Colorado's Approach for Nutrients Management and Operator Training



Overview

- Colorado's nutrients management approach
- Voluntary incentive program
- Mentoring program approach
- Facility inventory





Colorado's nutrient management approach



Colorado's original nutrient strategy

Technology based regulation

- Tech based effluent limits
- Enhanced stormwater controls
- Voluntary nonpoint source controls
- Monitoring requirements

Traditional clean water act approach

- Interim numeric values
- Focus on protecting classified uses
- Applied to streams above discharges

EPA action on Colorado's nutrient package

- Approved chlorophyll 'a' criteria
- Approved with recommendations total phosphorus and total nitrogen criteria for lakes
- No action on total phosphorus and total nitrogen criteria for rivers and streams



Colorado's revised nutrient strategy

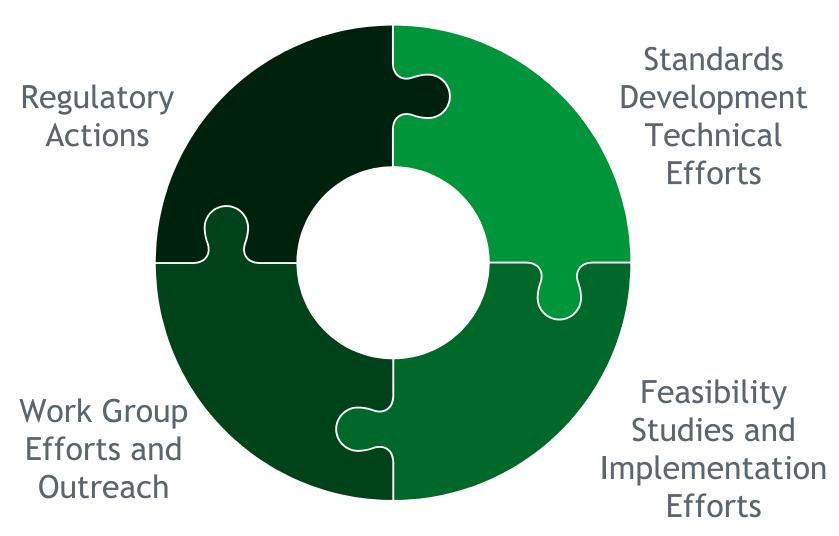
Technology based regulation

- Tech based effluent limits
- Enhanced stormwater controls
- Voluntary nonpoint source controls
- Monitoring requirements
- Voluntary incentive program

Traditional clean water act approach

- Focus on protecting classified uses
- Applied to streams above discharges
- Applied to a prioritized set of lakes
- Applied to protect municipal water supplies

10-year water quality roadmap

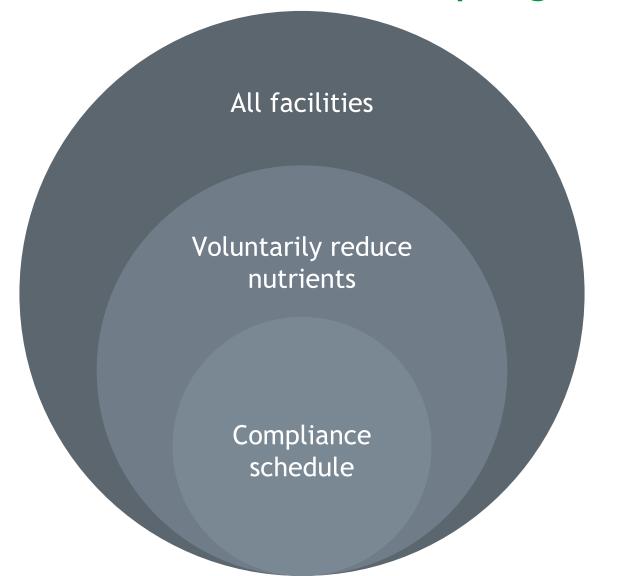




Voluntary incentive program



Overview of incentive program





Mentoring program intent

Experienced operators from regional WWTF assists with process operational changes

Small local WWTF receives incentive credits and prepares for 2027 nutrient standards

Program Partners

MENTORS

- Records review
- Site visit
- Site visit report
- Ongoing assistance
- Feedback to CPDHE

MENTEES

- Gather records
- ORC participation
- Commit to implementation schedule
- Feedback to CDPHE
- Pay it forward

CDPHE

- Develops templates
- Coordination
- Design capacity

Mentoring program goals



Rollout and status

Getting the word out		Implementation	
Regional roadshow	Direct outreach to facilities	In progress, target pilot by July 2018	Developing forms and templates

Preliminary feedback

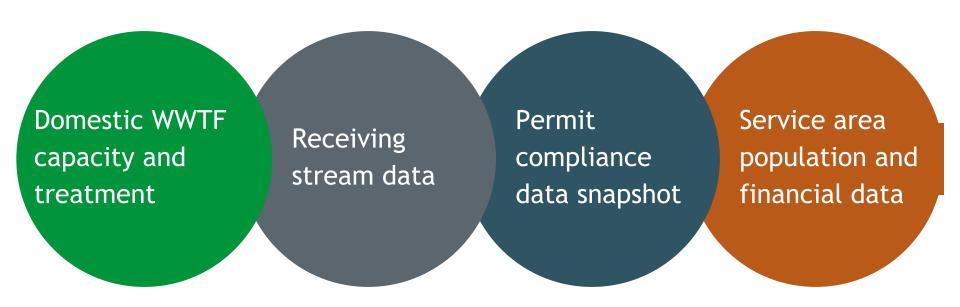
- Liability to mentors
- Risk/unintended impacts to other processes
- Misperceiving constructive criticism
- Operator workload concerns
 - Time limitations
 - Too few operators
- Outside of concerns operators highly interested
- Six responses from roadshow
 - 3 mentors and 3 mentees
 - Initial location challenges





Inventory project

Inventory project overview



Inventory project goals

- Determine Colorado's domestic WWTF universe
- Provide platform to query data
- Identify facilities likely to experience compliance challenges
- Proactively troubleshoot potential issues
 - treatment solutions
 - regulatory solutions
 - funding solutions



