How to Use ATTAINS Reports to Answer Questions

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Purpose: This document lists several common questions regarding Assessment results and explains how to find the answers using ATTAINS Reports. ATTAINS Reports work on a single Organization (State/Territory/Tribe) at a time. EPA users will need to select an Organization before running a report. Most reports are available from the Reports module in ATTAINS, unless otherwise noted.

Audience: This document refers to Reports that are available to any registered ATTAINS user. This document was originally geared for CWA Section 303(d) users, so many examples are based upon impairments. Similar methods could be used to look at Supporting waters.

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1 CYCLE SUMMARY REPORTS

Cycle Summary reports summarize information in a single Cycle and Snapshot.

1.1 WHICH WATERS ARE IN EPA IR CATEGORY 5?
The Assessments Cycle Summary report provides a summary by EPA IR Category, where each Assessment Unit falls under one category. It can be viewed by Count or by Water Type Size.

1. Run a Cycle Summary Report for Assessments. Select the Cycle and Snapshot of interest from the drop-down menu.

2. The report returns a pie chart that summarizes by count of Assessment Units in each EPA IR Category.

3. To view by size, first select a Water Type from the View By button.
4. To see the list of Assessment Units that are in EPA IR Category 5, either click on IR Category 5 in the summary table (top right corner) or use the column filters in the detail table (lower table in the report).

5. Add optional columns from the “Columns” button. The Water Type, Water Size and Units columns are useful if you want to include sizes of Assessment Units in the Detail table.

6. Use the “Download” button to export the filtered results.

7. Use the “Clear Selection” button to remove the filters. Note: If View by Water Type was selected, you will need to change the water type again also using the View By button.
1.2 **What is the Most Impaired Use?**

The *Uses Cycle Summary* report can help answer questions about which Uses are Supporting or Not Supporting, and it can be viewed by count or Water Type Size.

1. Run a Cycle Summary Report for “Uses” (or switch to the “Uses” tab from another Cycle Summary report). Select the Cycle and Snapshot of interest from the drop-down.
2. The summary chart (stacked horizontal bar chart in the top left corner) is ordered by total times a Designated Use was reported in ATTAINS.

3. To see the Use most frequently reported as Not Supporting, use the summary table (top right corner of the report) and click on the “Not Supporting” column label to sort the table by that column. Note: It is still reporting by Count of Assessment Units for all water types.
4. To see the Use with the largest size of Not Supporting Assessments, use the “View By” button to select a Water Type, and then click on the “Not Supporting” column label of the summary table to sort the table.

![LAKE/RESERVOIR/POND (Acres) Summary](image)

<table>
<thead>
<tr>
<th>Use</th>
<th>Not Supporting</th>
<th>Threatened</th>
<th>Insufficient Information</th>
<th>Not Assessed</th>
<th>Fully Supporting</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish and Wildlife Propagation, Recreation, and Stock Watering Waters</td>
<td>92525.81</td>
<td>0</td>
<td>19033.37</td>
<td>3451.47</td>
<td>35522.56</td>
<td>150533.21</td>
</tr>
<tr>
<td>Warmwater Permanent Fish Life Propagation Waters</td>
<td>53990.36</td>
<td>0</td>
<td>4755.63</td>
<td>0</td>
<td>2891.57</td>
<td>61637.56</td>
</tr>
<tr>
<td>Immersion Recreation Waters</td>
<td>35982.97</td>
<td>0</td>
<td>38419.54</td>
<td>21114.92</td>
<td>44650.35</td>
<td>140167.78</td>
</tr>
<tr>
<td>Limited Contact Recreation Waters</td>
<td>35982.97</td>
<td>0</td>
<td>38419.54</td>
<td>21114.92</td>
<td>44650.35</td>
<td>140167.78</td>
</tr>
<tr>
<td>Warmwater Semipermanent Fish Life Propagation Waters</td>
<td>29580.27</td>
<td>0</td>
<td>791.65</td>
<td>330.14</td>
<td>5306.4</td>
<td>36008.46</td>
</tr>
</tbody>
</table>

5. Add optional columns to the detailed results table, using the “Columns” button. The Water Type, Water Size and Units columns are useful if you want to include sizes of Assessment Units in the Detail table.

