of the NHDE Help Document here: NHDE Help Document. For additional information about the NHDE, please visit the North Carolina Natural Heritage Program's NHDE webpage. To contact the Natural Heritage Program about the NHDE or natural heritage data questions, please visit the Staff Contacts page for a list of staff available to assist you.

For best results, this site should be viewed in the *most current versions* of the following browsers: Firefox, Google Chrome, or Safari. The NHDE Map does not work in any version of Internet Explorer.
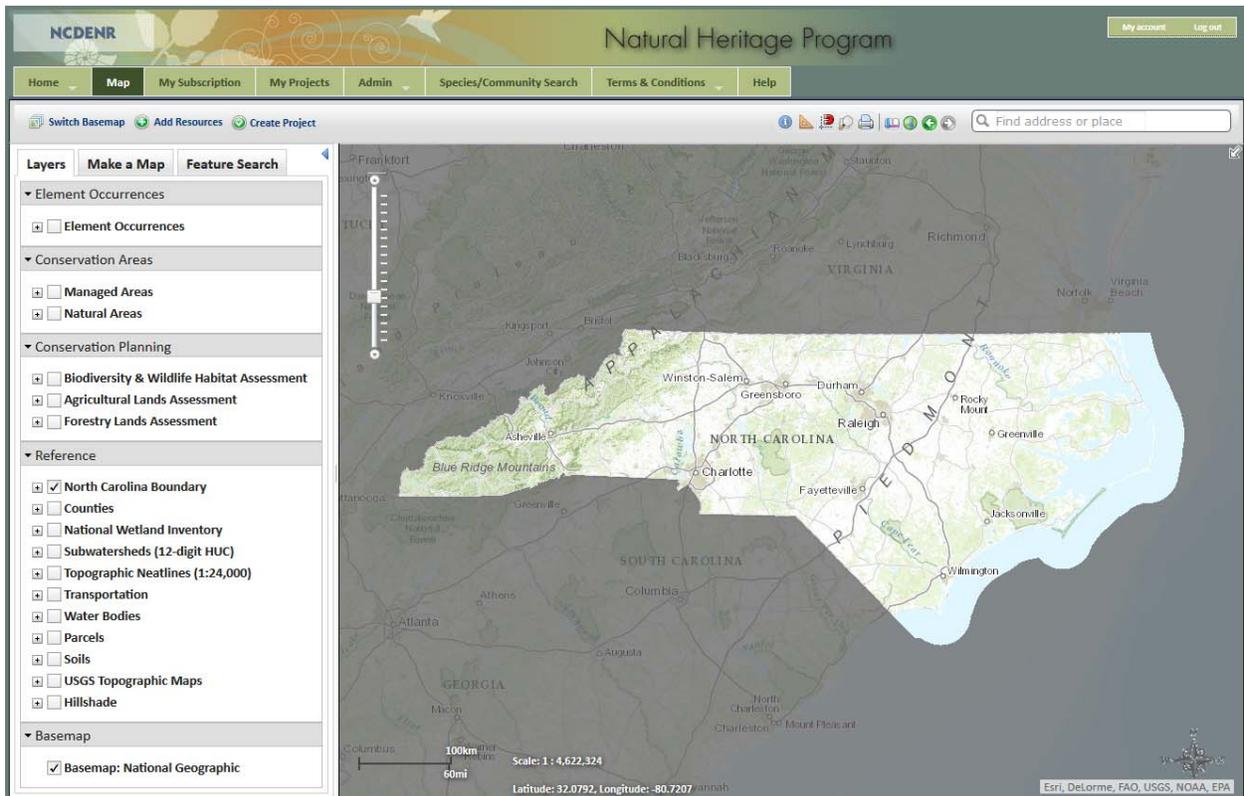
Note: While the NHDE website and map viewer may function in some tablet and smartphone formats, it was not specifically developed to be fully functional on these devices.

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MAP NAVIGATION AND USE

MAP VIEWER BASICS

NCDENR Logo: Click this logo to go to the homepage for the North Carolina Natural Heritage Program (www.ncnhp.org), the host program for this interactive mapping site.

Login Status and Account Information: You do not need to register, have an account or subscription, or login to use the NHDE. All publicly available map layers and analysis and mapmaking tools are available to anyone. To view publically available map layers, click the "Map" tab. However, if you wish to access sensitive data, or to submit projects for review, you will need to create an account and join a subscription. For more information, see the Access and Permissions section of this document.

If you are not a registered NHDE user and would like to create an account and join a subscription, click "Create New Account" on the Home page. You will be asked to fill out an account form. [*Note: A valid email address is needed. All emails from the NHDE system will be sent to this address. The email address is not made public and will only be used to send the results of your project reviews, and when you wish to receive a new password or other notifications by email.*]

Once you have created an account, an email will be sent to you for authentication purposes. A link in that email will lead you to a page for you to enter and confirm a password. **Once you have an account, you must either create or join an existing subscription**. By creating or joining a subscription, you will be able to submit projects for review and to view natural heritage data (depending on your assigned access level). To join a subscription, you must be invited by the subscription administrator. See the Access and Permissions section for more information about subscriptions.

If you are a registered NHDE user with an active account, enter your email address and password, which will provide you with access to the site based on your assigned access level. Once you are logged in, you can click on "My Account" in the upper right corner of the screen to be taken to a page that allows you to view and edit your account information, as well as view your profile, history, and group subscription information.
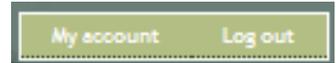
NAVIGATION BAR

The green navigation bar at the top of the screen provides easy access to various components of the NHDE. Note that the tab in which you are working at a given time is dark green (for example, the Home tab shown below indicates you are on the NHDE Home page).
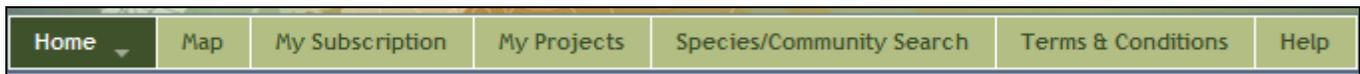
Home: The NHDE Home page, consisting of basic information about access to the NHDE, as well as a login/account registration window.

NCNHP Home: Place the mouse over the "Home" button to reveal the North Carolina Natural Heritage Program (NCNHP) Home link that will transfer you to the main NCNHP website (www.ncnhp.org).

Map: The NHDE Map Viewer is where the user can view and analyze map layers that summarize conservation status and values of lands, as well as reference and boundary map layers. Subscribed users can access additional natural heritage data and submit projects for review (see below for more information about the using the Map Viewer.)

My Subscription: This tab is only pertinent to users with a NHDE account and subscription, and to view it you must be logged in to your account. Click this tab to view and edit group subscription membership and to view information on other members within your subscription. To create a subscription and become an administrator for that subscription, click on "Create New Subscription." See the Access and Permissions section of this help document for more information related to creating subscriptions. If you are unsure whether your agency or organization holds a current subscription, please contact Suzanne Mason at suzanne.mason@ncdcr.gov or 919-707-8637 to locate the appropriate administrator within your group.

My Projects: This tab is only pertinent to subscribed users, and you must be logged in to your account. Click this tab to view and edit projects submitted through the NHDE for review. Projects may be sorted by Project Title, User Project Number, Submit Date, Project Description, or the NHDE Project ID; simply click on the heading to sort by that column. To reverse the order of sorting, click on the heading again. To access information for a particular project that has been

submitted, click on the individual Project Title. You will not be able to see projects submitted by anyone else in your subscription group, and, likewise, they will not be able to view your projects.

Species/Community Search: The Species/Community (Database) Search enables the user to search the Natural Heritage Program's database to generate tabular reports summarizing rare species and natural communities by a variety of attributes. Clicking on this tab transfers the user to the [Data Search](#) page on the main NCNHP website.

Terms and Conditions: This tab contains disclaimers related to the use of the NHDE as a conservation planning and environmental review tool, as well as terms and conditions that must be adhered to if accessing sensitive natural heritage data. All users of the NHDE website are required to adhere to these Terms and Conditions. There is also information on the NCDENR Disclaimer Policy, specifically related to Google Analytics which is used to track statistics about site usage.

BASIC MAP NAVIGATION

Scale Bar: Click at a point along the vertical scale bar (shown right) to zoom to a specific extent, or slide the scale block up and down to zoom in and out, respectively. *Note: The map scale and coordinates are visible in the bottom left hand corner of the map viewer (example below) and change accordingly when the scale bar or any other navigation tools are used.*
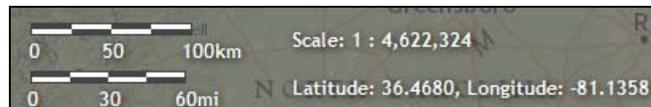
Overview Map: This map is located in the upper right corner of the map viewer.

- Show/hide the Overview Map by toggling the arrow icons in the upper right corner of the main map view. (The default view does not show the Overview Map.)

- Click and drag the gray box in the Overview Map to alter the map extent; the main map will adjust accordingly.

Panning: To shift the viewable area, click and hold anywhere on the map and drag the cursor/mouse.

Zoom In: Double click anywhere on the map to zoom in and recenter the Map window on that location. If using a mouse with a scroll wheel, scroll up to zoom in.

Zoom Out: If using a mouse with a scroll wheel, scroll down to zoom out; if not, use the vertical scale bar.

Hotkey Shortcut Tips:

Zoom In - Hold the SHIFT key while dragging a box on the map.

Zoom Out - Hold SHIFT and CTRL keys simultaneously while dragging a box on the map.

MAP TOOLS

Switch Basemap: The default basemap is National Geographic; the basemap can be toggled on or off by clicking the checked box to "off" next to the basemap layer on the map viewer. Click "Switch Basemap" in the upper left corner to select from other basemap options.

Add Resource: Click to import and use additional layers (via map services or zipped shapefiles) in the map viewer.

- For adding map services, enter a URL and title for the layer in the respective fields of the dialog box. *Note: The map service URL must have the correct format. For more information on this feature, see* **Accessing an outside map service.**

- For adding a zipped shapefile, browse to the file by clicking "Select File to Upload." For more information on this feature, see Import a shapefile to the map viewer.
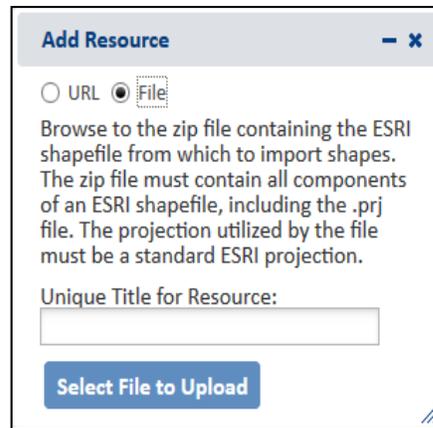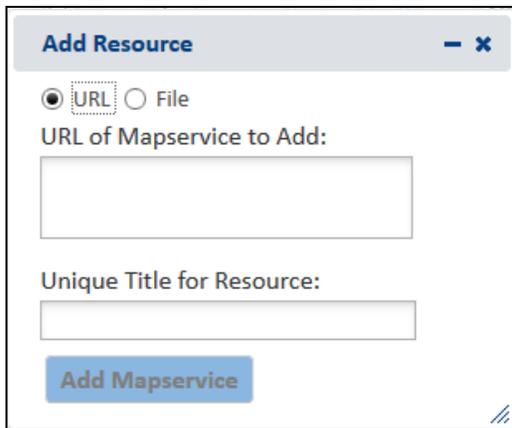
Create Project: Clicking "Create Project" opens a Draw/Edit toolbar that allows subscribers to submit projects for site-specific project review. For more information about this tool, see the How Do I? section and click on Submit a Project for Review. *Note: You must be logged in to your*
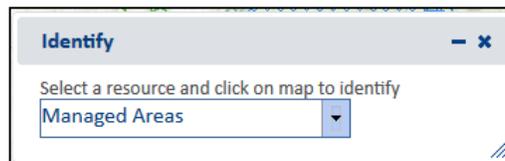
*account and be a member of a subscription in order to create a project.*
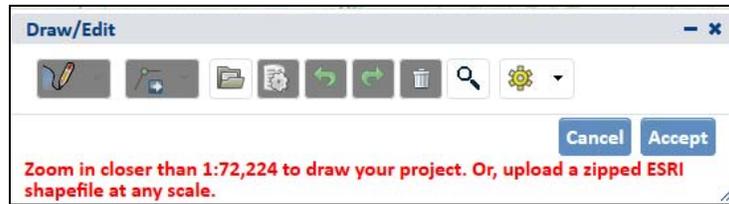
Tool buttons are used to navigate around the map, and to view and query datasets.

Identify Tool: Identify a feature from a data layer by selecting the layer from the pull-down menu and clicking on the type of resource to be identified. Related information will appear in the details window.
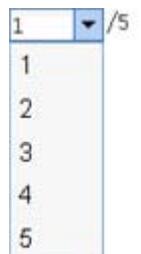

The Details window returns the identify results:
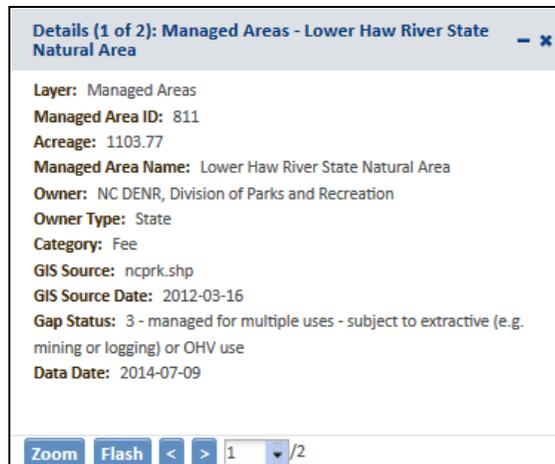
Within the details window, the following tools can be used:

 Zooms to the feature, Flashes the feature

If more than one feature is identified, navigate between them by:

 Using the arrows (left) to step back and forth through the set of features, or by selecting the

desired feature dialog from the dropdown list (right).

Measure Tool: Measure area and distance, as well as identify the coordinates of a location. Choose the unit of measurement from the dropdown list when measuring area or distance and the format for coordinate results (see examples on next page).

