



How Cross-Program Coordination and Environmental Justice are Changing the Way Colorado Prioritizes TMDLs for Vision 2.0

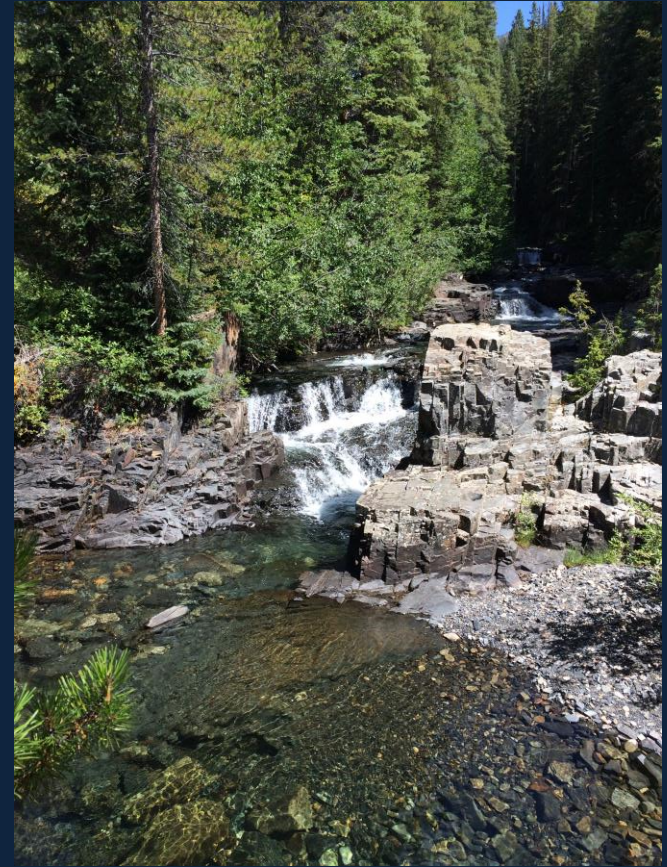
June 23, 2023

TMDL Prioritization Topics

Highlights for Vision 2.0

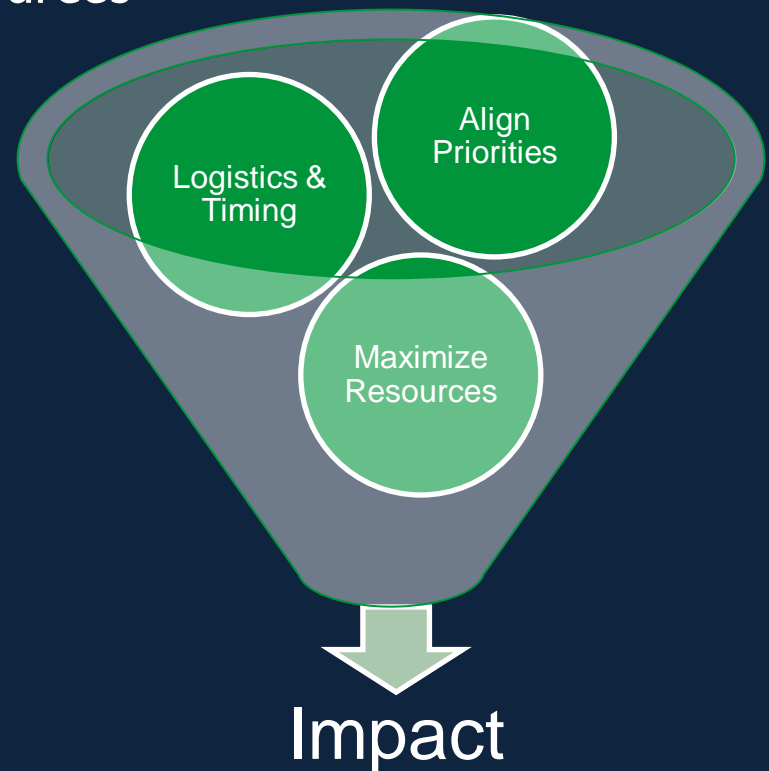
- Cross-Program Coordination
- Climate Change
- Environmental Justice

Overall Goal: Prioritize waters where TMDLs can provide needed analysis to promote effective pollution control and improve water quality where public health and aquatic life are most impacted.

