

SB23-186

Consultation with Huerfano County
ECMC and WQCD

March 12, 2024



COLORADO

**Energy & Carbon Management
Commission**

Department of Natural Resources

SB23-186 Directives

Directs ECMC and WQCD to conduct a study of two main issues

1. Systematically and Proactively identify methane seepage and measure seepage rates
2. Evaluate the quality of water produced from Coalbed Methane operations in the Raton Basin

SB23-186 Directives

Consultation and Collaboration:

State Agencies:

Colorado Energy Office

Division of Water Resources

Division of Mining, Reclamation, and Safety

Colorado Parks and Wildlife

Local Governments:

Las Animas County

Huerfano County

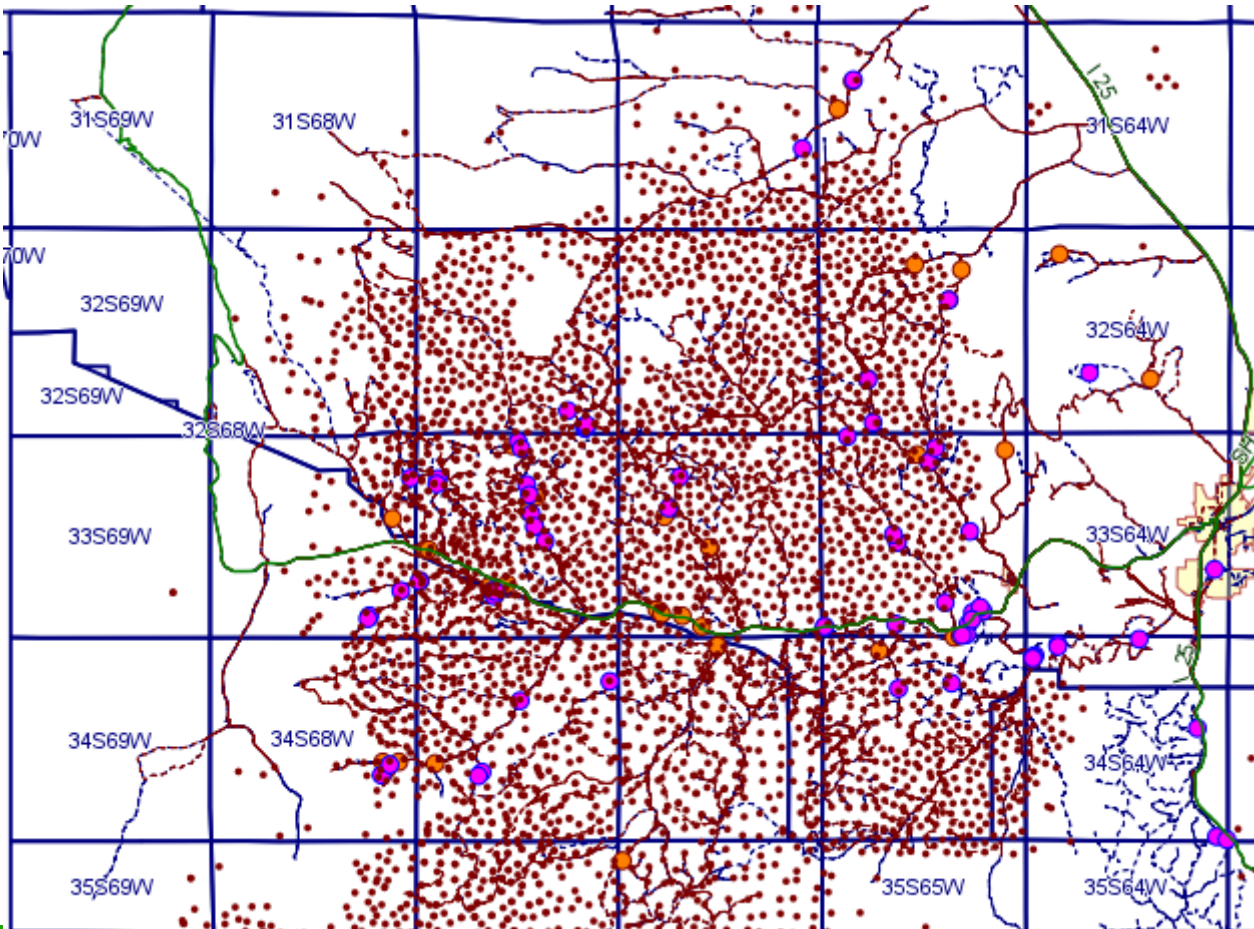
Methane Seepage Mapping

- Proactively and Systematically locate and survey methane gas seepage
- Document Previous Areas of Seepage
- Calculate differences in seepage amounts
- Assess the potential of methane to create hazardous conditions



Methane Seepage Mapping

Locate and survey methane seepage



Effort in Process

- Evaluate existing data.
- Driving Surveys
- COGCC Rule required surveys
- Geologic Data

May-June 2024

- Conduct Aerial Survey – Gas Mapping LiDAR in a subset of the basin

Map image from COGIS GIS Online

Methane Seepage Mapping

Measuring Seepage Rates

July 2024

- No baseline data for comparing changes
- Collect seepage gas samples
- This project is a starting block



Images from www.portablefluxmeter.com



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Methane Seepage Mapping

Data review, compilation and reporting

Fall 2024 – Winter 2025

- Summary report with maps of seepage areas and seepage rates
- GIS of summary report for easier viewing
- Incorporated into final legislative report

Water Quality Study

Data review, sampling, analysis and reporting

Spring 2024

ECMC and WQCD have contracted firms to aid in data evaluation and reporting

- ECMC currently working with contractor to evaluate existing data set
- Existing CMB produced water data
- Existing Domestic Water Well data
- Existing WQCD NPDES discharge data
- Other potential sources

Water Quality Study

Data review, sampling, analysis and reporting

Spring 2024

ECMC and WQCD have contracted firms to aid in data evaluation and reporting

June-July 2024

Additional Data Collection
Based on Identified needs or data gaps

Fall 2024- Winter 2025

Data analysis and reporting by contracts with review by ECMC and WQCD Staff

Questions and Feedback

<https://ecmc.state.co.us/about.html#/contacts>



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