



COLORADO

Oil & Gas Conservation Commission

# Outline: What Do We Need from Scientific Research?

- Who are we and what do we do?
- Shared Authority in Colorado
- Regulatory Evolutions over 25 years
- How does science shape policy?

## Who are we and what do we do?

Directive: to regulate oil and gas development "in a reasonable manner to protect and minimize adverse impacts to public health, safety, and welfare, the environment, and wildlife resources and shall protect against adverse environmental impacts on any air, water soil, or biological resource resulting from oil and gas operations."

## Who are we and what do we do?

#### • Commission:

- 5 full-time Commissioners that bring their specific expertise to bear on COGCC decisions:
  - Priya Nanjappa Environment/wildlife
  - John Messner Local Government
  - Karin McGowan Public Health
  - Bill Gonzalez Oil & Gas
  - Jeff Robbins, Chair Good Decision Maker
- 2 ex officio, non-voting members:
  - Dan Gibbs, Department of Natural Resources
  - Shaun McGrath, Colorado Department of Public Health & Environment ("CDPHE")

## Who are we and what do we do?

#### Organization:

140 Staff Members

Leadership Team organized by discipline:

Deputy: Scott Cuthbertson

Environmental: Greg Deranleau

Permitting: Jane Stanczyk

Engineering: Dave Andrews

Compliance: Mike Leonard

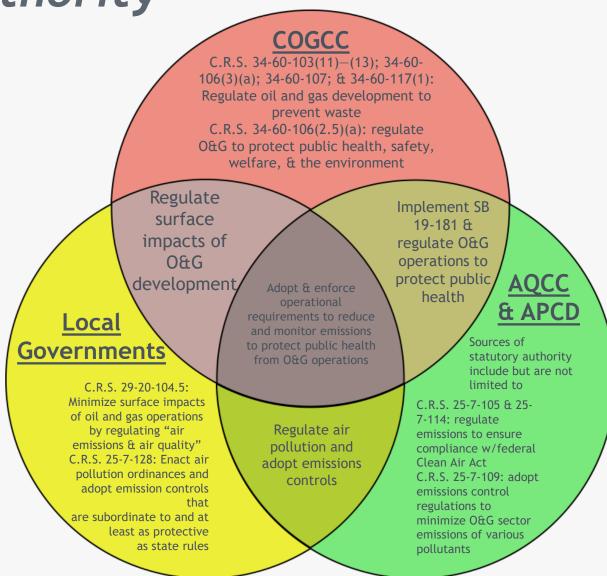
Regulatory: Mimi Larsen

Communications: Megan Castle

Finance: Jarrett Ellis

Shared Authority COGCC Regulate all aspects of oil and gas operations, including preventing waste of natural gas by regulating venting and flaring Downhole Implement SB 19-181 & aspects of regulate O&G Class II UIC operations to Wells protect public AQCC & health **Enforce** emissions **EPA** regulations for **APCD O&G** operations within Colorado • "Minimize" Adopt NAAQS emissions from oil and gas Adopt NSPS Ensure operations. **Adopt NESHAPs**  Air quality compliance with monitoring and NAAQS, NSPS, & data analysis **NESHAPs**  Issue permits under Title V of the federal Clean

**Shared Authority** 



# Regulatory Evolutions over 25 years

- 1996 COGCC adopts reclamation regulations
- 2002 COGCC begins to issue permits for surface impacts associated with oil and gas operations
- 2008 COGCC overhauls regulations in response to legislation reconstructing COGCC to achieve broader governance and increased consideration of and protection for the environment and wildlife
- 2011 COGCC requires disclosure of hydraulic fracturing fluids
- 2013 COGCC requires baseline and post-drilling groundwater sampling; establishes "setback" to limit impact of drilling near homes; and substantially tightens spill reporting and clean-up requirements
- 2014 COGCC overhauls plugging requirements & AQCC adopts regulations requiring methane emission reductions
- 2015 COGCC toughens enforcement and penalty structure and adopts increased protections for floodplains
- 2016 COGCC adopts rules requiring better coordination and consultation with local governments regarding oil and gas operations
- 2018 COGCC adopts comprehensive new regulations overseeing flowlines (i.e., the pipelines within COGCC's regulatory authority)
- 2019 General Assembly passes S.B. 19-181, which established a new mission and structure for COGCC and led to COGCC overhauling its regulatory requirements in 2020. Implementation work is ongoing, which includes additional rulemaking topics

