

# ATTAINS

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R6 Water Quality Protection Section

Region 6 Non-point Source Grant Workshop

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# What is ATTAINS?

- Assessment, Total Maximum Daily Load (TMDL) Tracking and Implementation System
- Online system to access information about the conditions of the Nation's waters
- 20 R6 Pueblos & Tribes (27 Nationwide)

# Welcome to ATTAINS





# Benefits

- Electronic submission
- Online access
- Time savings
- Easy updates
- Allows for continuity
- Increased data analysis understanding
- Easy visuals
- Level playing field with states
- Allows for easy reporting to Congress
- Available to the public (How's My Waterway!)

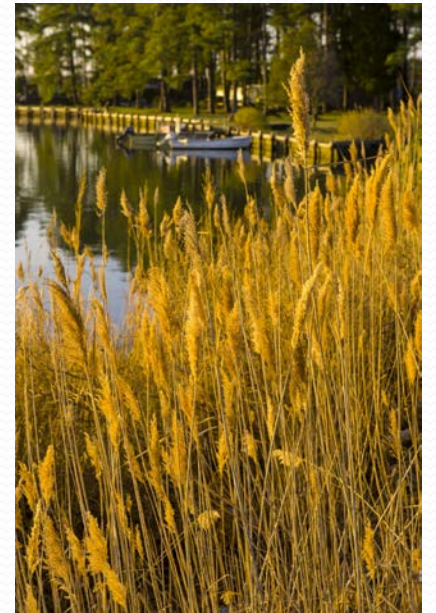


# Gathering the Pieces

# Designated/Beneficial Uses

Paraphrase from 40 CFR §131.3: *Designated uses* are those uses specified in water quality standards for each water body or segment whether or not they are being attained.

- Cultural Use
- Primary Contact Recreation
- Secondary Contact Recreation
- Aesthetics
- Aquatic Life Use
- Protection of Wild Rice
- Frogging
- Air Boating





# Criteria

Paraphrase from §131.3:

Criteria are elements of water quality standards, expressed as **constituent concentrations, levels, or narrative statements**, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

Numeric criteria consist of:

- Magnitude (how much)
- Duration (how long)
- Frequency (how often)

Dissolved Zinc: shall not exceed 90 µg/L as a 1-hour average more than once every 3 years

# Decision Rules

- Percentage ( $>10\%$ )
- Rate of recurrence (no more than once in 3 years)
- Outside of a range ( $x < y < z$ )
- Not to exceed ( $>x$ )

Example: Waterbody is supporting for aquatic life use when pH values are within a range of 6.5 to 9.0 standard units. Waterbody is not supporting for aquatic life use when pH values are outside the range of 6.5 to 9.0 standard units



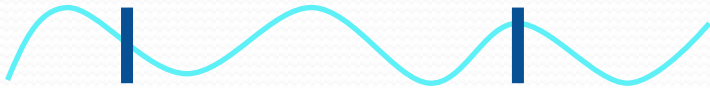
# Assessment Methodology

## What are your Assessment Units?

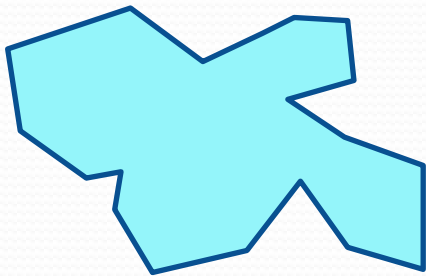
- *Monitoring location only*



- *A segment/length of the stream*



- *An area such as a HUC or Lake*



**How many results do you require for each parameter to make a determination on your use?**

Parameter	Number of samples for assessment
Dissolved Oxygen	10
<i>Escherichia coli</i>	6



