

## OJT Training Module Cover Sheet

**Title:** SRITB (Soil Resource Inventory Toolbox) QC Toolbar

**Type:**      Skill      Knowledge

**Performance Objective:**

Trainee will be able to use the tools available in the SRITB QC toolbar (Soil Resource Inventory Toolbox Quality Control Toolbar).

**Trainer Preparation:**

Make sure the participants have machines on which they have write permission to the C drive.

**Special Requirements:**

CCE configuration including the installation of SRITB 1.1.18 and ArcGIS 9.2.

**Prerequisite Modules:**

A general understanding of ArcGIS is required for this module to be useful to the Trainee.

**Procedure:**

Trainer will use as a job aid to help prepare for this task.  
Trainer can then use this job aid as a training module to accomplish the task.

**Notes/Purpose:**

The purpose is to give the user a general understanding of the SRITB QC toolbar. The user should develop an understanding of the advantages of using the SRITB QC toolbar to check for errors.

**Authors:**

Caryl Radatz, Whityn Owen and Henry Ferguson

**Approved by:**

# Objective

- Become familiar with the Soil Resource Inventory Toolbox - QC (Quality Control) Toolbar functions

# Soil Resource Inventory (SRITB) Toolbox

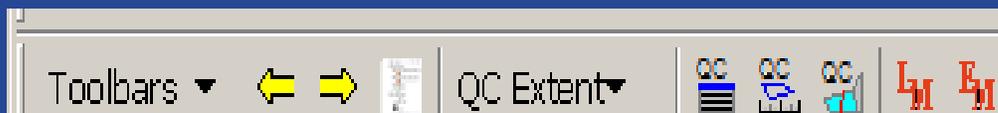
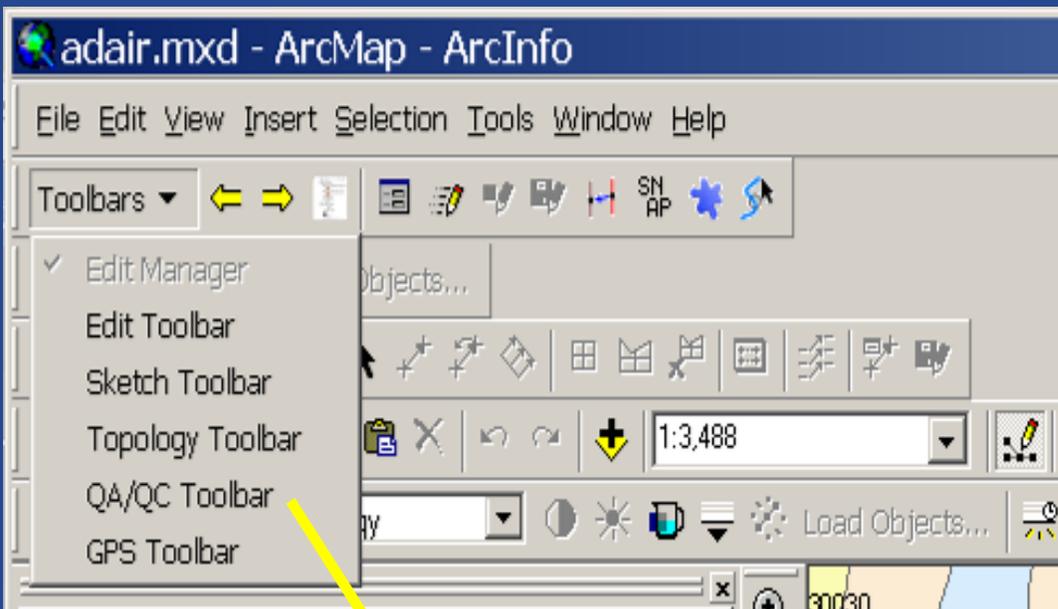
## Quality Control (QC) Toolbar



# The QC Toolbar contains five tools

- QC Error Inspector
- Find minimum size polygons
- Find common soil boundaries
- Find label mismatches
- Find edge mismatches