To create the feature to be measured, select the desired type of measurement (area, distance, or location). Digitize, or draw, a polygon for the area, or draw a line for distance, using the mouse and clicking along the shape boundary or line. Double click on the last point to finish the polygon or line. Click a point for coordinates. The measurement result is returned in the units specified within the measure window.   Change the unit to change the units of the result accordingly.
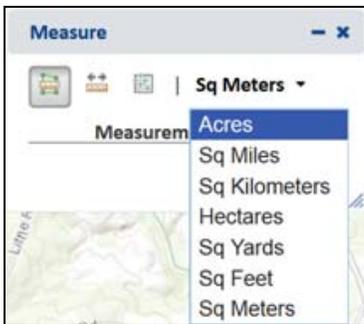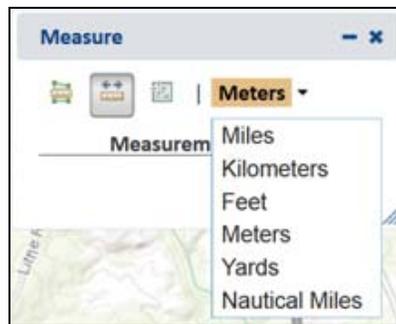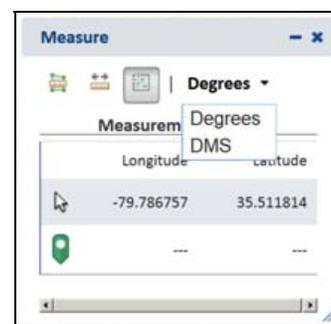
Area   *Distance*   *Location*


Snapping Settings: Add map layers to snapping settings that will allow you to use these layers for snapping to their features when drawing or measuring. For example, if you wanted to measure the distance of one managed area to another managed area, add Managed Areas to the snapping settings and when clicking near a managed area with the Measure tool and the tool will snap to the boundary for a more accurate measurement.
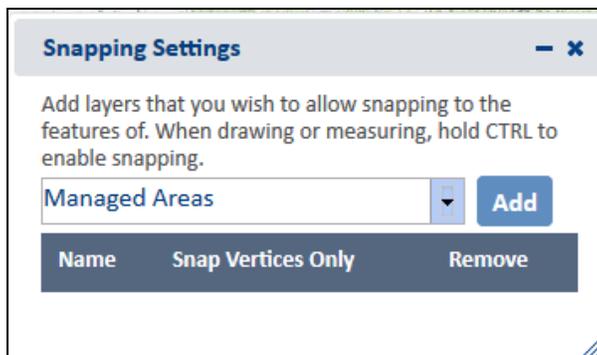

Zoom to Coordinates or Scale: Zoom to a specific location by selecting one of the predefined scale options or by entering latitude and longitude coordinates, making sure to specify the appropriate projection.
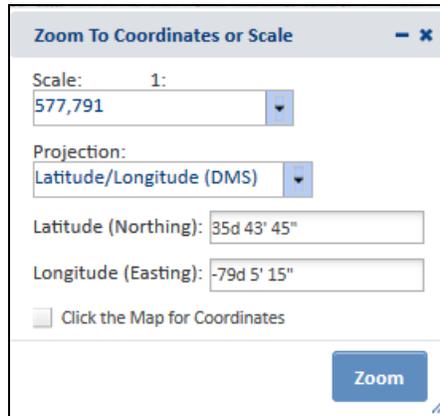
Print: Create a printable version of the map view. Click the "Print" button, and when the Print Map window opens, enter a title for the map, its author, any copyright information, and toggle the "Print" pull-down to select the paper setting. Maps can be generated showing Landscape Layout (PDF format) or Map Only (in PDF, PNG, or JPG formats).
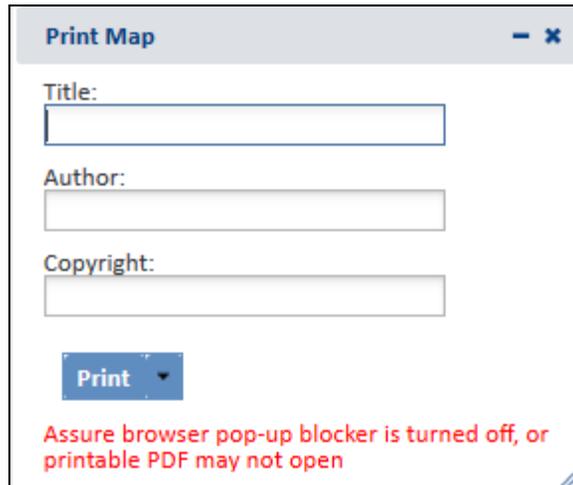

Note: The Print feature can also be used to save maps in PDF format. After the pop-up window opens, select the "Save" icon and specify where you would like the PDF to be saved.

Spatial Bookmarks: Bookmark the map at a particular extent and location to return to for later use during a session. Click the spatial bookmarks icon once the map is at the desired location and extent and type in a name for the bookmark. The bookmark will then appear in the spatial bookmarks window. *Note: Spatial bookmarks will not be retained if you close out of the NHDE map viewer or if the map viewer times out after thirty minutes of no use; they are only retained during the current session.*
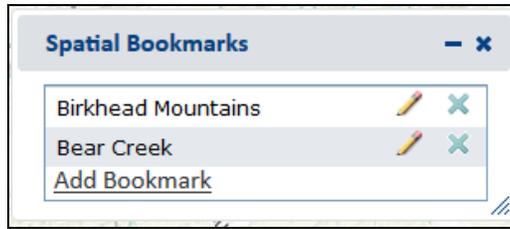
Default Extent: Zoom to the full view of all data layers.

Previous Extent: Moves the Map window back to the previous view. *Note: The button will appear gray if there are no previous views available.*

Next Extent: Moves the display to the next view. *Note: The button will appear gray if there are no next views available.*

Find Address or Place: Search for a place by typing a desired location in the text box. If searching for an address, include city, state and/or zip code. Hit "Enter" or click the magnifying glass icon to zoom to the location on the map.

Note: The default map scale when searching on an address or place is 1:9,028K; this scale is too large for the Terrain with Labels and Oceans basemaps to display. If either of these basemaps is being used, one must zoom out after searching to a scale of 1:72,224K.

MAP TABS

Note: The Map menu can be minimized by clicking the blue arrow to the right of the tabs (see above). The active tab, or the tab currently in use at any given time, is white (e.g., Layers).

Layers Tab: Displays the available map layers for view and query in the map window.

- Map layers are grouped by type, denoted by the gray heading (e.g. "Conservation Planning"). These groups can be expanded or collapsed by clicking that heading title in the gray bar.

- A layer can be turned on and off by clicking the check box. *Note: Some layers may be scale dependent, meaning that they are only visible at certain map scales based on the most appropriate scale for that layer. If a map layer's features are grayed out, then it can't be viewed at that scale.*

- The symbology for each map layer can be hidden or expanded by clicking the + or - to the left of the check box for a layer.

- When the mouse is hovered over a layer name, an arrow appears to the right of it. Clicking this arrow displays a menu with the option to adjust the layer's transparency as it appears on the map, zoom to the full extent of that layer, remove it (if it was added by the user), or view its map service details in another web browser tab. *Note: The Element Occurrence, Managed Areas, and Natural Areas layers also have a Filter option that allows the user to filter the individual layer based on its attributes.*

- See the Map Layers section of this document for detailed descriptions of each layer.

Make a Map tab: Create printable maps by digitizing an annotation layer on the map viewer.

- Points, lines, polygons, and text are available in many styles, sizes, and colors to satisfy a variety of mapping purposes.

- To begin annotating, choose a drawing type by clicking a selection on the pull-down menu. Once created, annotations may be edited by clicking on "Edit Annotations."   To delete all annotations, click on "Clear All Annotations."
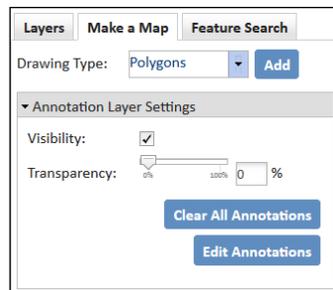
- Selecting Polygons (shown above) or Lines opens a Draw/Edit window, where users can upload zipped shapefiles to use as annotation geometries as well as use various editing tools to refine map making.

- See the How Do I… help section for some examples on how to use this tool. *Note: Shapefiles created by the user are only visible during the current NHDE session; once a user is logged out, the custom annotations will no longer be visible.*

Feature Search tab: Search additional (or back-end) data associated with map layers under this tab.

- Select the map layer to search within in the drop down menu for Resource.

- Searches can be conducted by using Attribute Search (by selecting text strings or choosing from the drop down list for each attribute) or by Spatial Search (by selecting a spatial area in which to conduct the search). Attribute Search and Spatial Search can also be used together. For example, Managed Areas can be searched by various attributes (e.g., Managed Area Name, Owner, Owner Type), as well as searched based on other map layers via the Spatial Search (e.g., county boundaries).

- Search results can be instantly viewed in a list at the bottom of the Feature Search window and within the map window.

- For more information on this tool please see the Feature Search help page.

MAP LAYERS

ELEMENT OCCURRENCES

Element Occurrences: This dataset is only visible and available for query to Tier 2 users and available in list form after project submittal to Tier 1 users. This layer identifies occurrences of rare plants and animals, exemplary or unique natural communities, and important animal assemblages (e.g., heronries and colonial waterbird nesting sites) tracked by the North Carolina Natural Heritage Program. Collectively, these plants, animals, natural communities, and animal assemblages are referred to as "elements of natural diversity" or simply as "elements." Specific occurrences of these elements are referred to as "Element Occurrences" or simply "EO.s" Each Element Occurrence is represented by a polygon indicating its known location. The polygons are intended to indicate the full known areal extent of the occurrence, modified to account for any known locational uncertainty of the source data. Note that records for the Blue Ridge Parkway are not included in this data set. You must contact the Blue Ridge Parkway if you need information for this area. (Data Source: North Carolina Natural Heritage Program)
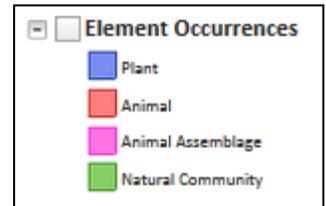
CONSERVATION AREAS

Managed Areas: This dataset is a collection of fee simple properties and easements where conservation is one of the management goals. It also includes a number of properties and easements that are not primarily managed for conservation, but that are of conservation interest. This conservation interest ranges from properties and easements which support rare species and intact, high-quality natural communities to those that are open spaces in places where open space is scarce. The property and easement boundaries in this data set were acquired from a wide variety of sources, and in some cases their boundaries are approximate. Because of these inaccuracies, this data set is intended to be used as an aid to conservation planning only and not as a substitute for land survey data. *Note: Inclusion of an area in this data set in no way implies that the area is open to the public. Permission of the land owner is needed to access all lands not open to the public.* (Data Source: North Carolina Natural Heritage Program)

Natural Areas: This dataset identifies terrestrial and aquatic sites that are of special biodiversity significance. A natural area's significance may be due to the presence of rare species, exemplary natural communities, or important animal assemblages. Each natural area is ranked based on the rarity, quality, and number of natural heritage resources it contains. The boundaries of a natural area are drawn by North Carolina Natural Heritage Program (NCNHP) staff, based on ecological and biological information collected during field surveys conducted by NCNHP staff and other professional biologists. Because the data can become outdated as conditions on the ground change, the North Carolina Natural Heritage Program should be consulted and field surveys should be conducted to verify conditions before using the data in making land-use decisions. *Inclusion in this data set does not mean that public access exists or is appropriate. Permission of the land owner is needed to access all lands not open to the public.* (Data Source: North Carolina Natural Heritage Program)
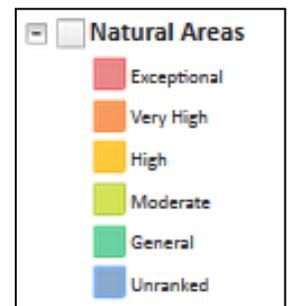
CONSERVATION PLANNING

Several map layers are provided to assist in conservation planning efforts in North Carolina. These layers comprise the North Carolina Conservation Planning Tool (CPT), developed by NCDENR in 2007. The CPT allows users to make conservation decisions strategically by accounting for the interests of different conservation stakeholders and the public. The following provides a brief definition of each CPT layer displayed on the map viewer. More background on the CPT can be found on the CPT website at *www.conservationtool.nc.gov*.

Biodiversity/Wildlife Habitat Assessment (BWHA): This dataset shows the state's conservation priorities for aquatic and terrestrial species and habitats, as well as landscape functions and connectivity. It is utilized by local governments, state agencies, regional councils of governments, funding programs, and conservation organizations to support land use, conservation, watershed, and transportation planning and decision making. The relative conservation values displayed by this dataset focus on (1) the biodiversity of aquatic and terrestrial species and communities, (2) large-scale landscapes, including core wildlife habitats and habitat connectors, and (3) lands important to ecosystem processes, such as riparian buffers and wetlands.
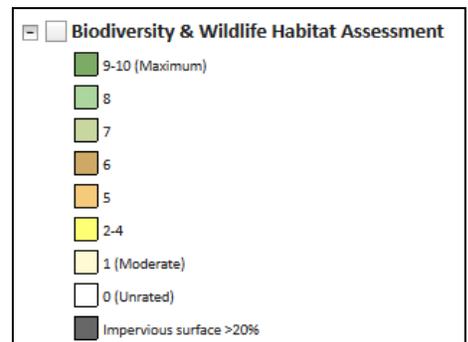
Priorities for conservation of important biodiversity and wildlife habitats are depicted using a scale of 1 (moderate conservation value) to 10 (maximum conservation value). Datasets used in this assessment are contributed by various state agencies and conservation organizations, and each individual data input is assigned a relative conservation value based on resource rarity and distinctiveness, resource function, and data precision, accuracy, and completeness. These data inputs are processed and combined to show conservation priorities statewide.

Data inputs include natural heritage areas, rare species occurrences, core wildlife habitats and their connections, important aquatic resources (e.g., trout streams, fish habitat, fish nursery areas, high quality and outstanding resources waters), wetlands, and watershed priorities based on Federally listed species and other factors. For each individual 30m x 30m pixel in the dataset, the maximum conservation value for that pixel is shown; to determine which categories of data inputs contribute to the maximum (final) score, use the Identify tool to view the attribute table.

The map layer associated with the Biodiversity/Wildlife Habitat Assessment was developed and is maintained by the North Carolina Natural Heritage Program, in collaboration with other agencies and organizations. For more information on the Biodiversity/Wildlife Habitat Assessment dataset, visit the CPT website to access the Chapter 4 of the CPT Report at http://portal.ncdenr.org/web/cpt/cpt-report.

Forestry Lands Assessment: This dataset shows programmatic and landscape priorities that were developed in an assessment of the past, current, and projected future conditions of North Carolina's forest resources by the North Carolina Forest Service and are published as part of the [North Carolina Forest Action Plan (2010)](). The assessment and priority maps, together with the strategic plan, constitute a coordinated plan for moving North Carolina forests into the future. The six priority map layers included in this assessment represent:

Programmatic Priorities

- Conserving Working Forest Lands

- Protecting Forests and Communities from Wildfire Risk

- Mitigating Threats to Forest Health

- Maintaining Viable Urban Forests

Landscape Priorities

- Rural Forest Priority Landscape

- Urban Forest Priority Landscape
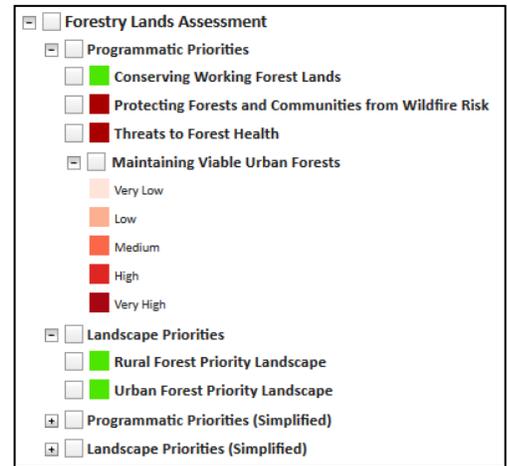
The priority landscape and programmatic maps illustrate areas within the state that will best be served by the strategic efforts detailed in the Forest Action Plan. The maps reflect the conservation, protection, and enhancement themes that were the focus of the assessment document and federal directives. These priority maps were developed to educate and inform stakeholders about forest resources and to assist resource professionals with focused implementation of plan goals, strategies, and objectives.

