

Chapter 9 - Creating Areas of Interest

Introduction

The focus of this chapter is the transition from gathering data on all stands to specific Areas of Interest (AOIs). To decide which areas are AOIs, all interested parties must be involved. Most AOIs will be developed because of the potential for treatment or special designation (e.g. – SCA), but any stand can be nominated.

This chapter is divided into 3 sections:

- Definition of Terms
- Management Notes Tool
- Creating the AOI Layer

Definition of terms

Area of Interest (AOI) – An Area of Interest is just that – a contiguous area that is of interest for management purposes, either strategic or tactical. Where stands are based on cover type, an AOI may be both cover type and management based. It may have the same geography as a stand, or may be a portion of a stand.

In some limited cases with designations of Special Conservation Areas, an AOI could overlap multiple stands and even cross compartment boundaries.

AOIs generally are nominated for two reasons:

Treatments - The parent stand (or a portion of it) are of interest for a potential treatment.

Designations - A stand (or collection of stands) meets the criteria to be a Special Conservation Area (SCA, as outlined in WI 1.4), and is not currently identified in the Spatial SCA database in the GDSE.

Management Notes Tool (MNT) – The Management Notes Tool (MNT) is used in the process of transferring Stands to AOIs, AOIs to Treatments, and the approval of Compartment Review decisions. It creates the attributes for the next database/layer in the process.

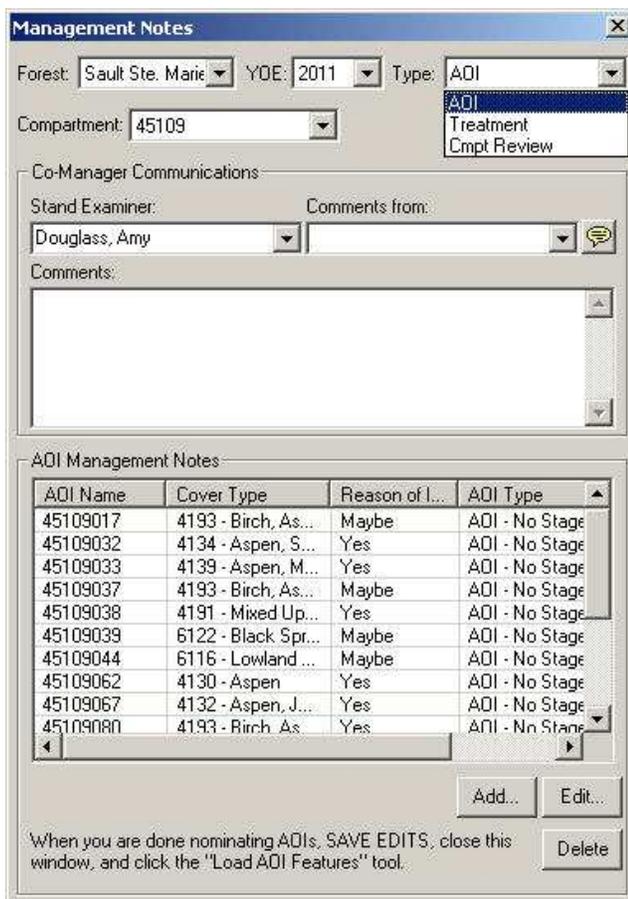
Management Notes Tools

The Management Notes Tool (MNT) is used in the process of transferring Stands to AOIs, AOIs to Treatments, and the approval of Compartment Review decisions. It creates the attributes for the next database/layer in the process.

AOI – The 'AOI' MNT is used to create Areas of Interest from Stage 1 Stands. This allows management (treatments or designations) to begin. **This is the portion of the MNT that will be used in this chapter.**

Treatment – the 'Treatment' MNT is used to take Areas of Interest and decide whether or not to apply a Treatment to them. If the decision is to apply a Treatment, the prescription is coded into the Treatment MNT. *Note – AOIs that are just for designations (SCA's, etc), and not being treated, are not forwarded to the Treatments layer. (See the following chapter for more direction on coding Treatments using the MNT).*

Compartment Review – The 'Compartment Review' MNT is used to approve decisions made at the formal Compartment Review. The stand examiner codes a Treatment as "Approved" or "Rejected" at review. **(See the following chapters for more info on this part of the MNT).**