# Access the QC Toolbar From the SRITB Edit Manager Toolbar

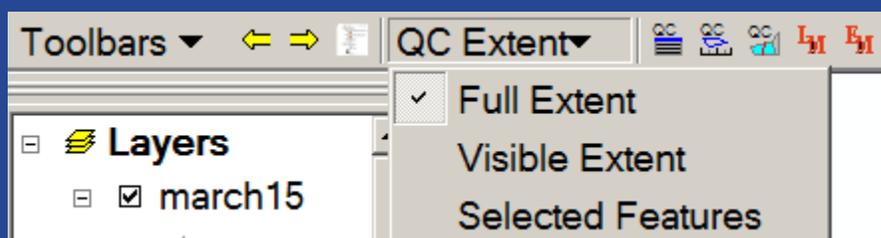


# Quality Control Inspector

- Displays errors from a task in a table.
- Allows user to zoom to and fix errors.
- Table records are temporary. They are not saved when you quit ArcMap.

# QC Extent

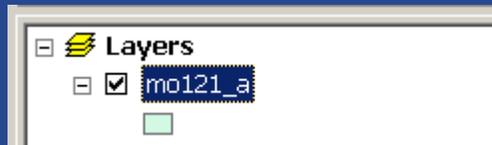
- Select extent for task
  - Full Extent
  - Visible Extent
  - Selected Features



When running a task on a smaller area, use the selected features option rather than visible extent. It runs much faster!

# Find minimum size polygons task

- Stop Editing Session
- Left click on soils layer name in the Table of Contents to highlight\*



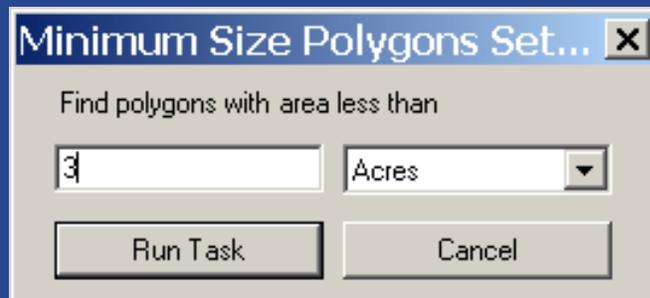
- Click on the Find Minimum Size polygon task icon on toolbar