More information on map layers associated with this assessment can be accessed at: [http://www.ncmhtd.com/arcgis/rest/services/AG_FS/ForestActionPlanPriorityLayers/MapServer/layers](). As noted above, these layers have a minimum scale at which they can be viewed.

Agricultural Assessment: This dataset serves as an assessment tool that shows priorities for preservation of important agricultural working lands in the state and is utilized by the North Carolina Agricultural Development and Farmland Preservation Trust Fund (ADFP) to assist in the successful administration of these funds. This assessment considers the economic and environmental importance of farmland to the state and was developed and is maintained by the North Carolina Department of Agriculture and Consumer Services (NCDA&CS).

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The Overall Agricultural Score in this assessment is comprised of three separate evaluations:

- Government Policy

- Agribusiness Infrastructure

- Soils

The base layer for this assessment consists of parcels predicted to be in agricultural use. All scores are assigned at the parcel level, and points for the three individual evaluations are added together for each parcel to obtain the Overall Assessment Score. Score results are grouped into tiers based on Jenks natural breaks. For the Overall Assessment Score, parcels in Tier I are considered to be the highest priority for conservation of working farmland. Within the individual assessments, parcels in Tier I represent the parcels that scored the best for each assessment alone.

More information on the Agricultural Assessment can be can be accessed in Chapter 6 of the CPT report available here: http://portal.ncdenr.org/web/cpt/cpt-report.
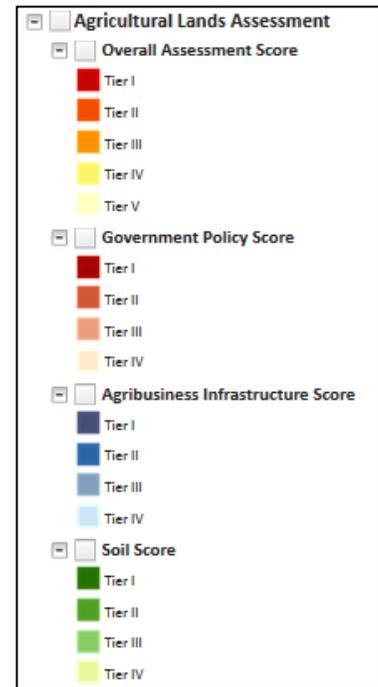
REFERENCE LAYERS

North Carolina Boundary: North Carolina state boundary (Data Source: North Carolina Geodetic Survey)

National Wetlands Inventory: This dataset represents the extent, approximate location, and type of wetlands and deepwater habitats in the coterminous United States. These data delineate the areal extent of wetlands and surface waters as defined by Cowardin et al. in 1979. Categories in the symbology identify the general description of the wetland based on the Cowardin wetland classification. For information on wetland codes, see: http://www.fws.gov/wetlands/Data/Wetland-Codes.html. (Data Source: U.S. Fish and Wildlife Service, http://www.fws.gov/wetlands/)

Counties: County boundaries. (Data Source: North Carolina Geodetic Survey)

Subwatersheds (12 digit HUC): The boundaries of the 1771 hydrologic units in North Carolina at the subwatershed (12-digit) level of detail, with each unit assigned a unique 12-digit hydrologic unit code (HUC). This dataset covers the entire state, derived from a national dataset, and these units are the immediate subsets of the 10 digit level of hydrologic units or watersheds in North Carolina. Developed for finer watershed planning work in the state than the 8 (subbasins) or 10 digit (watersheds) level of hydrologic unit allows, this level is the basis for North Carolina's watershed planning, assessment, and management efforts. It is also the official statewide hydrologic unit delineation for water quality reporting. (Data Source: U.S. Department of Agriculture, Natural Resource Conservation Service)

Topographic Neatlines (1:24,000): This dataset represents the outlines for the digital versions of the USGS 1:24,000 scale USGS topographic maps. (Data Source: U.S. Geological Survey)

Transportation: This dataset represents state-maintained primary and secondary roads, railroads, and bridges. (Data Source: North Carolina Department of Transportation)

Water Bodies: This dataset depicts streams, rivers, and lakes in North Carolina. (Data Source: Division of Water Resources, North Carolina Department of Environment and Natural Resources)

BASEMAPS

Basemaps are used to give geographical context for the layers displayed in the map viewer and can be changed based on the particular users' needs. The basemap gallery provided on NHDE contains imagery, imagery with labels, streets, topographic, terrain, canvas, National Geographic, and ocean maps. Users also have the option to add their own basemap via a map service or by uploading a zipped shapefile (see Add Resource help section).

For the North Carolina NHDE, the default basemap is National Geographic; this basemap can be turned off by clicking the check box next to the layer in the Map menu.

ACCESS AND PERMISSIONS

The Natural Heritage Data Explorer has 3 levels of access based on the specialized needs of our customers and partners.

Public Access includes the ability to:

- Display and query map layers including county boundaries, wetlands, watersheds, conservation planning layers, managed areas, and Natural Heritage Program natural areas.

- Use a suite of tools to explore North Carolina data and perform basic analyses including feature queries, area measurements, etc.

- Search a map layer for a certain feature and zoom to it, or display more detailed information.

- Zoom into an area and view data layers with any map gallery basemap.

- Make a map by drawing a polygon boundary for an area of interest and adding text labels.

Tier Level 1 allows the subscriber to:

- Perform all functions available to Public Access users.

- Submit projects for automated review by delineating a proposed project boundary or uploading a project boundary shapefile.

- Generate a report (in PDF format) of natural heritage resources intersecting with the submitted project boundary, and a table listing the features within the project area and within a one-mile buffer of the project boundary. The report also includes a map that shows managed areas and natural areas within one mile of the project area.

- View and query Natural Heritage Element Occurrence data within the map viewer. [Note: attributes for data sensitive Element Occurrences are not included at this tier level.]

Tier Level 2 (state and federal government agencies) allows the subscriber to:

- Perform all functions available to Public Access and Tier 1 users.

- Delineate a proposed project boundary or upload a project boundary shapefile and submit a project for review.

- Receive automatically, a PDF format report of natural heritage resources intersecting with the boundary and a table listing the features within the project area and within a one-mile buffer of the project area. The report also includes a map that shows Element Occurrence locations that intersect within a one-mile buffer of the project boundary.

- View and query Natural Heritage Element Occurrence data within the map viewer.

Any NHDE user can use the site at the Public Access level, without registering, logging in, or joining a subscription. In order to access the sensitive natural heritage resource information and project review functionality at Tier 1 or Tier 2 access levels, a user must create an account or subscription. This account will enable a user to assign a username and password and join a subscription for access to the site at the appropriate Tier level of functionality.

CREATING AN ACCOUNT

On the Home page, click "Create new account" under the Login menu or the "Create a Data Explorer account" link in the Subscription Access section of the Home page. [*Note: Once you have created an account, you will then need to create or join a subscription – see further instructions below*.]

1. Supply the required information on the Registration page (denoted by red asterisks).

    NOTE: The information you enter for your account will be used in all correspondence generated from the NHDE, including letter responses contained in site-specific project reviews. Please make sure you enter information as you would like it to appear in correspondence from the NHDE. We recommend avoiding using acronyms and abbreviations.

2. Read and accept the Terms and Conditions by clicking the check box next to "Accept Terms & Conditions of Use."

3. Click "Create new account" at the bottom of the page.

4. You will see a message on the NHDE Home page indicating that a welcome message with further instructions has been sent to the email address entered during account creation. This helps ensure that the email address entered was valid and reduce spam submissions.

5. Open your email and click on the link provided to activate the new account.

6. Click the "Log In" button on the Reset Password page, and you will be transferred to your account page. Enter and confirm a new password and click "Save" at the bottom of the page. A message will appear at the top of the page to say that the changes have been saved; the new account is now enabled.

CREATING OR JOINING A SUBSCRIPTION

Now that you have an account, you may either:

- Create a subscription, where you will be the **Subscription Admin**, or primary member of that subscription, or

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- Join an existing subscription, or group, to become a **Subscription Member**. If you are joining a subscription, then you will have been invited, via email, by that subscription's admin. Joining the subscription will give you the same access level as that admin, and all others in that group.

Differing Roles and Who Does What?

There are two main roles with differing permissions and responsibilities regarding subscriptions. The subscription links together multiple members who work together within an organization or agency.

- **Subscription Admin**: The member that creates a subscription for a particular organization or agency. This Admin can invite other members to join the subscription group and can cancel other members' access to the subscription. The Subscription Admin is the North Carolina Natural Heritage Program's point of contact for anything involving the subscription for a particular organization.

- **Subscription Member**: One of many possible members within an organization that have joined a NHDE subscription. The Subscription Admin invites members to join a subscription group and approves all members.

Once you have created an account, you will notice that you now have a My Subscription link in the navigation bar.
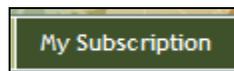
The My Subscription link will take you to a page that allows you to create a subscription or, if already subscribed, states your subscription group name and lists the admin of your group. You can also view group members and edit your profile information here. *Note: You may be a member of only one subscription at a time.*

Subscription Admin: Create and Add Users to a Subscription

By creating a subscription you will be identified as the managing Subscription Administrator ("Admin"). The Admin manages who can access the subscription and is the Natural Heritage Program's point of contact for any inquiries or updates to your subscription. You may identify other Admins for your subscription later.

Important: It is the responsibility of the Admin to appropriately safeguard and protect any information related to this subscription and user registration. This includes, but is not limited to:

- Not sharing the URL for a subscription with anyone other than those individuals who will be allowed to register for and use the subscription.

- Not sharing passwords or other user registration information.

- Not publicizing or openly documenting the URL or user registration information.

- Providing accurate user registration information.

- Deactivating members who have retired or left their organization.

- Helping ensure all members have received adequate training on using the NHDE website and interpreting natural heritage data.

To create a subscription, follow these steps.

1. Once you have an account and are logged in, click on the "Create New Subscription" link under the My Subscription menu tab on the navigation bar.

2. Fill out a unique subscription name and description on the Create Subscription page and click "Save." *Note that the name of your subscription will appear as the title for your subscription's pages, so make it descriptive based on how you will use it. The information you enter will be considered when assigning Tier access. Tier 2 access is generally reserved for state or federal government members with a need for statewide heritage data.*

3. An email will be sent to the North Carolina Natural Heritage Program notifying that a subscription has been created. ***Note: At this point, the new subscription provides site use at a public access level, which does not include sensitive Natural Heritage resource information or the ability to submit projects for review.***

4. Natural Heritage staff review the subscription request and, upon completion of training, gives Tiered access to natural heritage data. You will receive an email from the Natural Heritage Program notifying you of the Tiered access level for your subscription, with a link to access your subscription page. Click the link to access your subscription page.

5. You are now a Subscription Admin (Manager) and can invite users to join your subscription. On the My Subscription page, click your subscription's name.

6. Click the "Manage" tab, then "Manage members."
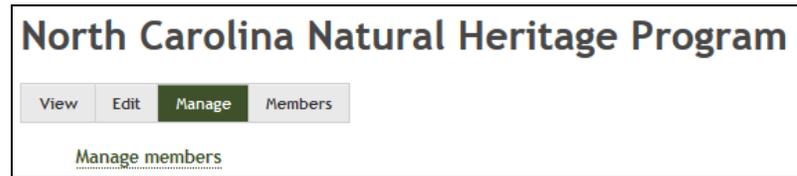
7. To invite members, click the "Invite by Email" tab, then enter email addresses for the members you would like to invite to join your subscription. Use commas or new lines to separate the email addresses. Once email addresses have been entered, click "Invite user(s)." A pop-up window will then appear stating that invitation(s) have been sent via email. You may add additional email addresses to your subscription at any time on this page.

8. Once invited, members receive the invitation via email. They will either create an account or, if they already have an account, will log in to the NHDE and request to join the group.
9. **The request must be approved by the Subscription Admin in order for the member to join a subscription**; the Admin will receive an email from the NHDE that includes a link to the Edit Subscription page. To approve the request, the Admin will click on "Manage," then "Manage Members," then scroll to the bottom of the page and click on "Edit" next to the member's name who made the request (their status will say "Pending"). On the Edit Membership page, choose "Active" as the Status, and click "Update Membership." The member will then receive a notifying email that the the subscription has been successful.

Subscription Member: Join a Subscription

1. A Subscription Admin will send an email via the NHDE asking you to join the subscription. *Note: You cannot join a subscription without being invited by the Admin.*

2. If you would like to join a subscription and DO NOT already have an account on the site, follow these steps:
   a) Register for an account on the NHDE Home page (see Create New Account above). After submitting the account registration form, please check your email to activate your account.
   b) Click on the activation link in the email to enable your account and set your password.
   c) Return to the subscription invitation email and click on the link for the subscription, or copy and paste it in your browser.
   d) Request to join the subscription.

3. If you would like to join and DO already have an account, follow these steps:
   a) Click on this link provided in the email from the subscription admin.
   b) Log in and you will be directed to the requested page.
   c) Click the "Request Group Membership" link to join the subscription.

4. Once the Subscription Admin approves the request, you will receive an email confirming your membership in the subscription.

5. You can now view your Tier level on the main group page and can also view other members associated with the subscription.
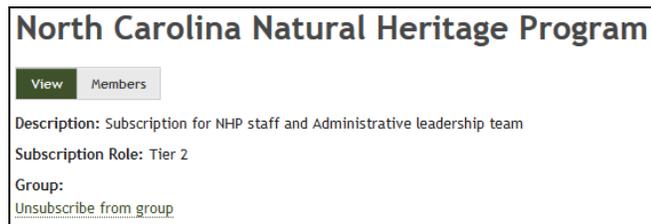
RESETTING USER PASSWORD

Please note that the NHDE user is responsible for resetting passwords; NC Natural Heritage Program staff are not able to reset NHDE user passwords. To change your password, while logged in to NHDE, click on the "My Account" button on the top right corner of the screen (if the password has been forgotten and needs to be reset, go to the next page):
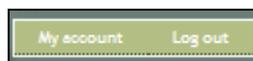
Click on the "Edit" tab, and enter the new password in both the Password and Confirm Password fields and click "Save" at the bottom of the page to reset the user password. A message will appear indicating that the changes have been saved.