## What are the water quality criteria you are using to make your decisions?

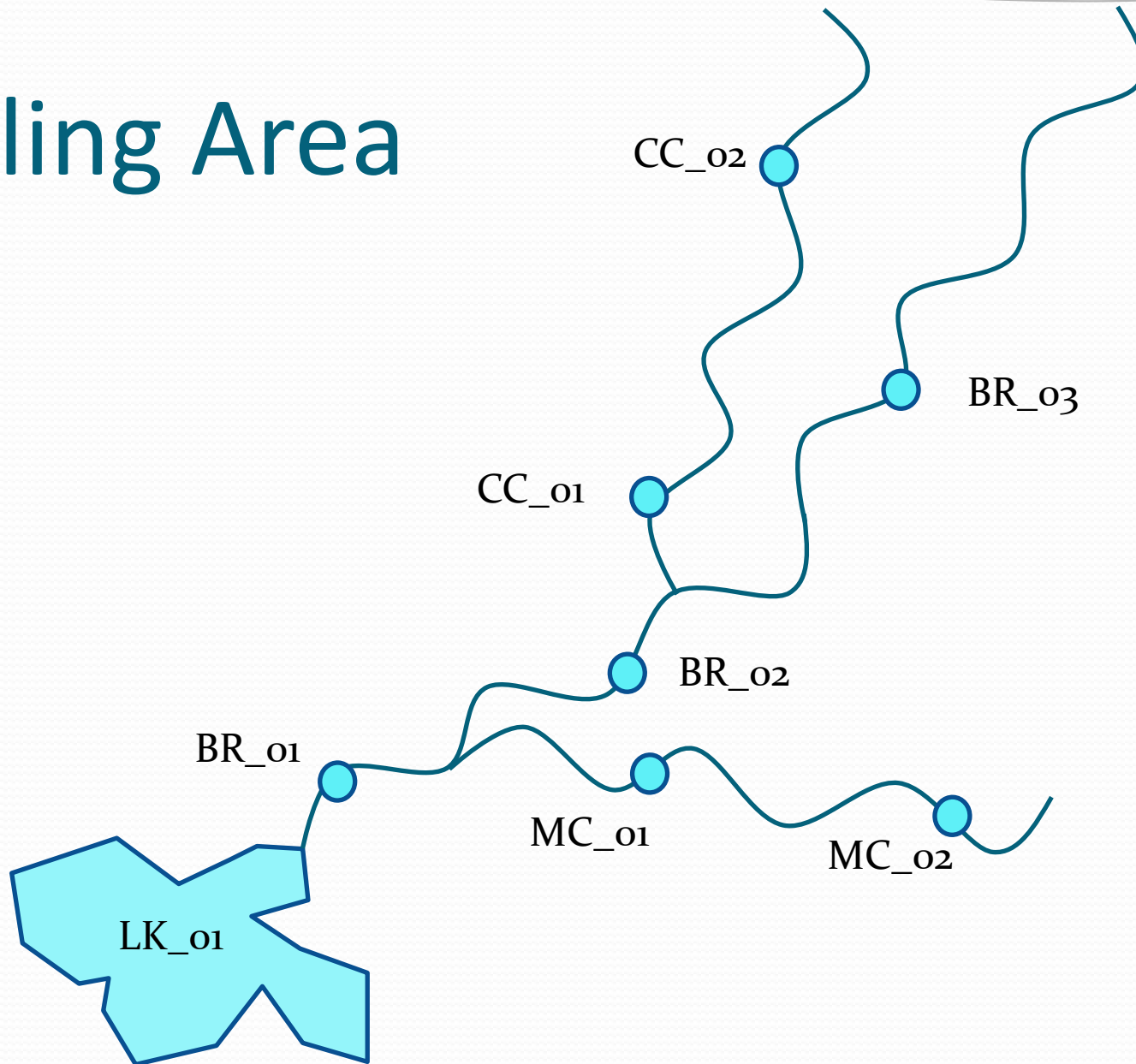
Parameter	Criteria
Dissolved Oxygen	6.0 mg/L
<i>Escherichia coli</i>	410 cfu/mL SSM

## What are your rules for determining whether your water is meeting a parameter and/or a designated use?

Parameter	Criteria	Supporting Use	Not Supporting Use
Dissolved Oxygen	6.0 mg/L	$\leq 10\%$ of DO samples are below 6.0 mg/L	$> 10\%$ of DO samples are below 6.0 mg/L
<i>Escherichia coli</i>	410 cfu/mL SSM	$\leq 10\%$ of <i>E. coli</i> samples exceed 410 cfu/100 mL	$> 10\%$ of <i>E. coli</i> samples exceed 410 cfu/100 mL

