ATTAINS – TAR REPLACEMENT
Assessment Reporting Modernized

Dale Miller-Water Quality Specialist
Sac and Fox Nation
WHAT IS ATTAINS?

THIS IS NOT A TRAINING BUT AN INTRODUCTION

• ATTAINS is an online reporting of Tribal Waterways Beneficial Use Assessments

https://attains.epa.gov/attains/login
WHEN & WHO PILOT’S ATTAINS?

The Tribal ATTAINS Pilot was officially started in 2016

• 15 tribal participants representing Regions 5, 6, & 9
  • At the end of the 2nd year, we retained 11 tribes
    • Dale Miller, Sac & Fox Nation, Dale.Miller@sacandfoxnation-nsn.gov
    • Kari Hedin, Fond du Lac Band of Lake Superior Chippewa, KariHedin@FDLREZ.COM
    • Brian McCaughey, Hoopa Valley Tribe, brian4epa@gmail.com
    • Teresa Turner, Otoe-Missouria Tribe, tswoyer@omtribe.org
    • Cyndi Johnson, Choctaw Nation, cynthiajohnson@choctawnation.com
    • Alec Marshall, Delaware Nation, marshalla@delawarenation.com
    • Stephen Wolfe, Seneca-Cayuga Nation, swolfe@sctribe.com
    • Lexi Freeman, Citizen Potawatomi Nation, lexi.freeman@potawatomi.org
    • Anita Uhles & Jason Scott, Chickasaw Nation, ANITA.UHLES@chickasaw.net, Jason.Scott@chickasaw.net
    • Sophie Stauffer, Pueblo of Tesuque, sstauffer@pueblooftesuque.org
    • Michael Chacon, Pueblo of San Ildefonso, mchacon@sanipueblo.org
WHAT STARTED TRIBAL ATTAINS?

Started as a simple idea, championed by Micco Emarthala of the Seneca-Cayuga Nation

- The idea was to simplify and standardize the way the TAR was completed.

- Misunderstandings and confusion as to what was needed and or met the standards of the current TAR guidance document was considered wasteful and not representative.

- Some opinions considered the TAR to be a bloated bunch of words without clear substance or purpose.

- The time and effort involved was considerable and effectiveness was lost in translation.
MENTORING/TRAINING PROGRAM

Mentoring Development:

• The pilot tribes, EPA, & ITEC are starting a new phase of the pilot by initiating and developing the training of mentor tribes.
• The pilot tribes will be trained to teach others about assessments and the ATTAINS system.
• This is a joint effort utilizing EPA, ITEC, and pilot tribes resources and direct observational input.
• In addition, the pilot tribes and EPA are identifying ATTAINS prerequisites for those tribes who want to participate in ATTAINS nationally.
PLANS AND GOALS

Planning:

• The current goal is to introduce tribes in a phased approach, bringing individuals on slowly starting in 2020, to report in 2021.

• EPA is planning a training in the spring of 2020 for Pilot Tribes and developing tribal assessment training modules to develop tribal program capacity and then introducing the electronic reporting mechanism.

• As described by the tribes in the pilot, ATTAINS is not an Easy Button but this process has greatly expanded their water quality programs.
  • Similarly, we can now share the water quality on tribal lands as never before.

• For those interested in participating in ATTAINS, there will be a memo sent to the EPA regions describing the next phase in the pilot and outlining perquisites. Then, we will start identifying the new phase of tribal participants.
WHAT INFORMATION IS REQUIRED?

• All pertinent results as covered in workplan/QAPP for assessment.
  • Verify your information in WQX as EPA reviewer will utilize this for accuracy.
  • Assessments are the determination based on the beneficial uses of your monitored waters.
  • Inclusion of your assessment parameters and basis for determinations from your workplan/QAPP.
    • Beneficial Uses Examples
      • Recreational Use (Cultural)
      • Aquatic-Wildlife Use
      • Agricultural-Livestock Use
      • Nutrient Threatened
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ASSESSMENT

- The assessment/determination is still in full control of the Tribe.
  - There are advanced tools supplemental to ATTAINS that can help if desired.
    - Unknown viability/functionality as not utilized.
  - This is best time for final QA/QC on data that is to be utilized.
    - Download information from WQX and compare to in-house data files.
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<td>933.7</td>
</tr>
<tr>
<td>8/29/2019</td>
<td>0.71</td>
<td>25.74</td>
<td>-6.3</td>
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<td>251.3</td>
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<td>-496.000</td>
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<td>1.64</td>
<td>999</td>
<td>54</td>
<td>93</td>
<td>933.7</td>
</tr>
</tbody>
</table>

### Summary Statistics

- Mean or Median Value: 0.83
- Minimum: 0.83
- Maximum: 615.670
- 25th Percentile: 8.7
- 75th Percentile: 6.6
- Standard Deviation: 3.8
- Coefficient of Variation: 0%

### Exceedance of Criteria

- 0%
- 0% of samples exceed 27% criteria.
- 0% of samples exceed 5% criteria.