\*May be a geodatabase featureclass or shapefile

# Find minimum size polygons task

- Enter a value for area in either acres\* or sq. meters



- Run task

\* You do not need to have an Acres field in the table

# Find minimum size polygons task

- Click on error inspector icon to display polygons smaller than specified size



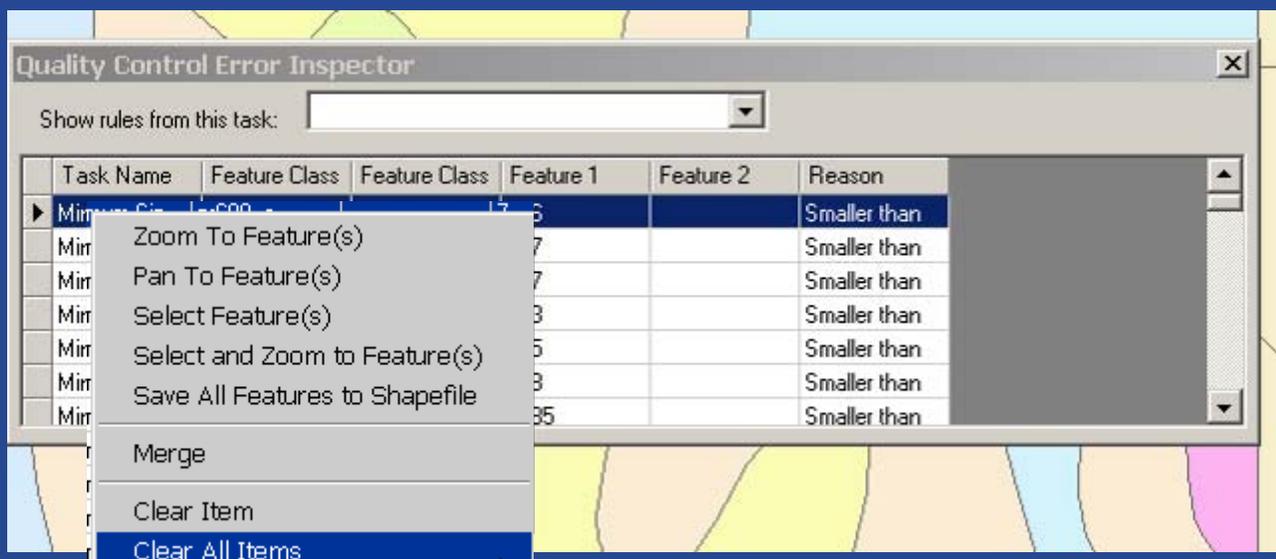
Quality Control Error Inspector

Show rules from this task:

Task Name	Feature Class	Feature Class	Feature 1	Feature 2	Reason
▶ Minimum Siz	mo121_a		156		Smaller than
Minimum Siz	mo121_a		177		Smaller than
Minimum Siz	mo121_a		497		Smaller than
Minimum Siz	mo121_a		583		Smaller than
Minimum Siz	mo121_a		705		Smaller than
Minimum Siz	mo121_a		828		Smaller than
Minimum Siz	mo121_a		1085		Smaller than

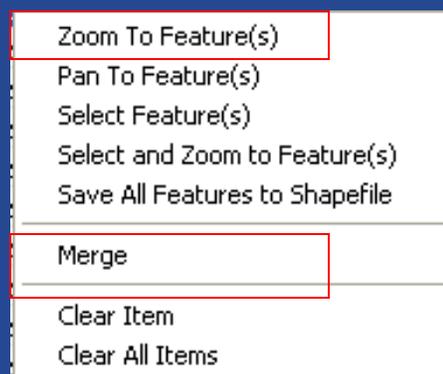
# Find minimum size polygons task

- Left click on a row in the table to select a feature
- Right click on the selected row to display options

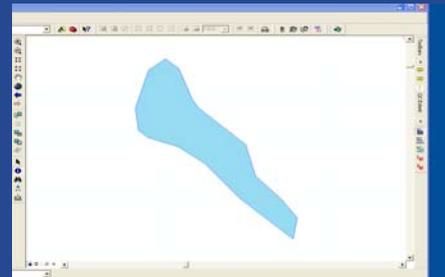


# Find minimum size polygons task

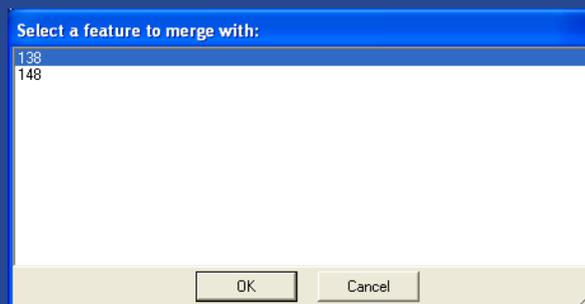
- Select and zoom to a feature using one of the zoom/select options
- Select Merge to merge selected small polygon with an adjacent polygon if needed...



- If the selected polygon is an “island” polygon, it is merged with the surrounding polygon

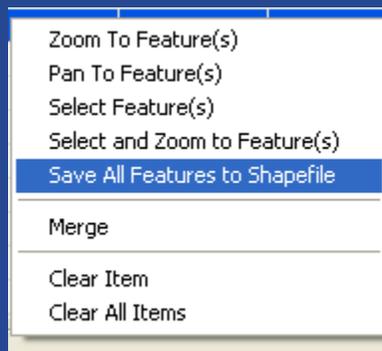


- If the selected polygon bordered by multiple polygons, an attribute box will appear
  - Click on the attribute in the left pane and the associated polygon will Flash on the screen
  - Select the polygon that has the desired attributes to retain