# Putting it together

# Sampling Area



# Assigned Beneficial Uses

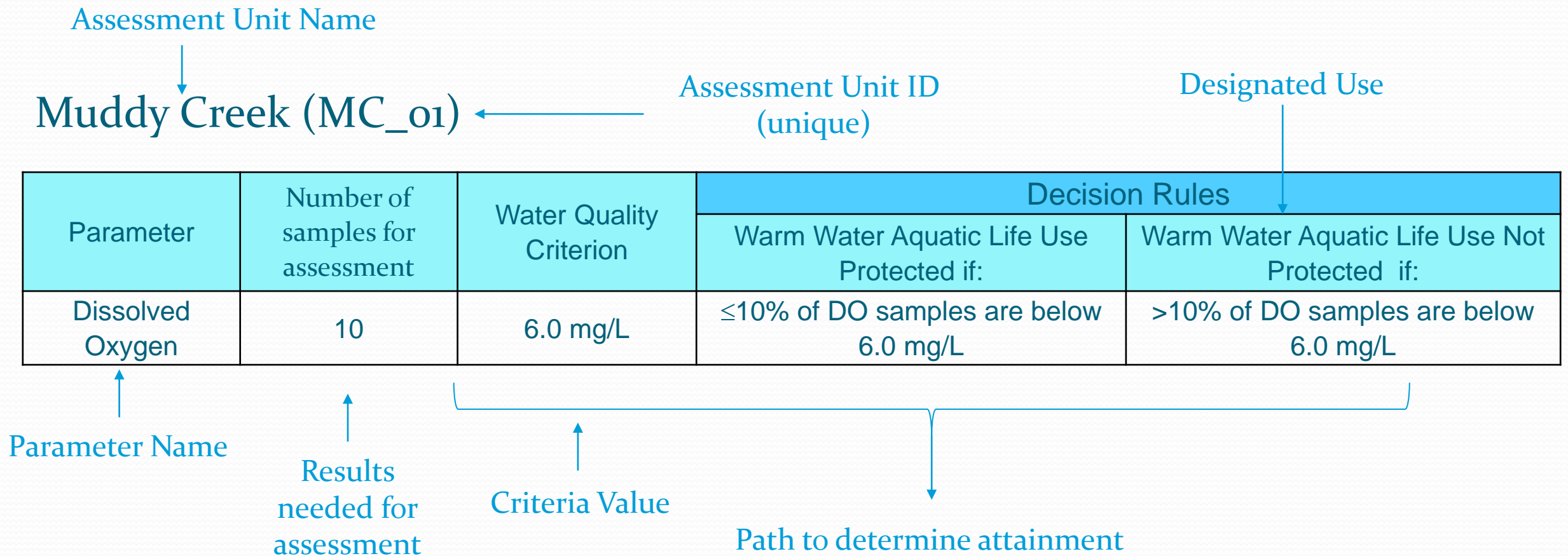
Waterbody	Beneficial/Designated Use
Big River	Warm Water Aquatic Life & Primary Contact Recreation
Clear Creek	Warm Water Aquatic Life & Primary Contact Recreation
Muddy Creek	Warm Water Aquatic Life & Primary Contact Recreation
Lake	Warm Water Aquatic Life & Primary Contact Recreation



# Muddy Creek (MC\_01)

Parameter	Number of samples for assessment	Water Quality Criterion	Decision Rules	
			Warm Water Aquatic Life Use Protected when:	Warm Water Aquatic Life Use Not Protected when:
Dissolved Oxygen	10	6.0 mg/L	≤10% of DO samples are below 6.0mg/L	>10% of DO samples are below 6.0mg/L
Selenium	10	5 µg/L	One sample or less in 3 years exceeds 5 µg/L	More than one sample in 3 years exceeds 5 µg/L
pH	10	Between 6.0 and 9.0	≤10% of pH samples are below 6.0 or above 9.0	>10% of pH samples are below 6.0 or above 9.0
Sulfates	10	20 mg/L	Median of all samples is ≤20 mg/L	Median of all samples is >20 mg/L
Parameter	Number of samples for assessment	Water Quality Criterion	Decision Rules	
			Primary Contact Recreation Protected when:	Primary Contact Recreation Not Protected when:
<i>E. coli</i>	6	Geometric mean of 126 cfu/ 100 mL	Geometric mean of <i>E.coli</i> samples is less than 126 cfu/100ml AND:	Geometric mean of <i>E.coli</i> samples is greater than 126 cfu/100ml OR:
		Single sample max of 410 cfu/ 100 mL	≤10% of <i>E. coli</i> samples exceed 410 cfu/100 mL	>10% of <i>E. coli</i> samples exceed 410 cfu/100 mL