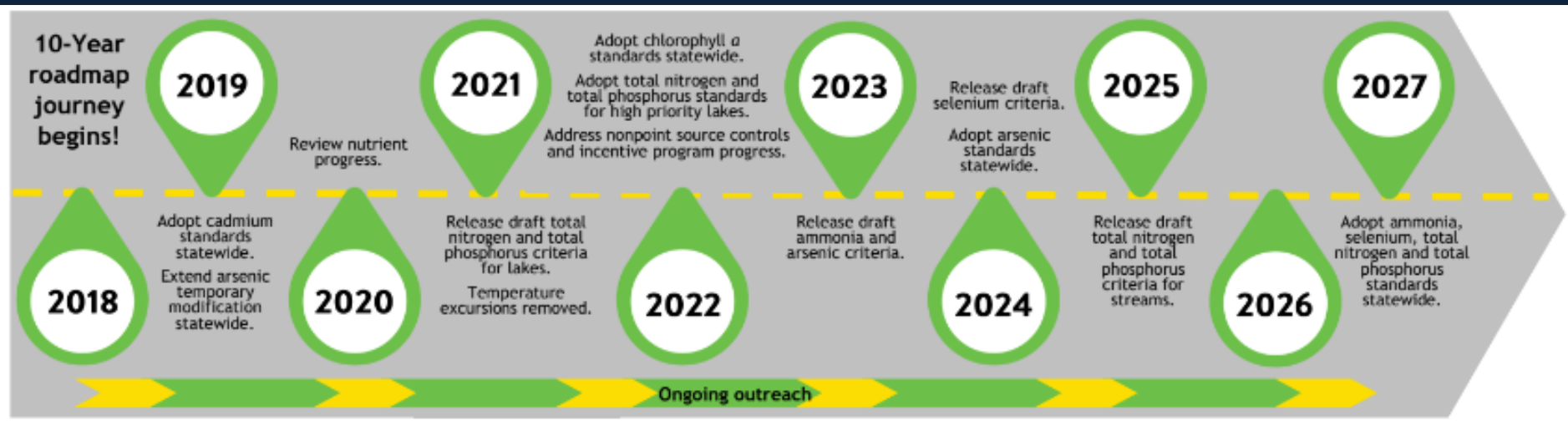


Cross-Program Coordination

- Clean Water Program Priorities → resources
- NPS Program Priorities → most implementable TMDLs
- Standards → timing
- Permits → resources



Colorado's 10-Year Water Quality Roadmap



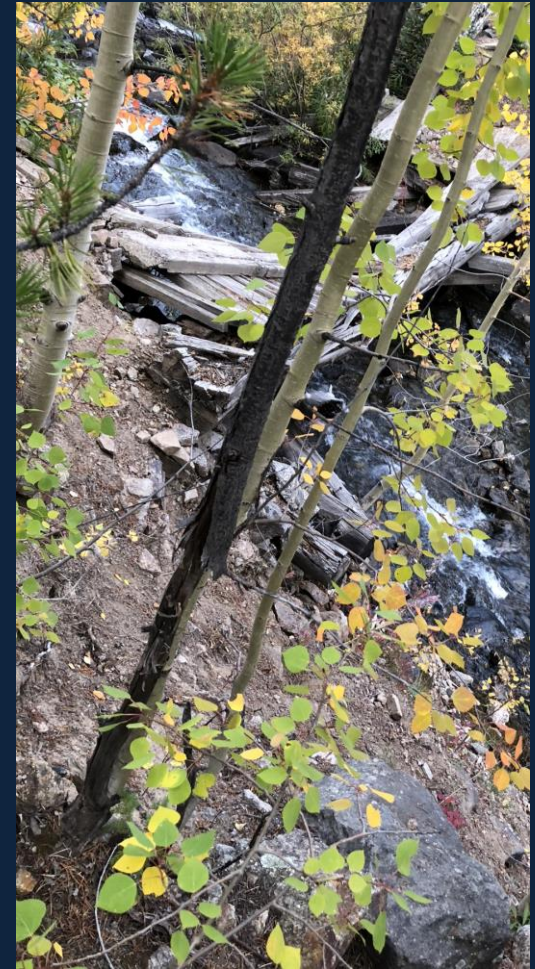
Considerations for standards revisions:

1. Certainty in the impairment status of 303d listings
2. Planning timeline for TMDL development

Nonpoint Source Priorities

NPS Program priorities inform where TMDLs are most implementable:

- Nutrients
- Selenium
- Wildfires and flooding
- Disproportionately impacted communities; and
- Unregulated stormwater runoff management



NPS Funding Trends



Abandoned Mine Land
Reclamation Projects



Agriculture BMP Projects



Wildfire and Flood Projects



Climate Change and TMDLs



Sediment TMDLs

- Wildfires are increasing in Colorado
- Stakeholder interest is high
- Opportunities to partner with federal and state agencies
- Colorado adopted numeric sediment criteria in 2014
- Opportunity to build modeling capacity for TMDL staff



Temperature TMDLs

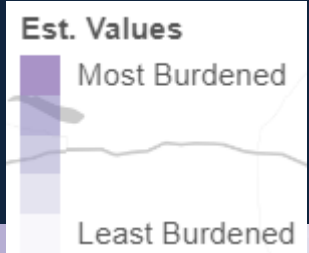
- >70 streams & lakes on 303d list for temperature
- Vision 2.0 will include Colorado's first temperature TMDLs
- Targeting implementable TMDLs
- Opportunity to build modeling capacity for TMDL staff
- Relevant for future nutrient TMDLs



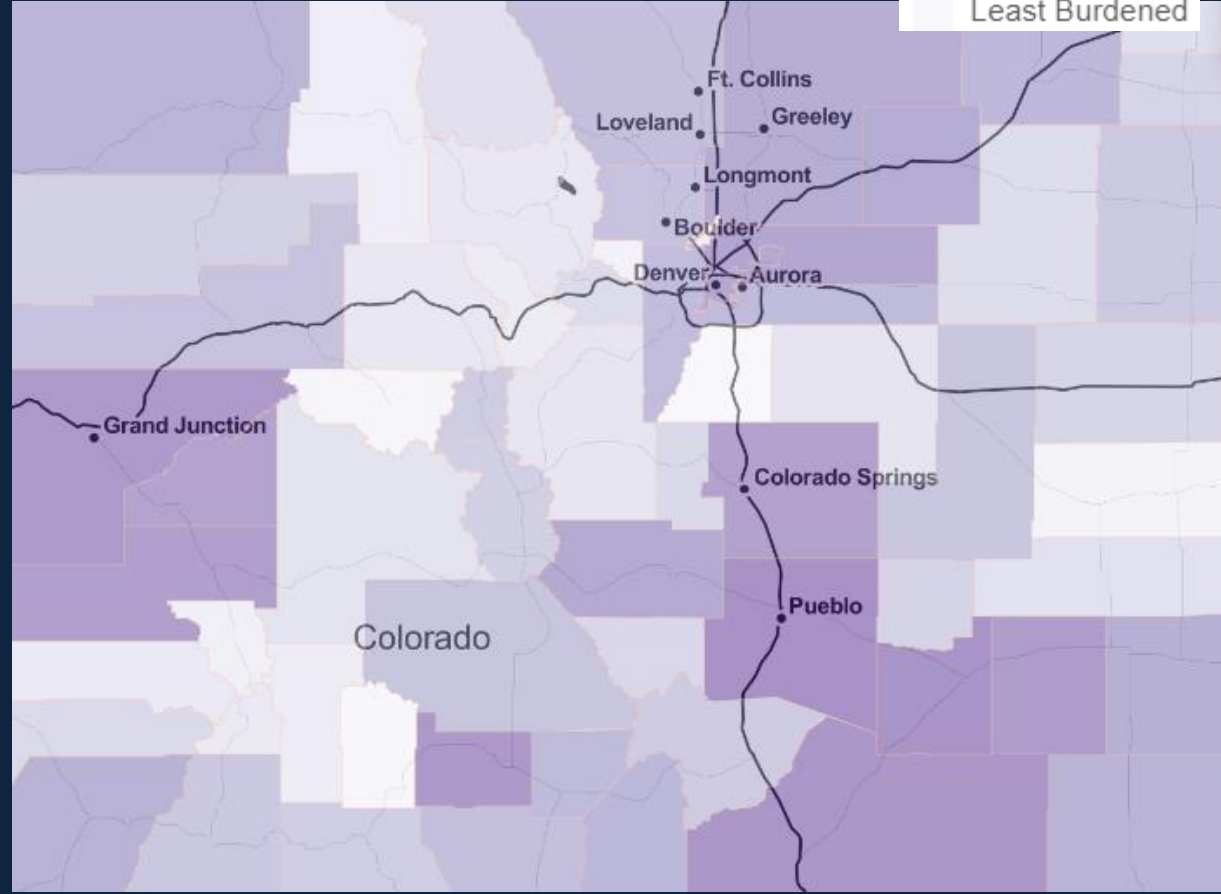
Environmental Justice and TMDLs



Colorado EnviroScreen



- Environmental Justice Mapping Tool
- Identifies areas with environmental inequities
- Collaboration between Public Health and Environmental Divisions