# Overview of SB 19-181

#### Governor Polis signed SB 19-181 on April 16, 2019

- Reconstituted the COGCC governing structure
- Set a new mission for the COGCC i.e., Mission Change
  - From "fostering" oil and gas development
  - To regulating it in a manner to protect public health, safety, welfare, the environment, and wildlife resources
- Created new local government authority over surface impacts and siting
- Clarified compensatory mitigation requirements
- Directed COGCC to undertake numerous rulemakings
- Required Air Quality Control Commission to strengthen oil and gas emissions regulations



# SB 19-181 Required Rulemakings

- 500 Series (COGCC hearing process)
  - Adopted July 2019
- Flowlines (pipelines that COGCC regulates)
  - Adopted November 2019
- Wellbore Integrity (groundwater protection)
  - Adopted June 2020
- Mission Change, Alternative Location Analysis, Cumulative Impacts, & Wildlife
  - Adopted November 2020
- Financial Assurance in process
- Permit Application Fees & Worker Certifications TBD



# New Regulatory Requirements for Water

#### Avoid Impacts through setbacks and planning

- Prohibition on development within 1,000 feet of a surface or groundwater public water supply intake
- Prohibition on development in proximity to certain high-priority aquatic habitats
- Requires hydrology map
- Incentivizes avoiding development within a floodplain, a surface water supply area, 2,640 feet of a public water system well, within High Priority Habitat, or within or immediately up-gradient from a wetland or riparian corridor by requiring Alternative Location Analysis
- Tracking development near surface waters through COGCC cumulative impacts database (CIDER)
- Notice and consultation with public water suppliers
- Protection for wetland impacts by requiring showing of approval to disturb wetlands from appropriate federal, state, or local authority
- Incentivizing water reuse & recycling, which eliminates use of fresh water, through better planning and tracking

#### Minimize Risk of Impacts

- Required protections for development within ½ mile of a public water supply or within a floodplain
- Robust wellbore construction, wellbore integrity monitoring & testing, and plugging requirements
- Enhanced secondary containment requirements
- Prohibition on certain chemicals in fracking fluids

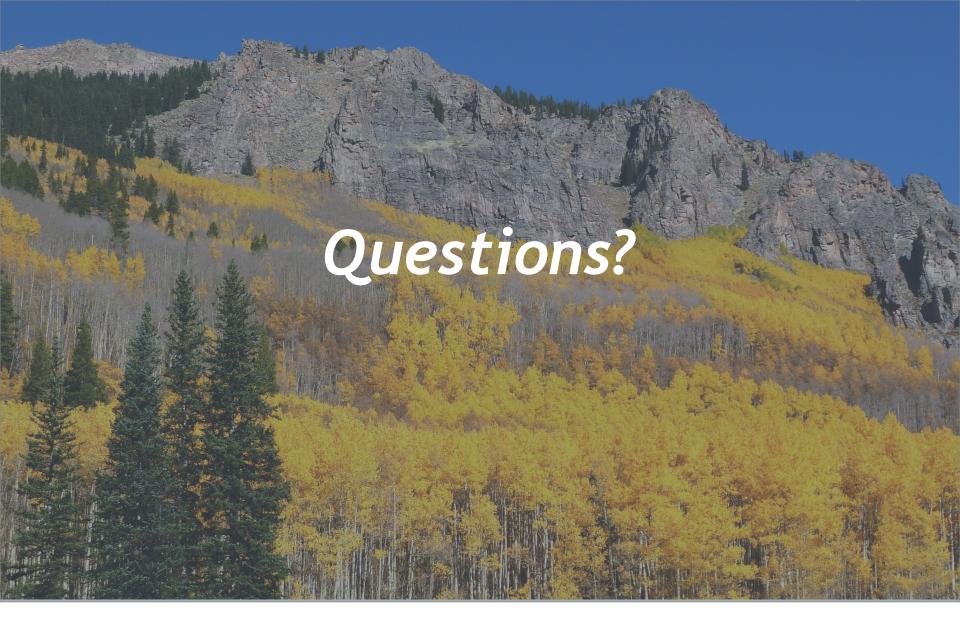
#### Mitigate Impacts

- Enhanced spill response requirements to avoid off-site impacts
- Robust wellbore, tank/equipment, and flowline integrity management protocols
- Tracking and reporting of certain chemicals stored on-site to inform action by first-responders



# How Does Science Shape Policy?

- Methane Regs policy driving scientific innovation
- Wellbore Integrity Regs surveying best regulatory practices & technical innovations
- CIDER collecting data for research to drive policy innovation







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