6. Use the “Download” button to export the filtered results.

7. Use the “Clear Selection” button to remove the filters. Note: If View by Water Type is selected, you will need to change the water type again using the View By button.
1.3 **What is the most reported cause of impairment?**

The Parameters Cycle Summary report can help answer questions about Parameters and their Parameter Status (Cause of Impairment, Meeting Criteria, Observed Effect, or Insufficient Information). It can be viewed by count or Water Type Size.

1. Run a Cycle Summary Report for Parameters (or switch to the Parameters tab from another Cycle Summary report). Select the Cycle and Snapshot of interest from the drop-down.

2. The summary chart (stacked horizontal bar chart in the top left corner) is ordered by total times a Parameter was reported in ATTAINS.

3. Sort the Parameters Summary table (top right corner of the report) by the Cause column, by clicking on the little triangle arrows in the column name) to see the most frequently reported Cause of impairment across all water types.

4. To see which Assessment Units have a specific Cause of Impairment, click on the row for that Parameter in the Summary Table, and the detailed results table at the bottom of the report will filter for those Assessment Units.

5. To see the most frequent Cause of impairment across a specific water type and view it by Size, use the “View By” button to select a water type. Then sort the water type Parameters Summary table by the Cause column.
1.4 **WHAT ASSESSMENT UNIT / PARAMETER COMBINATIONS ARE ON THE CWA SECTION 303(D) LIST?**

This question can also be answered by the **Parameters Cycle Summary** report.

1. Run a Cycle Summary Report for Parameters (or switch to the Parameters tab from another Cycle Summary report). Select the Cycle and Snapshot of interest from the drop-down.
2. Make sure the “View By” button is set to Count.
3. Click the “Columns” button. Under the “Parameter” group, select “Parameter EPA IR Category”, and any other columns of interest, and then click “Close”.
4. Then, filter the “Parameter EPA IR Category” by “5”. The “Selected” statement above the table tells you which options are selected in the table. (To quickly remove the filters for the table, click the “Clear Selection” button.)

**Note:** Any column filters that have the little downward triangle allow multi-select of values in that column. (No checkboxes selected is the same as Select All.) Other column filters use partial text matching based upon what you type in.

5. Click the “Download” button to export the filtered data to a Comma Separated Value (CSV) file format that can be viewed in Excel.
1.5 **Which Assessment Units have a specific Parameter as a Cause of Impairment?**
This question can also be answered by the **Parameters Cycle Summary** report.

1. Run a Cycle Summary Report for Parameters (or switch to the Parameters tab from another Cycle Summary report). Select the Cycle and Snapshot of interest from the drop-down.
2. Make sure the “View By” button is set to Count.
3. Filter for the “Parameter Name” of interest, either by clicking on the parameter’s row in the Summary table (top right corner) or using the column filter in the detail results table (lower table). Note: If you want to select more than one Parameter, then use the column filter in the detail results table.
4. In the “Parameter Status” column, select “Cause”.

Note: in ATTAINS, each Parameter can only have one “Parameter Status”, so if a Parameter is a Cause of Impairment for any Use, it is a Cause of impairment for all Uses. However, it can have a “Parameter Attainment” status that is specific to a Use. So, a water can have a “Parameter Attainment” of “Meeting criteria” for one Use and “Not meeting criteria” for a different Use, but it would have an overall “Parameter Status” of “Cause” for both Uses.

1.6 **Which Parameters were Delisted this cycle?**
The **Delistings Cycle Summary** report shows the Assessment Unit / Parameter combinations that were in EPA IR Category 5 in the prior cycle but have been moved out of EPA Category 5 in the current cycle. Note: This report includes both Delistings (such as moving to EPA Category 4a or 4b) and Restorations (such as moving to EPA Category 1 or 2).