# Making Connections



# ATTAINS

# Assessments Tab



Home



Assessment Units



Assessments



Actions



Reports



EPA Reports



Priorities



Surveys



Administration

## Assessments 2020

Cycle Selection ▾

Menu

Assessment Unit ID ▾	Assessment Unit Name ▾	Water Type ▾	Overall Status ▾	Cycle Last Assessed ▾	Last Modified ▾	Cycle Last Modified ▾	Validation ▾	Status ▾
<a href="#">MC_01</a>	Muddy Creek	CREEK	Not Supporting	2017	Nov 7, 2019 11:39:33 AM	2019	OK	Done
<a href="#">MC_02</a>	Muddy Creek	STREAM/CREEK/RIVER	Not Supporting	2019	Dec 21, 2020 10:24:04 AM	2020	OK	Done
<a href="#">CC_01</a>	Clear Creek	RIVER	Not Supporting	2019	Dec 21, 2020 11:21:25 AM	2020	OK	Done
<a href="#">CC_02</a>	Clear Creek	RIVER	Not Supporting	2019	Dec 21, 2020 11:44:15 AM	2020	OK	Done
<a href="#">BR_01</a>	Big River	RIVER	Not Supporting	2019	Dec 21, 2020 10:52:31 AM	2020	OK	Done



# General

General

Uses

Parameters

Sources

Documents

Summary

## General Information

Cycle Last Assessed / Categorized\* ⓘ

2018

Organization ⓘ

Agency\* ⓘ

☐ EPA ☐ State ☒ Tribal

Cycle ⓘ

2020

Year Last Monitored ⓘ

year last monitored

Organization IR Category



Show Definition

Comment ⓘ

assessment comment...

Internal Use Only

0 / 4000

Rationale ⓘ

assessment rationale...

0 / 4000

Completion Status ⓘ

☐ Done ☒ In Progress

# Sources

General

Uses

Parameters

Sources

Documents

Summary

## Probable Sources

Source\* 

Select Source

Confirmed\* 

☐ No ☐ Yes

Available Causes 

Add ➔

Cancel

Source ▲

Causes

Confirmed ⚡

No Sources

# Sources Tab Batch Upload

ASSESSMENT_UNIT_ID	SOURCE_NAME	SOURCE_CONFIRMED	SOURCE_PARAM_NAME	SOURCE_COMMENT
MC_01	ANIMAL FEEDING OPERATIONS (NPS)	N	NUTRIENTS	
MC_02	EROSION AND SEDIMENTATION	Y	TURBIDITY	
BR_01	WILDLIFE OTHER THAN WATERFOWL	N	ESCHERICHIA COLI (E. COLI)	
BR_01	NON-POINT SOURCE	N	CHLORIDE	
BR_02	RUNOFF FROM FOREST/GRASSLAND/PARKLAND	N	DISSOLVED OXYGEN	
BR_03	STREAMBANK EROSION	Y	TOTAL DISSOLVED SOLIDS (TDS)	
CC_01	REMOVAL OF RIPARIAN VEGETATION	N	PHOSPHORUS, TOTAL	Observed loss of riparian vegetation
CC_02	AGRICULTURAL RETURN FLOWS	N	TURBIDITY	

Sources

Source Name	Associated Causes	Confirmed
NON-POINT SOURCE	ESCHERICHIA COLI (E. COLI)	No
WILDLIFE OTHER THAN WATERFOWL	ESCHERICHIA COLI (E. COLI)	No