### Turbidity

- 100% of samples exceed 11.00 criteria.

### Pesticide

- 100% of samples exceed 0.00 criteria.

### Other

- 0% of samples exceed the 0% criteria.
Recreational Uses (Including Cultural Uses)

- **Cultural Uses** included in Primary Body Contact designation
  - Due to highest standard of human safety

- This is a sensitive and significant tribal cultural subject
  - Tribes made this clear and paramount in Tribal Assessments
  - By simply applying the general term **Cultural Use**
    - No specifics or actual information is exposed

- Without divulging specific cultural uses (Possible examples)
  - Ceremonial uses
  - Cultural Agricultural uses
  - Culturally important sites
Recreational Uses (Including Cultural Uses)

- Why keep Cultural Uses Confidential?
  - Example: Imagine the Cultural Resource is Gold in a stream
    - If this Cultural Resource was identified and shared
    - The location and value would be known
      - Gold Rush begins
      - Gold gets robbed
      - Land gets taken or damaged
      - Streams water quality is negatively affected

- This may sound Paranoid
  - However, this is what happened to the SIOUX
    - When Gold was discovered in the Black Hills
    - Anyone hear of Little Big Horn and Custer?
• Recreational Uses (Including Cultural Uses)

  • Primary Body Contact and Secondary Body Contact
    • E.coli standard
      • Oklahoma Water Quality Standards (Chapter 45/46)
        • Supporting
          • \( \leq 10\% \) of the sample concentrations exceed the MDLs (406 cfu/100mL) during recreational season AND Monthly geo mean is \( \leq 126 \) cfu/100mL.
        • Not Supporting
          • \( > 10\% \) of the sample concentrations exceed the MDLs (406 cfu/100mL) during recreational season OR Monthly geo mean is \( > 126 \) cfu/100mL.
## Primary Body Contact/Recreation Beneficial Use (Cultural)

**Criteria:**
Oklahoma Water Quality Standards (Chapter 45 (p21))

**Supported**
- ≤ 10% of the sample concentrations exceed the MDLs (406 cfu/100mL) during recreational season AND Monthly geo mean is ≤ 126 cfu/100mL.

**Not Supported**
- > 10% of the sample concentrations exceed the MDLs (406 cfu/100mL) during recreational season OR Monthly geo mean is > 126 cfu/100mL.

### Time Periods
- **October 1, 2018 - September 30, 2019**
- **May 1 - September 30**

### Monitoring Sites
- **Deer Creek 001**
- **North Canadian River**
- **North Canadian 002**
- **North Canadian 003**
- **Rock Creek 001**
- **Shan Creek 001**
- **Veteran’s Lake**

### Table:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Monitoring Site</th>
<th>% for Determination</th>
<th># Samples Planned</th>
<th># Samples Required</th>
<th># Actual Sampled</th>
<th>Criteria Level (p21 OWQS) Chap 45</th>
<th>Site Total Samples Exceeding (406)</th>
<th>% Exceedance (406)</th>
<th>Site GeoMean</th>
<th>Site Total Samples Exceeding (126)</th>
<th>% Exceedance (126)</th>
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<tbody>
<tr>
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<td>12</td>
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<td>11</td>
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<td>3</td>
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<td>128</td>
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<tr>
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<td>117%</td>
<td>12</td>
<td>9</td>
<td>14</td>
<td>406</td>
<td>126</td>
<td>4</td>
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<td>349</td>
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<td></td>
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<tr>
<td>Ecoli</td>
<td>North Canadian 002</td>
<td>108%</td>
<td>12</td>
<td>9</td>
<td>13</td>
<td>406</td>
<td>126</td>
<td>7</td>
<td>54%</td>
<td>335</td>
<td>Not Supporting Use</td>
<td></td>
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<tr>
<td>Ecoli</td>
<td>North Canadian 003</td>
<td>92%</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>406</td>
<td>126</td>
<td>5</td>
<td>45%</td>
<td>216</td>
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<td>92%</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>406</td>
<td>126</td>
<td>1</td>
<td>9%</td>
<td>98</td>
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</tr>
<tr>
<td>Ecoli</td>
<td>Shan Creek 001</td>
<td>117%</td>
<td>12</td>
<td>9</td>
<td>14</td>
<td>406</td>
<td>126</td>
<td>4</td>
<td>29%</td>
<td>135</td>
<td>Not Supporting Use</td>
<td></td>
</tr>
<tr>
<td>Ecoli</td>
<td>Veteran’s Lake **</td>
<td>100%</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>406</td>
<td>126</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>Not Supporting Use</td>
<td></td>
</tr>
</tbody>
</table>
ATTAINS SITE - INFORMATION

