ForHealth

A guide to creating, managing, and searching Forest Health Project Accomplishments

This User Guide was written by the ForMAP Help Desk Team. Please notify us with questions or comments:

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Getting Started with ForHealth

Background

The Forest Health Project Accomplishments (ForHealth) web application was developed for the U.S. Forest Service and its state and federal agency partners to create, edit, and report on Forest Health projects. In 2018, ForHealth replaced the FAD (Forest Health Protection Accomplishments Database) reporting system. The ForHealth application is a reporting module contained within USFS State and Private Forestry's Forest Mapping Accomplishment Portal – ForMAP.

The information provided in this guide is intended to show general functionality and requirements of the application. For guidance on project specifics and accomplishment reporting requirements, please refer to USFS Program Direction documents.

Creating an account

If you already have a ForMAP account and now expect to be reporting on Forest Health projects, you will need to request the role of ForHealth Project Editor. You can do this by logging into ForMAP and selecting the Request Authorized Changes button from the My Account page. This will send an email to the ForMAP Help Desk team to make the change.

If you do not yet have a ForMAP account, you will need to create one as described below.

To register for a ForMAP account you first need a USDA eAuthentication account. USDA employees accessing ForHealth should already have an "eAuth" account. If you are a state employee or from another federal agency, you will need to create one during the process. The following are simple step-by-step instructions for requesting eAuthentication and ForMAP user accounts with ForHealth Project Editor permissions:

1. Open your web browser and go to the ForMAP web application – *https://apps.fs.usda.gov/formap*.
2. If you need to create an eAuthentication account, please follow the "Create an account" link on the eAuthentication page. State partners will need to register with a *Customer* account. Note: You will need to supply an email address to begin the registration process. Follow the on-screen and email prompts to create your eAuthentication account. After creating the eAuthentication account, you'll then register for a ForMAP account.
3. Log into the *ForMAP web application (https://apps.fs.usda.gov/formap)* with your eAuthentication credentials (USDA employees will need to use their LincPass to log into the application).
4. Complete the ForMAP account request as follows:
   A. Fill out the User Details section and select the appropriate Organization
      i. USDA Forest Service (with Region if applicable) or
      ii. Other federal agency (e.g. BLM, BIA, Commerce, DOD, DOE, Education, FWS, HHS, HS, HUD, Justice, Labor, NASA, NPS, State, Transportation, Treasury, Veteran's Affairs)
      iii. State Forestry organization
   B. For Employee Type, state partners should choose "State Employee"; USDA and other Federal agency personnel should choose "Federal Employee".
   C. Under the Roles section, check the appropriate box. If you are a U. S. Forest Service employee, please check the Project Approver box – this will give you full access to the application such as

approving and adding funding to projects. Other federal users and state forestry staff should check the Project Editor box. See Table 1 below for more user role details.

5. Agree to the Rules of Behavior by left clicking on the Rules of Behavior hyperlink near the bottom, reading the rules, and if in agreement clicking *I Agree*.

6. Click *Register* to request your account. An email will be sent to the ForMAP National Administrators notifying them of the account request, and an email will be sent to you once the Administrator has approved or rejected your request.

Table 1. ForHealth functions by User Role and organization affiliation

| ForHealth Function	*Project Editor (from State Forestry organization)*	*Project Editor (from USFS or Other Federal organization)*	*Project Approver (USFS only)*
Search for Projects	✓*	✓*	✓
Download Projects data	✓*	✓*	✓
Create/Submit Project	✓ (See Program Direction)	✓	✓
Add Funding to Project			✓
Approve Project			✓
Reject Project			✓
Add/Edit Accomplishments		✓	✓
Upload Treatment polygons	✓ (See Program Direction)	✓	✓
Update Integrated Acres			✓

* Users who are affiliated with an organization other than the USFS will only be able to search for and download data for Projects from within their own organization

Basic Navigation

Once your ForHealth account is approved, please direct your browser to the ForMAP site (*https://apps.fs.usda.gov/formap*) and enter your eAuthentication login credentials. This time, you will land on the ForMAP Home page from which you can access all ForMAP modules you have authority to access (if you only have a ForHealth role, this will be the only option presented).
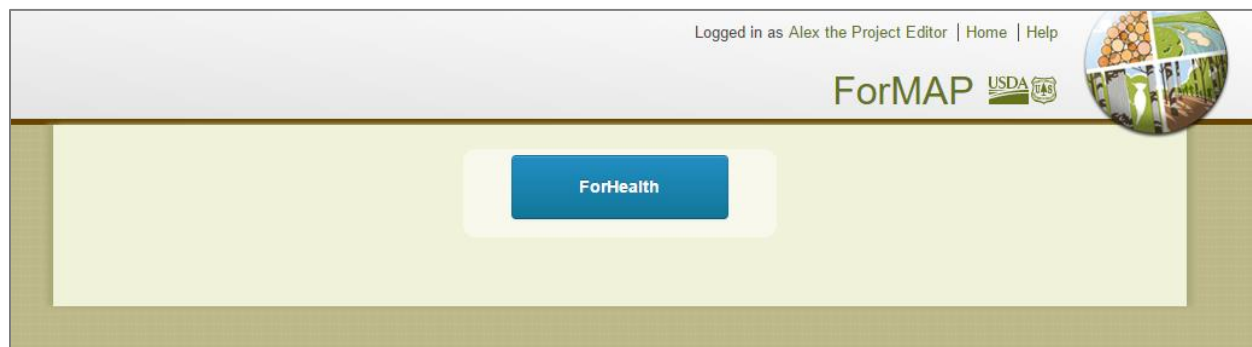
Once you click the ForHealth button, you will land on the ForHealth Module Homepage. If you are a Project Editor, you will see two buttons presented.
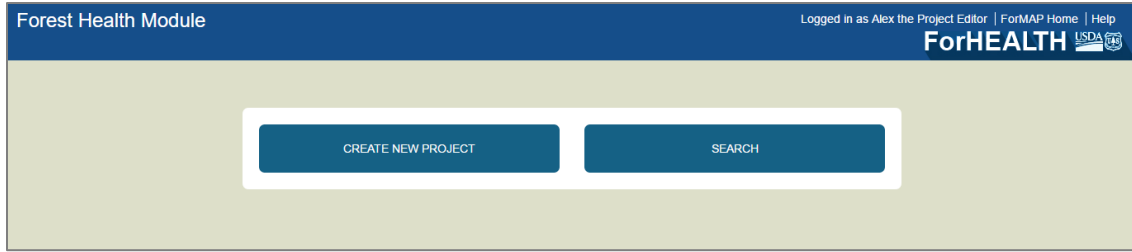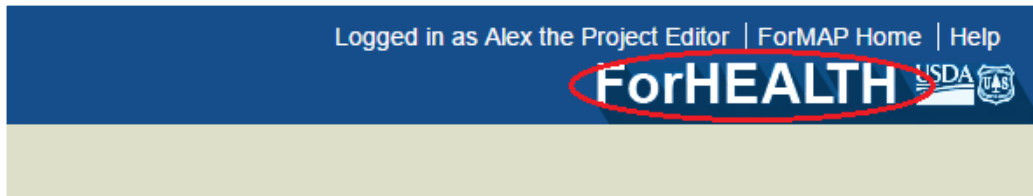
If you are a Project Approver, you will see four buttons.
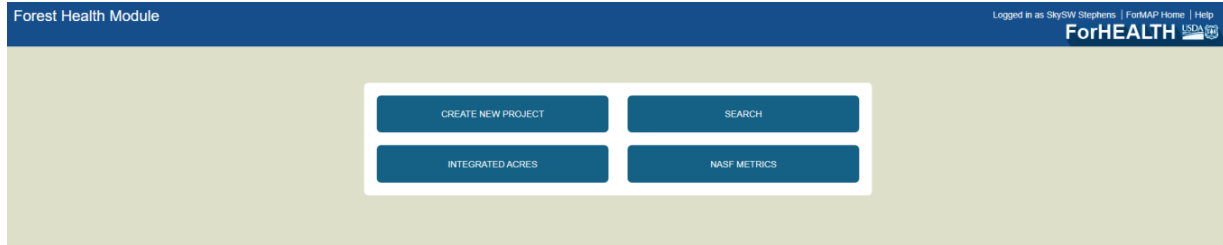
To return to the *ForMAP* Homepage at any time, click the ForMAP link in the top right of the header.

To return to the ForHealth Homepage at any time, click the ForHealth link in the Header.

High-Level Workflow

The basic workflow for adding, approving and reporting accomplishments for ForHealth Projects is as follows:

1. Project Editor or Project Approver[1] *creates a new Project*:

   → Fills in key details, including Fiscal Year, Project Type, Project Description narrative, etc.

   → Adds Disturbances, in the form of Agents and Hosts

   → Adds proposed Treatments and Activities, acres and estimated costs

   → Reviews entries and Submits for USFS review and approval consideration

2. USFS Project Approver *searches* for "Proposed" Projects

   → Can bookmark any search for easy access when needed; easily links to Project Summary page

3. USFS Project Approver reviews Proposed Project

   → Can make *edits*, if needed

   → Adds Funding sources and amounts, if Project is to be approved

   → *Approves or Rejects* Project

4. Project Editor *searches* for their "Approved" Projects

   → Can bookmark any search for easy access when needed; easily links to Project Summary page

5. As work is accomplished and completed, Project Editor updates Accomplishments & maps Treatments

   → Updates *Accomplishments* with Actual Acres and Actual ($) Spent[2]

   → *Maps actual Treatment area[3]* for each Treatment funded by the Project

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[1] USFS users will need to create Projects on behalf of all Cooperative Forestry Grantees for whom access to ForMAP is **not supported or not expected** as of version 5. See *Create a new ForHealth Project* for more details.

[2] If Project is Cooperative, Accomplishment 'actuals' are auto-filled when the Project is approved by the USFS, and is based on the Funding acres and dollars entered by the Approver. Only USFS can change these values for a Cooperative project.

[3] USFS users will need to upload mapped Treatment areas on behalf of all Cooperative Forestry Grantees for whom access to ForMAP is **not supported or not expected** as of version 5. See *Add Mapped Treatment Areas* for more details.