Management Notes

Forest: Sault Ste. Marie YOE: 2011 Type: AOI

Compartment: 45109

Co-Manager Communications

Stand Examiner: Douglass, Amy Comments from:

Comments:

AOI Management Notes

AOI Name	Cover Type	Reason of I...	AOI Type
45109017	4193 - Birch, As...	Maybe	AOI - No Stage
45109032	4134 - Aspen, S...	Yes	AOI - No Stage
45109033	4139 - Aspen, M...	Yes	AOI - No Stage
45109037	4193 - Birch, As...	Maybe	AOI - No Stage
45109038	4191 - Mixed Up...	Yes	AOI - No Stage
45109039	6122 - Black Spr...	Maybe	AOI - No Stage
45109044	6116 - Lowland ...	Maybe	AOI - No Stage
45109062	4130 - Aspen	Yes	AOI - No Stage
45109067	4132 - Aspen, J...	Yes	AOI - No Stage
45109080	4193 - Birch, As	Yes	AOI - No Stage

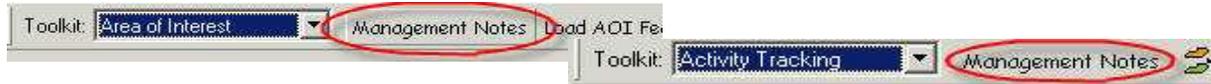
Add... Edit... Delete

When you are done nominating AOIs, SAVE EDITS, close this window, and click the "Load AOI Features" tool.

Creating Stage 1 Management note records

First, open Template 5_Prescribing AOI's and Treatments from the IFMAP templates. It contains the layers needed to run the Management Notes tools and to create the AOIs.

Next, open the Management Notes tool. The Management Notes Tool can be found on the "AOI" and "Activity Tracking" Toolkits.



The MNT has three parts to fill out.

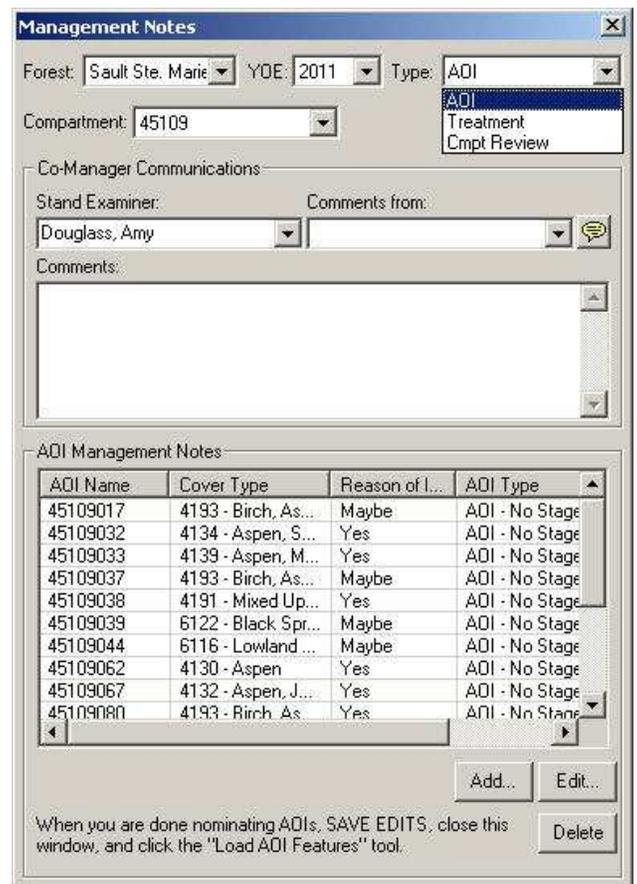
They are:

1) MNT Header: This is where an examiner selects the 'Forest', 'YOE', MNT 'Type', and Compartment to be worked with.

2) Co-Manager Communications: The examiner should choose their name from the list of examiners. Any comments received from co-managers about specific AOIs or proposed Treatments can be documented by choosing the commenter from the list at right, clicking the 'callout' button at far right, then typing (or copy/paste from email) any comments for the record.

3) Management Notes: This list displays the records of Stage 1 Stands that have been identified as being 'Of Interest' (yes/maybe).

For more direction on how to fill out the Management notes, see the next section.