1. Run a Cycle Summary Report for Delistings (or switch to the Delistings tab from another Cycle Summary report). Select the Cycle and Snapshot of interest from the drop-down.
2. Click the “Columns” button. Under the “Parameter” group, select “Parameter EPA IR Category” and “Parameter Attainment”, plus any other columns of interest, and then click “Close”.
3. This shows the Parameters that were delisted, the current Parameter EPA IR Category, Delisting Reason, and Delisting Comment.
2 CYCLE COMPARISON REPORTS

Cycle Comparison reports can show differences between two Assessment Cycles or Snapshots.

2.1 WHICH ASSESSMENTS HAVE CHANGED EPA IR CATEGORY SINCE THE PRIOR CYCLE?

The Cycle Comparison report for Assessments looks at two cycles or snapshots and shows changes at the overall Assessment level.

1. Run a Cycle Comparison Report Type and select “Assessments” as the Report. For Cycle, select the newer cycle or snapshot to be compared. For Comparison Cycle, select the older cycle or snapshot to be compared. Run the report.

2. The report runs with the default columns. Column names that start with “Previous” refer to the older “Comparison Cycle” snapshot. The other columns refer to the more recent cycle chosen for comparison. The “EPA IR Category Summary” column shows which Assessments were ADDED as new Assessments since the previous cycle, CHANGED status between the snapshots being compared, or were REMOVED since the previous cycle. The “- -” symbol indicates no change in EPA IR Category.
2.2 Which Parameters have changed status since the prior cycle?

The Cycle Comparison report for Parameters looks at two cycles or snapshots and shows changes at the Parameter IR Category level. Note: This report contains a lot of data, so it may take time to run the report.

1. Run a “Cycle Comparison” Report Type and select “Parameters” as the Report. For “Cycle”, select the newer cycle or snapshot to be compared. For “Comparison Cycle”, select the older cycle or snapshot to be compared. Run the report. (Or, if you were just in the Cycle Comparison Report for Assessments, you can just click the “Parameters” tab.)

2. The report runs with the default columns. Column names that start with “Previous” refer to the older “Comparison Cycle” snapshot. The other columns refer to the more recent cycle of the comparison. The “Parameter IR Category Summary” column shows which Parameters were ADDED to the Assessment since the previous cycle, CHANGED Parameter IR Category between the snapshots being compared, or were REMOVED from the Assessment since the previous cycle. The “- -” symbol indicates no change in Parameter IR Category.

3. To see additional information, click the “Columns” button and add optional columns.

4. The “Download” button will provide a .CSV file with the filtered results.

<table>
<thead>
<tr>
<th>Assessment Unit ID</th>
<th>Assessment Unit Name</th>
<th>Parameter Name</th>
<th>Parameter IR Category</th>
<th>Previous Parameter IR Category</th>
<th>Parameter IR Category Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD-JA-L-SOUTH_BUFFALO_01</td>
<td>South Buffalo Lake</td>
<td>CHLOROPHYLL-A</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-BS-R-SIXMILE_01</td>
<td>Six Mile Creek</td>
<td>SPECIFIC CONDUCTIVITY</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-MH-L-BURKE_01</td>
<td>Burke Lake</td>
<td>TOTAL DISSOLVED SOLIDS (TDS)</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-JA-L-CLEAR_M_01</td>
<td>Clear Lake</td>
<td>MERCURY IN FISH TISSUE</td>
<td>5</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-VM-L-WHITEWOOD_01</td>
<td>Whitewood Lake</td>
<td>AMMONIA-NITROGEN</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-JA-L-CARTHAGE_01</td>
<td>Lake Carthage</td>
<td>SPECIFIC CONDUCTIVITY</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-BS-L-E_OAKWOOD_01</td>
<td>East Oakwood Lake</td>
<td>ALKALINITY</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-BS-L-BULLHEAD_01</td>
<td>Bullhead Lake</td>
<td>SPECIFIC CONDUCTIVITY</td>
<td>2</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-BF-L-NEWELL_01</td>
<td>Newell Lake</td>
<td>ESCHERICHIA COLI (E COLI)</td>
<td>3</td>
<td></td>
<td>ADDED</td>
</tr>
<tr>
<td>SD-CH-L-HORSEHIEF_01</td>
<td>Horsethief Lake</td>
<td>DISSOLVED OXYGEN</td>
<td>3</td>
<td></td>
<td>ADDED</td>
</tr>
</tbody>
</table>
2.3 Which Parameters were in Category 5 in the prior cycle and are no longer in Category 5?