# Export out All of the Errors to a Featureclass or shapefile

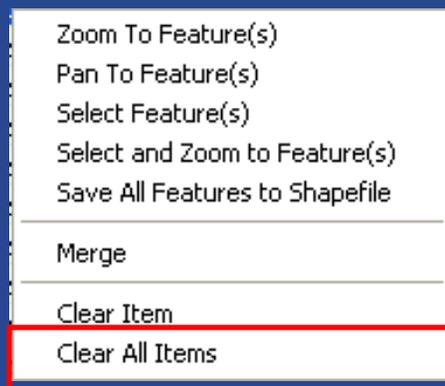
- Right click on any record in the error inspector table
- Select Save All Features to Shapefile



- Navigate to output location and give the new shapefile a name

# QC Error Inspector TIP

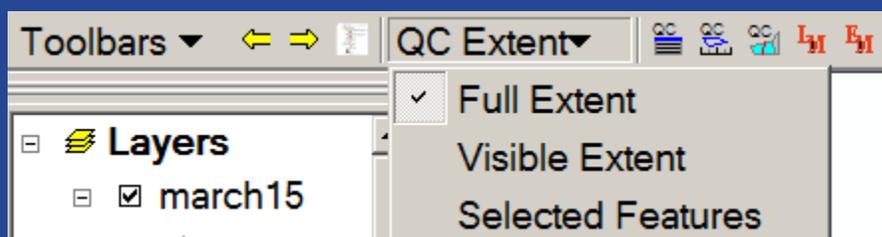
- Clear all records from the table before running another quality control task.



- If you do not clear the records they are carried over from one task to the next until you quit ArcMap. This causes confusion.

# Find common soil boundaries task

- Stop Editing
- Select extent for task
  - Full Extent
  - Visible Extent
  - Selected Features



When running a task on a smaller area, use the selected features option rather than visible extent. It runs much faster!

# Find common soil boundaries task

- Left click on soils layer name in the Table of Contents to highlight



- Choose the common soil line task icon on toolbar



# Find Common Soil Boundaries Task

- Wait for message box to appear when task is complete.\* Then click OK



- Process uses a lot of resources. Avoid running other processes at the same time

\* Note that features will appear in the error inspector as they are found. Wait until the process is completely finished to avoid processing errors

# Find common soil boundaries task

- Click on error inspector icon to display polygons with common soil boundaries



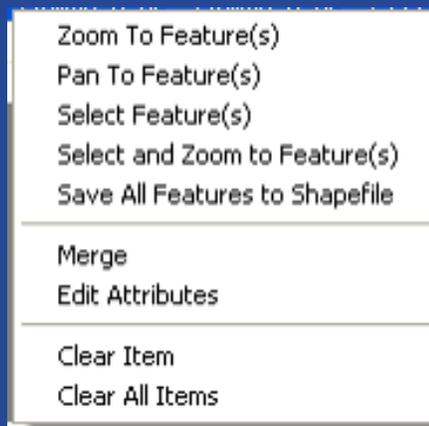
Quality Control Error Inspector

Show rules from this task:

Task Name	Feature Class	Feature Class	Feature 1	Feature 2	Reason
▶ Common Soil	mo001_a	mo001_a	1470	1421	Polygons both have MUSYM: 50001
Common Soil	mo001_a	mo001_a	1365	1421	Polygons both have MUSYM: 50001
Common Soil	mo001_a	mo001_a	1396	1421	Polygons both have MUSYM: 50001
Common Soil	mo001_a	mo001_a	1434	1421	Polygons both have MUSYM: 50001
Common Soil	mo001_a	mo001_a	1458	1421	Polygons both have MUSYM: 50001
Common Soil	mo001_a	mo001_a	3525	15519	Polygons both have MUSYM: 60201
Minimum Siz	mo001_a		641		Smaller than 1 acre

# Find common soil boundaries task

- Left click on a row in the table to select a feature
- Right click on the selected row to display options



# Find common soil boundaries task

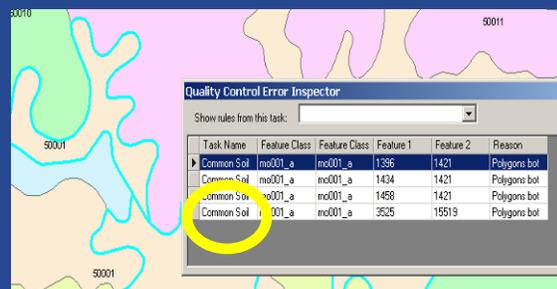
- Select and zoom to a feature using one of the zoom/select options

