



Water Quality Monitoring

South Platte River Committee

June 10, 2026

**Protect, improve and promote the health and environment of
Denver**

DDPHE Water Quality Programs

Water Quality Monitoring

Mosquito Control

Water Conservation

Education & Outreach, and Policy



Water Quality Monitoring



Streams



Lakes



Macroinvertebrates



Green Infrastructure

Advancing Health Equity & Outcomes



Water Quality and Public Health

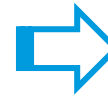
Pollutant Sources

- Stormwater Runoff
- Fertilizers
- Wildlife Waste
- Storm / Sanitary Cross Connections
- Industrial Discharge



Public Health Risks

- Chemical Contamination
- Microbial Contamination
- Harmful Algal Blooms
- Vector-Borne Disease



Key Interventions

- Enhanced Water Quality (WQ) Monitoring
- Vector Surveillance
- Public Advisories
- Public Education and Outreach

WQ Monitoring Program Goals

1. Evaluate health **risks** at sites with active recreation
2. Understand long-term **WQ trends**
3. Assess effectiveness of **interventions** to improve and protect water quality
4. Increase **awareness** of
 - Public health issues
 - Water quality issues
 - Actions people can take to protect water quality



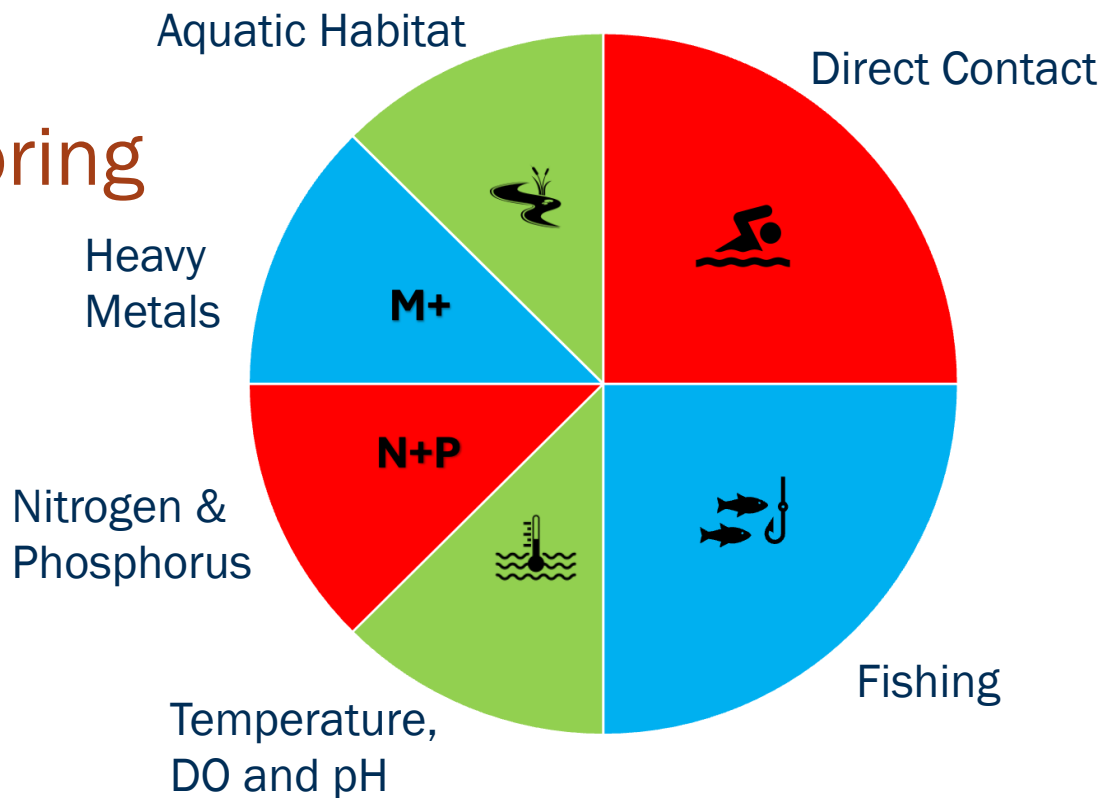
Risks & Trends: Common Pollutants



Graphic courtesy of City of Wilmington, NC

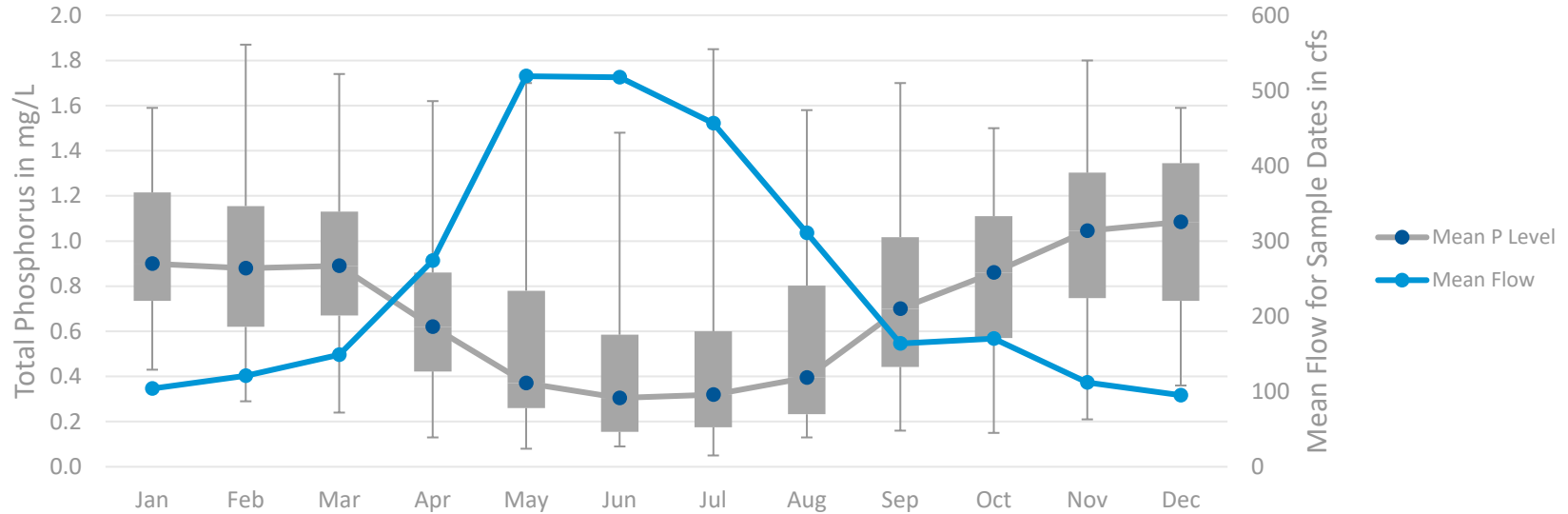
