Introduction to the Trainers

Dwane Young, US EPA

Jesse Boorman-Padgett, US EPA
Asking Question During this Webinar

• If you have questions during this webinar, type them into the GoToWebinar Questions box. One of the trainers will respond directly.

• We’ll be doing a mix of Powerpoint and live demo.
Training Objective

This ATTAINS training is meant for ATTAINS users who are responsible for entering and/or reviewing data in ATTAINS.

We will discuss:

• Tips and tricks for how to navigate through ATTAINS
• Dealing with common problems
• Certain tricks that can simplify ATTAINS entry and review
• Highlight how data go from ATTAINS to HMW to help trainees understand how their data will show up to the public
## Overview

<table>
<thead>
<tr>
<th>Topic</th>
<th>Trainer</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Tricks</td>
<td>Jesse Boorman-Padgett</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Assessment Units</td>
<td>Jesse Boorman-Padgett</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Assessments</td>
<td>Jesse and Dwane</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Batch Upload</td>
<td>Jesse and Dwane</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Accessing Data</td>
<td>Dwane Young</td>
<td>15 minutes</td>
</tr>
<tr>
<td>HMW Tips</td>
<td>Jesse and Dwane</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>
General Tricks

During this Section, we’ll cover the following items:

1. Navigation in ATTAINS using the URLs – DEMO (see handout)
2. Using multiple tabs in the browser – DEMO

*Advanced tip – It is possible to link directly into ATTAINS from other web applications (e.g. Excel online, Google Sheets, ArcGIS Online). You must be authenticated in ATTAINS and have the other tool open in the same browser.
DEMO

NAVIGATION

USING MULTIPLE TABS IN THE BROWSER
Assessment Units

During this Section, we’ll cover the following items:
1. Using Filters / Advanced Filters – DEMO
DEMO

USING FILTERS / ADVANCED FILTERS
Questions?
Assessments

During this Section, we’ll cover the following items:

1. Filters - DEMO
   • Using the Validation Flag in filters
   • Power of Cycle Last Modified
2. Printed Report / Last Change Date - DEMO
3. Parameter Status – What does this mean?
4. Understanding Errors / Common Errors
5. Delisting Woes and How to Fix Them – DEMO
DEMO

FILTERS

PRINTED REPORT / LAST CHANGE DATE

DELISTING WOES AND HOW TO FIX THEM
Each AU / Parameter combination can only have 1 Parameter Status

• You should use the following priority order in determining the right status:
  1. Cause: The parameter is a cause for 1 or more uses
  2. Meeting Criteria: The parameter is not a cause for any uses and is meeting criteria for at least 1 use
  3. Observed Effect: The parameter is an observed effect for all relevant uses
  4. Insufficient Information: The parameter is insufficient information for all relevant uses

• When a parameter is no longer a cause, you don’t need to remove it. You can just change the status.
Understanding Errors / Common Errors

Getting from: Needs Information To: OK

⚠️ This assessment is incomplete. Show Details

- Invalid cause (CHLOROPHYLL-A). A cause that is part of a 303(d) list must include a cycle scheduled for TMDL or a 303d priority ranking.
- Invalid cause (CHLOROPHYLL-A). The cycle first listed is required when the pollutant indicator is yes.

Where the error is  A Description of the Error

Common Errors:
- Any Category 5 parameter must have a cycle first listed
- Any Category 5 parameter must have either a TMDL schedule or a priority to develop a TMDL
- Any Not Supporting Use must have at least 1 Cause parameter associated with it
- Sources can only be associated with Cause parameters
- You must associate an action if you want the parameter in Categories 4A, 4B, or 5A
- You must connect your parameters back to your uses
Questions?
Batch Upload

• How Batch Upload Works
  • The ‘Header’
  • Update vs. Replace
  • The ‘uncaught’ error and other common errors
• Troubleshooting your files – DEMO / see handout
  • Naming of Files
  • One File at a Time
  • Domains / Case Sensitivity
  • Finding Orphan Records
  • The Impaired Waters Block
  • Associated Actions
How Batch Upload Works

The Header

• ATTAINS is looking for specific column names. It doesn’t matter what order they’re in. The template is a good resource. The data export is also a great resource.

Update vs. Replace

• Update leaves in place existing data and tries to either update based on the batch file or ‘add to’ the existing record.

• Replace removes existing data and replaces it with the data in the uploaded file. It replaces information for only those Assessment Units that are in the file. ALWAYS have a copy of the original data before performing a replace!
Batch Upload Errors

ATTAINS will generate this error anytime it encounters an error that isn’t caught by it’s error checking routines. It basically means that there is an error that ATTAINS didn’t expect. It can often be caused by bad domains, case sensitivity issues with Assessment Units or across batch upload files, trying to upload all three parameter files at once during an update, or other situations that we just haven’t thought about.