Probable Source - NON-POINT SOURCE	
Comment	Not Specified

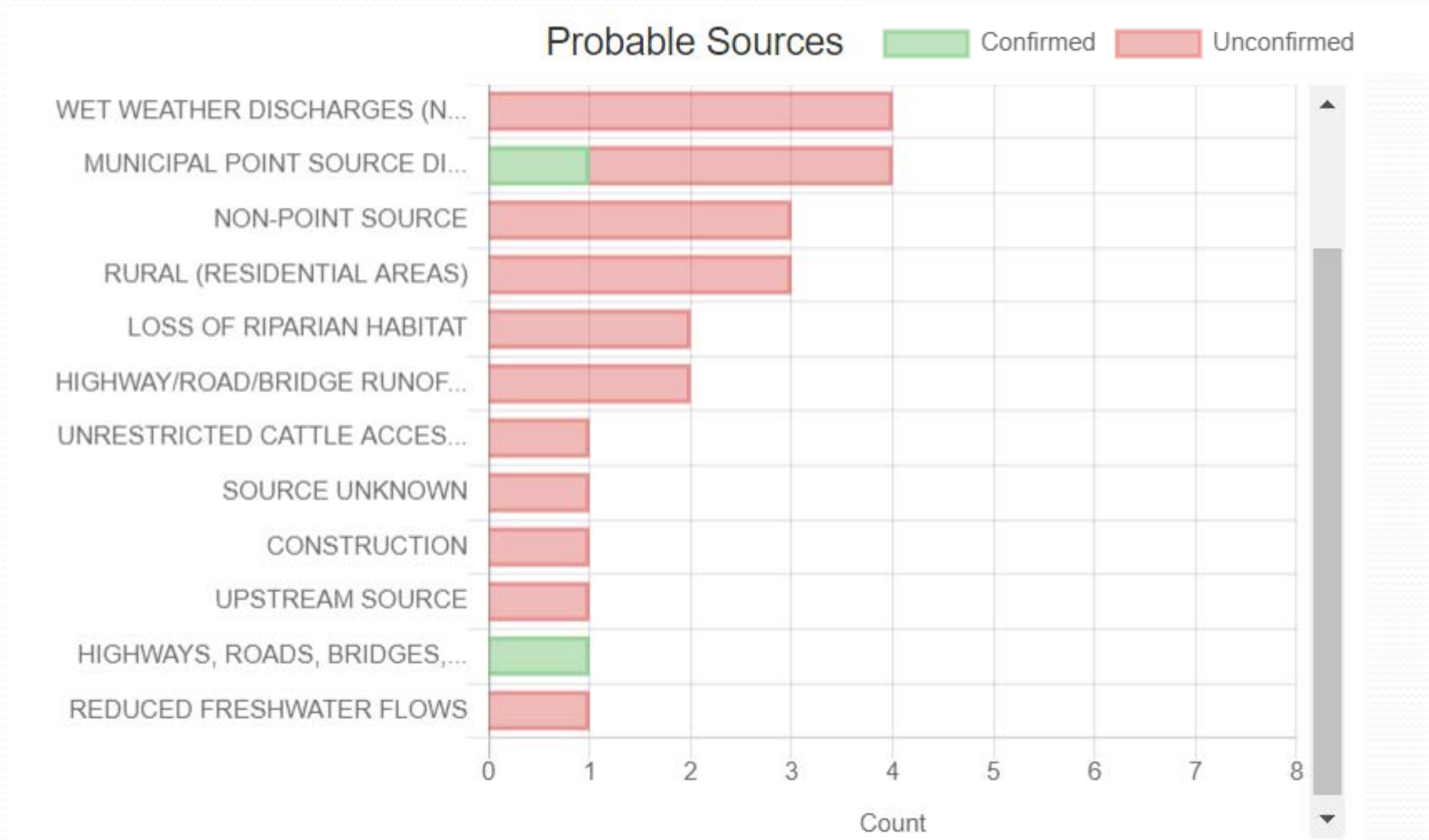
Sources

Source Name	Associated Causes	Confirmed
LIVESTOCK (GRAZING OR FEEDING OPERATIONS)	ESCHERICHIA COLI (E. COLI)	No
NATURAL-DROUGHT	DISSOLVED OXYGEN, DISSOLVED OXYGEN SATURATION	No
RECREATION AND TOURISM (NON-BOATING)	ESCHERICHIA COLI (E. COLI)	No
RUNOFF FROM FOREST/GRASSLAND/PARKLAND	ESCHERICHIA COLI (E. COLI)	No
WATERSHED RUNOFF FOLLOWING FOREST FIRE	DISSOLVED OXYGEN SATURATION, DISSOLVED OXYGEN, PHOSPHORUS, TOTAL	No
WILDLIFE OTHER THAN WATERFOWL	ESCHERICHIA COLI (E. COLI), DISSOLVED OXYGEN, DISSOLVED OXYGEN SATURATION	No

Probable Source - LIVESTOCK (GRAZING OR FEEDING OPERATIONS)	
Comment	Not Specified



# Probable Sources Report





# Things to Remember about ATTAINS

- ATTAINS holds attainment decisions, it does NOT make the decision for you
- ATTAINS does not hold raw data; however, there is a place to put a data link
- Be sure to update comments for each cycle
- Use of ATTAINS does not make written reports obsolete, a narrative report covering all activities under the grant should still be sent to the project officer
- Attach the Assessment Methodology and any other important information to the cycle before you promote the cycle.
- ATTAINS is easy to update from cycle-to-cycle
- Promote to Organization Public Comment or Organization Final Action – Submittal.

# New Features in ATTAINS

# Help

## Help & Support

Search Help...  

General >

Assessment Units >

Assessments >

Actions >

Reports >

Surveys >

Administration >

Batch Upload Templates >

## How to Use the Help Module

Topics are organized in topic groups. Most topic groups correspond with a module in ATTAINS. Users may navigate through the topic list in the left panel or use the Search Help box to search for relevant help results.