If the password has been forgotten and you cannot log in to the NHDE, click on the "Request New Password" button on the User Login menu on the home page:

Enter your email address in the User Account menu and click "Email new password." A message will appear indicating that further instructions have been sent to the email address you supplied.

Click on the link provided in the email; it will take you to a one-time log in that will expire after one day. Click "Log in" and follow the steps to change your password provided in the beginning of this section.

PROJECT REVIEW

The NHDE allows subscribers to submit site-specific project areas for review by either drawing a project boundary with the Draw/Edit toolbar, or by uploading a zipped shapefile of the project boundary. The project boundary is then intersected with Natural Heritage Program data to provide an automatically generated report of natural heritage resources documented within the project boundary and within one mile of the project boundary. The report includes a letter that summarizes the results and tables that provide information on documented natural heritage resources relative to the project boundary (if any). The report also includes a map that shows the estimated extent of natural heritage resources within the project area and within one mile of the project area.

Note that the map included in the report only shows resources within the project and within one mile of the project; natural heritage resources beyond one mile from the project are not shown on the map, but can be viewed in the Map viewer.

Please refer to the Terms and Conditions document on the NHDE website for important information regarding the use of Natural Heritage Program data. The absence of records of natural heritage elements within or near a project area does not necessarily mean that they are not present. It may simply mean that the area has not been surveyed. The use of Natural Heritage Program data should not be substituted for actual field surveys.

For more information on how to create a project for review, see **Submit a project for review** below.

For more information on the attributes included in the report tables, please see the Definitions document.

For assistance in interpreting the results received in the report, please contact Suzanne Mason at 919.707.8637 or Suzanne.Mason@ncdcr.gov.

FEATURE SEARCH

The Feature Search tab allows users to search data associated with map layers by entering text, or selecting features by an attribute search or spatial search. Search results can be instantly viewed in a list and within the map window. **The attribute search and spatial search can be used separately or together (examples are below).**

Resource: The layer on which the attribute or spatial search is to be performed. Select the resource layer from the pull-down menu.

Resource Visibility: By default, the Resource Visibility is checked so that your search is visible in the map viewer; click on the check box to turn visibility off.

ATTRIBUTE SEARCH allows the user to search the layer of interest by its attributes; in

this example (right), the Managed Areas layer can be searched on by the Managed Area Name, Owner, Category, Owner Type, and GAP Status. *Note: Searchable fields change based on the layer that the search is being performed on. That is, the fields in the Attributes Search section will alter based on the layer selected in the resource pull-down list.*

SPATIAL SEARCH allows the user to spatially search the layer of interest.

Search By: A subset of features can be selected by a spatial search; either an area delineated by the user (box, polygon, point, or line) or selected by its relation to another layer in the map viewer (Features from Other Resource).

Search Type: This field determines how the search is performed in regards to how the layer of interest relates to its spatial search criteria (so if searching by a box or polygon, the user can determine what features intersect the box, are contained by the box, or the what features lie completely within the box). Note: Depending on the *Search By* input, additional options (such as the ability to apply a buffer to the search input or the ability to draw the search input freehand) will become available.

The different types of spatial searches are outlined as follows (this example uses a polygon as the **Search By** criteria on the Managed Areas layer):

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Use the pull-down options on the Spatial Search menu to select the desired search input for Search By and Search Type. Click on the map in your area of interest to begin drawing, clicking at each vertex; double click to complete the drawing. Once you've drawn your spatial graphic (a polygon, in the case below), then click "Stop Select by Drawing." Click "Search" and the results will become highlighted on the map viewer, with their details displayed in the Results menu.

"Intersects" selects all features in the layer of interest that touch the spatial graphic.
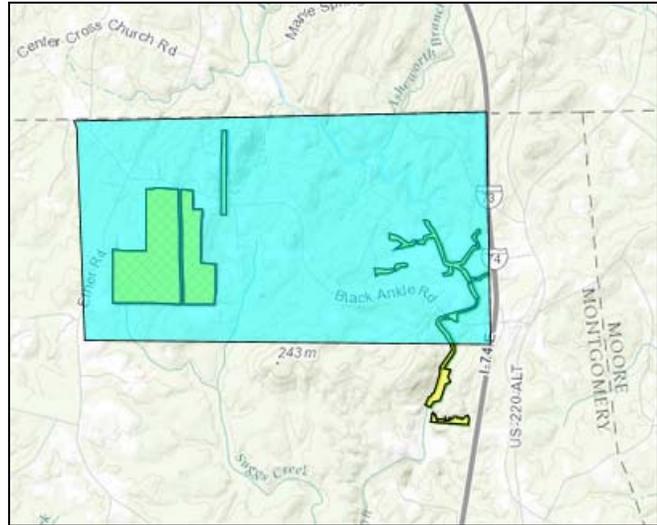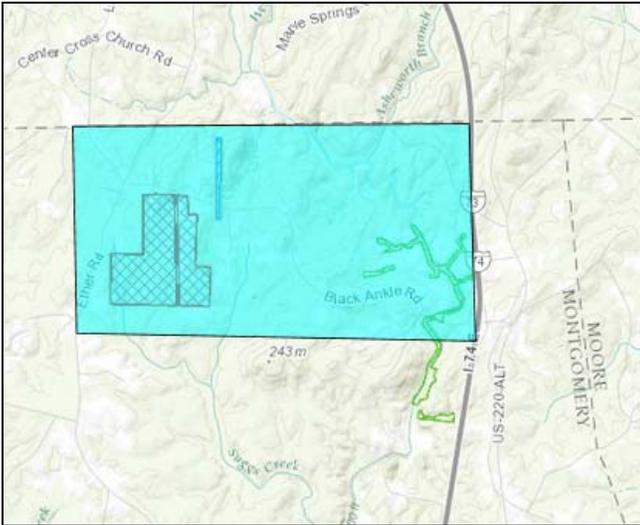
"Contains" selects the features of the layer of interest that are contained by the spatial graphic.
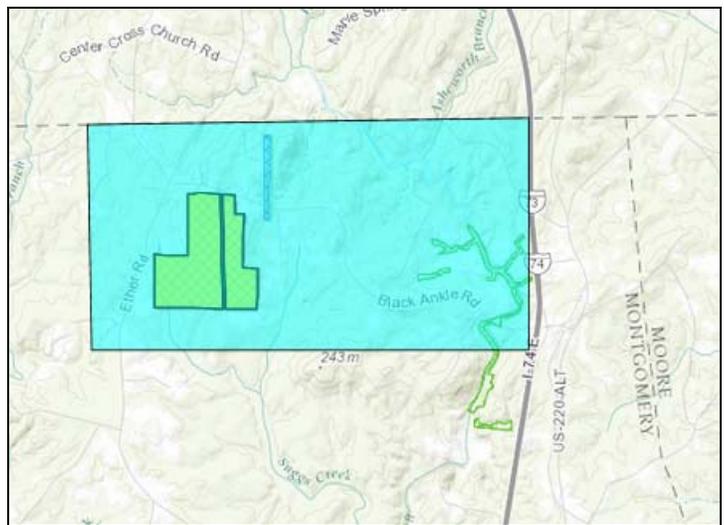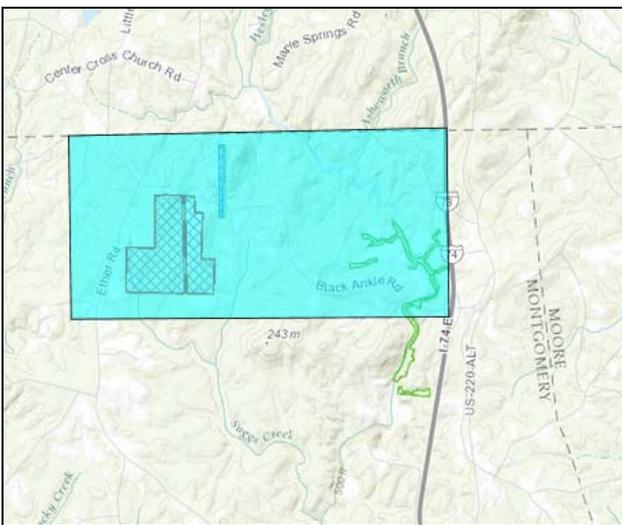
"Within" selects the feature that lies entirely within the spatial graphic.

Note that in addition to the Search By polygon option, all of the above examples apply to the box Search By option. Point and line Search By criteria do not have the Search Type selection Contains, as these features are not appropriate for that search type.

Box, point, line, and polygon search types provide the capability to search using a buffer, by clicking on the box next to Use Buffer and selecting a distance and the appropriate units. The buffer will be applied to your spatial search area.

Line and polygon search types can also be drawn freehand:

For some examples on how to use Feature Search, visit the How do I section and click on Search for a certain feature in a layer.

How do I...

- **Turn map layers on and off**

  ☑, There's a check box next to each map layer. Click this box to toggle the layer on and off. Some of the layers are scale dependent meaning that they are only available at certain map scales. This is done to maximize the performance of the site as some layers would take a long time to display and refresh at smaller (more zoomed out) scales. Layer names are grayed out in the legend if a layer is unavailable at your current scale.

- **View topographic maps and aerial photography**

  These are available as basemaps on the map. All basemap layers can be viewed when ⬚ Switch Basemap
  Switch Basemap is clicked at the top left corner of the map viewer; eight different basemaps are available. Select
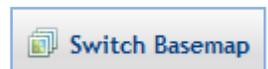
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the picture of the desired map and the map viewer will refresh accordingly. The current basemap being used is visible as the last layer listed on the Layers menu.
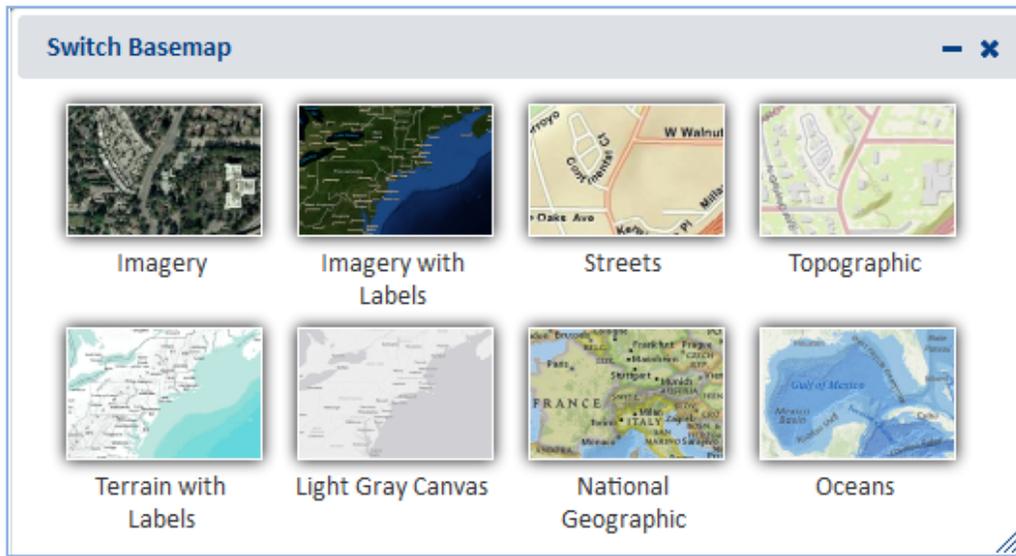
- **Use the Species/Community Search**

  Clicking on the Species/Community Search tab will take you to the Heritage Data Search page, where users can query the database for species and natural communities records and receive summarized results by county, by topo map, or statewide. The Data Search page provides links to a Help document and Definitions document to assist in using the data search and interpreting the results.

- **Retrieve information about a particular feature**

  To retrieve a snapshot of information about a particular feature on the map, click the Identify tool (i.e. the blue circle with the "i" in the toolbar, shown here in the red box) and the Identify window will appear.

Use the blue arrow to open the pull-down menu and click on the layer of interest (e.g., Managed Areas).
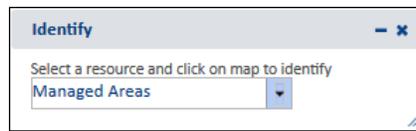
Click on a feature with the mouse pointer. The selected feature will highlight blue, and a Details window will appear, with attribute information related to that particular feature.   Clicking the "Zoom" button in the Identify window will zoom to and center the map on the selected feature. Clicking the "Flash" button in the Identify window will illuminate the selected feature for a few seconds. If more than one feature is present within the area identified, the arrow buttons can be used to scroll through the identified features.
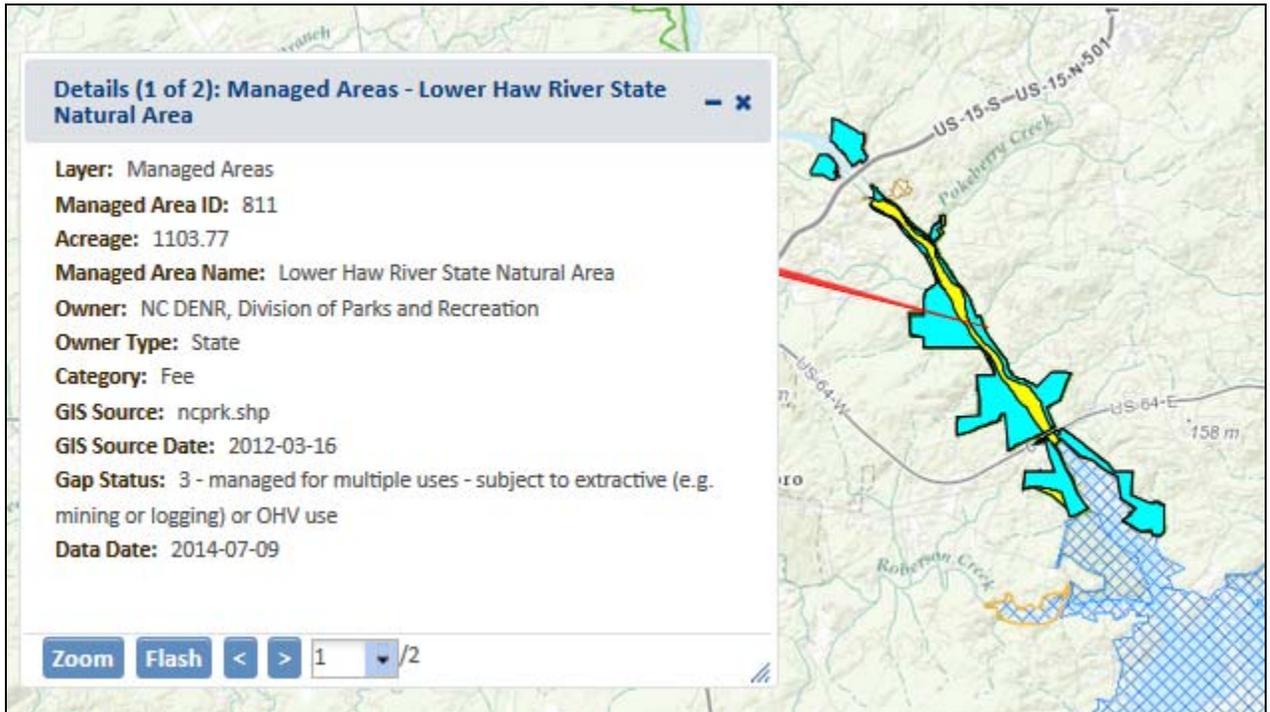
- **Zoom to a particular map coordinate**

Click on the magnifying glass icon (shown with red box at right) on the toolbar. A Zoom to Coordinates or Scale window will open with the option of latitude/longitude coordinates in either decimal degrees or degrees minutes seconds, UTM coordinates for both zones 17 and 18, or defined projections. Click the arrow to open the projection pull-down, and click on the

appropriate projection. Once the projection is selected, you can click on the map to automatically enter the coordinates, or enter coordinates in the following format:

o   Latitude/Longitude (DMS) can either be in _d _' _" format (example below) or just the numbers with spaces in between. Longitude must be negative.

o   Latitude/Longitude (Decimal) are entered as two digit numbers with decimals (example below). Longitude must be negative.

o   UTM (make sure to specify zone 17 or zone 18) is entered as a 7 digit number with decimals for the Northing, and a 6 digit number with decimals for the Easting (example below).