Create a new ForHealth Project

Before creating a new project, we recommend searching the database to see if one has already been created. Please see section below for details on searching for projects. Since projects cannot be deleted in ForHealth, if an existing project is found in the database it may be more prudent to update that record, than to create a new one.

Any user with a ForHealth role may create a new Project, however, not all Grantees will create Projects in ForHealth. Cooperative Forestry Grantees who are NOT affiliated with a State Forestry Agency (e.g. State Agricultural Agency employees, University employees, etc.) cannot create ForMap accounts with a ForHealth role, and therefore cannot access ForHealth to create Projects. The USFS Regional Contact will create Projects for these Grantees on their behalf.

Any U.S. Forest Service employee or Other Federal employee may register for a ForHealth role for the purposes of proposing and reporting on funded Forest Health Projects.

To ensure all Cooperative Forestry projects are included in ForHealth, U.S. Forest Service Project Editors/Approvers will create new Projects on a Grantee's behalf, and **must add Projects for all Cooperative Forestry Grantees. At this time, State Forestry Agencies should not create new projects in ForHealth unless Program Direction instructs them to do so.**

Steps for creating a ForHealth Project:

1. From the ForHealth Home Page, click on the Create New Project button.
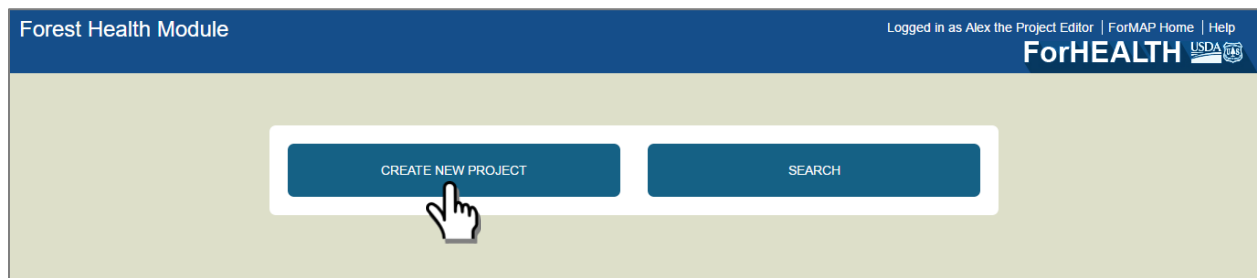
2. Fill in the Project Details on the Create New Project page. Fields with the asterisks are required.

   If you are affiliated with an "Other" Federal Agency as your Organization, your Grantee Ownership, Grantee Type, Grantee (name) fields are all pre-filled with the appropriate values. Enter in values for all other required fields. Click Save when entries are complete.

Project Details

Indicates a required field

Project Name*	[ ]	**Project Type ***	Type in name or click arrow to see list.. ▾
Fiscal Year*	ex:2016	**USFS Region ***	Type in name or click arrow to see list.. ▾
Primary State*	Type in name or click arrow to see list.. ▾	**Project Priority**	[ ]
Grantee Ownership*	Other Federal		
Grantee Type*	Department of Interior		
Grantee*	BLM		
Administrative Unit*	[ ]		
Proposed Project Description*	[ ]		

Save

If you are affiliated with USFS as your Organization, you will need to enter in details for all fields, since you can create a Project for any type of Grantee. Click Save when entries are complete.
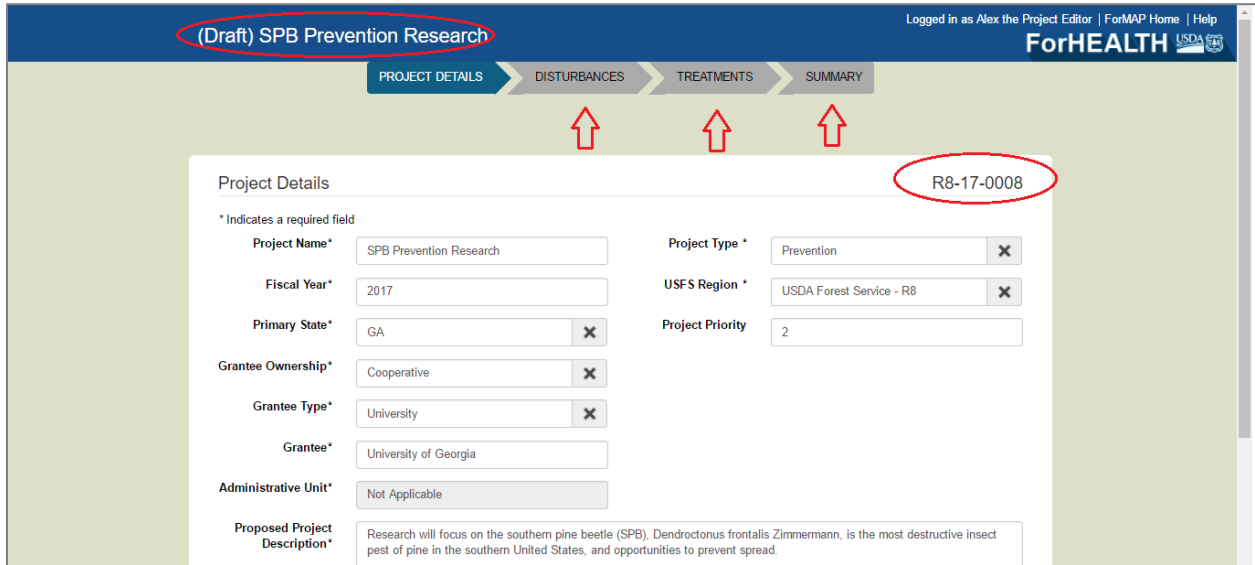
Project Details

Indicates a required field

Project Name*	[ ]	**Project Type ***	Type in name or click arrow to see list.. ▾
Fiscal Year*	ex:2016	**USFS Region ***	Type in name or click arrow to see list.. ▾
Primary State*	Type in name or click arrow to see list.. ▾	**Project Priority**	[ ]
Grantee Ownership*	Type in name or click arrow to see list.. ▾		
Grantee Type*	Type in name or click arrow to see list.. ▾		
Grantee*	Type in name or click arrow to see list.. ▾		
Administrative Unit*	Not Applicable		
Proposed Project Description*	[ ]		

Save

3. Once the Project Details have been saved, the page will update with the project title in the upper-left corner of the page prefixed with the Project Status (shown below as "Draft"). The automatically
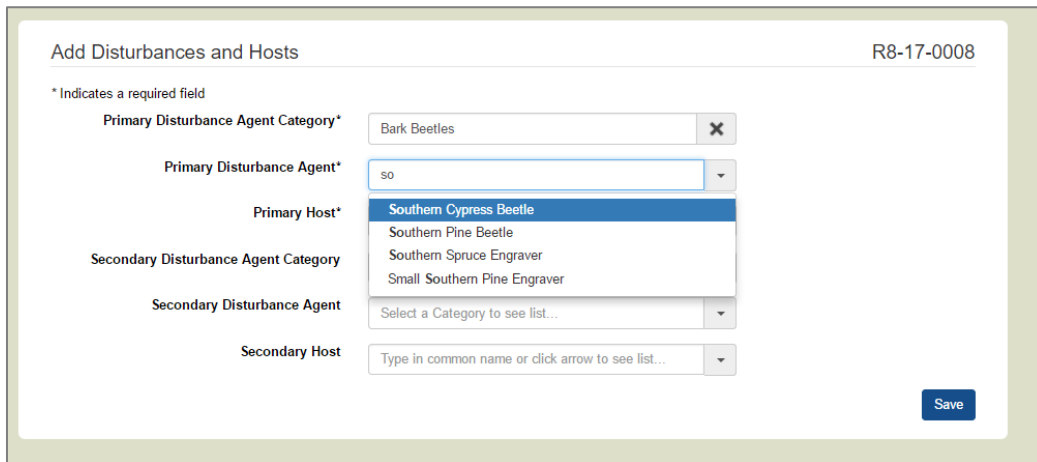
generated Project ID displays above the Project Type, and reflects the USFS Region ID, the Fiscal Year and a sequential counter. Navigation tabs indicate that you are on the Project Details page, and that three other pages are available for navigation. The typical workflow is left to right, although any of the tabs may be worked on at any time during this phase of project creation. When finished editing the Project Details page, click on the Disturbances tab.

4. From the Disturbances page, add Disturbance Agents and Hosts to be addressed as part of the project. A primary agent and host set is required; a secondary agent & host set is optional.

In the Disturbance Agent Category field, type in the category to filter the list, or click on the arrow to see the values in the drop-down list. Pick a Category. Next, in the Disturbance Agent field, type in a few letters to see the filtered list, or click on the arrow to see a list of agents. Pick an Agent.

In the Host field, type in a common name or click the arrow to see a list. After selecting the appropriate agent & host set(s), click on the blue Save button.

5. Select the Treatments tab and click on the blue Add button to add a proposed treatment or activity to the Project.

A pop-up window will appear; pick a value from the Description list and enter Estimated Acres and Estimated Cost into the respective fields. Estimated Acres is only required for treatments. Click on the Add button.

The Treatments page will display a table of the treatment or activity you added. Click the Add button from the Treatments page again to add any additional Activities or Treatments to the Project. Once complete, the Treatments page will display all the treatments and activities associated with the project, their associated acres and costs. You may delete existing ones as needed.

6. Click on the Summary tab. This Summary page displays all the information added to the project thus far and can be accessed at any point during project creation.