- To navigate through the documents, click on a topic group on the left. The topic group will expand and provide a list of help documents related to that topic group. Mouse over and click on one of the options in the left panel to open the document in the right panel.
- To search for a document, use the Search Help box and enter your search topic. A box will open that provides a list of documents related to the search topic. Click on an entry to open that help document.

In addition to the information loaded in this Help module, additional instruction documents may be available on the public ATTAINS website (<https://www.epa.gov/waterdata/attains>).



# Information

## 2020 IR Assessment - Muddy Creek

Assessment Unit ⓘ	MC_01
Water Type ⓘ	River (0 Miles)
Cycle Last Assessed ⓘ	2019
Year Last Monitored ⓘ	2019
Organization ⓘ	Comments that should be maintained about the Assessment. This field is for Internal Use Only (it is not published in public ATTAINS web services). Optional.
Comment ⓘ	FY October 1, 2019-September 30, 2020

# How's My Waterway

# How's My Waterway?

Informing the conversation about your waters.

## Let's get started!

▼

Search EPA tribal areas...

>> Go

OR

 Use My Location

All

Address, zip code, and place search

EPA Tribal Areas

Watershed

National

## Explore Topics:



Swimming



Eating Fish



Aquatic Life



Drinking Water

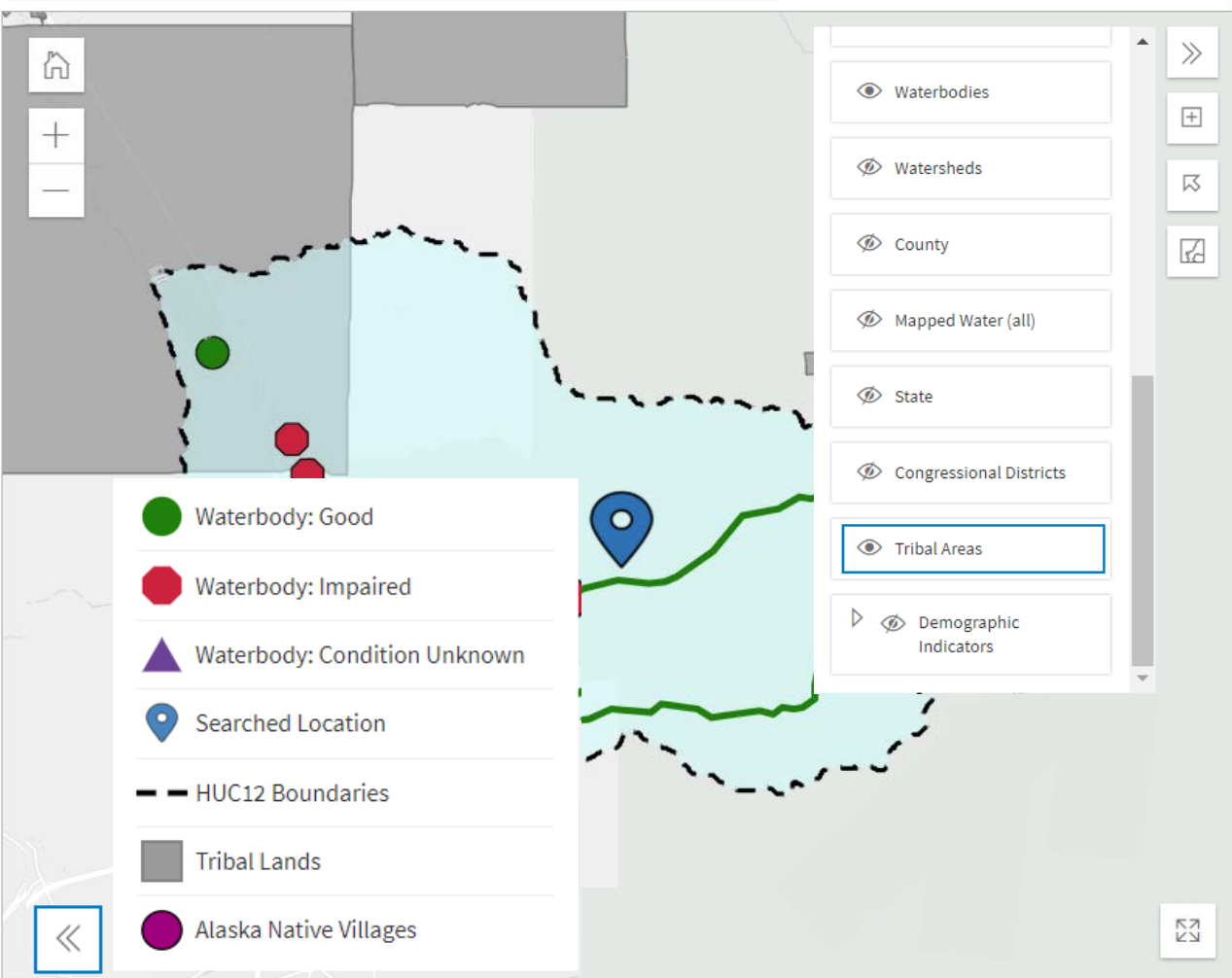
Let's get started!

