

# Colorado Water Reuse Regulations

Brandi Honeycutt, CDPHE  
Water Quality Control Division

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# What is Water Reuse?

- Broad term for using water more than once for beneficial purposes
- Different source waters
- “Fit for purpose” treatment
  - Recycled or reclaimed water
  - Graywater
  - Stormwater
  - Rainwater
  - Condensate
  - Produce water
- Potable water reuse



# Water Quality Control Commission Reuse Regulations

- Reg. 84
  - Reclaimed Water Control Regulation
- Reg. 86
  - Graywater Control Regulation
- Reg. 11
  - Colorado's Primary Drinking Water Regulations
    - Direct Potable Reuse Rule (11.14)

# Reg. 84 - Reclaimed Water

- Non-potable reuse
- Colorado
  - ~ 5 - 5.8 billion gallons annually
  - Landscape and industrial
  - 30 Treaters
  - 566 Users
- 20 uses
- 3 Categories (standards) and treatment
- Centralized vs. localized treatment systems

# Reg. 86 - Graywater

- Non-potable
- 4 classes of graywater
- 2 Uses
  - Single family Irrigation and toilet flushing
  - Commercial Irrigation and toilet flushing
- Locally enforced
  - 5 local ordinances



# Direct Potable Reuse

- Reuse for drinking, bathing and cooking
- Meets Federal regulations and MCLs for drinking water
- Advanced treatment techniques purify the water to make it safe for potable purposes

# Reg. 11 - Direct Potable Reuse Rule

- DPR Rule - 11.14
  - Application
  - Communications
  - Enhanced source control
  - Operations
  - Wastewater treatment control
  - Multiple barriers
    - Pathogens - Log reduction targets
    - Chemicals - indicator reduction by %

# Is DPR Safe? - Yes!



- We are a culture of health.
- Would not develop a DPR rule if we did not trust that it can be done safely.
- Purified water from a DPR process in CO will be rigorously tested to ensure it consistently meets or exceeds all public health standards.



# Public Perception

- “Toilet to tap”
- Critical to educate and involve public
- Demonstrations
- Messaging
  - De facto water reuse
  - “Purified water”



# Future of Reuse in CO

## Impediments

- Water rights
- Non-potable
  - Dual plumbing/distribution
  - Unknowns
- Resources and reg implementation
- DPR
  - Public perception?

## Opportunities

- A lot of options in our regs!
- Water sharing agreements
- CO still growing
  - New construction plan for reuse
- DPR
  - Water supply planning
  - Someone needs to go first