

San Miguel Watershed Coalition Water Quality Monitoring







SURFACE WATER QUALITY

EPA AQUATIC LIFE USE STANDARDS

SUBMIT DATA TO CDPHE WATER QUALITY CONTROL **DIVISION AND EPA** 

**DEVELOP STANDARDS** AND TMDL'S

PUBLICLY AVAILABLE DATA

# What?

tributaries and wetlands

San

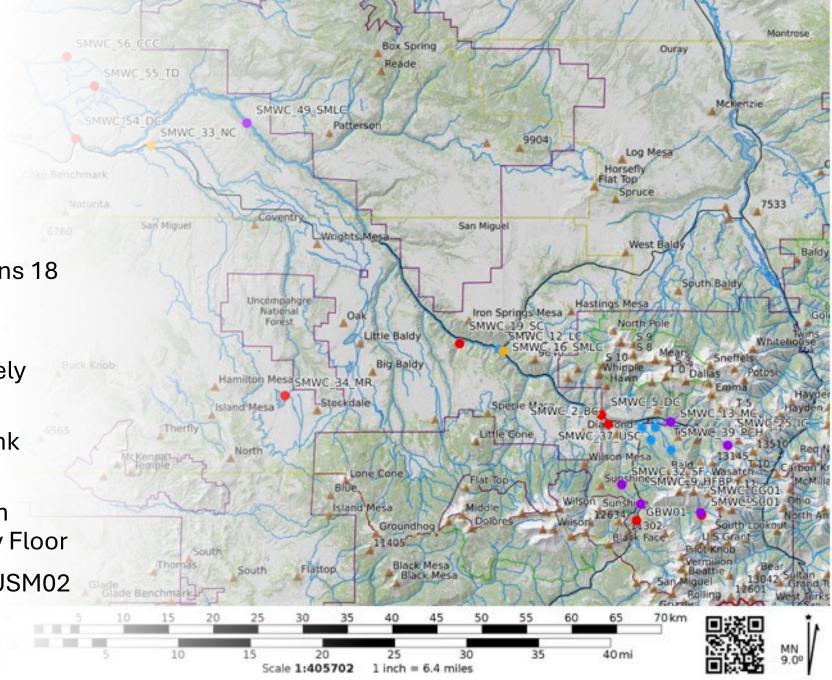
- Metals
- Nutrients
- Field parameter s (DO, pH, conductivi y, temp)
- Discharge flow

| and 8.   |                                  |                                    |           |         |                 |         |             |  |
|--|----------------------------------|------------------------------------|-----------|---------|-----------------|---------|-------------|--|
|  | Classifications                  | Physical and Biological            |           |         | Metals (ug/L)   |         |             |  |
| Designation  | Agriculture                      |                                    | DM        | MWAT    |                 | acute   | chronic     |  |
| Reviewable   | Aq Life Cold 1                   | Temperature °C                     | CS-I      | CS-I    | Arsenic         | 340     |             |  |
|  | Recreation E                     |                                    | acute     | chronic | Arsenic(T)      |         | 0.02        |  |
|  | Water Supply                     | D.O. (mg/L)                        |           | 6.0     | Cadmium         | TVS     | TVS         |  |
| Qualifiers:  |                                  | D.O. (spawning)                    |           | 7.0     | Cadmium(T)      | 5.0     |             |  |
| Other:   |                                  | pH                                 | 6.5 - 9.0 |         | Chromium III    |         | TVS         |  |
| Temporary M  | odification(s):                  | chlorophyll a (mg/m <sup>2</sup> ) |           | TVS     | Chromium III(T) | 50      |             |  |
| Arsenic(chroni   |                                  | E. coli (per 100 mL)               | -         | 126     | Chromium VI     | TVS     | TVS         |  |
| Expiration Date of 12/31/2024  |                                  |                                    |           |         | Copper          | TVS     | TVS         |  |
|  |                                  | Inorganic (mg/L)                   |           |         | Iron            |         | WS          |  |
| *Uranium(acute) = See 35.5(3) for details.<br>*Uranium(chronic) = See 35.5(3) for details. |                                  |                                    | acute     | chronic | Iron(T)         |         | 1000        |  |
| - Uranium(chro   | (inc) = dee 33.5(3) for details. | Ammonia                            | TVS       | TVS     | Lead            | TVS     | TVS         |  |
|  |                                  | Boron                              |           | 0.75    | Lead(T)         | 50      |             |  |
|  |                                  | Chloride                           |           | 250     | Manganese       | TVS     | TVS/WS      |  |
|  |                                  | Chlorine                           | 0.019     | 0.011   | Mercury(T)      |         | 0.01        |  |
|  |                                  | Cyanide                            | 0.005     |         | Molybdenum(T)   |         | 150         |  |
|  |                                  | Nitrate                            | 10        |         | Nickel          | TVS     | TVS         |  |
|  |                                  | Nitrite                            |           | 0.05    | Nickel(T)       |         | 100         |  |
|  |                                  | Phosphorus                         |           | TVS     | Selenium        | TVS     | TVS         |  |
|  |                                  | Sulfate                            |           | WS      | Silver          | TVS     | TVS(tr)     |  |
|  |                                  | Sulfide                            |           | 0.002   | Uranium         | varies* | varies*     |  |
|  |                                  |                                    |           |         | Zinc            | TVS     | TVS/TVS(sc) |  |

Miguel River from its source to a point immediately below the confluence of Leopard Creek, except for listings in Segments 1, 6a, 6b,