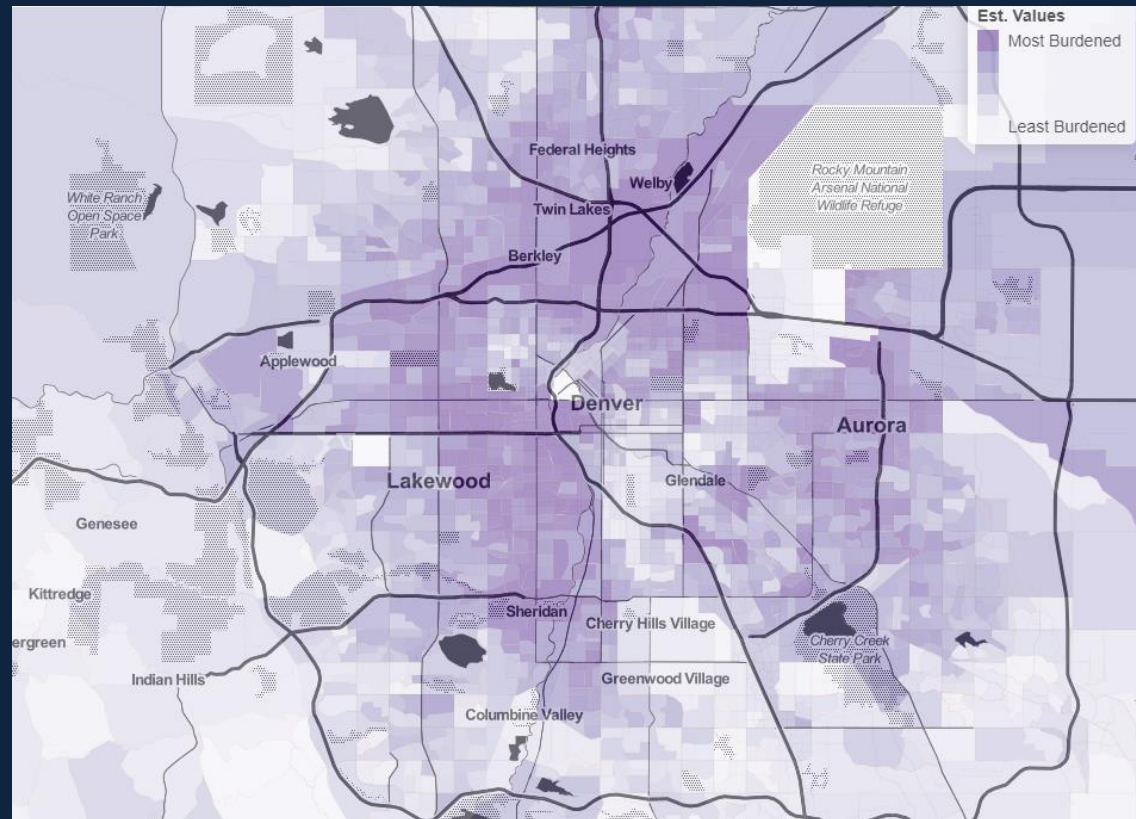


<https://cdphe.colorado.gov/enviroscreen>

Colorado EnviroScreen

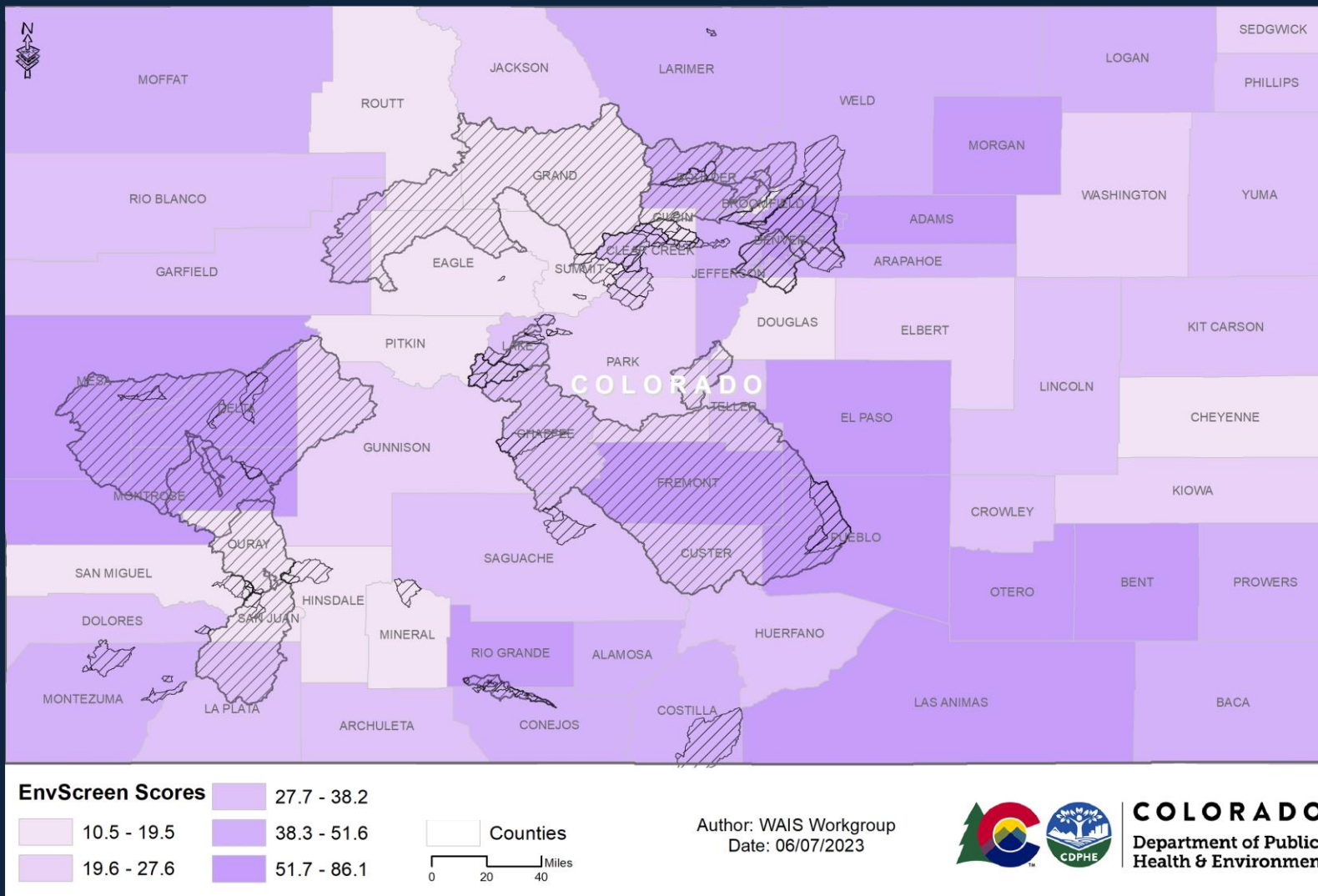
Numeric score based upon many factors, including:

- Cumulative Environmental Exposures: air pollution & drinking water
- Proximity to hazardous waste facilities, mines, oil & gas
- Proximity to impaired streams and rivers
- Health indicators: asthma rates, cancer prevalence, life expectancy, low birth weight



<https://cdphe.colorado.gov/enviroscreen>

Colorado Existing TMDLs and EnviroScreen



Environmental Justice and E. coli

- Prioritizing TMDL development for E. coli in urban streams
- Wadeable streams where local children play
- Direct human health risk that can be addressed through TMDL implementation
- Opportunity to reduce other stormwater pollutants through TMDL implementation



Closing Thoughts

Changes in Priority for Vision 2.0 TMDLs:

- Less focus on abandoned mine impacts and high altitude streams (metals impairments)
- More focus on watersheds with EJ disparities
- More focus on implementable TMDLs
- Incorporation of modeling to support implementation
- Anticipated challenges: new pollutants (temperature), urban stormwater, intermittent and ephemeral stream hydrology, indicator compounds (E. coli)



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