Once all the project details, disturbances and treatments have been added to the project, it is ready to be submitted to a Project Approver for approval. Click on the Submit Project button and agree to submit the project.
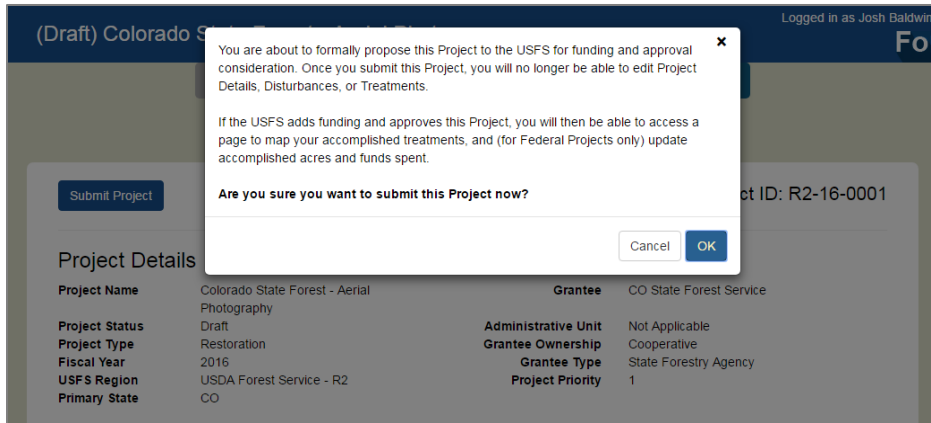
After submitting the project, its Status will update from "Draft" to "Proposed". If the Grantee has access to ForHealth, they can continue to view the Summary Page for this Project. However, they can no longer make edits to it. Further edits will only be allowed to be made by USFS users (see *Edit, Fund and Approve a ForHealth Project*).
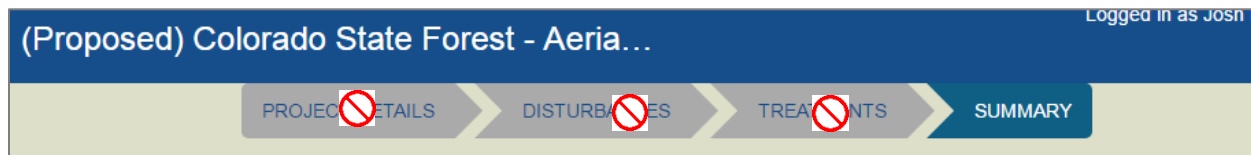
Edit, Fund and Approve a ForHealth Project

Once a Project has been Proposed (submitted by a user), a USFS Approver must log into ForHealth to review and consider it for funding and approval. Note that there is <u>no</u> automated email generated by ForHealth for Approvers to respond to; therefore, the Approver will need to look up the Proposed Projects to be reviewed using the Search tools in ForHealth (see *Search and Download ForHealth Projects*).

Any Project that is to be approved will require Funding details be entered prior to approval.

1. As a USFS Project Approver you will perform a search and click on the Project ID link for the Project to be reviewed.

Search ForHealth Projects

| Filter By | Select one... ▼ | | + |

🗑 | Proposed ✕ | Cooperative ✕ | ⬇

| ←Previous | | Page ① of ① | | Next→ |

Project ID	Project Name	Grantee Ownership	Grantee	Status
NA-17-0001	Testing	Cooperative	VA Department of Forestry	Proposed
R10-13-0002	Alaska Test Project	Cooperative	AK Division of Forestry	Proposed
R10-16-0002	Suppression project of alaskan forest pest	Cooperative	The Grantee	Proposed
R8-16-0003	asdasd	Cooperative	Florida Forest Service	Proposed
R8-17-0008	SPB Prevention Research	Cooperative	University of Georgia	Proposed

2. Review all submitted details from the proposed Project's Summary page, and if edits to existing details are needed, navigate to the appropriate pages (Project Details, Disturbances, Treatments). (Note that a USFS Project Editor may also edit entries on those pages.)

3. As a USFS Project Approver, click on the Funding tab go to the Funding page. (This step is only required and should only be done if the Project will be Approved.) The Proposed Treatment acres and project costs are displayed for reference.

| PROJECT DETAILS | DISTURBANCES | TREATMENTS | FUNDING | SUMMARY |

Funding   R8-17-0008

Treatment / Activity Totals: Estimated Acres = 1,000.0 Estimated Costs = $11,000

Please Add Funds to the Project.   Add

4. Click the Add button to add a funding entry to the Project.

5. A window will display prompting you to pick the Funding Source, Type, Acres and Funding Amount. Click Add when finished. A Project may be funded from more than one Funding Source/Type, if needed; click the Add button from the Funding page if additional entries are appropriate.

6. After all project details are finalized, return to the Summary page and click on the Approval button.

7. Click the Approve (or Reject) button, as appropriate for the project. Note that no automated email is sent upon approval or rejection, and direct communication with the Grantee outside of ForHealth is recommended.
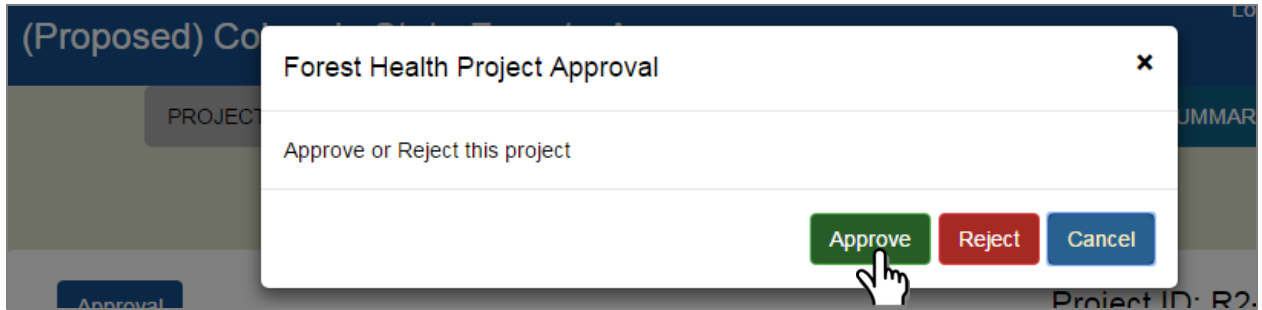
8. Once approved, the Project Details, Disturbances, Treatments and Funding pages will no longer be editable by any user. A Project Approver may click the Approval button again to revert the Project to "Proposed" status if errors on those pages need to be fixed.

If for some reason a project needs to be deleted, please contact the ForMAP Help Desk. They will initiate a deletion request with the ForMAP database administrator. Not all requests can be granted, as ForMAP is bound by data integrity rules which govern record deletions. As mentioned above, before creating a new project please search for any existing projects to minimize duplicates in the database.

Update Project Accomplishments

Project Accomplishments are reported in the form of "Actual Acres" and "Actual Spent" (in dollars) per Project.

IMPORTANT: For all Cooperative Forestry projects, the values for Actual Acres and Actual Spent are automatically filled in based on the Funded acres and Funded amounts. Only USFS users may edit these values for the Cooperative Forestry projects. All Projects that are USFS or Other Federal should be updated annually to reflect progress on Acres and Funding Spent to date.

1. If you've used your browser to bookmark the Summary page for the Project to be updated, go to that bookmarked page. Otherwise, use the *Search* tools to find Approved Projects to be updated with Actuals accomplished and access the Project's Summary page from the Search results.

2. As a USFS or Other Federal User, click on the Accomplishments tab. Click on the hyperlinked Actual Acres or Actual Spent (per Funding Source, if there are multiple) to enter actuals.

3. A window will display, prompting you to enter acres and expenditures. Click Save when finished.

4. The updated values will display in the Accomplishments table.

Accomplished Acres & Actual Expenditures   R8-17-0009

Source	Type	Est. Acres	Actual Acres	Funded Amount	Actual Spent
RO Carryover	SPFH	100.0	50.0	$10,000	$5,000
TOTALS		**100.0**	**50.0**	**$10,000**	**$5,000**

Add Mapped Treatment Areas

Accomplished Treatments will be mapped by the Grantee, even if a USFS user is entering the data into ForHealth on their behalf. All Treatments must be mapped as polygons (areas) in Shapefile (or other valid ESRI vector polygon) format[4]. If a USFS user is entering data into ForHealth on your behalf, you must provide them with a Shapefile once the Treatment has been implemented (see Program Direction below).

Program Direction

Users are encouraged to obtain spatial data on projects and include them in the ForHealth project record. The scale for the spatial data will vary widely across the variety of projects included in the ForHealth application. Note that reported acreage values for accomplishment reporting will continue to come from the tabular entries in the project record and not from the spatial component. The spatial component is intended to show the location and overall extent of the projects on the landscape.
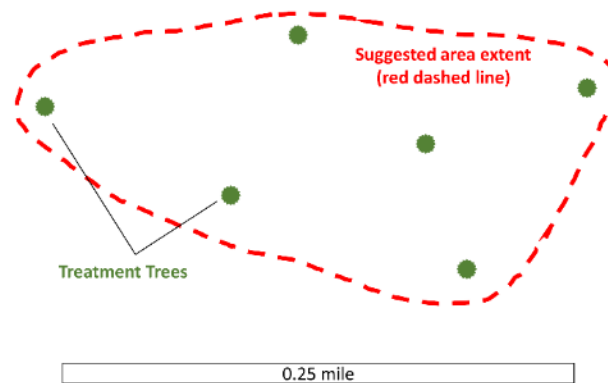
Specific guidelines:

- Scale – This will vary depending on the project. Large projects such as aerial application will encompass significant areas, while smaller individual tree-based projects might be just a few acres.

- Number of features – The application requires users to enter each feature individually or dissolve the features to create a multipart feature which can be loaded as a single entry. It is highly recommended that users create multipart features for projects with more than a few individual areas (>10) to facilitate the operation.

- Project extent/area – Depending on the feasibility of the project area and the activity type, the spatial data should represent the treatment as close as possible. Here are a few suggested guidelines:

  - Stand levels – Projects that have clearly defined stand-level boundaries should have those boundaries entered into the application.

  - Aerial application – Spray block boundaries can be entered directly to show the project area.

  - Individual tree-based projects – Currently the ForHealth application only allows polygon (area) entries, and not points. If individual tree(s) or point(s) are the treatment, the individual point locations should be buffered to produce an area. Alternatively, a small polygon encompassing the locations could be created. No specific buffer guidelines are provided at this time and the local unit can best decide the size of appropriate buffer areas. If individual locations are buffered, the buffer would ideally reflect the size of the activity or treatment.
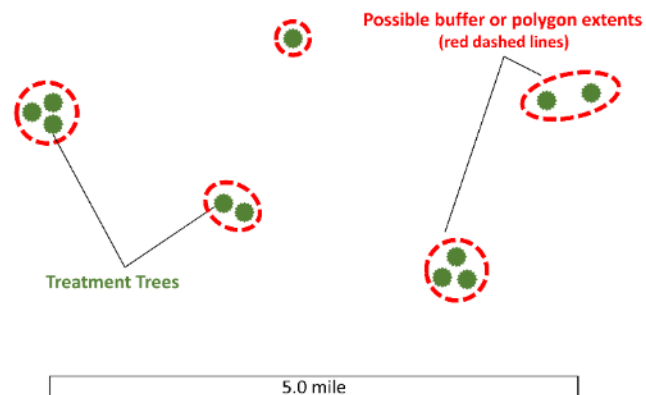
    Examples include:

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[4] A valid .prj file must be included. The ShapeUp tools and ForHealth support multi-part polygons. For a multi-part shapefile to be uploaded as a single treatment area, the records will have to be merged into a single record before upload. If additional assistance is needed, please contact the ForMAP Help desk at *www.formap.info*.