## Two Edit Options:

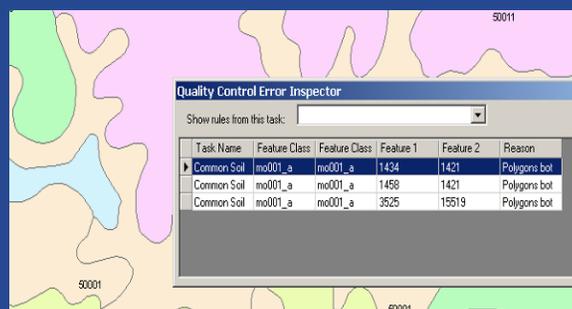
- Select Merge to merge adjacent polygons if needed
- Select Edit Attributes to change an attribute if needed

# Find common soil boundaries task

- Merge feature
  - When selected, both polygons sharing a common boundary are highlighted

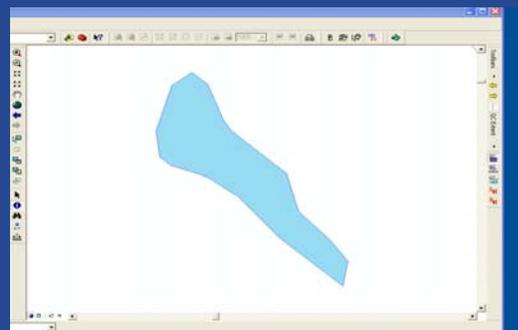


- After merging, one polygon remains, record is cleared from table

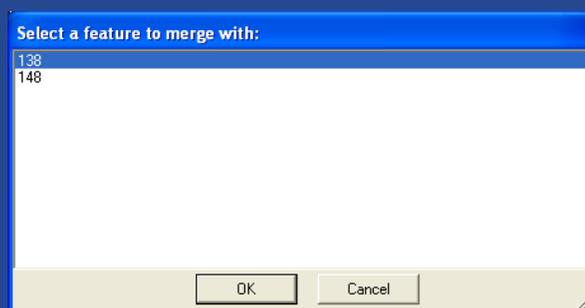


## Merge Common Line Polygons

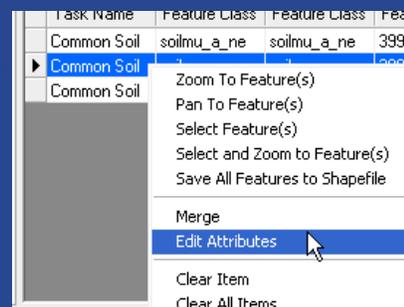
- If the selected polygon is an “island” polygon, it is merged with the surrounding polygon



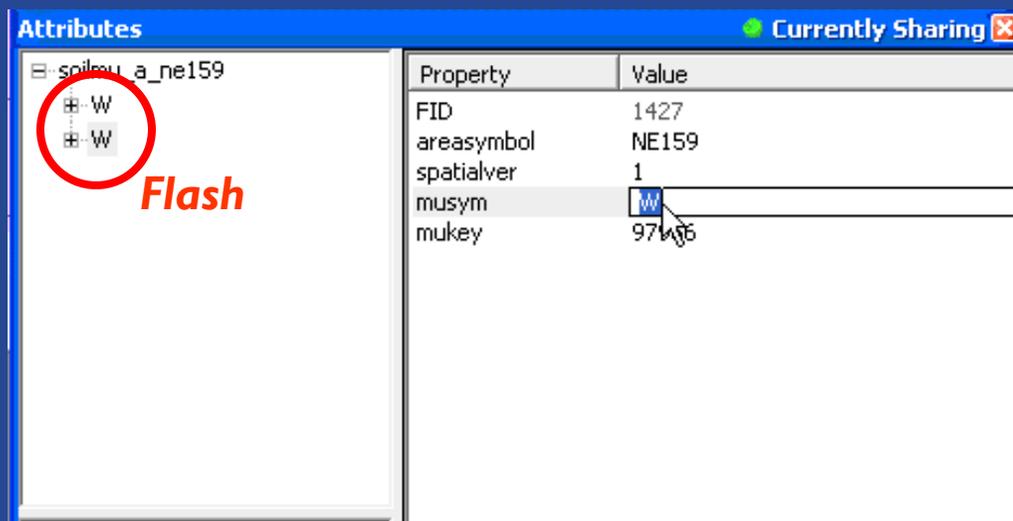
- If the selected polygon is bordered by multiple polygons, an attribute box will appear
  - Click on the attribute in the left pane and the associated polygon will Flash on the screen
  - Select the polygon that has the desired attributes to retain