▼ Pueblo or Tribe

>> Go

OR

📍 Use My Location



Waterbodies

Monitoring & Sensors

Permitted Dischargers

### Waterbody Conditions:



Good



Impaired



Condition Unknown

Expand All

Overall condition of 9 waterbodies in the *Pueblo or Tribe* watershed.



#### Big River

Tribal Waterbody ID BR\_01



#### Muddy Creek

State Waterbody ID: ST\_MC\_1001



#### Muddy Creek

Tribal Waterbody ID MC\_01



#### Clear Creek

State Waterbody ID: ST\_CC\_2001



#### Clear Creek

State Waterbody ID: ST\_CC\_2002



#### Clear Creek

Tribal Waterbody ID CC\_01



#### Big River

State Waterbody ID: ST\_CC\_2002





## Big River

Assessment Unit ID: BR\_01

**Waterbody Condition:** Impaired

**Existing Plans for Restoration:** No

**303(d) Listed:** No

**Year Reported:** 2020

**Organization Name (ID):**

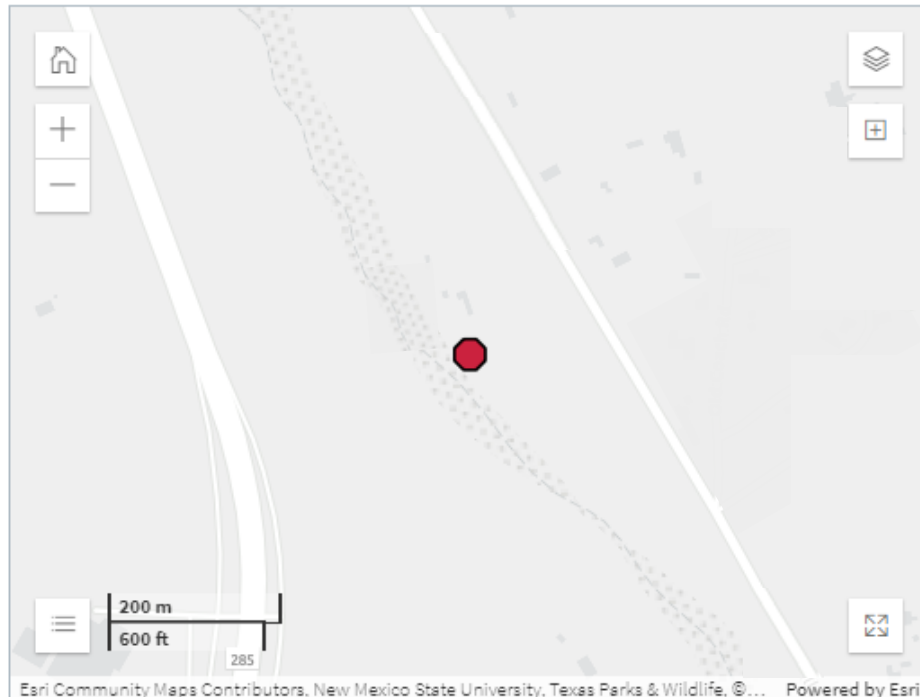
Pueblo or Tribe

**What type of water is this?**

Stream/creek/river (0 Miles)

**Where is this water located?**

Big River (Headwaters)



## Assessment Information from 2020

**What is this water used for?**

Expand All ☒

General

Insufficient Info



Groundwater Recharge

Insufficient Info



Irrigation

Insufficient Info



Livestock Watering & Wildlife Habitat

Insufficient Info



Primary Contact

Impaired



Warmwater Fishery

Insufficient Info



**Probable sources contributing to impairment from 2020:**

Source

Confirmed

Non-Point Source

No

Wildlife Other Than Waterfowl

No

## Plans to Restore Water Quality

**What plans are in place to protect or restore water quality?**

No plans for this waterbody.