1.

Suggested area extent
(red dashed line)

Treatment Trees

0.25 mile

2.

Possible buffer or polygon extents
(red dashed lines)

Treatment Trees

5.0 mile

Adding Mapped Treatment Areas

To update the Project with the Treatment shape, please follow these steps:

For the Project in question, click on the Map tab to get to the Map page.

1. Map tools include:

    A. Search box (on left)

    B. Zoom tools (on left)

    C. Zoom to previous extent (on left)

    D. Imagery information (on right)

E. Map overlays (on right)

2. Click on the Import New Area button on the bottom right of the screen. A window opens with options to download import tools and to paste in WKT coordinates (if you have already used the import tool). NOTE: If you have never imported a shape into ForHealth or other ForMAP module (like SMART or LaSR), you will need to download one of the ShapeUp upload tools to convert your Shapefile to "WKT Coordinates" for use in ForHealth.
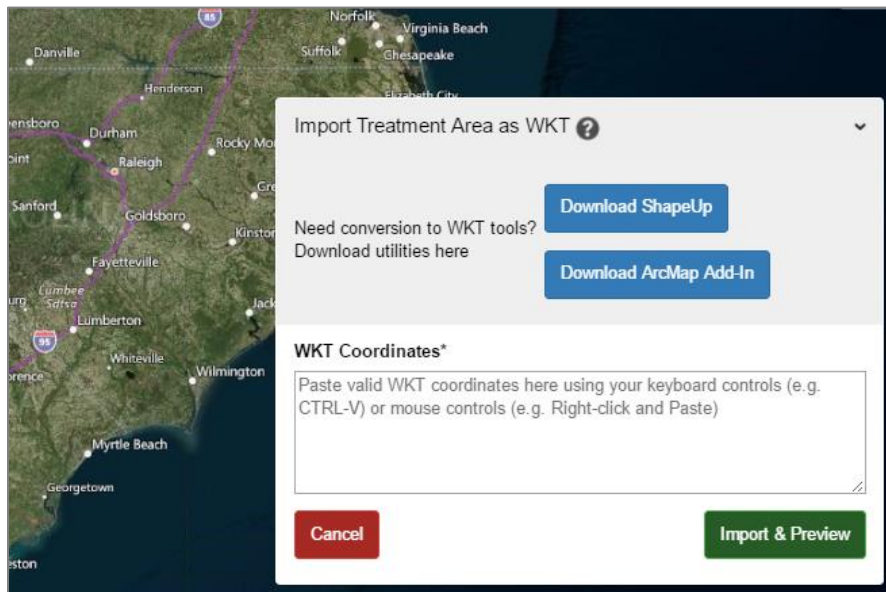
3. If you do <u>not</u> use ESRI ArcGIS software or prefer not to use the ArcMap Add-In, click the 'Download ShapeUp' button to download the standalone utility. (See Step 4 if you do use ArcMap)

    A. Once downloaded, unzip the folder from your computer and double-click the "SMARTShapeUp.exe" file to launch the utility. (If you do not have administrative privileges for

your computer, you may need to right-click on the .exe and open it with the Run Elevated command. If additional assistance is needed, please contact the ForMAP Help desk at ***www.formap.info***.

B. Once the ShapeUp utility window is open, there will be an information box in the lower left-hand corner that provides guidance. NOTE that the text refers to other ForMAP Modules, but Steps 1-3 are applicable to ForHealth.

C. Click on the Upload Shapefile button, then navigate to the Shapefile on your computer that contains the Treatment area(s).

D. In the map, click on the treatment area to import (it will turn red).

E. Click the Copy button in the coordinates window. (The coordinates are now stored in your computer's 'copy' memory, ready to be pasted in ForMAP)
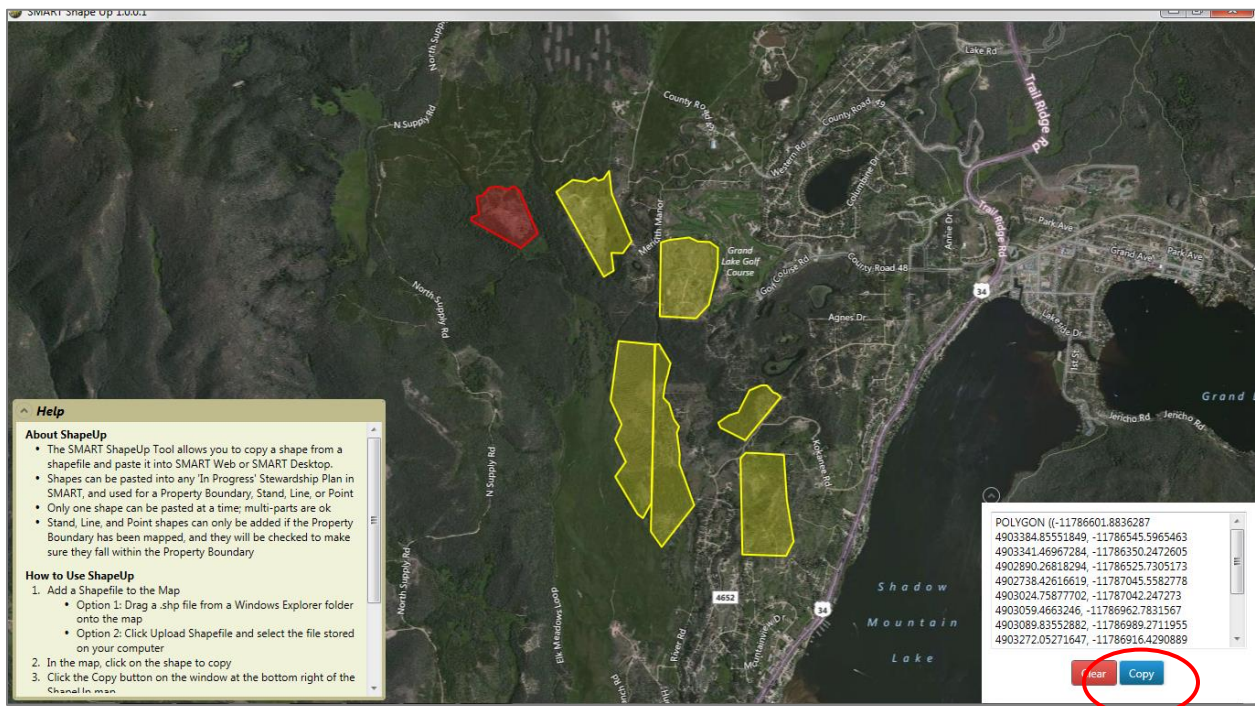

F. Return to the Map page in ForHealth for the Project in question and if the Import Area window is no longer open, click the Import Area button to open it.

G. Paste the copied WKT Coordinates (ctlr-V or right-click/paste) into the WKT Coordinates box.
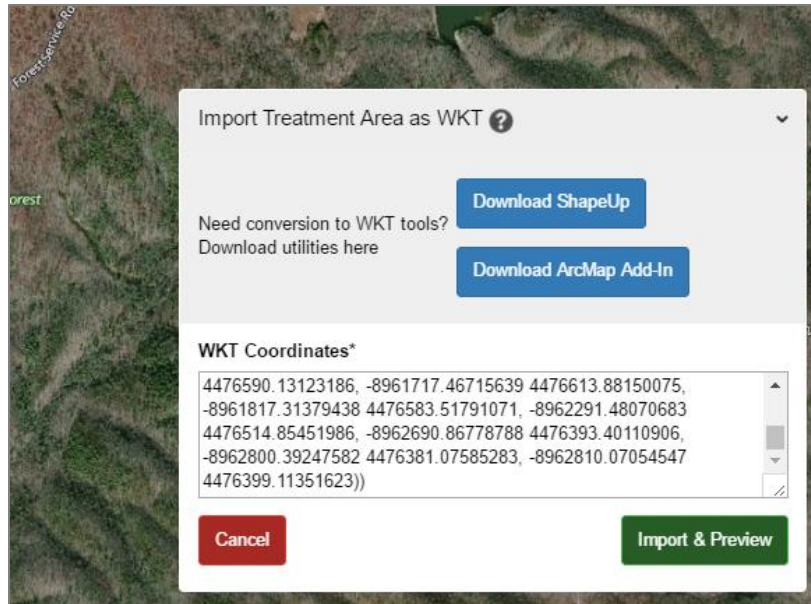
H. Click the green Import & Preview button.