Welcome Dale Miller

Release Notes

About This Release - December 2019
The Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System (ATTAINS) is now available. Version 1.0.11 is a production-ready release. The ATTAINS production system now serves as the System of Record, which means that it holds the official submittal of the Clean Water Act Section 303(d) list, and the Section 305(b) assessed waters information. This system should be used for real water quality assessment decisions, only. Do not enter test data into this production system.

The latest instruction documents, domain values, and batch upload templates can be found on the Public ATTAINS Website

User Support
When you need assistance with ATTAINS, or have general ATTAINS questions, please email attains@epa.gov. Please include your state abbreviation in the subject line, along with the brief description of the issue. We are tracking these requests and closing out user support tickets as we finish them. If you have multiple questions or issues over time, please use a new email subject (rather than continuing to use an old, closed email chain), to help us distinguish between the different issues.

Release Features
This release includes the following:

Assessments:
- Delisting: We have updated ATTAINS to allow users to remove parameters that are not Causes without the system considering it a delisting.
- Combined Cycles enhancement: ATTAINS previously accepted Combined Cycles, but the cycle labels were unclear in the User Interface. This enhancement makes the cycle labels for Combined Cycles clearer in the Assessments tab. Note: Combined Cycles are created at the time of cycle creation by selecting a cycle year that is at least 3 cycles later than the previous cycle in ATTAINS.
- Bug fixes: The Year Last Monitored and Year Last Assessed fields are saving again.

Cycle Promotion:
Organizations may now re-promote to the same status multiple times, if necessary. This allows the creation of multiple snapshots within a status, such as multiple Organization Public Comment status snapshots.

Cycle Sharing:
- State/Territory/Tribal Assessment Administrators may now choose to share their Draft or Working Copy with EPA. The entire cycle may be "Not Shared" (by default), or Shared as "View (Read-Only)", or Shared as "Editable by EPA". The setting only applies to the current cycle. It reverts to "Not Shared" for each new cycle. State/Territory/Tribal Assessment Administrators may change that setting at any time. EPA can always see any Snapshot beyond Draft status. So, sharing a cycle affects the Draft status and any changes made since the previous Snapshot. (Note: The Exceptions section was temporarily removed from this release to allow use of Exports, Batch Upload and Reports on Shared Cycles.)

Actions:
- At least one document is required for TMDL 4B, Alternative, and Protection Approach Actions. Previously, it was only requiring a document for TMDL Actions.
### ATTAINS Site - Units

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Water Type</th>
<th>Size</th>
<th>Units</th>
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<tbody>
<tr>
<td></td>
<td>Veterans Lake</td>
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<td>5</td>
<td>Acres</td>
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<tr>
<td></td>
<td>Wildhorse Creek</td>
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<td>Miles</td>
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<tr>
<td></td>
<td>Skull Creek</td>
<td>Creek</td>
<td>0</td>
<td>Miles</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>North Canadian River</td>
<td>River</td>
<td>0</td>
<td>Miles</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>Cimarron River</td>
<td>River</td>
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<td>Active</td>
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<td>Deep Fork River 002</td>
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<td>Miles</td>
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<tr>
<td></td>
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<td>Active</td>
</tr>
<tr>
<td></td>
<td>Sand Creek</td>
<td>Creek</td>
<td>0</td>
<td>Miles</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>North Canadian 003</td>
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<td>0</td>
<td>Miles</td>
<td>Active</td>
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<tr>
<td></td>
<td>Bellcreek 001</td>
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<td>Active</td>
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21 Records
### Assessments 2019 (EPA Final Action)

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<tr>
<th>Assessment Unit ID</th>
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<th>Organization IR Category</th>
<th>Multi-IR Category</th>
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<tr>
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<td>RIVER</td>
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<td></td>
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<td>CREEK</td>
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<td></td>
<td>5.2</td>
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<td>No Change</td>
</tr>
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<td>CREEK</td>
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<td></td>
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<td>No Change</td>
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<td>CREEK</td>
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<td></td>
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<td>Nov 7, 2019 2:14:07 PM</td>
<td>2019</td>
<td></td>
<td>OK</td>
<td>No Change</td>
</tr>
</tbody>
</table>

**21 Records**
2019 IR Assessment - Deep Fork River (Deep Fork River)

**Assessment Unit**
- Deep Fork River (Deep Fork River)

**Water Type**
- River (0 Miles)

**Cycle Last Assessed**
- 2017

**Year Last Monitored**
- 2017

**Organization IR Category**
- Not Specified

**Comment**
Monitoring period Oct. 1, 2015 to Sept. 30, 2017. This river runs directly through the central part of the Sac and Fox Nation's historical lands and is used in cultural, agricultural, and other uses by the Nation.