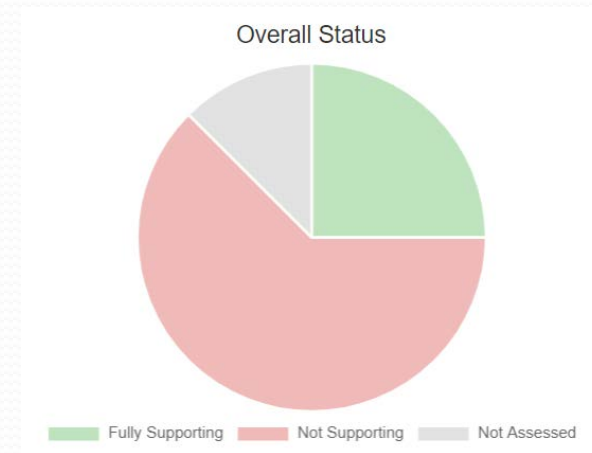
# Progress

2016-2022



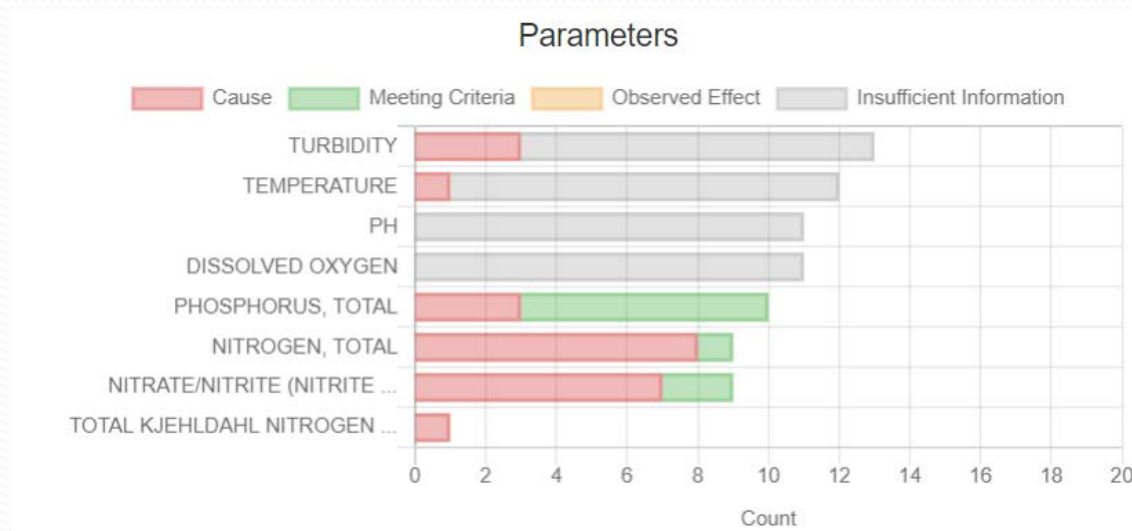
# Pilot Project

- Started in 2016
- In-person trainings held in Oklahoma
- Pueblos & Tribes from Regions 5, 6, & 9 signed up to participate
- Access to Regional and Headquarters staff
- Attended training to be mentors



# Phase I Rollout

- First Phase of the rollout process began in 2020
- Pueblos & Tribes from Regions 1, 2, 5, 6, & 9 requested to join
- Monthly training calls
- New participants team up with a mentor from the pilot group
- Access to Regional and Headquarters staff



# Future

- Potentially bring more Pueblos & Tribes into ATTAINS
- Continued Trainings
- Improved resources available to assist in the learning the system
- What that process might look like:
  - Solicitation from HQ for Pueblos & Tribes to participate
  - Letter of interest from the Pueblo or Tribe
  - Regional concurrence that Pueblo or Tribe meets eligibility prerequisites
  - Assessment reports will need to be submitted annually

# Prerequisites – from Solicitation Letter

- Meet all 106 grant requirements;
- Actively submit water quality data to WQX;
- Able to perform water quality assessments and link parameters monitored to uses;
- Be committed to developing or revising assessment methodology;\* and
- Have adequate time to participate in assessment methodology development, trainings, and entering assessments into ATTAINS

\*Not expected to have assessment methodologies in place prior to participation but will need to have one in place to submit water quality assessments to ATTAINS.

# Technical Reviewers

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# Questions?

