STATE OF COLORADO
OIL & GAS
CONSERVATION COMMISSION

DEPARTMENT OF NATURAL RESOURCES
Bill Ritter, Jr., Governor
1120 Lincoln St. Suite 801
Denver, CO 80203
Phone: (303) 894-2100
FAX: (303) 894-2109
www.colorado.gov/cogcc

To: Colorado Oil and Gas Conservation Commissioners

From: Colorado Oil and Gas Conservation Commission Staff

Dated: January 12, 2011

As you requested at your September 2010 hearing, this memorandum will address the possibility of preparing one or more Geographic Area Plans (GAPs) under Commission Rule 513 during the current year.

Rule 513 imposes few requirements on GAPs. Rule 513.a states that GAPs are "intended to enable the Commission to adopt basin-specific rules that promote the purposes of the Act." Rule 513.b specifies that GAPs "shall cover an entire oil and gas field or geologic basin, likely encompassing the activities of multiple operators, in multiple sub-basins or drainages, over a period of ten (10) years or more." Rule 513.c. provides that GAPs are adopted through formal rulemaking, which must include local notice, public comment, and a public hearing. It also requires consultation with the Colorado Department of Public Health and Environment, the Colorado Division of Wildlife, and local governments, and it further states that GAPs may include development scenarios, designate units, adopt spacing orders, implement sampling or monitoring plans, or require consolidation of facilities.

The Commission staff has solicited input from a variety of stakeholders on whether the Commission should prepare one or more GAPs during the current year. The San Juan Citizens Alliance (SJCA), Anadarko Petroleum Corporation, and the Nature Conservancy responded, and copies of their responses are attached. The SJCA urged the Commission to prepare a GAP for Gothic Shale development in southwestern Colorado. Acknowledging that little development is currently occurring in that area, the SJCA recommended that a GAP could nevertheless "proactively address[] potential problems in an effort to avoid detrimental impacts," and that the Commission now enjoys a "window of opportunity to gather and analyze data, establish baselines, and create guidelines for development without . . . having to issue APDs at a time of high activity." Anadarko warned that a GAP for the Niobrara play in northeastern Colorado would be premature at this time. Explaining that this area is in a "very early and highly competitive stage," Anadarko cautioned that the "scale and scope of future operations" cannot be predicted yet nor are all of "the significant stakeholders" known. The Nature Conservancy supported the creation of GAPs for the Niobrara and Gothic Shale plays. The Conservancy echoed SJCA's concerns about the Gothic Shale and warned that northeastern Colorado contains key wildlife habitats that are "sensitive to fragmentation" and have been "the focus of past conservation efforts by local and statewide land trusts."

The Commission staff recommends that the Commission not consider this issue in isolation, but in conjunction with other program priorities, opportunities, and responsibilities for the current year. At this time, the staff remains extremely busy with permitting, production reporting, reclamation projects, inspections, enforcement, inter-agency coordination, and various other

DEPARTMENT OF NATURAL RESOURCES: Mike King, Executive Director
COGCC COMMISSION: Richard Alward – Thomas L. Compton – DeAnn Craig – Mark Cutright – Michael Dowling – Joshua B. Epel – Trési Houpt – Mike King – Martha Rudolph
COGCC STAFF: David Neslin, Director – Margaret Ash, Field Inspection Manager – Debbie Baldwin, Environmental Manager –Carol Harmon, Hearings Manager – Mark Weems, Engineering Manager

ongoing matters. In addition, the Commission previously deferred action on several other matters either to allow additional time for consensus building or because of budget and staffing limitations. Those matters included potential application of the amended rules to gas storage and pipeline projects and midstream operations as well as other possible amendments addressing well setbacks, reclamation standards, wildlife best management practices, riparian areas, and local government regulation. They also included future studies relating to the potential environmental effects of oil and gas development. Preparation of one or more GAPs during 2011 could affect both the staff's work on ongoing matters and its ability to undertake other initiatives during the year. Therefore, the staff recommends that the Commission seek to establish its priorities for 2011 and consider the GAP issue as part of that exercise. To that end, the Commission staff provides the following initial comments on several possible GAPs:

The Gothic Shale. Although the Commission staff agrees that advance planning can be beneficial, it remains concerned that preparation of a Gothic Shale GAP would be premature at this time. During 2010, the area accounted for less than 1% of the drilling permits issued and wells started in the state, and there are several other relatively undeveloped areas experiencing comparable or greater levels of exploration. Only a handful of wells have been drilled in this area, and more information would be useful on well spacing, surface facilities, water needs, waste generation, ancillary facility requirements, and other issues. Otherwise, development of a GAP could prove to be a largely speculative undertaking. In addition, the Commission staff is already taking steps to collect baseline ground water quality data in the area and to monitor permit applications and drilling activity. If the Commission wished, the collection of such data could be further formalized through a field-specific regulation or order without undertaking an extensive GAP.

The Niobrara Play. The Commission staff is concerned that it would be premature to initiate a GAP on the Niobrara play at this time. Although the level of current activity exceeds that of the Gothic Shale, well spacing, density, and development patterns are still evolving and operators are still in an exploratory phase. As with the Gothic Shale, more information would help to make a Niobrara GAP more productive and predictive and less speculative. However, the Commission staff does believe that it would be prudent to have operators begin collecting baseline ground water quality data for the area, and the staff is working with operators and other stakeholders to develop sampling guidance for this purpose. The staff also anticipates speaking with operators about the development in this area of waste management plans, which are optional throughout the state under Rule 907a.(3), and possible alternatives to flaring natural gas under Rule 912. The common objective behind all three issues, ground water sampling, waste management planning, and alternatives to gas flaring, is to ensure that reasonable, technologically available, and cost-effective measures are taken in connection with exploratory activities in this area. As with the Gothic Shale, these issues could be dealt with through a field-specific regulation or order if the Commission wished, without undertaking an extensive GAP. Such an effort, could also conceivably address other exploratory areas.

The Piceance Basin. The Commission staff believes that a limited GAP on the Piceance Basin that addresses only well spacing, well density, and ground water sampling could provide several benefits. Such a GAP could be similar to certain portions of Rule 318A, the Greater Wattenberg Area Special Well Location, Spacing and Unit Designation Rule, and Rule 318B, the Yuma/Phillips County Special Well Location Rule, which address well locations and density, and, in the case of Rule 318A, ground water sampling. Those rules have proven successful in the DJ Basin in increasing predictability and consistency, improving regulatory efficiency, and reducing the number of Commission hearings, and the staff believes that similar benefits could be attained in the Piceance Basin. Although some operator attorneys have urged that most of

the Piceance Basin is already spaced, the Commission considered 21 spacing and well density applications for that area in 2009 and another 31 such applications in 2010. This accounted for more than 50% of all spacing and well density applications that the Commission considered during the past two years, which suggests that it would be beneficial to address spacing and density. Although a number of Commission orders and location assessments require ground water sampling in certain areas or for certain wells, such requirements are of limited scope. Accordingly, it would be beneficial to address ground water sampling as well.