I. You will need to pick a treatment type for the area (it does not need to match what was proposed in the Project). Click the green Save Treatment Area button.
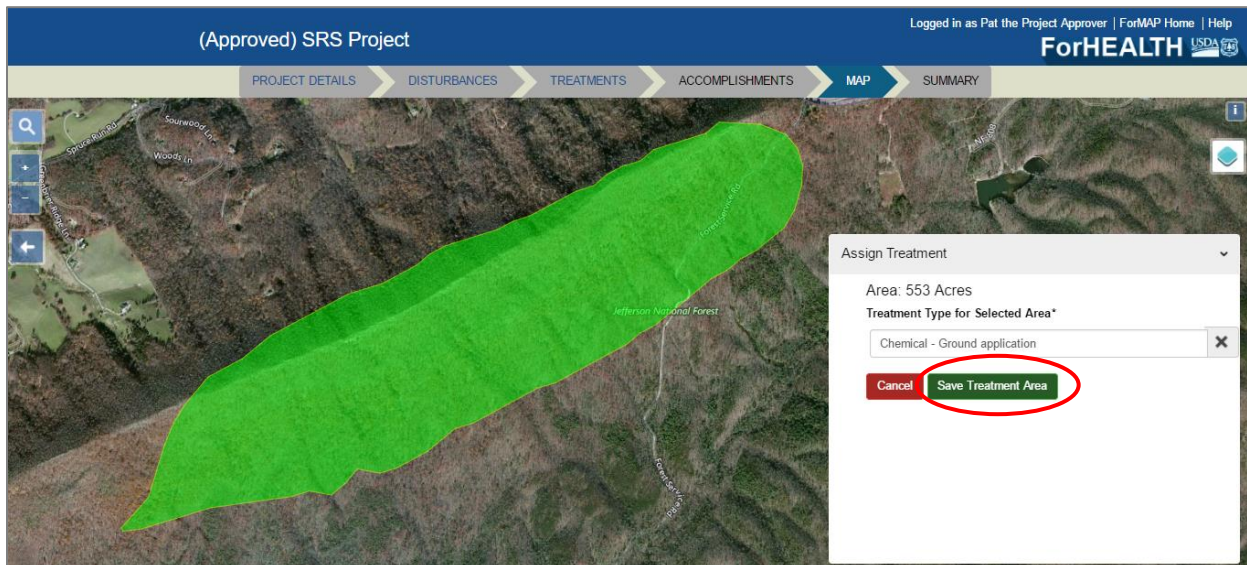

J. After the Treatment area has been added to the Project, it will display on the map and a list of all mapped treatments will display at the lower left part of the screen. You can add more Treatment areas as needed. Use the zoom controls in that window to zoom the map to all Treatments on the Project, or to a single Treatment.
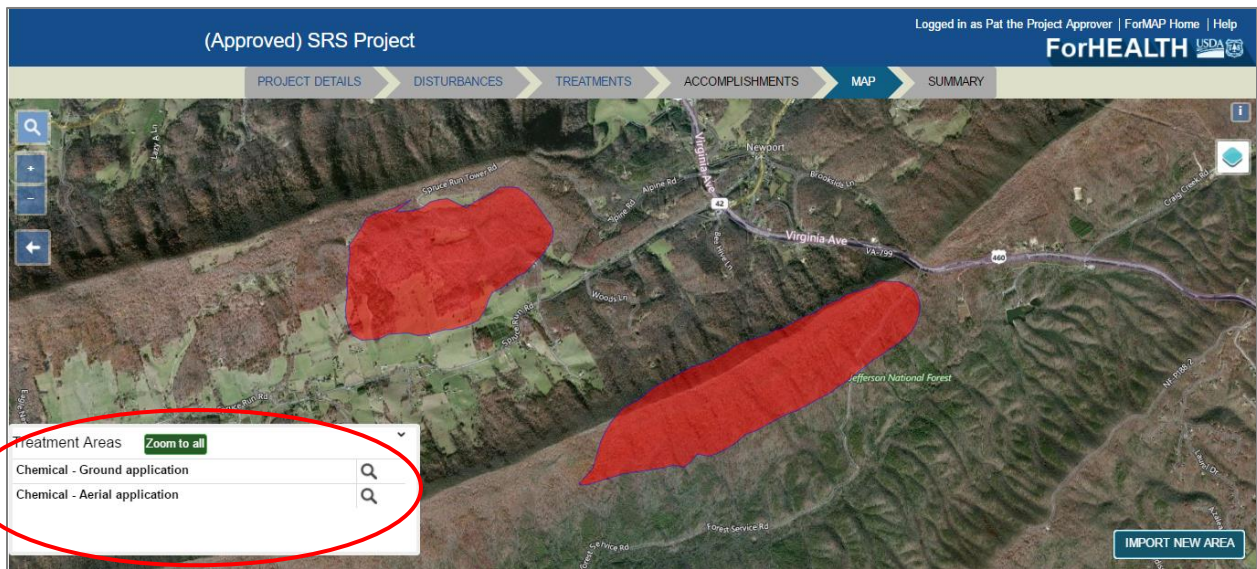
K. Click on a Treatment area in the map; it will change color. A window at the bottom right displays the calculated Treatment acres, and allows you to update the Treatment type or delete the Treatment area.
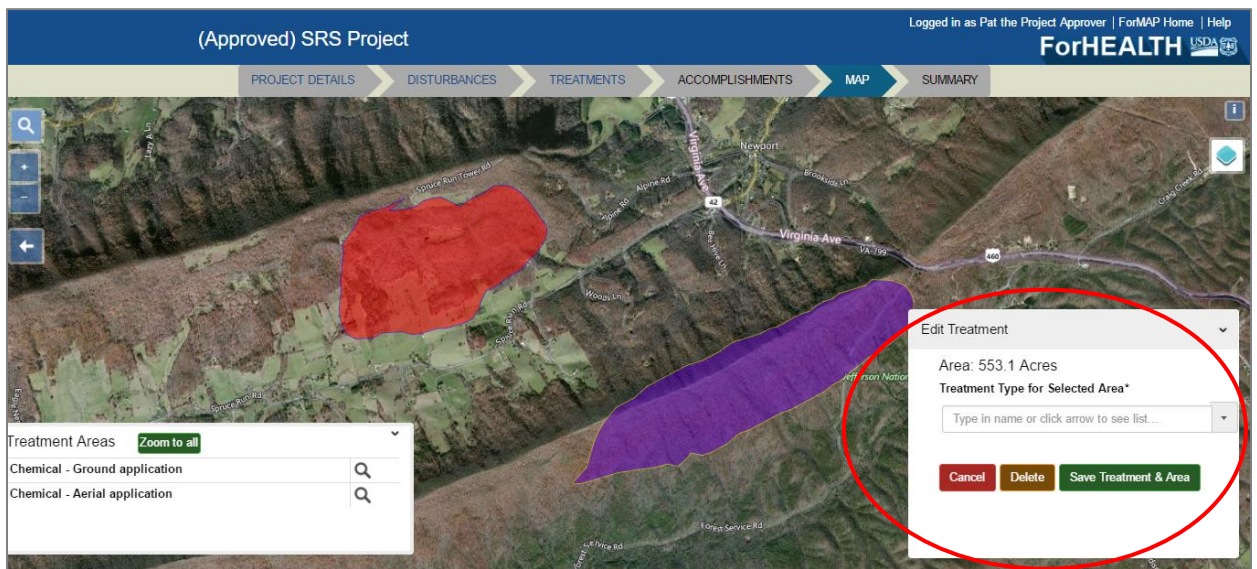
4. If you have ESRI ArcGIS software, you may alternatively download the ArcMap Add-In. Click on the 'Download ArcMap Add-In' button to download the file. A Help Document is provided in the ShapeUp download folder, which provides guidance on the process of installing and using the tool. If additional assistance is needed, please contact the ForMAP Help Desk at *www.formap.info*.

A. In ArcMap, click the Selected Geometry to WKT icon on the ArcMap toolbar (see icon below, as highlighted by red arrow).

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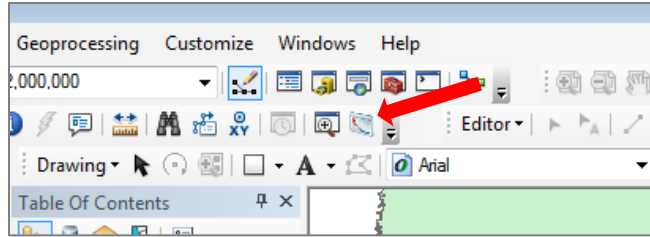
B. With the ArcMap selection tool, select the polygon of interest. The shape coordinates will show up in the WKT Display window.

C. Click on the Copy to Clipboard button (red oval, image below).
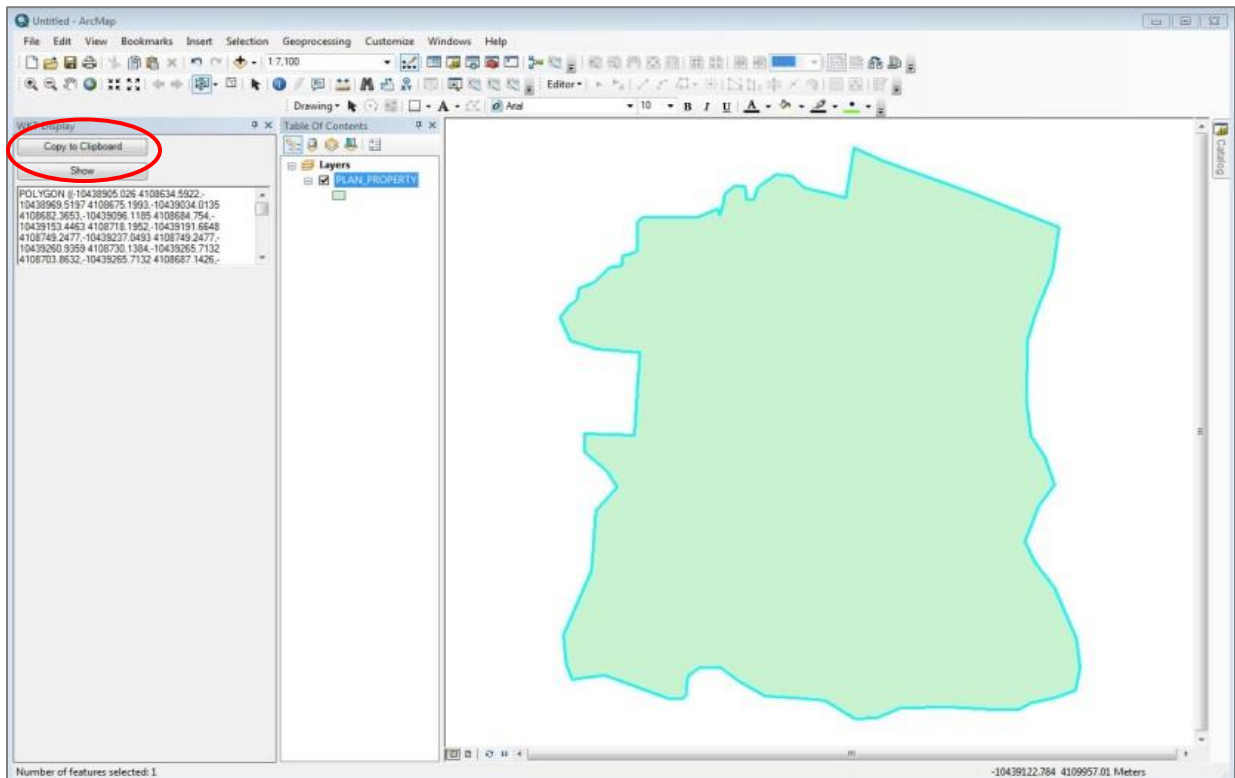
D. Return to the Map page in ForHealth for the Project in question; if the Import Area window is no longer open, click the Import Area button to open it.