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o   Define Projection: enter Well Known ID (WKID) or Well Known Text (WKT). *NOTE: WKID and WKT values can be found here: http://www.spatialreference.org/. Also, the WKT can be copied from a projection (.prj) file.*
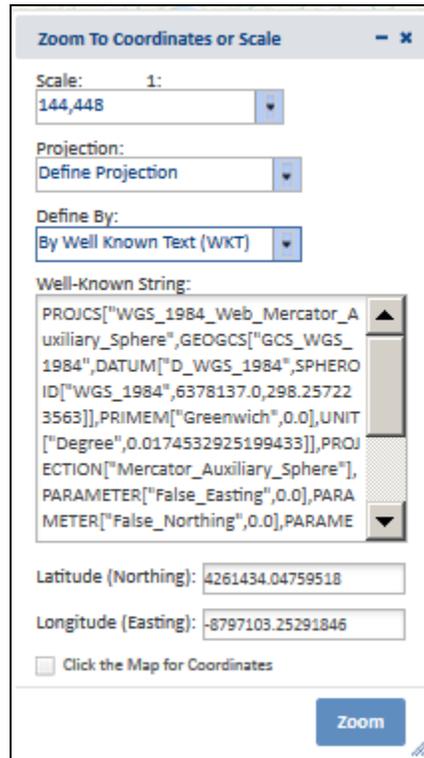
Specify a scale at which to view the map, then click "Zoom" (the smaller the number, the more closely it is zoomed). The map will center and a red diamond icon will appear on the coordinates entered. The diamond marker will move to the center point of wherever the map is zoomed, while the Zoom To tool is open. When the Zoom To window is closed, the marker goes away.

- **Submit a project for review**

   This option is only available for members of a subscription.

1. Click on the "Map" tab.

2. Click on the "Create Project" button in the gray bar just above the map window, and a draw/edit toolbar will appear (example below).
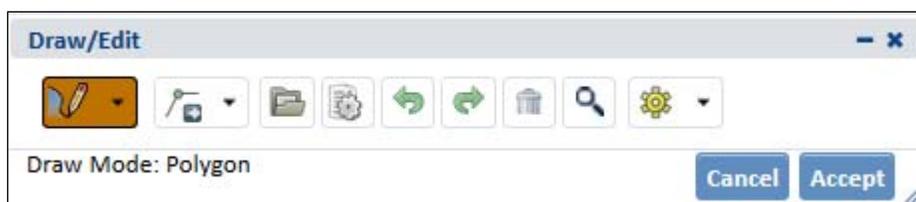
3. ***To upload a shapefile of your project area:***

a. Upload a shapefile at any scale by clicking on the "Upload Shapefile" button.

b. In the upload shapefile window, click on the "Select File To Upload" button and browse to select a **zipped** shapefile with all the parts of an ESRI **shapefile**, a **KML** file or a **GML** file. The Map view will automatically zoom to the extent of the project boundary from the shapefile.
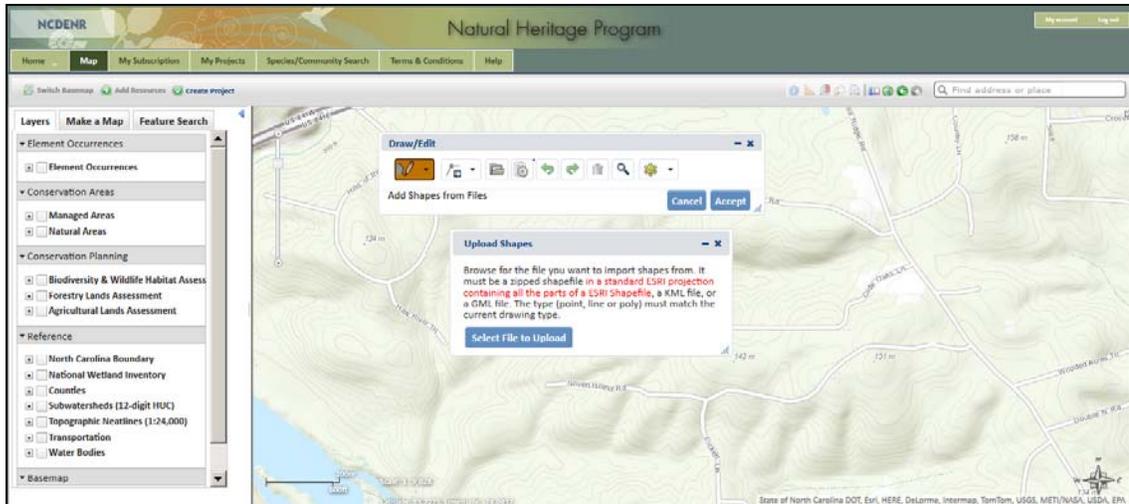
4. ***To draw a project boundary***, instead of uploading a shapefile, you must be zoomed in to a scale of 1:72,224 or closer. Locate the area of interest on the map by using an address to find your location or by zooming to coordinates. You can also shift/click and drag a box to zoom in or double click the map to zoom into a location. *Note: If tool icons in the Draw/Edit toolbar are gray, you are not zoomed in close enough to draw a project boundary.*

a. To start drawing, click on [icon] and draw the project boundary by clicking and dragging on the map, clicking at each change of direction, or vertex.

b. You can edit this polygon while drawing it, using the Draw/Edit tools by clicking this icon [icon] and choosing edit options.

c. Click on the black arrow that provides a pull-down menu of edit options that allow you to:

   i. *edit shape* by moving a vertex;
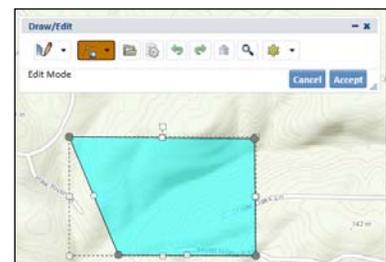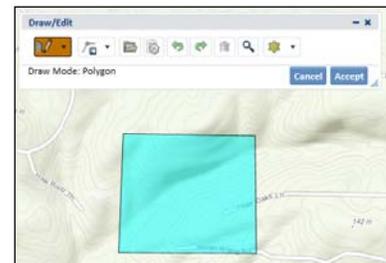
ii.   *erase* spaces to remove areas that are fully contained by the project boundary (think doughnut holes). This is best used once your project shape is complete. Simply draw the area to be removed within the boundary, the same way you drew the boundary itself.
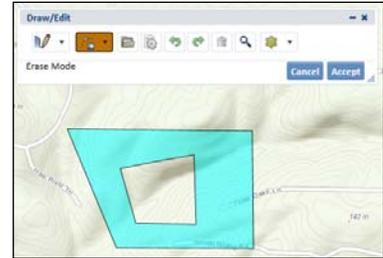
iii.   *crop* to remove sections of the project boundary that include part of the boundary. This is best used once your project shape is complete. Simply draw the area of the polygon *you wish to keep.*
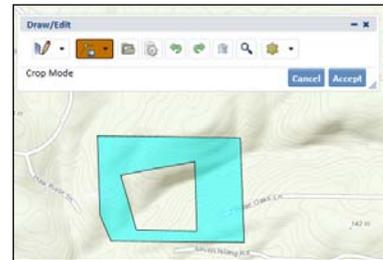
iv.   *buffer* to buffer your polygon. This is best used once your project shape is complete. You will be asked to enter a buffer distance and specify units (e.g., feet).
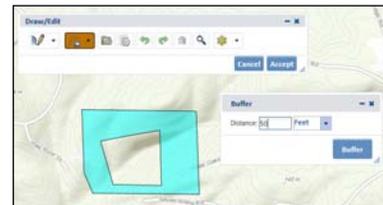
c. Click to undo your last drawing action, such as a misplaced point.

d. Click to redo your last undo.

e. Click to delete a boundary, or shape, entirely.

f. Click to change settings of Draw/Edit tools. To lock the map in place so panning does not interfere with boundary drawing, click the "Disable Navigation While Drawing" box; to enable freehand drawing, click next to "Use Freehand."
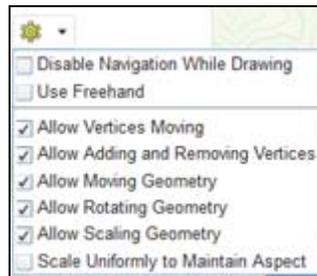
5. Once drawing/editing of the project boundary is complete, click "Accept" in the Draw/Edit toolbar.

6. A window will then open to allow for entry of information about the project. Enter project information into the fields provided in the Create Project window. Any field with an asterisk (*) must be filled in to submit a project. See graphic below for an example.

- **Project Title:** Give the project a title. This title will be displayed in the letter contained in the review response, and can be used to sort your projects in My Projects.

- **User Project Number:** Give the project a unique, identifiable number that will be convenient for your reference if one is available. The User Project Number will be displayed in the letter contained in the review response, and can be used to sort your projects in My Projects.

- **Project Type:** Click the radio button next to the project type category that bests represents your project. For development/redevelopment projects, click the "+" button to expand this category and choose from residential, commercial, or industrial.

- **Project Description:** Succinctly describe what work is proposed at the project site (e.g. residential subdivision).

- Your contact information should be entered in the format you would like it displayed in the generated response letter, and your email address should be the address at which you will receive confirmation of project submittal and the project review report. *Note that your account contact information and email address is automatically populated by default when creating a project.*

7. File attachments such as photographs, survey documents, site plans, etc., can be uploaded and attached to the project form if desired. Click "Browse" to navigate to the file on your computer or network. When the correct file(s) is/are listed, click "Upload." Individual files must be less than 2 MB each. *Note: NCNHP staff will not be reviewing uploaded documents unless specifically requested to do so.*

8. Click the "Submit" button at the bottom of the open window to submit your project (or "Cancel" to cancel your project).

9. Once the project is submitted, a pop-up window will be displayed that lets you know that a notification email will be sent once the automated review is complete.

10. Click on the link in the notification email to access your project review results, or access it via the My Projects tab in the NHDE by clicking on the Project Title. Projects on the My Projects page can be sorted by clicking on any of the column headings. *Note: To view the project review report, you will need to be logged in to your account on the NHDE.*

11. On the Project Review Results page, click on the PDF Report File, which contains a response letter, tables of natural heritage resources within your project area and within one mile of your project area (if any), and a map showing your project area, a one-mile radius buffer around your project area, and natural heritage resources intersecting with a one-mile buffer around the project area.

This PDF may be printed or saved and will remain on your My Projects page for later reference. A boundary shapefile is also created for each project submitted (including the project boundary drawn as part of the project submission).

Note: Natural heritage resources documented beyond the one-mile buffer WILL NOT appear on this map, and Natural Heritage Element Occurrences will not appear on the map at all for Tier 1 users.

- **Add and edit point, line, or polygon annotation to my map**

    1. Zoom to your area of interest and click on the "Make a Map" tab.
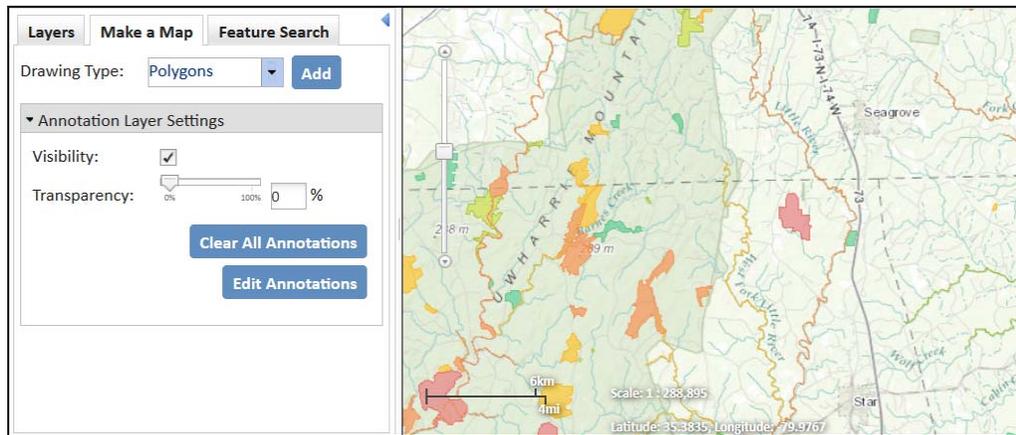
    2. Select a Drawing Type of Polygons, Lines, or Points from the pull-down menu and click "Add." A Draw/Edit toolbar will appear with annotation settings specific to the Drawing Type.
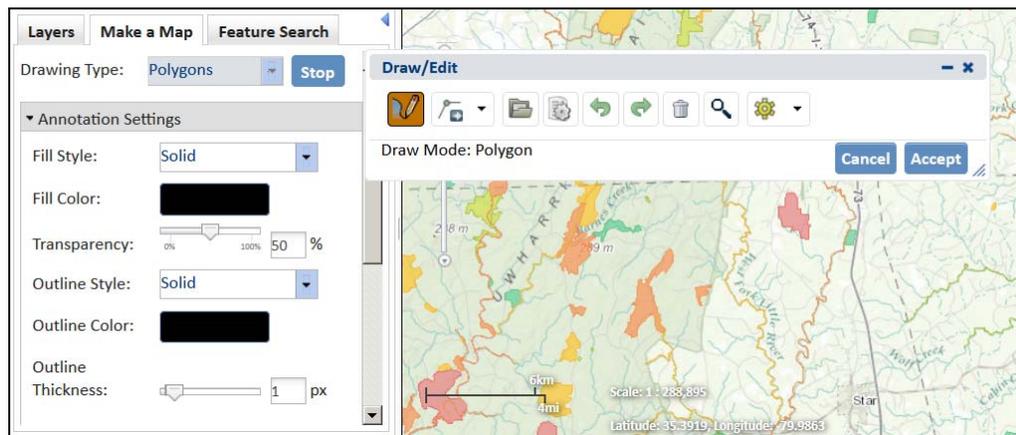
    3. Select the desired fill style and color, transparency, and outline style, color, and thickness. [*Note: If the chosen drawing type is polygon and the fill style is not solid, then the option to choose fill color and transparency will not be available*.]