# Find common soil boundaries task

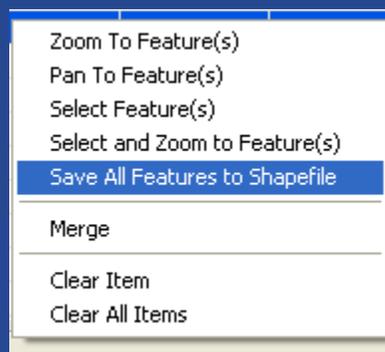


- **Edit Attributes** feature
  - Attributes window opens allowing user to edit attribute of each selected polygon
- Click on polygon attribute in left pane and the polygon will flash
- Change the attribute in right pane



# Export out All of the Errors to a Featureclass or shapefile

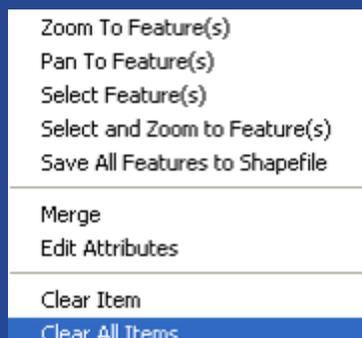
- Right click on any record in the error inspector table
- Select Save All Features to Shapefile



- Navigate to output location and give the new shapefile a name

# Find common soil boundaries task

- Save Edits. Edits are not automatically saved when using the error inspector.
- Clear all records from the table before running another quality control task (Rt. Click > Clear Item).



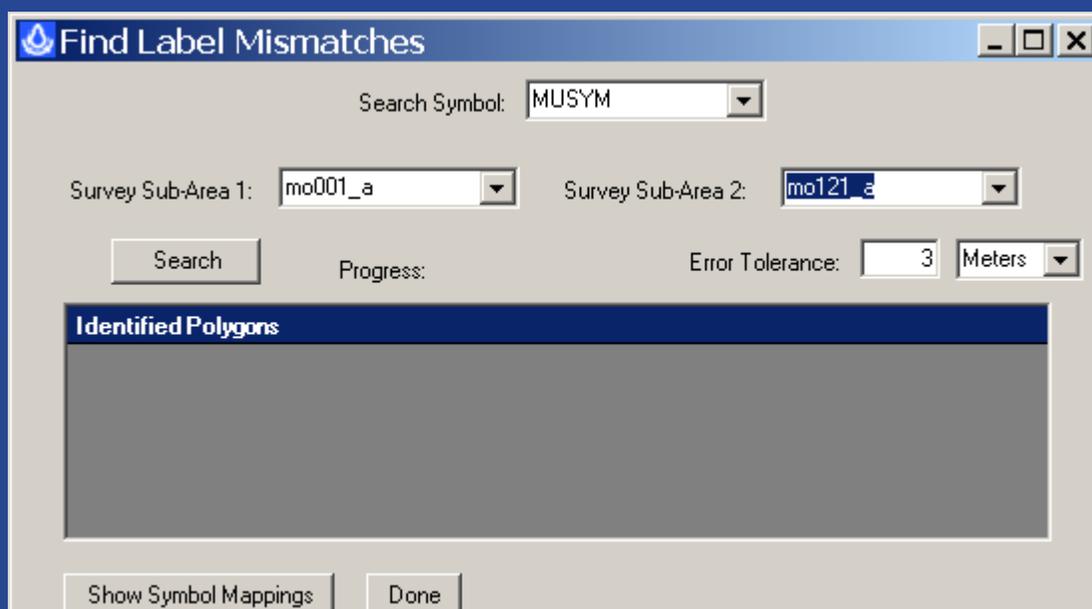
# Find Label Mismatches task

- Add adjacent shapefiles or feature classes to map
- Click LM task icon on toolbar