E. Paste the copied WKT Coordinates (ctlr-V or right-click/paste) into the WKT Coordinates box.
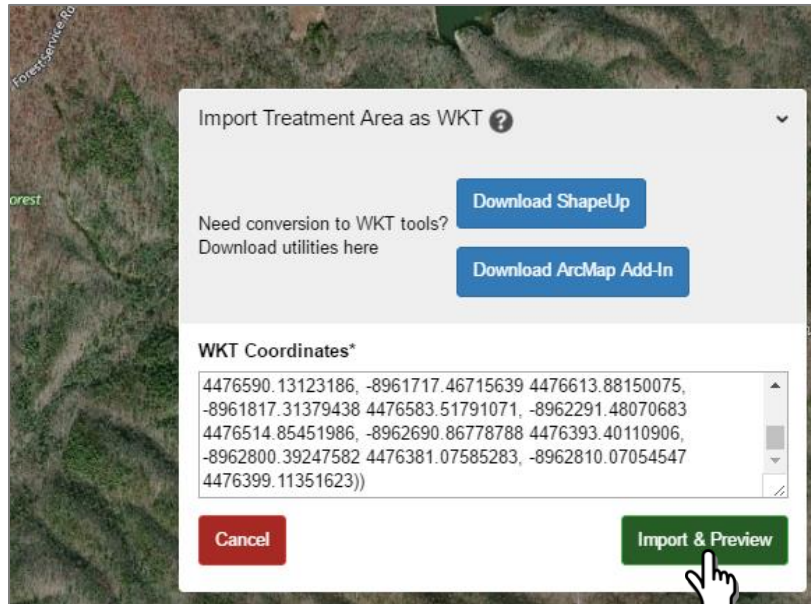
F. Click the green Import & Preview button.

G. You will need to pick a treatment type for the area (it does not need to match what was proposed in the Project). Click the green Save Treatment Area button.
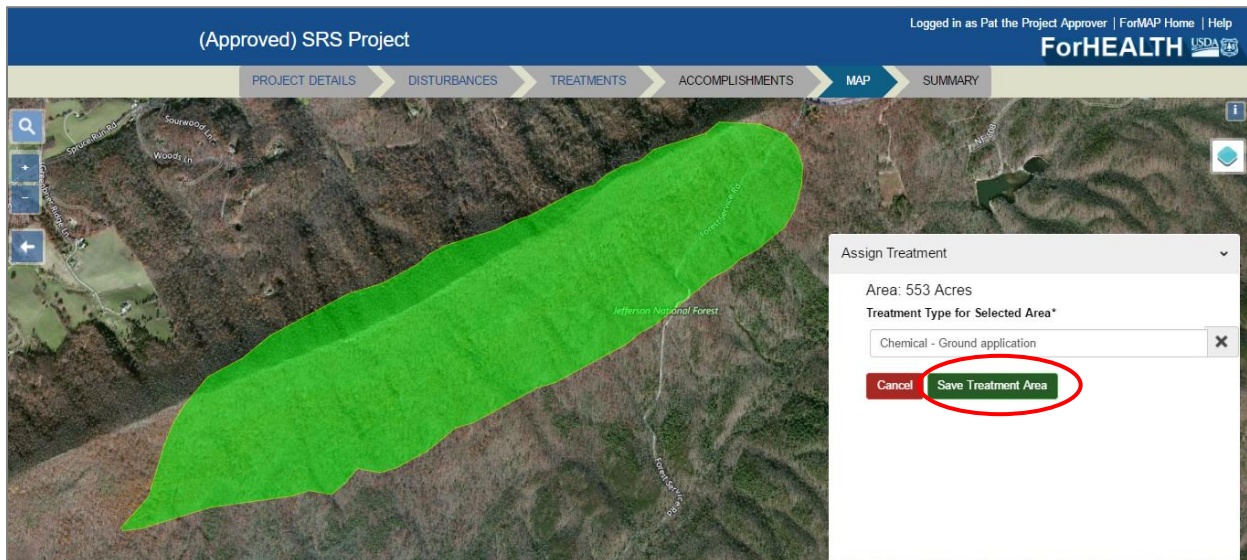
H. After the Treatment area has been added to the Project, it will display on the map and a list of all mapped treatments will display at the lower left part of the screen. (You can add more Treatment areas as needed.) Use the zoom controls in that window to zoom the map to all Treatments on the Project, or to a single Treatment.
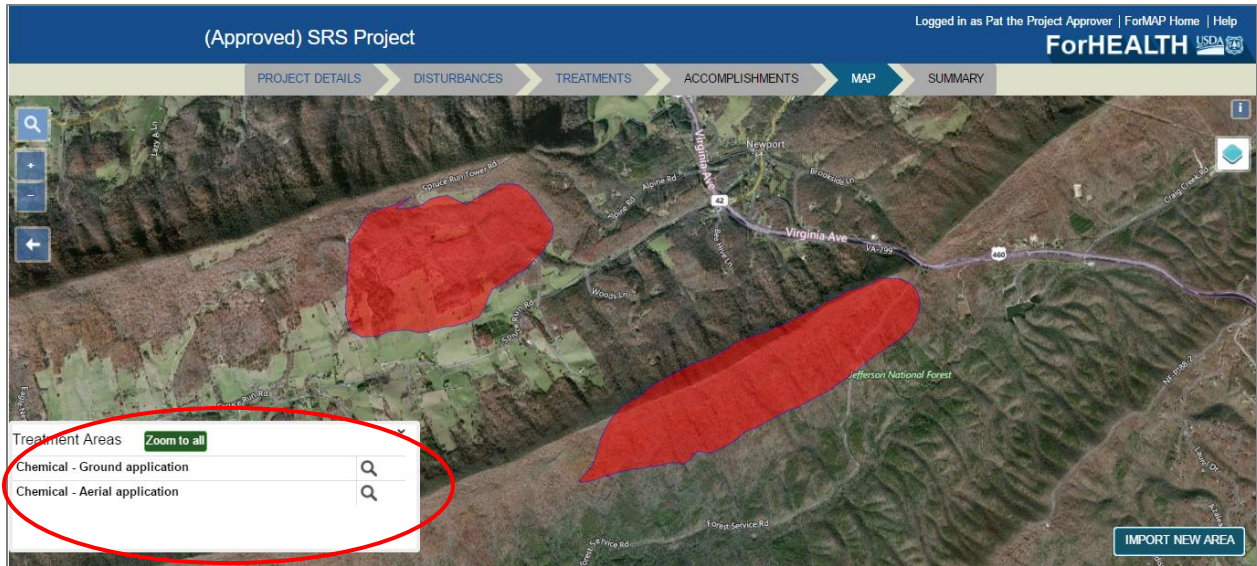
I. Click on a Treatment area in the map; it will change color. A window at the bottom right displays the calculated Treatment acres, and allows you to update the Treatment type or delete the Treatment area.
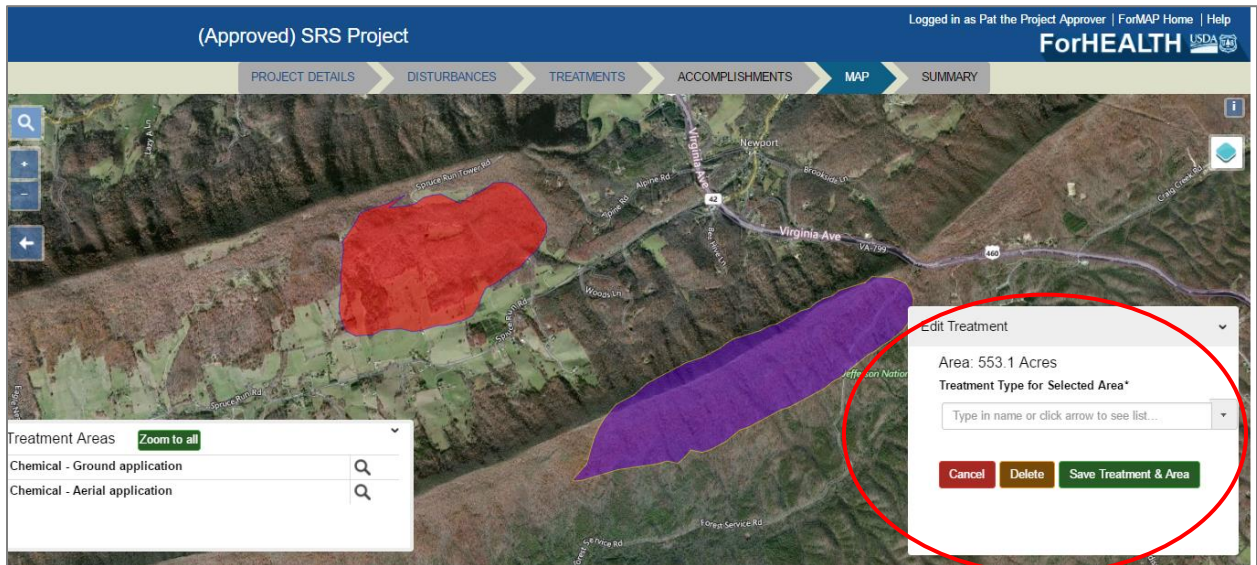
Search and Download ForHealth Projects

To find an existing Project in ForHealth, use the Search tool available from the ForHealth Home Page. Projects may be searched for using the following Filter options:

- Project Name (full or partial name)
- Project ID[5] (full or partial ID)
- Fiscal Year (federal)
- Grantee Ownership (Cooperative, USFS, Other Federal)
- Grantee Type (Local Government, State Forestry Agency, State Agricultural Agency, Other State Agency, Tribe, University, Other Cooperative, Department of Interior, Other Department (federal), National Forest, Research Station)
- Grantee Name (full or partial name)
- Project Status (Draft, Proposed, Approved, Rejected)