**Use Attainment - Agricultural Water Supply**

<table>
<thead>
<tr>
<th>Use Name</th>
<th>Use Support</th>
<th>Threatened</th>
<th>Agency</th>
<th>EPA IR Category</th>
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<tbody>
<tr>
<td>Agricultural Water Supply</td>
<td>Not Supporting</td>
<td>No</td>
<td>Tribal</td>
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<tr>
<td>Aquatic and Wildlife</td>
<td>Not Supporting</td>
<td>No</td>
<td>Tribal</td>
<td>5</td>
</tr>
<tr>
<td>General</td>
<td>Not Supporting</td>
<td>No</td>
<td>Tribal</td>
<td>5</td>
</tr>
<tr>
<td>Livestock Watering</td>
<td>Not Supporting</td>
<td>No</td>
<td>Tribal</td>
<td>5</td>
</tr>
<tr>
<td>Primary Human Contact</td>
<td>Fully Supporting</td>
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<td>Tribal</td>
<td>2</td>
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<tr>
<td>Secondary Human Contact</td>
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<td>Tribal</td>
<td>2</td>
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</tbody>
</table>

**Location Description**
- Bridge Access Point

**Use Class**
- Not Specified

**State**
- OK

**Cycle**
- 2019

**Agency**
- Tribal

**EPA IR Category**
- 5

**Rationale**
Not meeting criteria for Agricultural and Livestock Watering on 12 of 30 samples for TDS. Not meeting criteria for Aquatic and Wildlife on 5 of 30 samples for pH. Nutrient Threatened (General) due to non-point source nutrients outside of EPA Eco-region.
# ATTAINS SITE - SUMMARY 2 OF 2

### Parameters

<table>
<thead>
<tr>
<th>Parameter Name</th>
<th>Parameter Status</th>
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<td>CHLORIDE</td>
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<td>DISSOLVED OXYGEN</td>
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<td>No</td>
</tr>
<tr>
<td>ESCHERICHIA COLI (E. COLI)</td>
<td>Meeting Criteria</td>
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<tr>
<td>NITRATE/NITRITE (NITRITE + NITRATE AS N)</td>
<td>Cause</td>
<td>5</td>
<td>No</td>
</tr>
<tr>
<td>PH</td>
<td>Cause</td>
<td>5</td>
<td>No</td>
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<tr>
<td>PHOSPHORUS, TOTAL</td>
<td>Cause</td>
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<td>No</td>
</tr>
<tr>
<td>SULFATE</td>
<td>Meeting Criteria</td>
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<td>No</td>
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<td>TEMPERATURE</td>
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<tr>
<td>TURBIDITY</td>
<td>Cause</td>
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</table>

### Sources

No Sources

### Documents

No Documents

### Meeting Criteria Parameter - CHLORIDE

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<th>Parameter Attainment</th>
<th>Trend</th>
<th>Seasons</th>
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<tr>
<td>Agricultural Water Supply</td>
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<tr>
<td>Livestock Watering</td>
<td>Meeting criteria</td>
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<td></td>
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</table>

### Assessment Types

- Not Specified

### Assessment Methods

- Parameter Information
- Associated Actions
### ATTAINS SITE - CYCLES/TIME PERIODS

#### 2019 Cycle Management

**Cycle History**

**CYCLE INFORMATION:** This cycle has been submitted to the EPA for review.

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Label</th>
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<th>Type</th>
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<tbody>
<tr>
<td>2019</td>
<td>IN_PROGRESS_2019</td>
<td>EPA Final Action</td>
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<tr>
<td>2019</td>
<td>SNAPSHOT_2020_01_06</td>
<td>EPA Final Action</td>
<td>Snapshot</td>
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<tr>
<td>2019</td>
<td>SNAPSHOT_2020_01_06</td>
<td>EPA - Document Decisions</td>
<td>Snapshot</td>
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<td>2019</td>
<td>SNAPSHOT_2020_01_02</td>
<td>Organization Final Action - Submittal</td>
<td>Snapshot</td>
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<tr>
<td>2019</td>
<td>SNAPSHOT_2019_11_22</td>
<td>Organization Public Comment</td>
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</tbody>
</table>