AOI Name	Cover Type	Reason of Interest	AOI Type
45109017	4193 - Birch, As...	Maybe	AOI - No Stage
45109032	4134 - Aspen, S...	Yes	AOI - No Stage
45109033	4139 - Aspen, M...	Yes	AOI - No Stage
45109037	4193 - Birch, As...	Maybe	AOI - No Stage
45109038	4191 - Mixed Up...	Yes	AOI - No Stage
45109039	6122 - Black Spr...	Maybe	AOI - No Stage
45109044	6116 - Lowland ...	Maybe	AOI - No Stage
45109062	4130 - Aspen	Yes	AOI - No Stage
45109067	4132 - Aspen, J...	Yes	AOI - No Stage
45109080	4193 - Birch, As	Yes	AOI - No Stage

Completing Stage 1 Management Notes

When the Management Notes are first opened for a compartment, you will be prompted to add stands that were identified as potentially "Of Interest" ('yes' and 'maybe') during Stage 1.

A decision must be made on each record in the list. Please follow the directions below:

If the **record is to be considered for Treatment or Designation**, code it as an AOI. Highlight the record and click "Edit". Then fill-out the information in the next window, assigning the type of AOI as necessary (usually 'AOI – No Stage 2').

If a record does not appear in the list, but you would like to consider it for treatment or designation, click the "Add" button, then select the proper stand number from the list at the top of the next window.

Notes:

- Forested stands that were identified as "Of Interest?" = 'Yes' or 'Maybe' during Stage 1 data collection will be automatically identified and require further review.
- Nonforested stands of interest must be identified and manually added as Areas of Interest during the Post Stage 1 process.
- If a stand will be split into two or more AOIs, the AOI must have two separate records created in the Management Notes list. Use the "Add" button. A separate AOI name must be entered for each portion. Additionally, one AOI can also have more than one Treatment. See Chapter 10, page 10 for more information.

You are done with the Stage 1 Management Notes once you have coded each stand with an AOI Type, and you have added any Nonforested or additional Forested records to the list.

You can now continue with the next step of creating the AOIs (then moving on to Treatments, etc.).

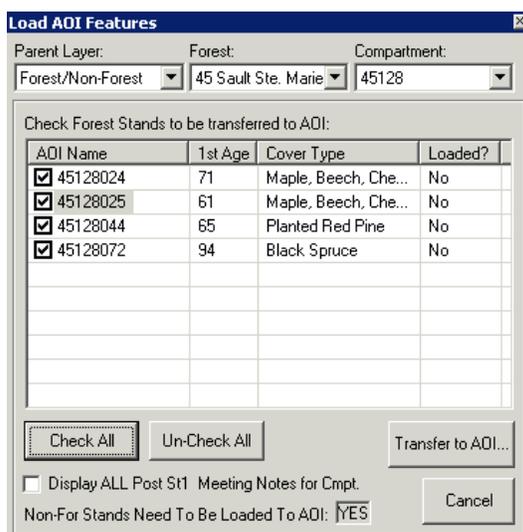
Creating the AOI layer

Once all stands that will become AOIs have been entered into the Meeting Notes Tool, you can proceed to create the AOI layer.

- Zoom to your compartment,
- Open the Load AOI features tool (Make sure the AOI layer is loaded).



The Load AOI tool copies the parent stand geometry from the Forest Stands layer to the AOI layer. **Only those stands listed in the Meeting notes can be copied over into the AOI layer.**



- Select your forest and compartment.

All the AOIs for that compartment will be listed.

The checkmark indicates that the parent stand shapes for these AOIs are ready to be transferred. The User can:

- transfer all of the AOIs in one operation or
- select only those AOIs that they are ready to edit right away. To transfer a selected set of AOIs, uncheck any AOIs that you do not want transferred.

The parent Forest Stands that are checked will be selected in the Map View.



- When you have selected (checked) the stands you wish to transfer, hit the "transfer to AOI..." button

AOI features are loaded into the AOI layer with the same geometry as the forest/non-forest stand.