1. From the ForHealth Home page, click on the Search button. (To get to the Home page click the ForHealth link in the page header)

2. Select a filter type. Either type in text (for Project Name, Project ID, Fiscal Year, Grantee Name) to find a match, or pick a value from the drop-down lists presented (for Grantee Ownership, Grantee Type, and Project Status). Click the Plus button to add a filter to the query.
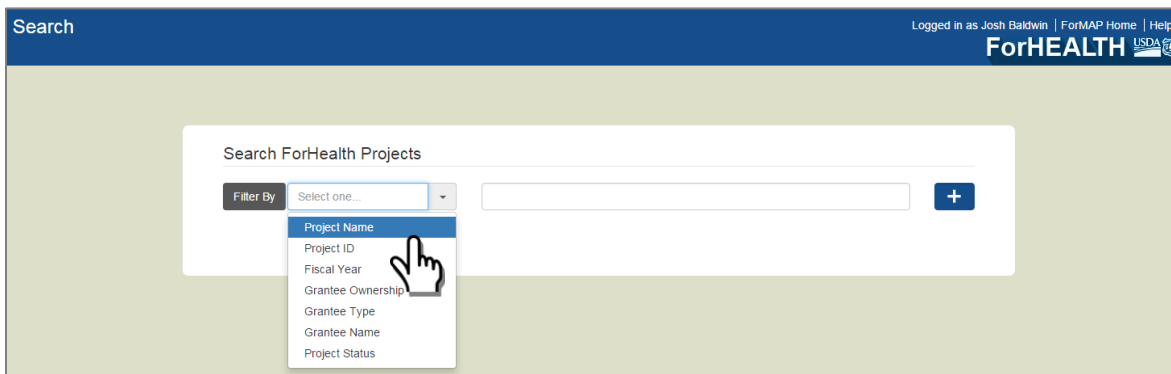
You may add multiple filters to the query to refine your search, as shown below. Filter terms can be deleted separately by clicking on the "X" inside its button, or all at once by clicking on the red trash can. Search results will automatically update as filters are applied or removed, and are shown in a table below the filter inputs.

HINT: You can use your browser to bookmark a search results page with often used search parameters, and when visiting that bookmarked page in the future, it will pre-load the search results. For example, if you want to

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[5] To search by USFS region, use Project ID and enter region – e.g. R2.

frequently see Proposed Projects in Region 2, add filters to a search with Project ID = R2 and Project Status = Approved, and then bookmark the page.

3. Click on the blue Project ID link to access the individual Project, located in the left most column of the search results table.

4. If desired, export the search results as an excel spreadsheet with the blue Download button located under the add filter (plus) button. The excel workbook will contain two sheets: Forest Health Projects and Treatments and Activities.

Add Integrated Acres

Only Project Approvers may add Integrated Acres into ForHealth, to report on National Forest System funded projects.

1. From the ForHealth homepage, a USFS Project Approver clicks on the Integrated Acres button.

2. From the Integrated Acres page, click on the Add button.
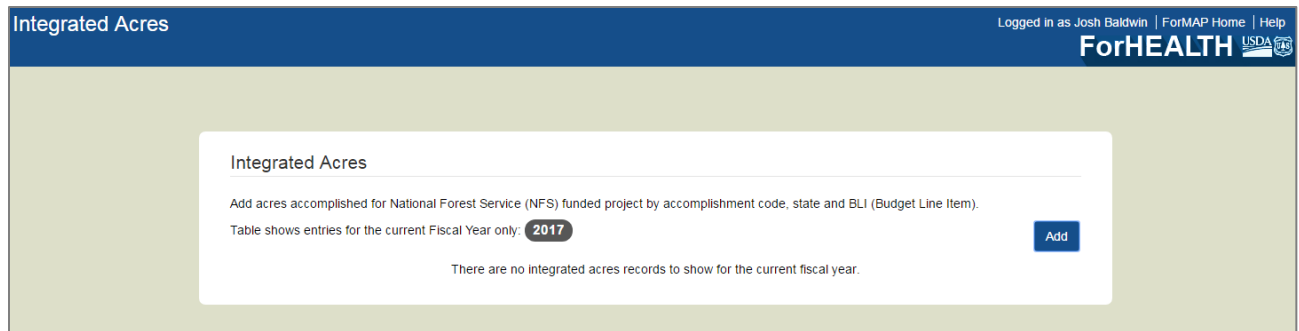
3. A window appears prompting entry of Fiscal year, State, Accomplishment Type, BLI code and Acres. Note that you can add accomplishments for Fiscal Years other than the current one, but only the current Fiscal Year will be displayed in the table.
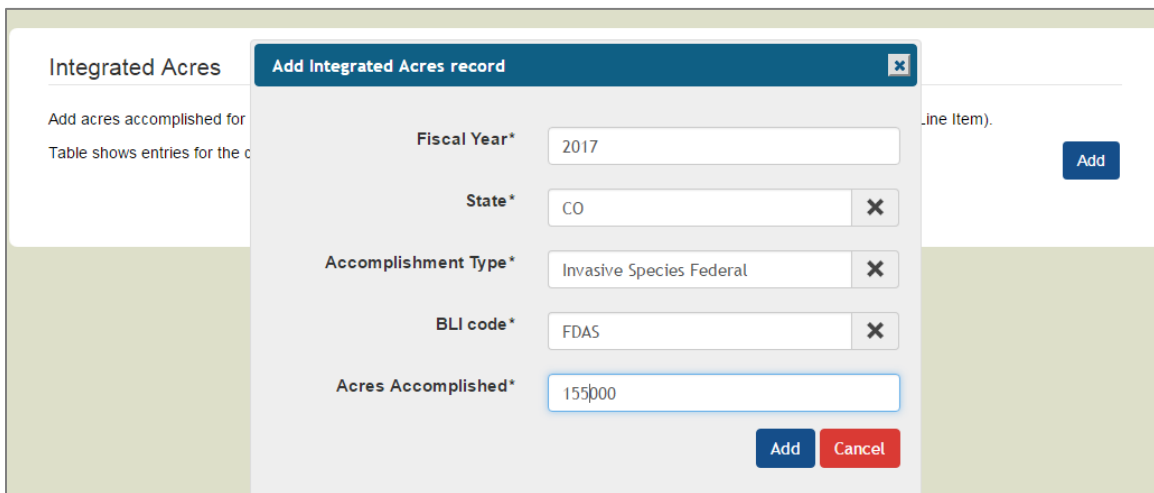
4. Integrated acres accomplishments will show up in a list. Records can be added and deleted as needed

Integrated Acres

Add acres accomplished for National Forest Service (NFS) funded project by accomplishment code, state and BLI (Budget Line Item).

Table shows entries for the current Fiscal Year only: 2017

[Add]

[←Previous]   Page 1 of 1   [Next→]

State	Accomplishment Type	Acres	BLI Code	Remove
CO	Invasive Species Federal	155000	FDAS	Delete

NASF Metrics

USDA Forest Service Forest Health Protection
Accomplishments Reporting Guidance

Intent

It is the intent of this document to provide state agencies with recommended guidance to report annual accomplishments more accurately and effectively for USFS Forest Health Protection grants. These guidelines are meant to help establish reporting consistency across USFS regions, allowing for easier digestion of accomplishments.

Acres of Cooperative Lands Monitored and Treated

    a. Acres Treated for Pests, Diseases or Invasive Plants

        i. Treatments including spot treatments shall be recorded as the acres of "managed area."

        Guidance:

- *To establish consistency for projects receiving grant funding, define the entire grant-funded zone as the "project area" and the sector actually monitored or treated during the reporting period as the "managed area."*

- *When reporting micro-specific areas such as spot treatments, biocontrol releases, trapping, etc., report on the entire acreage of the managed area. (See Appendix A)*

- *Multi-year projects may have the same managed acreage for each year or may be adjusted if project or managed area within the project is changed.*

        ii. Bio-control treatments shall be recorded as acres managed within the project area.

        Guidance:

- *Initial release area is credited to managed acres.*

- *Within the area surveyed to verify establishment following release, acres where introduced biocontrol agents are established can be reported as managed acres.*

    b. Acres Surveyed or Monitored

        i. Total area of the state surveyed for forest damage or monitoring.

        Guidance:

- *The total area recorded using Digital Mobile Sketch Mapper (DMSM) during aerial or ground survey can be used under this metric and is part of the Forest Service report (submitted in conjunction with the Forest Health Assessment and Applied Sciences team report, usually mid- November) that details recorded forest damage.*

- *If a state does not use a DMSM to record damaged areas, use data from the method used.*

- *The area of damage recorded can be used if there is no record of area surveyed (though it may underestimate the total area surveyed for damage.)*

- *The same area may be counted multiple times if there are overlapping*

surveys for different target organisms or using different modes of survey (e.g., ground, aerial, remote sensing, etc.).

ii. Post-release surveys to determine if biocontrol has established may be credited to survey regardless of establishment.

iii. Acres credited for a trapping program are based on that part of the managed area for which the forest health staff are responsible.
Guidance:

- *For trapping programs contributed to by other agencies or groups, acreage credited to the forest health program staff will not equal the entire acreage of the trapping program. (See Appendix B)*
- *If states provide forest health services through more than forest health staff, credit the work done by other staff either in acres (and contacts) and explain how it is calculated (methodology section). One way of getting an estimate is to use the proportion of support other program staff receive to do forest health work. (See Appendix C)*

iv. For traps placed in isolated, high-risk locations, acreage reported will be at the state's discretion. Use of the area of lure attraction is appropriate if known or generally accepted. (See Appendix B)

c. Reporting Period

- *Acres treated and surveyed report will be due to region USFS FHP program directors in conjunction with spatial forest health survey data submitted to the Forest Health Assessment and Applied Sciences Team. The reporting period is October 1-September 30 (federal fiscal year).*

Outreach and Education Activities Related to FHP: Base credits on the number of people reached (contacts). Report combined counts of direct contacts and estimated audiences (indirect contacts) reached.