#### Cycle 2019 (EPA Final Action)

**Document Name** | **Document Type** | **Agency Code** | **File Name**  
---|---|---|---
WQX North Canadian River | Other Supporting Documents | Tribal | North Canadian River FY 18-19.csv
WQX North Canadian 002 | Other Supporting Documents | Tribal | North Canadian 002 FY 16-19.csv
WQX North Canadian 003 | Other Supporting Documents | Tribal | North Canadian 003 FY 16-19.csv
WQX Veterans Lake Sites All | Other Supporting Documents | Tribal | Veterans Lake FY 18-19.csv
SFN Assessment Temp late | Other Supporting Documents | Tribal | ATTAINS Big 4 Worksheet 18-19.xlsx
WQX Rock Creek 001 | Other Supporting Documents | Tribal | Rock Creek 001 FY 16-19.csv
WQX Deer Creek 001 | Other Supporting Documents | State | Deer Creek 001 FY 18-19.csv
PREPARED QUESTIONS?

• The first question needs to be, “How can my tribe prepare now for ATTAINS?”

• The second question should be, “When can my program start utilizing ATTAINS?”

• The third question should be, “Pros and Cons of using ATTAINS?”

• The final question needs to be, “How many of you are still awake?”
HOW CAN MY TRIBE PREPARE NOW FOR ATTAINS?

Tribes that are interested in participating will need to meet a series of prerequisites, recommended by the pilot tribes, to ensure they are prepared for the transition to ATTAINS reporting:

1. Meet all 106 grant requirements;
2. Actively submit water quality data to WQX;
3. Be able to perform water quality assessments and link parameters monitored to uses like recreation and aquatic life support;
4. Be committed to developing or revising a tribal assessment methodology;
5. Have adequate time to participate in assessment methodology development, trainings and entering their assessments into ATTAINS
   • * Tribes are not expected to have assessment methodologies in place prior to participating in the ATTAINS program, but they will need to have one in place to submit their water quality assessments to ATTAINS. (Big 4 reference)
WHEN CAN MY PROGRAM START UTILIZING ATTAINS?

• Initial Phase of Rolling out ATTAINS for Tribal Water Quality Programs:
  
  • In the next phase of the program
    
    • EPA seeks up to 15 additional tribes to volunteer to participate and share their water quality decision data in ATTAINS.
    
    • Tribes from the initial pilot will be available to mentor the new tribes by providing training and technical assistance.
PROS AND CONS OF ATTAINS

• **Cons**
  • Requires Familiarity with Online Tools and Systems
  • Requires Internet Service
  • Requires Training for ATTAINS Site Operation

• **Pros**
  • Electronic submission
    • Allows for multiple points of online, on demand access, and ease of reviews
  • Removes extraneous material
    • Previous TAR report was 175 pages long
  • Promotes results to equal levels with states
    • States are already utilizing the ATTAINS Reporting System
  • Provides on demand reports for Congressional Budget Reviews through EPA
  • Saves time and expenditures
    • Completing ATTAINS entries from entering sites to assessments
    • Overall only consumes days instead of weeks and/or months
HOW MANY OF YOU ARE STILL AWAKE?

• Your Thoughts and Questions ??
ACKNOWLEDGEMENTS

Appreciation to all those whom volunteered time, effort, and resources

• All the Tribal Environmental Professionals investing time, effort, and sanity

• Tribal Leaders for supporting this endeavor

• EPA (s) Leadership both in Washington, D.C. and Regionally for the support

• EPA (s) Project Officers for their understanding and continued support

• EPA (s) Developmental Team with the unending changes and backflips

• EPA (s) Technical Reviewers with their coaching, patience, and expertise
SPECIAL ACKNOWLEDGEMENTS

Micco Emarthala of the Seneca-Cayuga Nation
- Truly championed the uphill battle for modernizing and elevating tribal water assessments
- Pushed for a new way to assess and report tribal waters
- Wanted something that was more like a “Turbo Tax” fillable form
  - Keep it simple, was a repeated statement
- Micco is and will be sorely missed

Laura Shumway of the EPA main office in Washington, D.C.
- Oversaw, represented, organized, strategized, and pulverized obstacles
- Translated much of the Pilot members discussions into “developer speak”
- Kept the ball rolling with sheer positive attitude at times
- Laura is still performing ambassador duties “Herding the cats”
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Additional information on the initial pilot can be found at
  • https://e-enterprisefortheenvironment.net/attains-provides-big-picture-on-tribal-water-quality/