Risks & Trends: South Platte Monitoring

Color	Score	Rating
Green	95 – 100	Excellent
Blue	80 – 95	Good
Yellow	65 – 80	Fair
Orange	50 – 65	Marginal
Red	<50	Poor
Grey	No Data	None



Risks and Trends: Impacts of Drought on Water Quality

Phosphorus Levels in the South Platte River at Speer Blvd.



Interventions: Denver's Common Pollutants

E. coli

- End of Pipe Treatment (DOTI)
- Infrastructure Maintenance (DOTI)
- Education and Outreach (DOTI, DDPHE, DPR)



Nitrogen, Phosphorus

- Enhanced Street Sweeping (DOTI)
- Green Infrastructure (DOTI)
- Infrastructure Maintenance (DOTI)
- Phosphorus-Free Fertilizer (DPR)
- Education and Outreach (DOTI, DDPHE)
- Wastewater Plant Treatment Upgrades (Metro WW, SP Renew, others)

Sediment

- Green Infrastructure (DOTI)
- Enhanced Street Sweeping (DOTI)



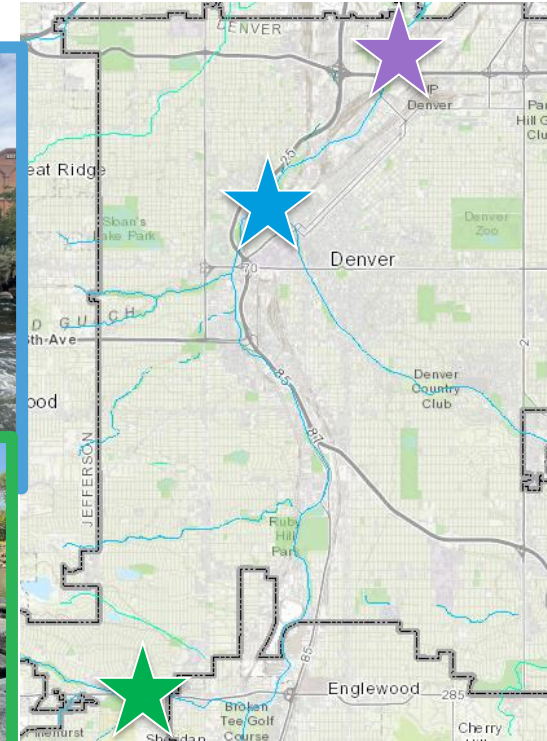
Trash

- Green Infrastructure (DOTI)
- Routine Trash Removal Along Trails (DOTI, DPR, MHFD)
- Education and Outreach (DOTI, DDPHE, other city partners)



Interventions: WQ Monitoring Innovations

- Installation of continuous monitoring stations in 2026
- Automation of data analysis and reporting



Awareness: Communications Strategies

- Seasonal Weekly Water Quality Data Email (internal only)
- Community Messaging
- Annual Report
- Outreach Events



Questions?

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