# Find Label Mismatches task

- Select: Search symbol, Survey Sub-Areas, and Error Tolerance from drop downs
- Click Search button

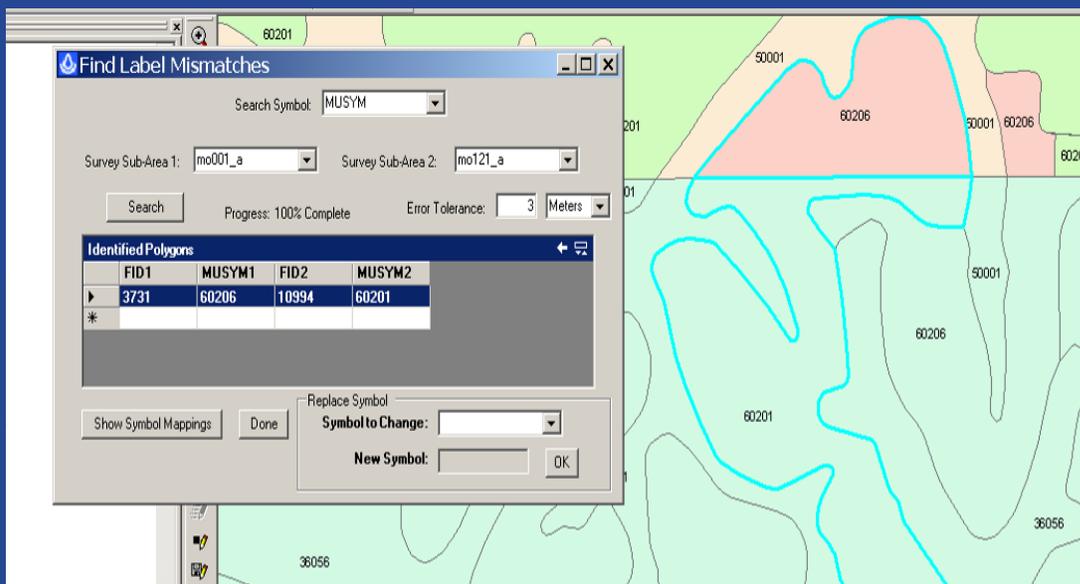


The screenshot shows a software window titled "Find Label Mismatches". The window contains the following elements:

- Search Symbol:** A dropdown menu with "MUSYM" selected.
- Survey Sub-Area 1:** A dropdown menu with "mo001\_a" selected.
- Survey Sub-Area 2:** A dropdown menu with "mo121\_a" selected.
- Search:** A button to initiate the search.
- Progress:** A progress indicator.
- Error Tolerance:** A numeric input field with "3" and a unit dropdown menu set to "Meters".
- Identified Polygons:** A large empty rectangular area for displaying search results.
- Show Symbol Mappings:** A button at the bottom left.
- Done:** A button at the bottom right.

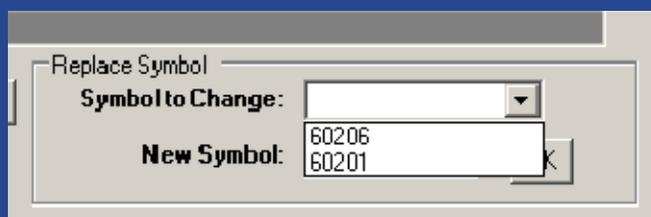
# Find Label Mismatches task

- Left click on a row of identified polygons to zoom to and select
- Right click on row to open Replace Symbol options



# Find Label Mismatches task

- Select symbol to change from drop-down list



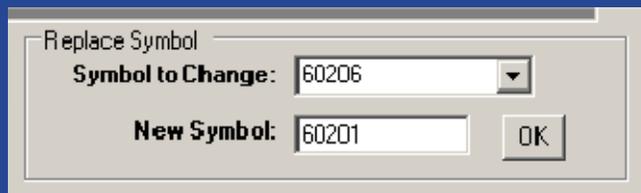
Replace Symbol

Symbol to Change: [dropdown menu]

New Symbol: 60206  
60201

OK

- Enter New Symbol, click OK



Replace Symbol

Symbol to Change: 60206

New Symbol: 60201

OK

- Change is saved automatically, no undo!