This question can also be answered by the Cycle Comparison Report for Parameters.

1. Run a “Cycle Comparison” Report Type and select “Parameters” as the Report. For “Cycle”, select the newer cycle or snapshot to be compared. For “Comparison Cycle”, select the older cycle or snapshot to be compared. Run the report. (Or continue from the prior example.)
2. In the “Previous Parameter IR Category”, filter for category 5 (and category 5A if applicable).
3. To see only records that have changed, filter the “Previous IR Category Summary” column to select “CHANGED” AND “REMOVED”. (We aren’t including “- -” because that means No Change, and we aren’t including “ADDED” because this question is looking at Parameters that were previously in Category 5.)
4. That should leave only the Assessment Unit / Parameter combinations that were previously in Category 5 (and/or Category 5A if applicable) in the previous cycle snapshot, that are no longer in Category 5 (or 5A) in the newer cycle snapshot.

2.4 How do I tell which Use is associated with the Parameter in a Cycle Comparison Report?

Parameters can have a different Parameter Attainment Status for each Use. Knowing which Use is associated with a specific report record can be useful. This question can also be answered by the Cycle Comparison Report for Parameters.

1. Run a “Cycle Comparison” Report Type and select “Parameters” as the Report. For “Cycle”, select the newer cycle or snapshot to be compared. For “Comparison Cycle”, select the older cycle or snapshot to be compared. Run the report. (Or continue from the prior example.)
2. To see additional information, click the “Columns” button and add optional columns.
3. Add “Use Name” and “Parameter Attainment” from the Parameter group of columns. Add “Previous Parameter Attainment” from the Previous Parameter group of columns. This will tell you the Parameter Attainment result related to the specific Use.
   a. Note: The “Parameter Status” and “Previous Parameter Status” columns will identify which Parameters are Causes of impairment. However, the Parameter Status such as Cause of impairment applies to the overall Parameter across all Uses for the Assessment Unit. So, if the Parameter is a Cause for one Use, it will be a Cause for all Uses, even if it has a “Parameter Attainment” of Meeting Criteria for a specific Use. So, when you are interested in Attainment for a specific Use, it is better to use “Parameter Attainment” and “Previous Parameter Attainment” rather than “Parameter Status”.
3 **MISSING GIS REPORT**

The Assessment Units Missing GIS Data report shows which active Assessment Units do not have geospatial data loaded in ATTAINS.

3.1 **Which waters are missing GIS? Which of those are part of the WQ-27 list of Priority Waters?**

The Assessment Units Missing GIS Data report shows which active Assessment Units do not have geospatial data loaded in ATTAINS. If geospatial data have been submitted but not yet processed, those Assessment Unit IDs will also appear in this report.

1. Select “Assessment Units” as the Report Type, and “Assessment Units Missing GIS Data” as the Report and click Run Report.
2. The table will show any Active (non-Retired) Assessment Units which are missing geospatial representation in ATTAINS.
3. The “303d Priority Water” column indicates whether the water is part of the list of Priority waters for purposes of the 303(d) Measure sometimes referred to as WQ-27.

4 **PRINTABLE PDF REPORT FOR A SINGLE ASSESSMENT**

This report summarizes the information for a single Assessment Unit.

4.1 **How can I print a report of the information about a single Assessment Unit?**

There is the ability to print a PDF-style document of the information for a single Assessment Unit. This function is available from the Assessments module (not the Reports module).

1. Click on the Assessments module.
2. Click on an Assessment Unit ID to open the Assessment record for that Assessment Unit in that cycle.
3. Click on the Menu button and select “Print PDF”.
   Note: If you have tabbed screens (data entry), click on the Summary tab. Then click the Menu button and select “Print PDF”.