    4. Once you've chosen your setting, use the tools in the Draw/Edit toolbar to draw your polygon (described below).

    5. To add annotations by drawing directly on the map, choose the "Draw Shapes" button (shown right) and draw the shape by single-clicking on the map, making sure to click (or put a vertex) at each direction change for lines and polygons. Double click to finish the line and polygon

shapes. *Note: You may change the annotation settings at any point while drawing. To move the Draw/Edit toolbar out of the way, click and drag the title bar.*
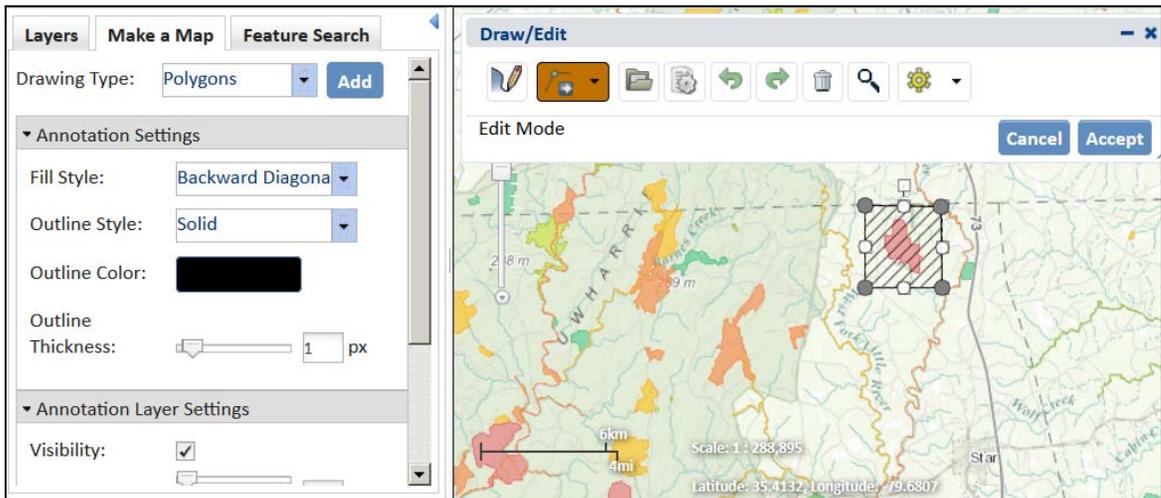
6. Click the "Edit Shapes" button and choose one of the four tools described below to edit the newly created shape.
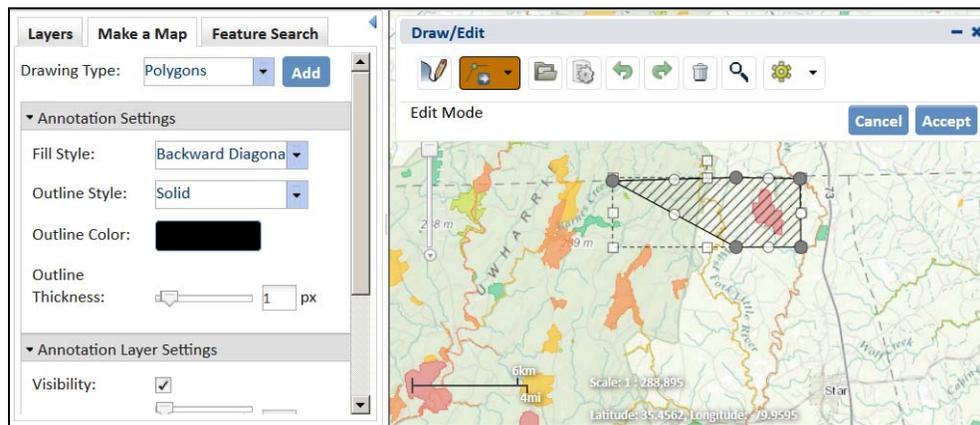
   The Edit Shape tool allows you to move, resize, or rotate the shape, or alter its appearance by moving indivdual vertices.

 The Erase tool removes areas that are INSIDE the shape you delineate with the tool.

 The Crop tool removes areas that lie OUTSIDE the shape you delineate with the tool.

 The Buffer tool buffers the shape by the distance specified in the Buffer dialog box.

Shapes can also be added by using the "Upload Shapes" button (shown right). See the [Import a Shapefile to the map viewer](#) help for more information regarding this option.

Use the "Additional Mapping Options" to select shapes from existing map layers, shapes you've already drawn in My Maps, or specify map coordinates.

The "Undo" button undoes the last drawing action.

The "Redo" button redoes the last undo.

The "Clear Shapes" button deletes the shapes.

The Draw Settings pull-down gives the user the option to draw lines freehand (by holding and dragging the mouse over the map, rather than clicking individual points) and to disable navigation while drawing (locking the map in place so panning does not interfere with digitizing).

7. When Drawing and Editing are complete, click "Accept" on the Draw/Edit toolbar.

8. If at any point you want to go back and re-edit the line, click on "Edit Annotations" under the Annotation Layer Settings heading:
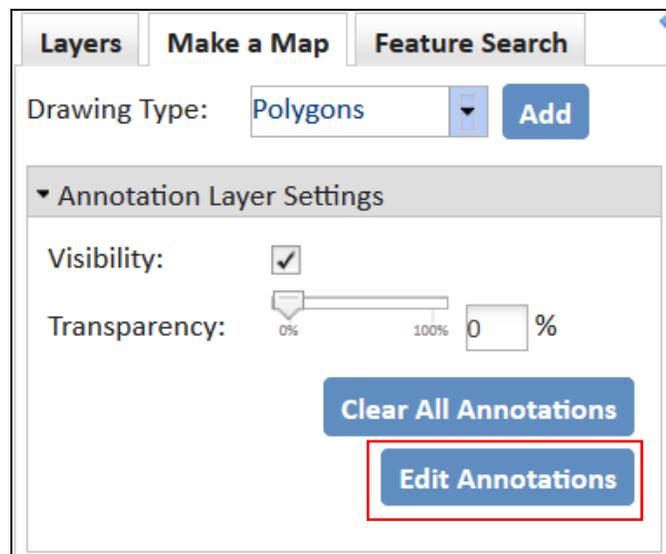
Then click on the annotation to be edited and make the appropriate adjustments. When finished, click "Stop Editing."

- **Add text to my map**

    1. Zoom to your area of interest and click on the "Make a Map" tab.

    2. Select a Drawing Type of Text from the dropdown menu, click the "Add" button, and then click on the map where you'd like the text placed.

The holder text <Please Add Text> label will be added to the map as well as a red dot which indicates the location on the map where you clicked.
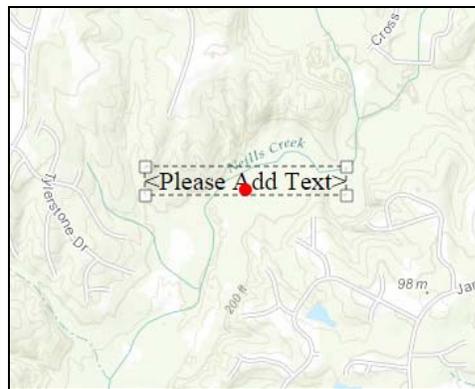
    3. In the Annotation Setting section, enter your text to the Text to Add box and adjust text color, size, alignment, angle, style, weight, and font if you like.
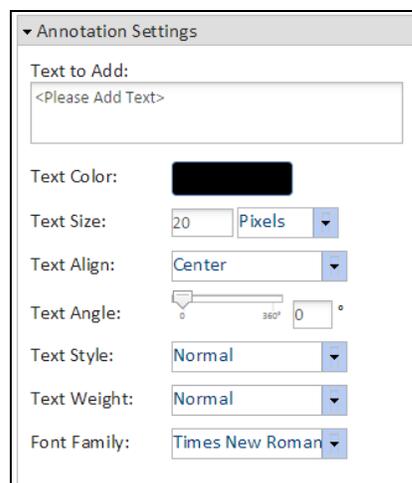
You can also choose whether the text is visible, adjust its transparency, and clear or edit existing labels using the Annotation Layer Settings.
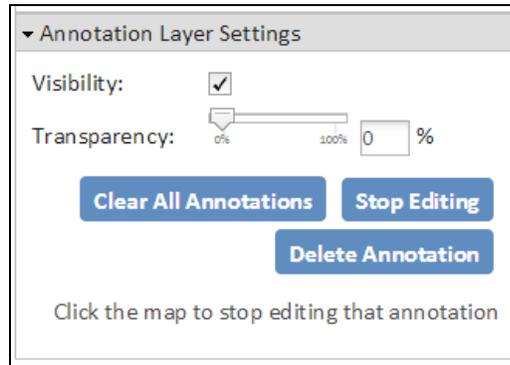
4. Once you've added your text and are satisfied with the settings, click the "Stop Editing" button.

5. Once the text is placed, you can adjust any of the settings. To remove all the text labels you've added, click the "Clear All Annotations" button. To edit existing text, click the "Edit Annotations" button, click on the label you'd like to edit, make your adjustments, and when you're finished, click the "Stop Editing" button.

- **Print a map**

1. Click the printer icon on the map toolbar. The Print Map window will open.
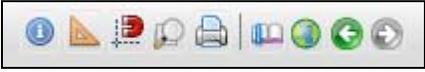
2. Optionally enter a Title, Author, and Copyright information.

3. To create the map, click the blue arrow to the right of the blue Print button and choose a print setting. The map will open in a new tab of your web browser. *Note: Make sure your browser allows pop-ups for the web site or the new tab will not open.*

4. If the map is acceptable, use the browser's print function to print the map. If you'd like to make changes to the map, exit the preview and return to the map viewer to make edits.

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- **Find a location of interest**

    1. Locate the Find Address or Place tool on the map toolbar.

    2. Type your address or place name, preferably including state and/or zip code, in the text box. Hit the "Enter" key on your keyboard or click the magnifying glass icon to zoom to the location on the map.

    Note: If searching for a commonly used name, be specific. The tool is a global place name search. For example, when searching for Concord, you should specify Concord, North Carolina to avoid being taken to, e.g., Concord, California.   Because the map scale you are taken to when searching for an address or place is too large for the "Terrain with Labels" and "Oceans" base maps to display properly, you will need to zoom out after searching to see the base map.

- **Search for a certain feature in a layer**

    Use the Feature Search tab to search data layers for features of interest. Below are some examples on how to use this tool.

    Use the Feature Search to pinpoint a specific area of North Carolina:

    o Example: Feature Search on the North Carolina counties layer

       Click on the Feature Search tab and select the Counties layer. Enter the County Name and click "Search."

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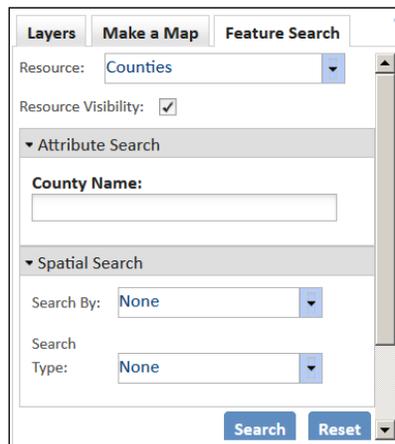
The results will reveal the particular county, and clicking "Zoom" will zoom to the extent of the selected county in the map viewer. Clicking "Flash" will flash the selected county on the viewer.
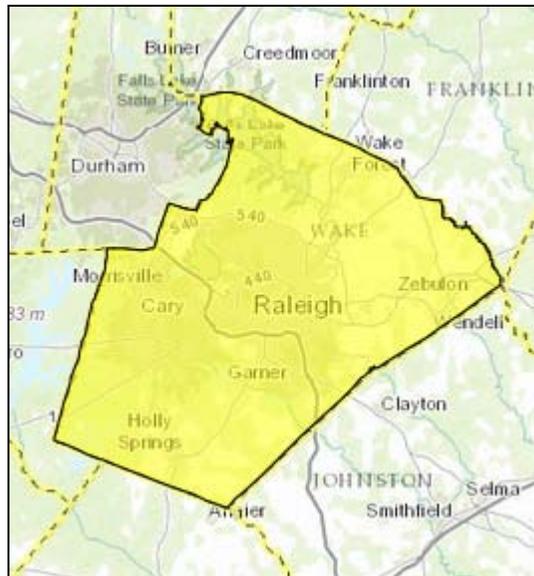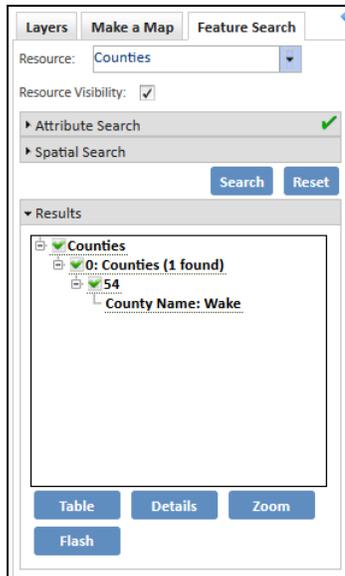

o   Example: Feature Search to find a specific USGS topographic quadrangle (Topographic Neatlines 1:24,000)

Click on the "Feature Search" tab and enter a topo map name.

