DISCUSSION OUTLINE

- Administrative overview
- Round-robin water quality update
- WQCC Rulemaking update
- Water quality sampling program review
- Macroinvertebrate sampling results
- Water quality review
- Diel assessment
- New business/open discussion
PROGRAM GOAL

Provide ongoing water quality monitoring while fostering collaborative action to preserve or enhance the integrity of the watershed.
ADMIN. OVERVIEW

- 7 Streamflow Monitoring Sites
- 9 Water Quality / Bio-Monitoring Sites
- 2 Real-time Temperature Monitors
- 1 Real-time Specific Conductance Monitor
## BUDGET

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<td><strong>Total Program Costs</strong></td>
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**Total Costs:** $195,092

### Diagram

- **USGS JFA**
- **Contracts & Contingency**
- **Management & Coordination**

**Graph:** Line chart showing budget allocation from 2013 to 2020.
ANNUAL CONTRACTS

- CRWCD is the cooperator for the USGS JFA
- Lotic Hydrological will continue to manage the program for ERWC
- Timberline Aquatics will collect/analyze macroinvertebrate data
2019 SAMPLING PLANS

Core Program
- USGS Water Quality (9 program sites)
- Timberline Aquatics Biomonitoring (9 program sites)

Coordinated Efforts
- Black Gore Creek TMDL indicators (ERWSD, ERWC)
- Gore Creek tributary biomonitoring (ERWC, TOV)
- ERWSD Sampling (East Fork Eagle River, E-22)
- Eagle Mine Monitoring (Newfields)
- RiverWatch (ERWC, TOV)
- Frost Creek PUD (ground/surface water)
REPORTING

- Water Quality Conditions Graphics
- Timberline Aquatics Memorandum
- Presentations provided to partners on as-needed basis
- Water Quality Report Cards
- USGS Special Studies
DATA ARCHIVAL AND PUBLICATION

- WQX Database and Water Quality Portal (WQP)

![Diagram](image-url)

- River Watch
- Eagle Mine
- Frost Creek
- WQP Web Application
- Data Discovery Tool
- REST Web Services
DATA ARCHIVAL AND PUBLICATION

- WQX Data Upload:
  https://www.epa.gov/waterdata/water-quality-data-wqx

- Water Quality Portal:
  https://www.waterqualitydata.us

- Data Discovery Tool:
DATA ANALYSIS & REPORTING
PUTTING DATA TO WORK

- Background and trends monitoring
- Development of graphics to assist in communication and outreach to general public
- Web Storymapping for ‘curated’ issues exploration
AMBIENT WQ MONITORING

- Supports local planning/permitting/protection efforts
- Among the most robust long-term WQ datasets for a HUC8 watershed in Colorado.
MACROINVERTEBRATES

Median MMI
- 0-42
- 42-50
- 50-52
- 52-65
- 65-100
- Streams

0 5 10 mi

MMI V4: 2018 ERWC sites
305(b) REGULATORY ACTION

- Arsenic (In regulatory flux)
- Aquatic Life (Urban zones)
- Cd, Zn, Cu, Fe (Eagle Mine/ Minturn)
- Sediment (Black Gore)
SUPPORTED PROGRAMS

- Black Gore Creek TMDL monitoring
- Permitting for West Vail Pass Auxiliary Lane expansion
- Urban Runoff control efforts (e.g. Restore the Gore)
- Clean Water Act regulatory hearings: data calls, standards reviews
- Community outreach and reporting: WQ Report Card, Story Mapping
- Strategic Planning: ERWC Watershed Plan, Community Water Plan
- Development permitting and approvals: 1041 referrals
VAIL PASS LANE EXPANSION

- WQMAP analysis of partner-owned datasets tracks progress over time for CDOT sediment control measures
- Informs the anticipated impacts of expansion to 6 lanes
- Supports negotiating position for in-basin mitigation ask
URBAN RUNOFF CONTROL

- Compliments data collection efforts by partners (TOV, ERWSD) for Restore the Gore work.
- Informs municipal regulatory advice (via WQIPs) to down-valley communities regarding increasing urban impacts, new zoning, PUD and sketch plan referrals.
Our watershed...

The Eagle River watershed covers approximately 970 square miles of rugged mountainous terrain and picturesque river valleys in Eagle County. In fact, most of the towns and land area within Eagle County fall within the bounds of the Eagle River watershed.
Choose a monitoring parameter and site to see how Eagle River dissolved metals values have changed over time.

Data for Zinc at EAGLE RIVER BELOW OLD TAILINGS

Location ID: CBS-E-12A
Reporting org: CBS
Earliest sample: 9/12/1989
Most recent sample: 10/19/2015
Total observations: 264
Observation ranges (ug/L)
Minimum: 13.00
Median: 270.0
Maximum: 4,220
EDUCATION/OUTREACH

Link:

https://www.arcgis.com/apps/Cascade/index.html?appid=a60f25acb6a049f6842f575a17c37810

Embed Code:

<iframe width="100%" height="800px" src="https://www.arcgis.com/apps/Cascade/index.html?appid=a60f25acb6a049f6842f575a17c37810"></iframe>
QUESTIONS?

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