Colorado's Approach for Nutrients Management and Operator Training

ACWA Nutrients Permitting Workshop
June 6, 2018
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

Regulatory Actions

Standards Development Technical Efforts

Work Group Efforts and Outreach

Feasibility Studies and Implementation Efforts
Voluntary incentive program
Overview of incentive program

All facilities

Voluntarily reduce nutrients

Compliance schedule
Mentoring program approach
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 CDPHE

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

CDPHE
- Develops templates
- Coordination
- Design capacity
Mentoring program goals

● Volunteer Mentors
  ○ Training Units for Operator(s)

● Participant Mentees
  ○ Training Units for Operator(s)
  ○ Opportunity to participate in V.I.P.
  ○ Ongoing assistance

● Water Quality Improvement

● Knowledge sharing/relationship building
Rollout and status

Getting the word out
Regional roadshow
Direct outreach to facilities

Implementation
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

- Domestic WWTF capacity and treatment
- Receiving stream data
- Permit compliance data snapshot
- Service area population and financial data
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