Guidance:

- ***Direct contacts*** *include activities where the number of persons reached is known, including person-to-person visits, phone calls, workshops and trainings, website visits, and social media.*
- ***Practice plans*** *for private forest owners and prescriptions should be counted as direct contacts under Outreach and Education. If these are implemented, they may also be counted as acres treated.*
  (See Appendix C)
- ***Indirect contacts*** *are those where the number of attendees is not known, including billboards, radio and TV interviews and programs, or advertising. These estimates can be provided by the media vendor.*
- ***Reporting*** *will be due to region USFS FHP program directors on December 31 (calendar year)*

Appendix A

When reporting micro-specific areas such as spot treatments, biocontrol releases, trapping, etc., use the entire acreage of the managed area

Example: Multiyear treatment of hemlocks with a systemic insecticide to manage hemlock woolly adelgid.

The maximum amount of imidacloprid that can be applied as a soil drench or injection per acre limits the number of hemlocks that can be treated within a project area each year. For example, 16 trees with a 24-inch trunk circumference or eight trees with a 48-inch circumference can be soil injected/soil drenched each year per acre. The protection from imidacloprid treatment persists for 4-5 years, so eventually all the hemlocks in an area can be protected from hemlock woolly adelgid if treatments are applied over several years.

The map below shows a management area of 322 acres within which individual hemlocks are identified for treatments in either 2018 or 2019. In both years of the project, report the area treated as 322 acres.



Long Hollow HWA Treatments 2018-2019
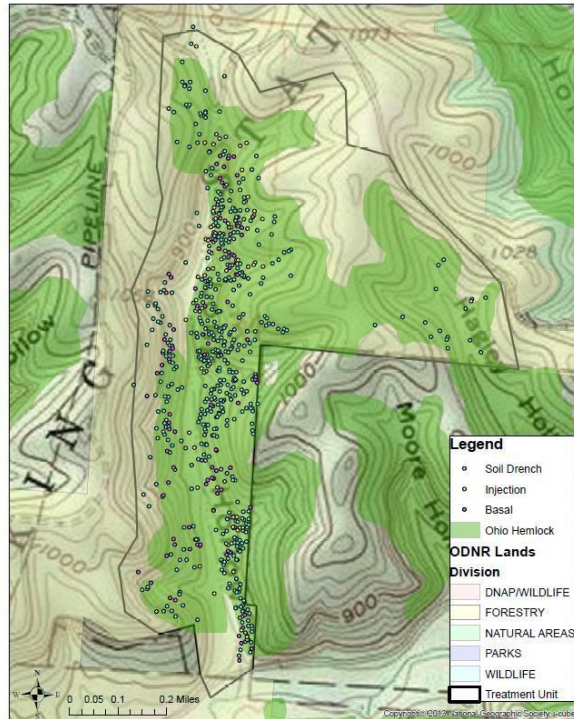
Appendix B

Acres credited for a trapping program are based on the size of the managed area for which the forest health staff are responsible.

Guidance:

- *For trapping programs contributed to by other agencies or groups, acreage credited to the forest health program staff will not equal the entire acreage of the trapping program.*

Example: A statewide EAB trapping program with contributions by three agencies: APHIS, DATCP and DNR Forest Health program. Only that part of the managed area trapped by Forest Health
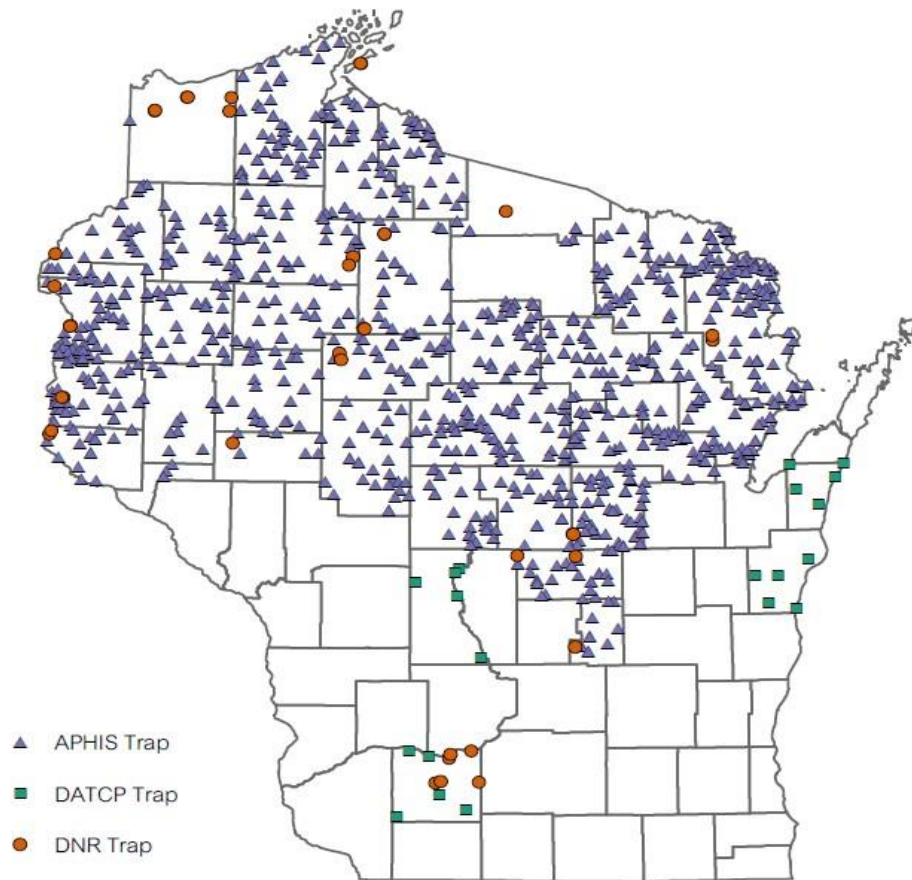
Trap locations reflect the cooperative survey efforts of the following partners; WI Department of Agriculture, Trade and Consumer Protection (DATCP), WI Department of Natural Resources (DNR) and USDA Animal and Plant Health Inspection Service (APHIS).

Map created 5/31/2016

Program staff would be credited to this meta-metric, not the entire statewide managed area. In this example, Forest Health program staff set single traps at state parks that are at high risk of EAB introduction (see iv. below).

iv. For traps placed at isolated, high-risk locations, acreage reported will be at the state's discretion. Use of the area of attraction of the lure is appropriate if known or generally accepted.

Guidance:

- *In the example of the EAB trapping program above, DNR Forest Health program staff set 31 traps at state parks. As this trap has a limited area of attraction, 31 acres might be credited to survey.*

Appendix C

Example of Insect & Disease Metrics from Rural Forestry Practice Plans

In many cases, important forest health work may be done by staff that receives a portion of their FTE funding from forest health sources. In the example illustrated by the map below, some district foresters writing practice plans are partially supported by forest health funding. For those foresters, the state may choose to include a proportion of practice plans written in their forest health reporting metrics where the plan objectives are relevant to forest health objectives.

2019 Forest Practice Plans in Kansas
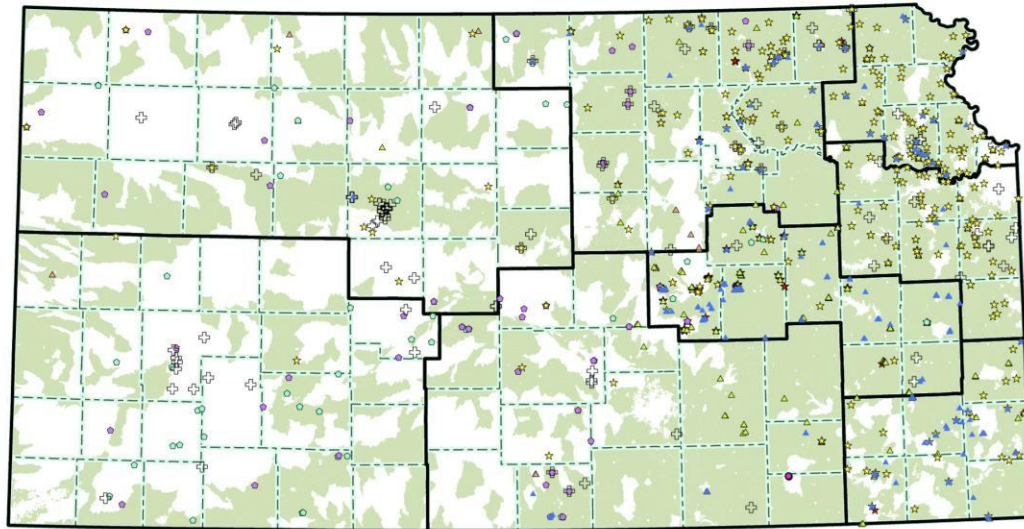
County
Kansas Forest Action Plan Priority Areas
Kansas Forest Service District
2019
✛ Insect and Disease - 101
★ Landowner Assistance - 825

★ Riparian Forest Buffer - 108 (129 acres)
△ Timber Stand Improvement - 191 (2973 acres)
▲ Timber Stand Marking - 187 (1875 acres)
△ Tree Planting - 53 (148 acres)
○ Windbreak Establishment - 54 (2825 acres)
● Windbreak Renovation - 55 (2230 acres)
● Woodland Harvest - 2 (19 acres)

KANSAS FOREST SERVICE
KANSAS STATE UNIVERSITY

10/7/2019

Practice Plans Acreage
Total Area: 10,262
Priority Area: 5,654

N

0 15 30   60 Miles
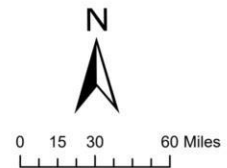
If the state's internal reporting systems allow them to be identified, forest health reporting metrics can include practice plans with forest health components (invasive plant control, stand management due to invasive insects and diseases, etc.) written by a forester who receives forest health funding.

For instance, 500 acres of plans written by a forester with a 0.10 FTE from forest health (assuming these plans have a significant forest health component) could be counted as 50 acres of outreach at the time of writing and 50 acres of treatment when these plans are implemented by the landowner or contractor.

In the map above, the "Insect and Disease" points refer to individual landowner contacts with a forest health concern, and could be counted as outreach if the forester has forest health funding supporting them. As long as the reporting state has a reasonable and logical linkage to forest health funding, these outreach and treatment metrics should be able to be included in forest health numbers reported by the state, at their discretion.

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Project Data from FAD

Forest Health Projects from the Forest Health Protection Accomplishments Database (FAD) were migrated into the ForHealth database to every extent possible. Because of differences between data structures and data requirements, some Projects some projects were not migrated.