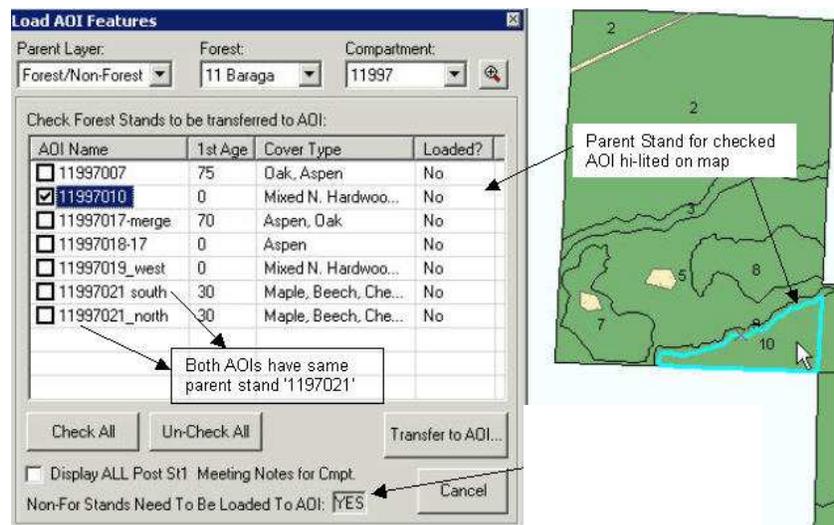
- The Loaded AOIs are removed from the listing in the Load AOI tool and only those AOI records that you chose not to transfer remain.
- To delete an AOI that was already transferred, in an edit session, the User should make the AOI layer selectable, then use the select tool  to highlight the individual AOI. Click the "delete" button on their keyboard, and save edits.

To create multiple AOIs in the same “parent” stand:

- Make sure the meeting notes contain all AOI names for AOIs to be created in that stand. This will mean adding multiple records into the tool.
- In the Load AOI Features tool, select (check) at least one AOI from the parent stand.

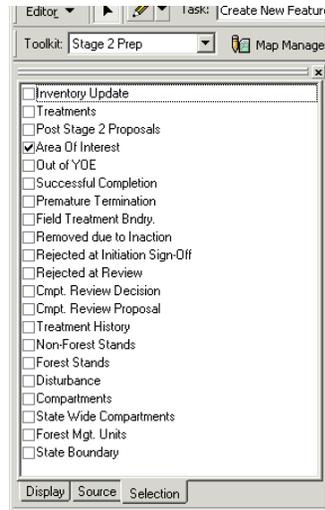
TIP: All AOI records for a parent stand will be selected whether or not the User selects one or all of the AOIs in that stand.

- Use the tools described below under “Edit AOI shapes and attributes” to create the multiple AOIs as needed.



Edit AOI shapes and attributes

As in all Edit sessions check your Selectable layers. In this situation, make it so that only the AOI layer is selectable.

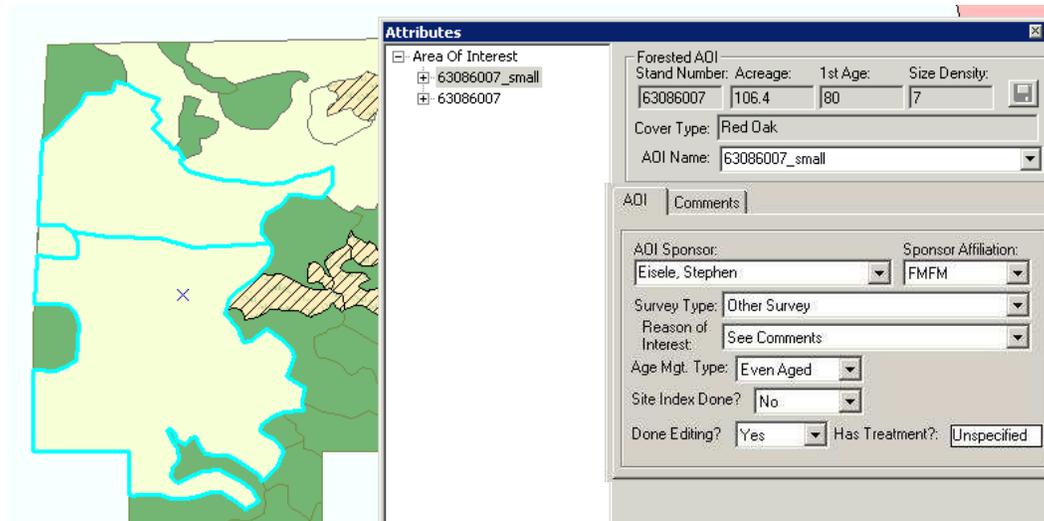


To split an AOI into two or more pieces:

- Start an edit session.
- Make sure the specific AOI is selected.
- To select a portion of the parent stand as the AOI, use the editing tools in the Stage 2 Prep toolkit:

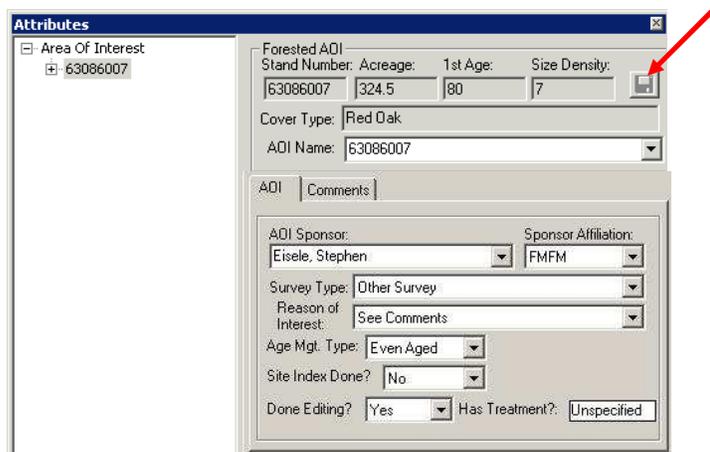


- In the example below, the north third was designated as a separate AOI from the south during the Post Stage 1 process (two records exist in the meeting notes tool). The "split polygon" tool is used to create the AOI from the parent geometry. When the split is complete, the attribute editor appears:

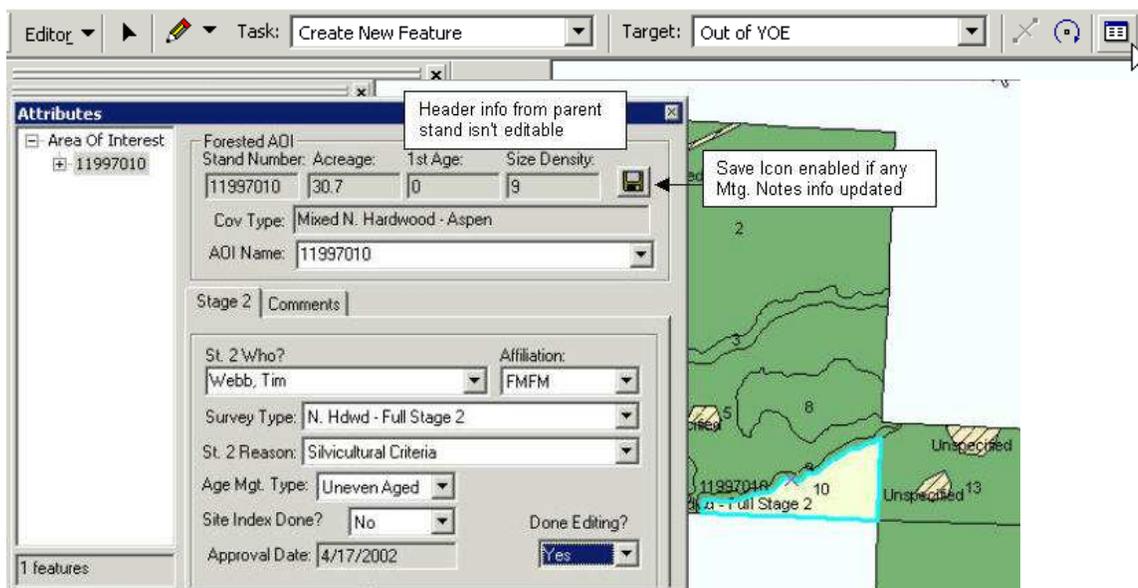


- The stand is split into 2 AOIs – 63086007_small, and 63086007. The dropdown will contain all potential AOIs names that were transferred from the meeting notes for this parent stand (63086007). Select the correct name.

- Edit data, comments, limiting factors as needed. Set "Done Editing?" to Yes.
- When you are complete with the first portion of the parent stand (63086007_small – already highlighted in the list in the example above), click on the other AOI listed (63086007 above). Select the name and edit data, comments, and limiting factors as needed. Set "Done Editing?" to Yes.
- Note that initially in the attribute editor, the Save icon is not enabled:



It will enable as changes are made. To save changes, click the icon. A final Save will only occur when the user 'Saves Edits' for the edit session.