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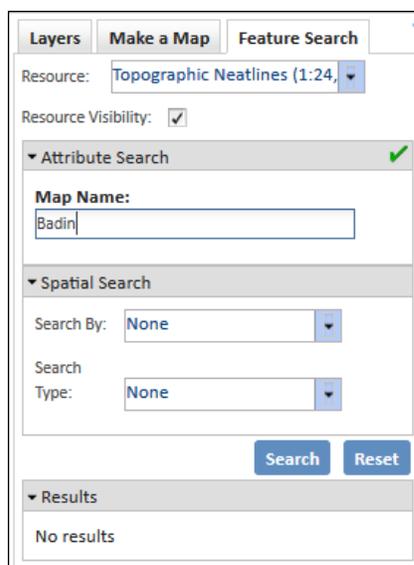
The results will reveal the selected topographic map, and clicking "Zoom" will zoom to the extent of the selected topo map in the map viewer. Clicking "Flash" will flash the selected county on the viewer.
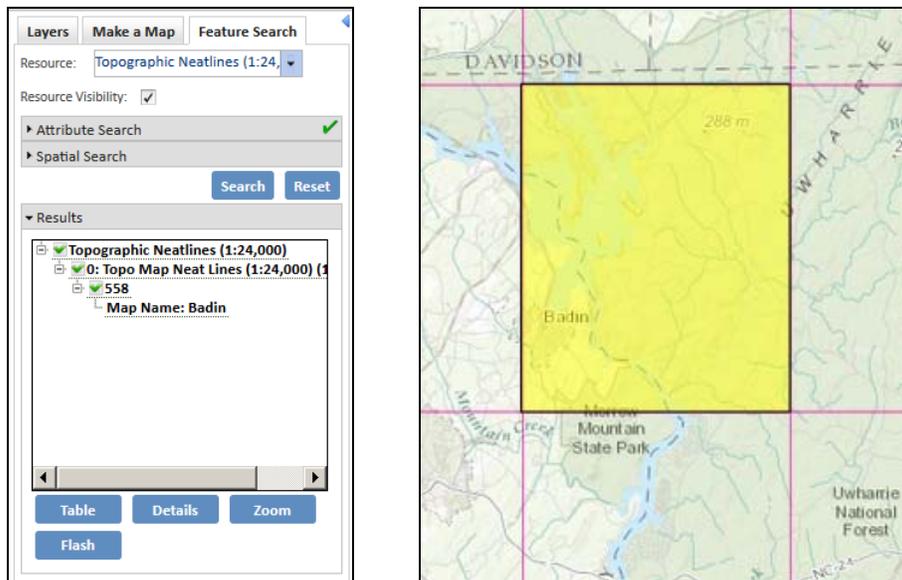
- **Search a layer by attributes and by spatial location**

  Example: Feature Search to find out how many Element Occurrences of reptiles are within a county (combine Attribute Search and Spatial Search)

  1. In the Map view, click the "Feature Search" tab.

  2. Select a Resource layer from the dropdown menu. In the image below, the Element Occurrences layer is selected. Other options are Managed Areas and Natural Areas.
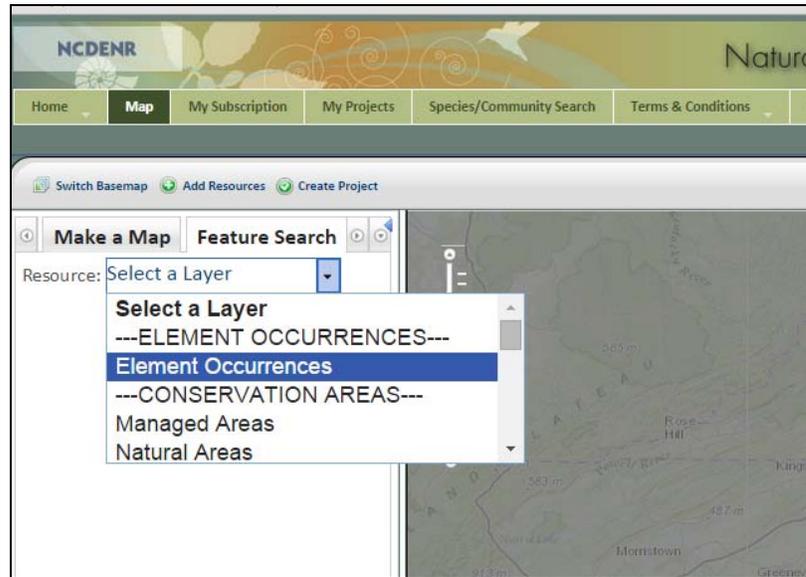
3. After the layer of interest is selected, search parameters must be entered in the Attribute Search and Spatial Search fields (shown with red arrows below).
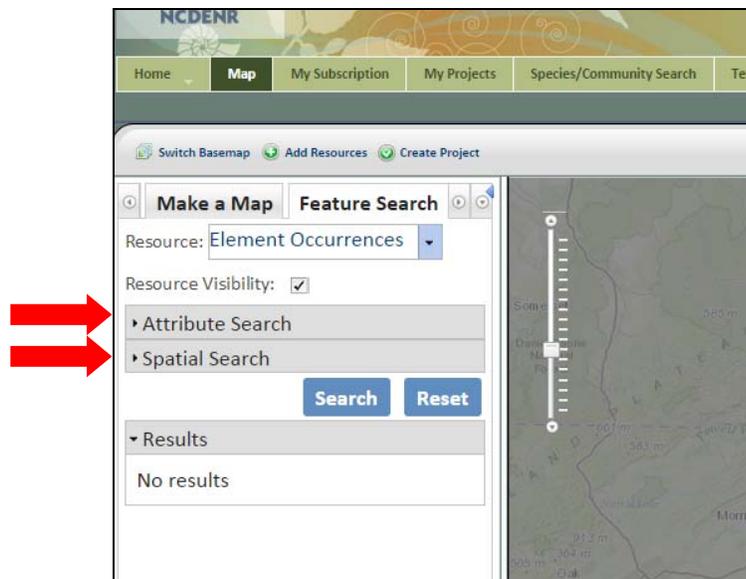
a. Click the arrow to the left of Attribute Search to view the menu of attribute fields that may be searched.

b. Under the Name Category, select "Animal."

c. Scroll down and click the arrow to the left of Spatial Search to view the menu of spatial search options.

d. In the Search By menu, click on "Features from Map Resource."

e.   From the Resource menu, select "Counties."

f.   In the Search Type menu, click "Intersects."

4. Click the "Select from Resource" button. Use the pointer to drag a box including the desired county. To select Wake County, draw a box within Wake County. *Note that beside the "Search from Resource" button, there is the option to view the spatial graphic (the county), which will become highlighted in blue in the map.*

5. Click the "Search" button. The search results are highlighted in yellow and outlined in black.
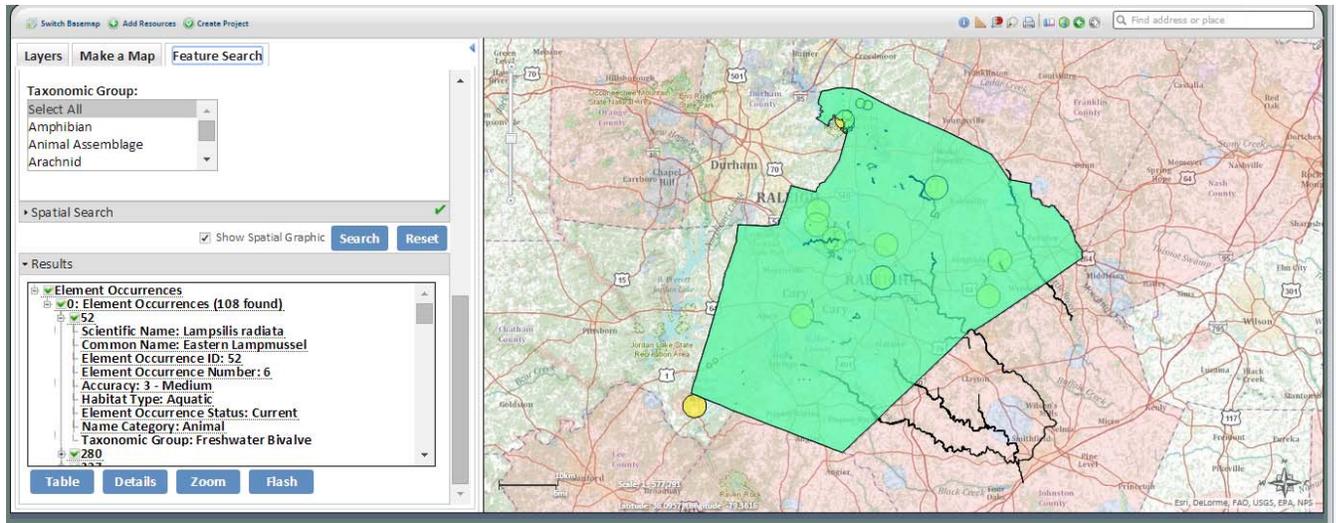
6. After the search is performed, the Results section will automatically expand. Results details can be viewed by checking the + sign next to each result, or by clicking on the "Details" button to open a details window. Click the "Flash" button to illuminate the selected results i.e. those checked) for a few seconds on the map viewer.

7. Click the "Table" button to open the results in tabular format. Clicking "Print to PDF" opens a PDF version of the table in a new web browser tab.

- **Search for conservation/managed areas in a given county**

    1. Click the Feature Search tab and select the Managed Areas layer from the pull-down menu.

    2. Click the "Spatial Search" section to expand it (you may close the Attribute Search section to save space on the screen).
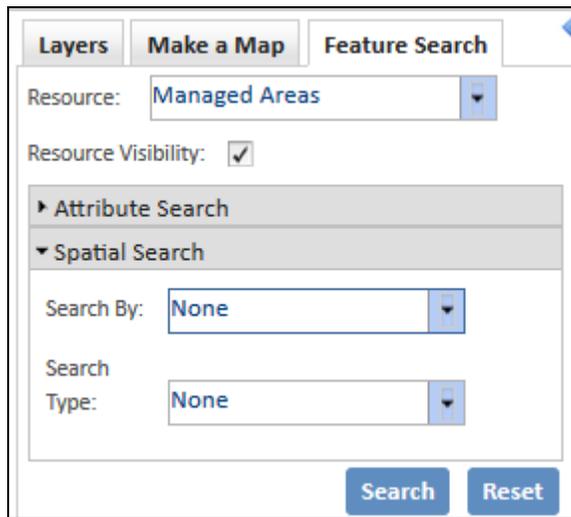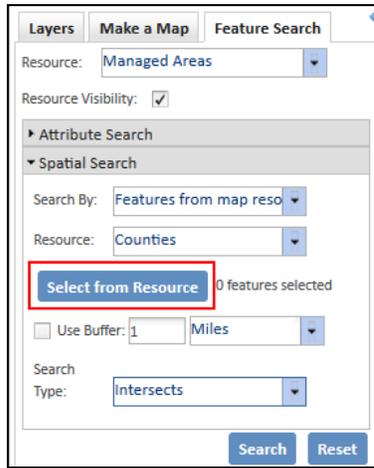

   3. Use the pull-down menus to select the following:

    Search By: Features from Map Resources (features from another map viewer layer) – the options for this search feature will appear in the window.

    Resource: County

    Search Type: Intersects

4. Once the search parameters are set, click "Select from Resource," and click and drag a box on the county, or multiple localities of interest, which will be highlighted on the map. A Details window will also appear that allows you to zoom to the extent of your selection.
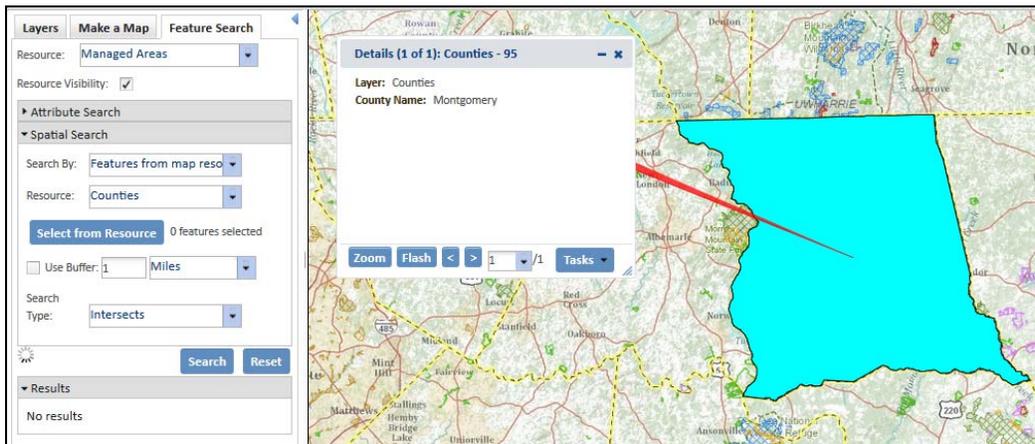

5. Next close the Details window to use the resources selected, and click on "Search." (A pop-up window will appear to remind you to close the Details window.)
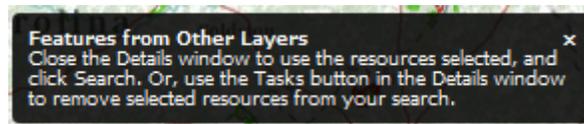