# Find Label Mismatches task

- Run label mismatch task again after editing labels
- Switch Sub-Area 1 and Sub-Area 2 to ensure all label mismatches are found

# Find Edge Mismatches task

- Add adjacent shapefiles or feature classes to map
- Click EM task icon on toolbar



# Find Edge Mismatches task

- Select: Search symbol, Survey Sub-Areas, and Error Tolerance from drop downs
- Click Search button

Find Label Mismatches

Search Symbol: MUSYM

Survey Sub-Area 1: mo001\_a Survey Sub-Area 2: mo121\_a

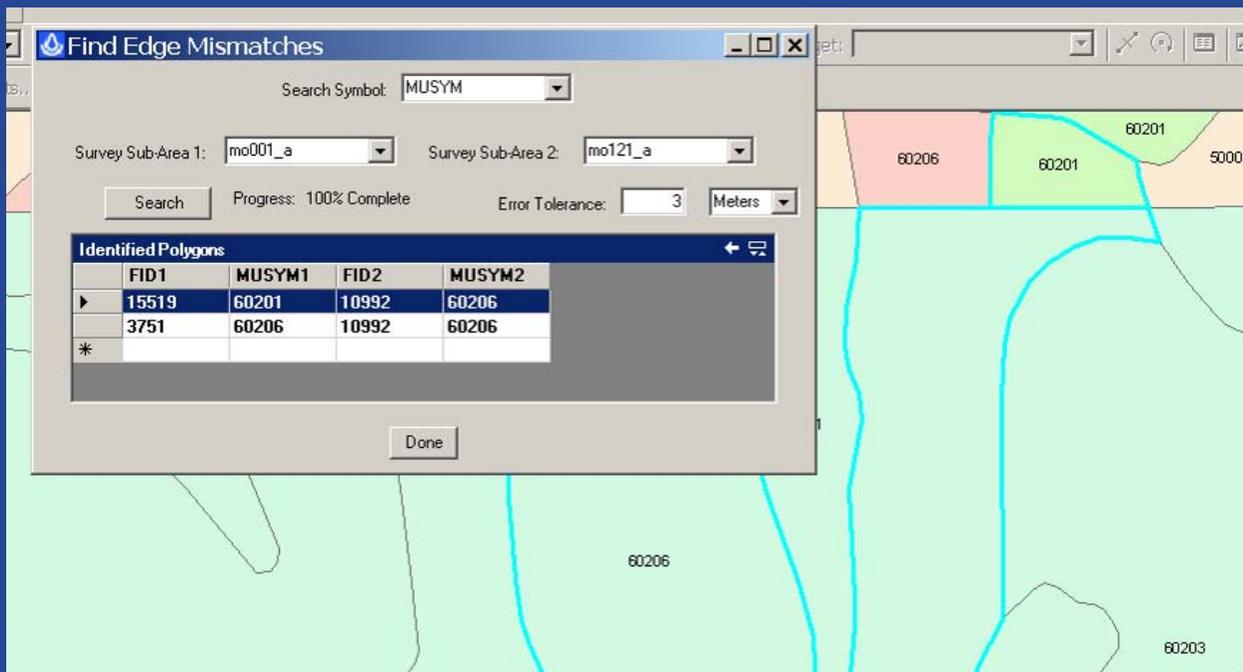
Search Progress: Error Tolerance: 3 Meters

Identified Polygons

Show Symbol Mappings Done

# Find Edge Mismatches task

- Left click on identified polygons to zoom to and select
- Use appropriate editing tools to match edges



# Find Edge Mismatches task

- Run edge mismatch task again after editing polygons
- Switch Sub-Area 1 and Sub-Area 2 to ensure all edge mismatches are found