Other Common Errors:

• Missing Agency Code
• Missing Cycle Last Assessed
• Providing Parameter Agency Code, Pollutant Flag, Cycle First Listed, TMDL Schedule/Priority with parameters that aren’t ‘Causes’
• Having more than one parameter status associated with a parameter
Troubleshooting DEMO

- One File at a Time
- Domains / Case Sensitivity
- Finding Orphan Records
- The Impaired Waters Block
Questions?
Accessing Your Data

- Multiple Ways to Access Your Data
- What’s a Snapshot?
- Using Filters in Reports to Answer Specific Questions
- The Power of Cycle Comparison Reports
Multiple Ways to Access Your Data

- Data Exports
- Reports
- Web Services (Publicly Accessible Data Only)
- GIS Services (Org Final or Later Data Only)
- How’s My Waterway
How’s My Waterway Tips

- Navigating waterbody reports and state advanced search
- Provide Meaningful Action Names
- State-Scale Surveys can be a valuable way to communicate on water quality state-wide
- The State page ‘blurbs’ and ‘metrics’ are completely in your control
- Data without GIS is practically invisible
DEMO

Navigating Waterbody Report Pages

State Advanced Search
Use meaningful Assessment Unit Names. This will make it easier for the public to understand which waters are showing up in HMW.

Location Descriptions show up in HMW. Good locations descriptions will make your data more meaningful.

Middle Fork Browns Creek
Assessment Unit ID: TN05130202023_0200

- **Waterbody Condition:** Impaired
- **Existing Plans for Restoration:** No
- **303(d) Listed:** Yes
- **Year Last Reported:** 2020
- **Organization Name (ID):** Tennessee (TDECWR)

**What type of water is this?**
River (3.5 Miles)

**Where is this water located?**
Middle Fork Browns Creek from Browns Creek to headwaters. Ecoregion 71h Davidson County
Decision Rationale can be used as a good way to communicate more details about a particular assessment.
More HMW Tips

Reporting Parameters that are ‘Meeting Criteria’ can help provide additional context for your assessments.
Uploading your documents provides an additional one-stop-shop for the public.
HMW – State Links

More Information for Pennsylvania

Links below open in a new browser tab.

- Other Integrated Reports
- Existing and Readily Available Data
- 2020 Integrated Report Mapping Application
- 2020 Integrated Report

Providing links can help lead the public to more information on your sites.
Questions?
Addendum – Common Errors
Common Errors and troubleshooting

**ABC123**

- **ERROR:** The assessment unit ABC123 does not exist in the system. Please provide all necessary data

The above error indicates an AUID is not active in ATTAINS. Check the Assessment Unit Tab and determine whether or not the AUID has ever been created (e.g. retired previously). If not, add it under the Assessment Unit tab and then reload.

**CC_WH_R- WHITE_04**

- **WARN:** Invalid cause (ENTEROCOCCUS). A cause parameter must have at least one use that is not supporting or threatened.
- **WARN:** Invalid cause (FECAL COLIFORM). A cause parameter must have at least one use that is not supporting or threatened.

The above error indicates the assessment has causes but is not associated with an impaired Use. The Use attainment and parameter attainment must be consistent.

**CC_BE_R- BEAR_BUTTE_01**

- **ERROR:** Invalid parameter (SEDIMENT). The assessment parameter references a use that is not associated with this assessment.
- **WARN:** Invalid parameter (SEDIMENT). One or more of the seasons have overlapping days for associated use (IRRIGATION WATERS).

The above error indicates the use for the parameter and uses file do not match. This can be because the use is truly not in the file or that the allowable value in the parameter file is a different case or misspelled.
Common Errors and troubleshooting (cont)

The above error indicates the required listing information is missing. Provide the required metadata and reload.

The above error indicates the assessment is missing essential metadata. It usually is referencing a file that you did not provide during a replace upload. If you are doing a replace, you must provide all the essential files for the replace. (e.g. load at least the assessments, Use, and parameter files all at once)

The above error indicates there are sources on parameters that are not a cause. The system doesn’t allow that. Remove the source for the parameters identified.
Congratulations! You have found the red herring. The file could not load because the error hasn’t been logged in the system yet. ATTAINS error reports are derived from previous errors encountered. Sometimes the file contains a situation the system has not encountered yet. To isolate the issue, do the one file at a time approach and see where the process breaks down. Continue to isolate the problem within the file by checking any rule you know of. (e.g. allowable values, consistency with other files such as with the sources file, making sure all required data is provided). If you work through the files and are still having trouble, email attains@epa.gov and we will help diagnose the uncaught error and log it for the system to catch in the future.