6. The Results section will populate with all Managed Areas that intersect the selected county (Montgomery, in this example). In the case below, there are 30 Managed Areas that intersect with the Montgomery County boundary. You may need to expand the Results window by clicking and dragging on the right side of the window, or using the bar at the bottom of the Results window to scroll.
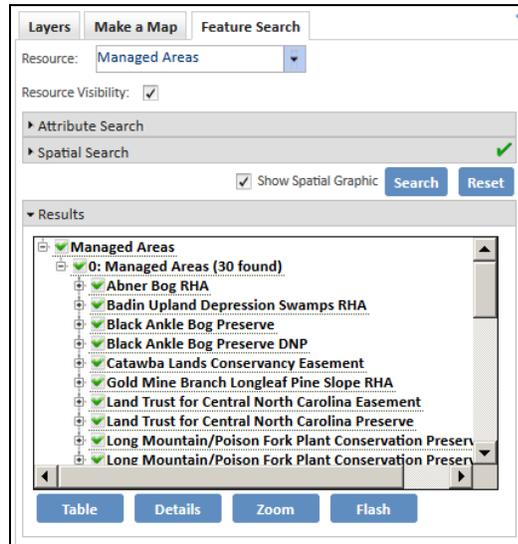
7. Select/Unselect individual results by clicking the check box next to the result. Expand result details by clicking on the plus sign next to a record:
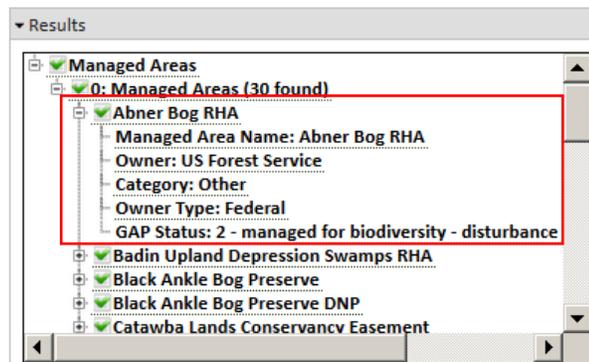
8. Clicking "Details" will open a Details window in which the user can step between, Flash, and Zoom to the individual results on the map viewer. In the example below, the arrows were used in the Details window to go to the record for Black Ankle Bog Preserve, and the "Zoom" button was used to zoom to the managed area. NOTE: Uncheck the box next to Show Spatial Graphic in the Spatial Search window if you'd like to remove the graphic for your selection (in this case, Montgomery County).
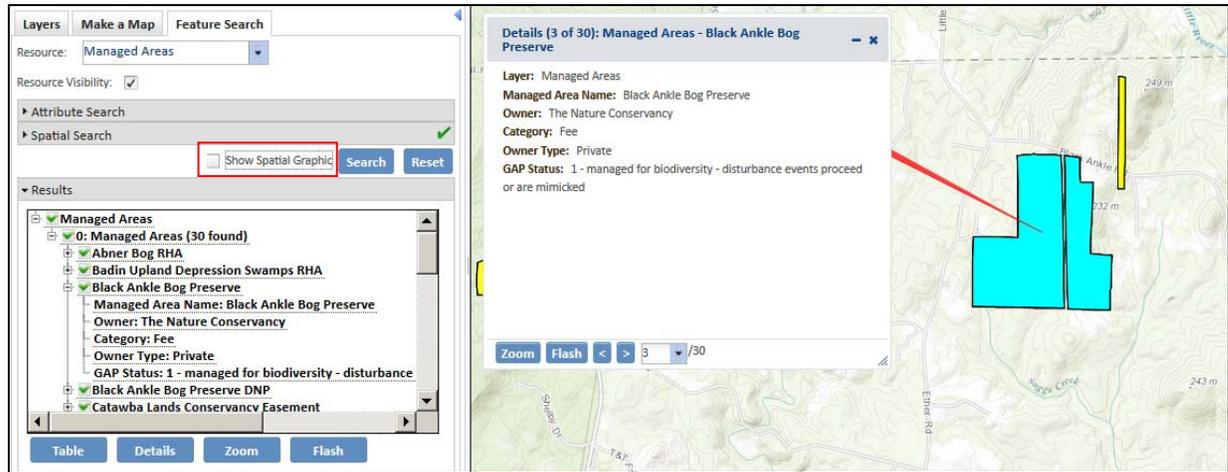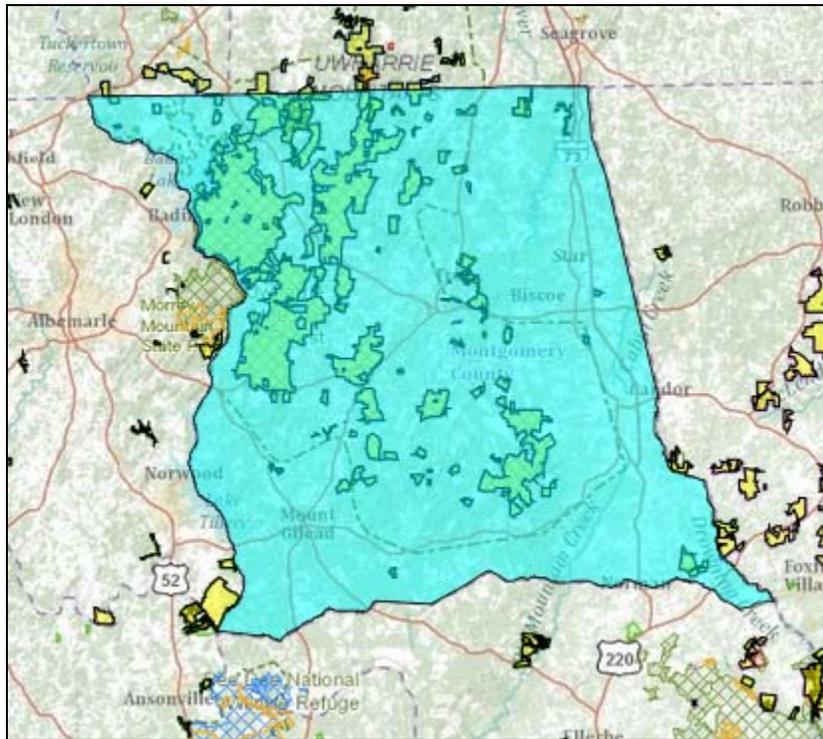
9. Click "Table" to open the results in a tabular format. The user can still zoom to and flash selected results; a PDF of the results can also be generated for printing and saving by clicking the "Print To PDF" button.


10. The results are highlighted on the map viewer (graphic below).

Note that some highlighted Managed Areas fall outside the search county of Montgomery. This is because they are part of the same conserved entity (for example, the Uwharrie National Forest), they are part of a larger group of statewide managed areas (e.g., conservation easements held by the North Carolina Clean Water Management Trust Fund), or they are adjacent to the county and got selected because the managed area crosses county boundaries. Another search type, Contains, will return Managed Areas that fall completely within the selected county, excluding areas that overlap into more than one county, but any features that lie outside the selected area WILL NOT be included.
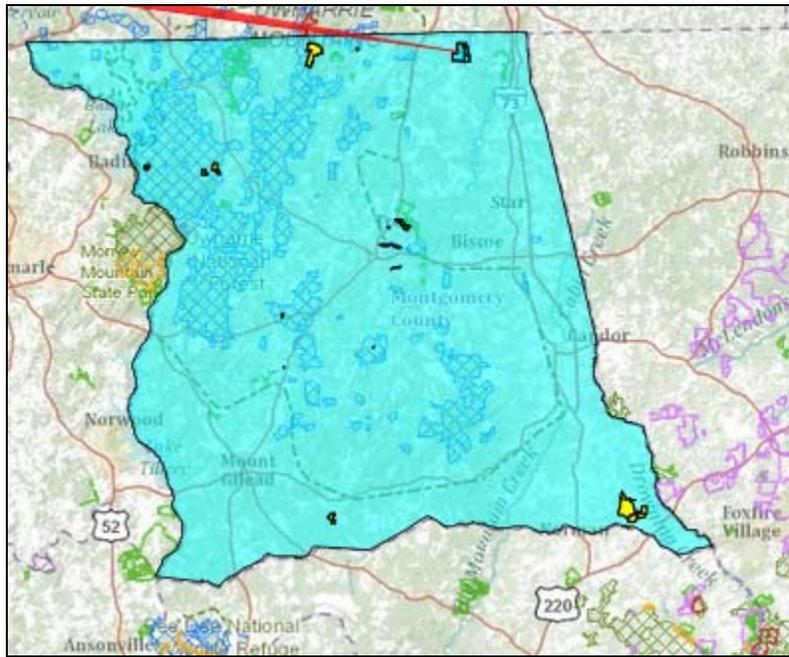
- **[Access an external Map Service for use in the map viewer](#)**

    1. Click the "Add Resources" tool in the upper left corner of the map viewer (in red, below).

    2. Select the "URL" radio button and type the URL of the map service to add (or copy and paste it in the box). Give the map service a unique title; this title will be displayed in the layer table of contents on the map viewer. *Note: The URL of the map service should be in the following format: **https://<your server>/arcgis/rest/services/<service name>/MapServer**. See example below.*

   *If the URL you have provided is to a map service not protected by SSL, you should first try adding this URL with the "https:" prefix instead of "http:." If you continue to add an insecure service, it may be blocked by the browser. If not blocked, the browser will treat this page as insecure, and give a warning. Click "Yes."*
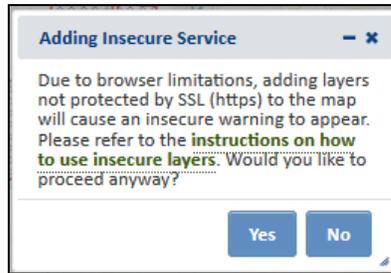
Instructions for loading an insecure map service in Google Chrome, Firefox, and Internet Explorer are shown below.

**Loading an insecure map service in <u>Google Chrome</u>:**

Chrome opens a very subtle shield icon, shown in the screenshot below, when attempting to add a map service to the map. At first glance the user may mistake this for the map viewer not working properly when it's actually due to the way the browser treats insecure map services.
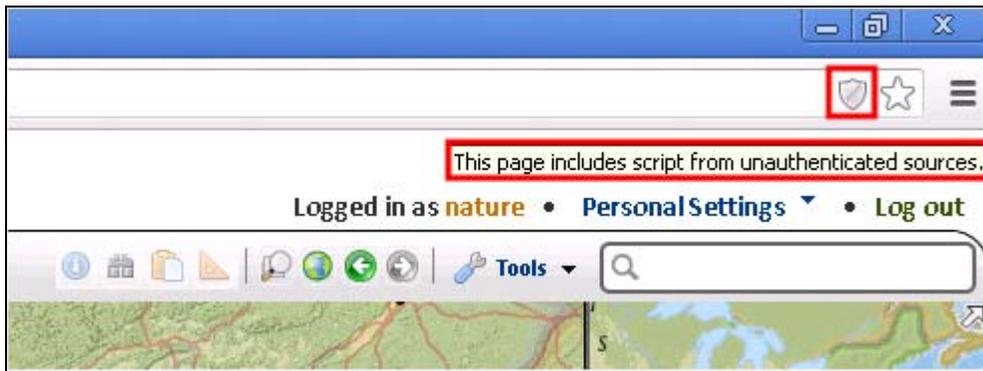
1. To load the map service, click the shield icon, which displays a second message.

2. Within the message indicating that the page includes script from unauthenticated sources, click the link to "Load unsafe script."

3. In the subsequent Confirm Reload dialog, click "Reload this Page." This will reload the map viewer page in a mode that allows mixed content to be used. *Note: This has the unfortunate side effect of clearing out what has been previously done in the map viewer, so the map service will need to be added again.*
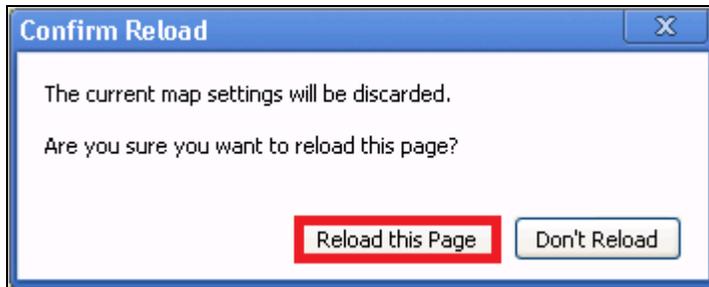
This time the map service is added, but the URL bar shows a warning that the page contains insecure content. This warning continues to be present if the user navigates away from the map viewer to other pages or open up the full record pages in new windows.

The browser only performs these behaviors for the first map service that's added insecurely, and the warning message will indicate what needs to be done. No further warnings or prompts will be given upon adding subsequent insecure map services.

Loading an insecure map service in <u>Firefox</u>:

1. Click the small gray and white shield icon at the far left of the URL box near the top of the browser window.

2. Within the dialog which opens upon clicking the shield, select "Disable Protection on This Page."
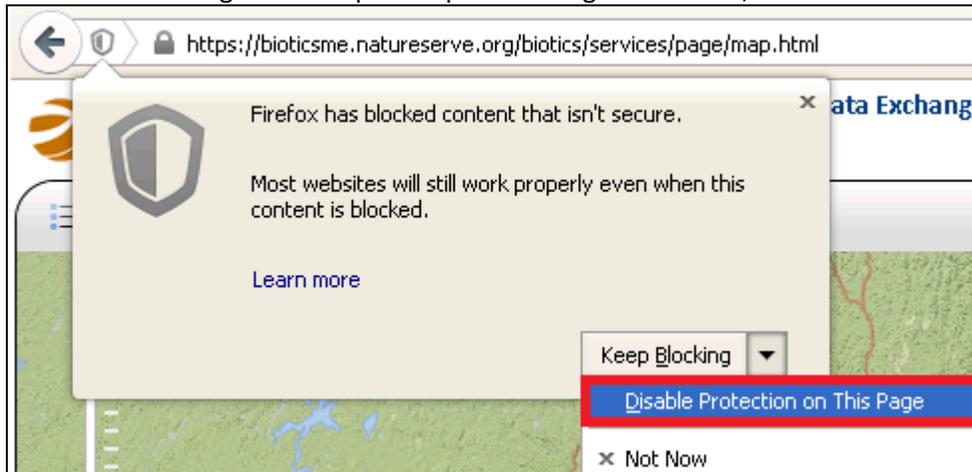
3. Then, click "Leave Page" to allow the page to load again with the map resources enabled.

Note: You will have to do this every time you open the map viewer, even in the same session.
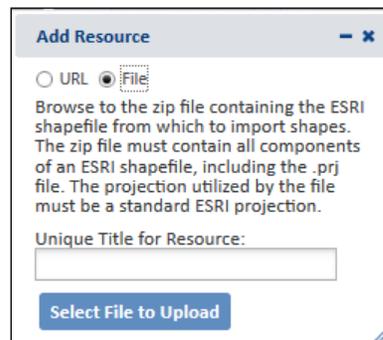
- **Import a shapefile to the map viewer**

  Any user can import a zipped shapefile to the map viewer by clicking "Add Resources" on the Map page.

  1. Click on the "File" radio button, and then click "Select File to Upload" to browse and select a zipped shapefile.

  2. Enter a unique title for the shapefile; this title will be displayed in the map viewer table of contents under the heading Added Resources. If you do not enter a title, the name of the zipped file will be used.

  NOTE: Shapefiles must be zipped and the file must contain all components of an ESRI shapefile, including .shp, .shx, .dbf, and .prj files.

  Added resources will only remain visible during a current session; if you log out, or if the map viewer times out (after 30 minutes of inactivity), the shapefile will no longer be available on the map viewer.

  Imported shapes by default appear orange; the symbology cannot be changed, but the transparency can be adjusted. To remove the shapefile, click on the arrow to the right of the layer title and select "Remove."

- **Get help through NHDE support**

  Contact Suzanne Mason, North Carolina Natural Heritage Program, at Suzanne.Mason@ncdcr.gov or 919-707-8637. Please screen capture any error messages so they can be sent electronically, and use the subject line "NC NHDE Support" in your email along with a brief note describing your need for support.

FREQUENTLY ASKED QUESTIONS

- **How often are the Natural Heritage Program datasets updated?**

  Element occurrences, managed areas, and natural areas data are updated quarterly each year (January, April, July, and October). The North Carolina Conservation Planning datasets are updated less frequently – see http://ncnhp.org/conservation/conservation-planning-tool for information on the most recent updates.

- **Why did I get automatically logged out of my session?**

  The NHDE website times out for security reasons after 30 minutes of inactivity.

- **Why can't I input a specified view scale and zoom to it?**

  Due to the way basemaps are defined in web services, there are a set number of scales that can be viewed; these are standardized across the various available basemaps. Offering many more or all possible scales for viewing would greatly reduce the speed and performance of the site.

- **How long will it take for me to receive my automated report when I submit a project for review?**

  Report PDFs are generated in batch files, and it may take up to ten minutes for the user to receive the report after submittal.

- **Why doesn't the NHDE save my Spatial Bookmarks or Map Annotations?**

  Unfortunately, these are only saved within a user's session. Logging out or timing out of a session will clear these settings.

SPECIES/COMMUNITY SEARCH

| Home ▾ | Map | My Subscription | My Projects | Species/Community Search | Terms & Conditions ▾ | Help |

Click the Species/Community Search tab to search our database and create summaries of Natural Heritage resources - rare species and natural communities - by county, 7.5-minute (1:24,000) USGS topographic map, or statewide – by various attributes, including species and common name, state or global conservation status rank, taxonomic group, or protection status.

Please reference the Data Search Help document for more information on how to use this service. For information on the definitions used in the summaries, including protection status, please see the Data Search Definitions document.

Species/Community Search

(Data updated on October 17, 2016)

Summarize results	● by County, ○ by Topo Map, ○ or Statewide
County Name like	
Scientific Name like	
Common Name like	
State Rank like	
Global Rank like	
Taxonomic Group is	Any ▾
Protection Status is	Any ▾
	☐ Exclude introduced populations from results?
	Search Reset Fields