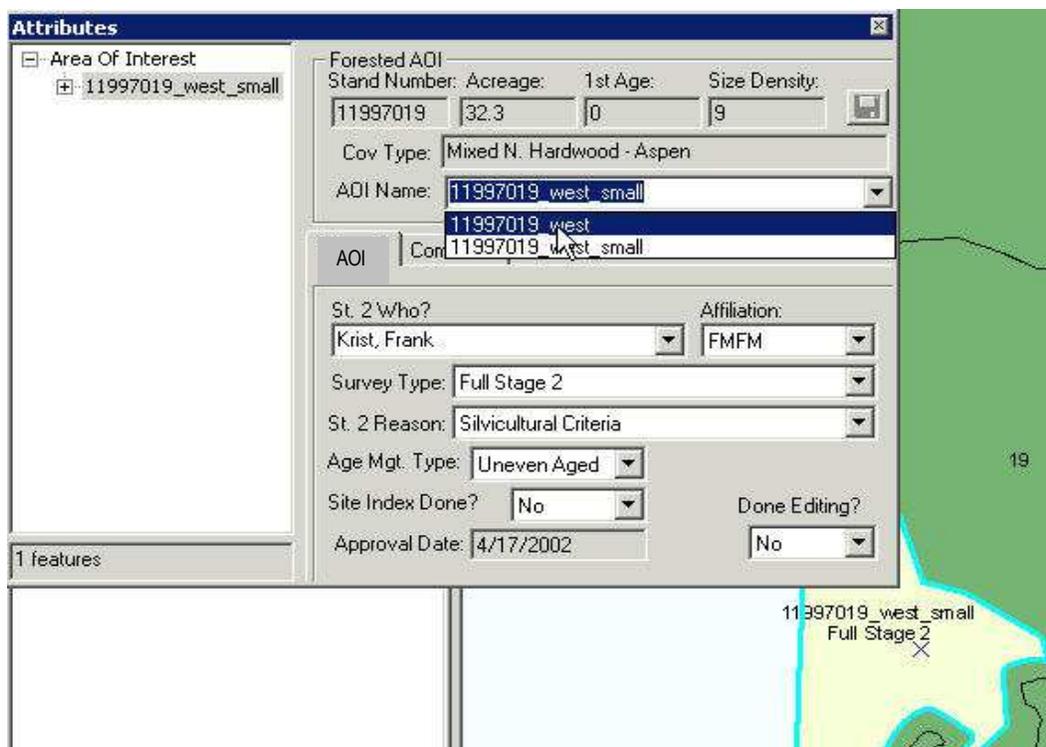


To use when the desired AOI is only a sub-set of a transferred AOI:

- Only a portion of a stand is to be designated as an AOI.
- Split the AOI as needed.
- The custom attribute editor will pop open.
- Dismiss (X-out) the custom attribute editor window.
- Clear the selected features



- Select the portion you want to remove and hit the 'Delete' key on your keyboard. (If you make a mistake, remember the 'Undo' button on the standard ArcMap toolbar).
- Select the remaining portion – this should be the desired AOI sub-set.
- Select the attributes icon  in the editor toolbar to display the custom attributes editor.
- If the AOI Name is '<AOI_name>_small' select the correct <AOI_name> as listed in the meeting notes.



- After making any other necessary attribute edits, set 'Done Editing?' to Yes.

To use when the desired AOI is an island in a transferred AOI:

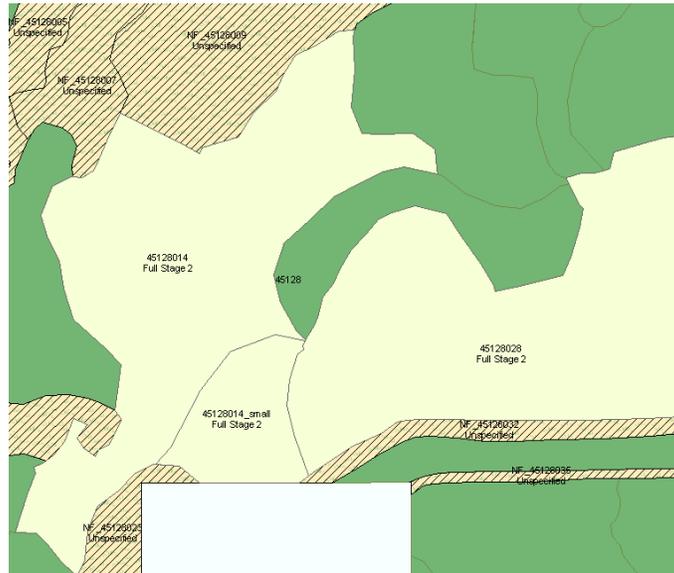
- The same procedure for the sub-set above applies.
- Instead of the split tool, use the island tool.  The only difference is that the automatic suffix for the island is '_island' instead of '_small'. The 'donut' (as opposed to the 'donut hole' or island) will always retain the original AOI Name.

To use when more than one stand is to be transferred to one AOI:

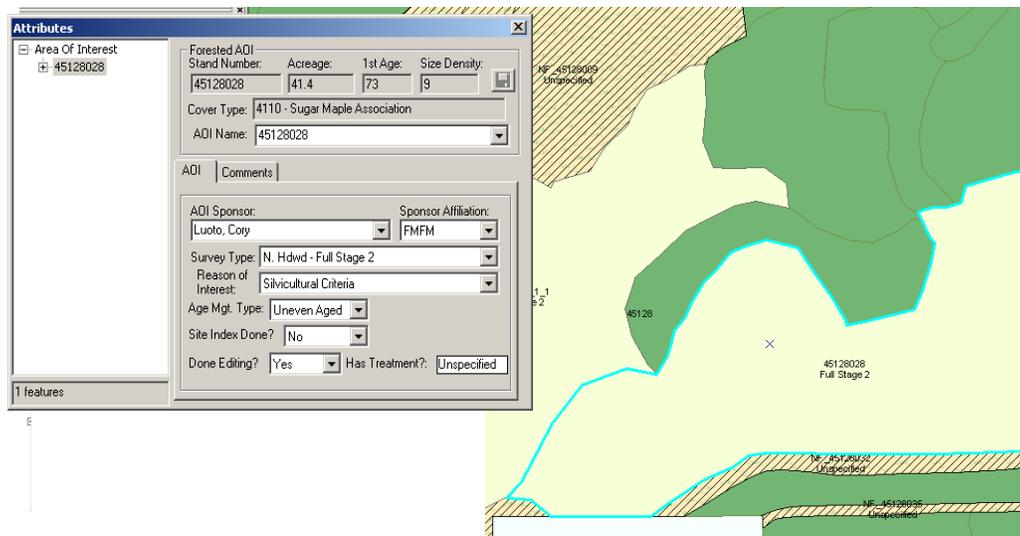
- In the meeting notes tool, include all of the stands to be merged.
- Using the Load AOI tool, transfer all parts of the multi-part AOI to the AOI layer.



- If any of the parts of the stands need to be broken out into separate AOIs that will not be merged, do that first. Once the parts are merged into a multi-part polygon, Shape edit locks will prevent any further split or island operations.



- Zoom in to an extent where you can clearly see the 'root' part and the first 'merge' part that will be merged into the root.
- Make sure that the AOI layer has the AOI_name label visible. If not, update Layer properties to label the AOI layer with its AOI Name.
- Select the 'root' part – the AOI that contains the attributes you want the merged stand to contain.
- Use the Merge Tool to merge the two pieces.



- The pieces will merge and the attribute editor will appear. The resulting AOI will contain the attributes of the "root" or "parent" AOI.
- If more than 2 parts, repeat steps to merge the other 'merge' parts into the 'root'
- After making any other necessary attribute edits, sets 'Done' to Yes.

Conclusion

Stage 1 Management Note Tools are used to create AOIs from Stage 1 Forested and Nonforested Stands for the purpose of proposing treatments or special designations (SCA's, etc.).

Stands that meet generic silvicultural criteria, and are not managerially desirable for proposing treatments or designations should be assigned Site Conditions (aka limiting factors) through the use of the Site Conditions layer. See Chapter 16 for digitizing instructions and Appendix O for a list of Site Conditions.

At this point, you should have AOIs created in the AOI layer. If any additional data collection is needed, proceed to collect that information. When you are ready, proceed to the next chapter to begin coding Treatments.