# Sites

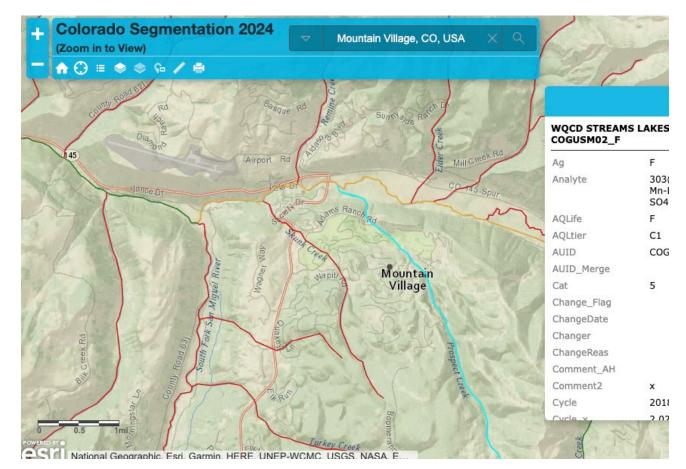
- SMWC currently maintains 18 sites in the Watershed
- 4 sites are within TOMV boundaries or immediately upstream/downstream
- Prospect Creek and Skunk Creek
- Additional CDPHE site on Prospect Creek on Valley Floor
- All sites are within COGUSM02



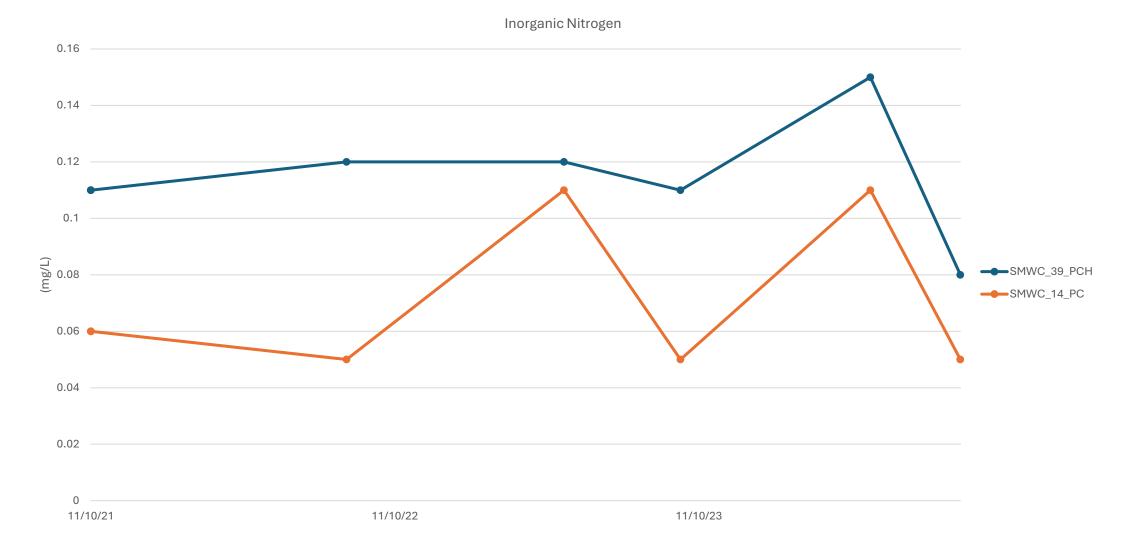
### Regulation 35 - Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins (DWR Division 4)

#### COGUSMO2

- All tributaries, including all wetlands, to the San Miguel River, from the source to Leopard Creek, excluding Bear Creek, Cornet Creek, Muddy Creek and Howard Fork above Swamp Canyon.
- 303(d) list of impaired waters for:
  - Fe-D (dissolved iron)
  - Mn-D (dissolved manganese)
- M&E (monitoring and evaluation) list for:
  - As-T (total Arsenic)
  - SO4 (sulfate)



#### Minimum quantification limit = .02 mg/l



### Metal Exceedances October 2024

|                            | Result Value (ug/L) | acute (ug/L) | chronic (ug/L) |
|----------------------------|---------------------|--------------|----------------|
| Arsenic, dissolved         | 1.01                | 340          | n/a            |
| Arsenic, total recoverable | 1.32                | n/a          | 0.02           |
| Iron, dissolved            | 65.7                | n/a          | 300            |
| Iron, total recoverable    | 406                 | n/a          | 1000           |
| Manganese, dissolved       | 32.9                | 3258         | 1800           |
| Sulfate                    | 14.8                | n/a          | 250            |

\*based on TVS hardness 130 mg/L

| Task                    | Price    | Quantity     | Task Cost   |
|-------------------------|----------|--------------|-------------|
| Field Labor             | \$50.00  | 36           | \$1,800.00  |
| Shipping                | \$250.00 | 2            | \$500.00    |
| Equipment Fee           | \$100.00 | 2            | \$200.00    |
| Metals Lab              | \$444.00 | 4            | \$1,776.00  |
| Nutrients Lab           | \$444.00 | 4            | \$1,776.00  |
| Data Orginization       | \$50.00  | 27           | \$1,350.00  |
| Analysis/Interpretation | \$50.00  | 26           | \$1,300.00  |
|                         |          |              |             |
|                         |          |              |             |
|                         |          |              |             |
|                         |          | Subtotal     | \$8,702.00  |
|                         |          | Indirect 15% | \$1,305.30  |
|                         |          | Total        | \$10,007.30 |

TOMV Budget

# Funding

| DRMS \$9,000                 |
|------------------------------|
| SWCD \$7,000                 |
| TOMV \$10,000                |
| San Miguel County \$5,000    |
| TOT Off Year from CCAASE     |
| Telluride Foundation \$5,000 |
| Total \$35,000               |

## Future Plans

