

**MINUTES OF THE REGULAR MEETING OF THE
ARAPAHOE COUNTY PLANNING COMMISSION
TUESDAY, SEPTEMBER 17, 2024**

ATTENDANCE	<p>A regular meeting of the Arapahoe County Planning Commission (PC) was called and held in accordance with the statutes of the State of Colorado and the Arapahoe County Land Development Code.</p> <p>The following Planning Commission members were in attendance: Rodney Brockelman; Brooke Howe; Kathryn Latsis; Randall Miller; Richard Sall; Lynn Sauve, Chair.</p> <p>Also, present were Ava Pecherzewski, Current Planning Manager (Moderator); Molly Orkild-Larson, Principal Planner; Loretta Daniel, Long Range Planning Manager, Larry Mugler, Planner and Kim Lynch, Planning Technician.</p>
CALL TO ORDER	<p>Ms. Sauve called the meeting to order at 6:30 p.m. and roll was called. The meeting was held in person and through the Granicus Live Manager platform with telephone call-in for staff members and public.</p>
GENERAL BUSINESS ITEMS:	
APPROVAL OF THE MINUTES	<p>The motion was made by Mr. Brockelman and duly seconded by Mr. Miller to accept the minutes from the August 20, 2024, Planning Commission meeting, as submitted.</p> <p>The vote was:</p> <p>Mr. Brockelman, Yes; Ms. Howe, Yes; Ms. Latsis, Abstain; Mr. Miller, Yes; Mr. Mohrhaus, Absent; Mr. Sall, Yes; Ms. Sauve, Yes.</p>
STUDY SESSION ITEMS:	
ITEM 1	<p>WATER SUPPLY STUDY UPDATE – LARRY MUGLER, PLANNER / PROJECT SPECIALIST – PUBLIC WORKS AND DEVELOPMENT (PWD)</p> <p>Mr. Mugler introduced the Water Supply Study (Study) consultants Mr. Will Koger of Forsgren Associates, Mr. Bill Fronczak of LRE Water (attending by call-in) and Ted Heyd of Michael Baker International to present a progress report of the Study. He stated the purpose of the Study was to understand present and future conditions of water supply and demand, to identify efficiencies that could be achieved, and to take steps through comprehensive planning, development review, and regulatory processes to encourage best practices for water demand management, water efficiency, and water conservation. He said the overall intent of the Study was to ensure that land use decisions were made based on balancing the efficient use of limited water supplies with the needs of new residents, businesses, and industry to have a reliable water supply. He added another important consideration was to develop an approach to evaluate the water supply for new development at an earlier stage in the development process. He outlined the goals of the Study as follows:</p>

1. Close potential gaps between future supply and demand;
2. Improve water use efficiency; and
3. Extend the life of Denver Basin aquifers to sustain a long-term supply.

Mr. Koger reported the Study had a planning horizon of 2050 and expanded on the scope of an earlier water study completed in 2001 and which was incorporated into the 2001 Arapahoe County Comprehensive Plan. He explained Recommendations from this Study would be used to update the goals, policies, and strategies in the 2018 Water Supply Study as well as lead to new regulations in the Land Development Code. He provided an overview of the Study’s 10 sections:

1. Introduction. This section explains the goals and objectives of the study and introduces the interactive map developed for this Study.
2. Stakeholder/Public Participation. An Advisory Committee was established with representatives of water providers and land use planners in the county’s jurisdictions. Public engagement consisted of a survey and three public meetings which provided opportunities for the public to identify their concerns and provide ideas.
3. Land Use & Socioeconomic Scenarios. Two growth scenarios were developed, in part based on the 2023 Colorado Water Plan. The projections include population and employment growth.
4. Water Providers. This section provides an overview of the water providers in the county and their service areas.
5. Projected Water Demands. Using the growth scenarios of Section 3, water demands were estimated for the water providers’ service areas.
6. Groundwater Analysis. This section identifies the available groundwater sources in the county and describes the results of the Petra modeling.
7. Water Supplies vs. Demands. This section uses the information and data in the previous water demand and groundwater supply information to compare water supplies to demands and identify potential gaps.
8. Water Management Strategies. Strategies such as water conservation are analyzed in detail and estimates of potential reductions are provided. The role of water reuse is also explained.
9. Recommended Policies. The Study concludes with policies for the County to implement.
10. Implementing Recommendations. This is a summary of the recommended policies and actions.

Mr. Koger described how the consultant team identified an approach using production factors based on the Petra modeling for the four Denver Basin aquifers in consideration. He summarized the previous actions and discussions about the 100-, 200-, and 300-hundred-year “rules” for groundwater:

1. State law limits groundwater withdrawals to one percent per year with the intent that the well lasts 100 years. This is often referred to as the “100-year rule.”

2. The County's 2001 Comprehensive Plan had a policy that limited wells to 50 percent of the state's one percent per year. This would extend the life of a well to 200 years.
3. The Planning Commission directed that the 2018 Comprehensive Plan include a policy with a goal of having wells last 300 years or implement a "300-year" rule.

Mr. Heyd described the results of the public outreach and reported on the results of the survey. He said there were 498 respondents who returned 15,681 survey data points. Respondents indicated a concern about future water supply (63%), an interest in participating in home water recycling systems (34% already had a system), willingness to change landscaping to reduce water use (27% planned to do so) and 33% would like to but expressed concerned about the associated cost of implementing these home water recycling systems.

Mr. Koger described the increased demand projections for population growth, estimated demand, and the supply that would be available to meet demand in 2050. He suggested with more conservation efforts in the future we could reduce the demand with respect to the expected supply. He explained how groundwater availability was estimated by how much groundwater was physically available. He cautioned that theoretical data differed dramatically from what was accessible and retrievable (and therefore economically feasible). He reported that study data indicated a lower production rate than what the state said was possible. He added that 2/3rds of the supply available was located in the deepest aquifer and noted that was more difficult to access (expensive) and was sometimes of questionable quality. He concluded that variable demand and actual population growth could actually result in an increase in effective technologies and other strategies to conserve the limited supply. He concluded the study would make 10 recommendations and focused on the following five:

- AP1: Production Factors Recommendation – very specific to AC
- AP2: Connected Systems – collaborative public water systems
- AP3: Early water Evaluation Plan
- AP8: Groundwater systems best practices – supports the centralization of wells. Newer wells deeper, shallower available to existing users
- AP10: Graywater HB24-1362 encourages the adoption of greywater treatment systems during construction.

He confirmed neither the policies from the 2001 nor 2018 Comprehensive Plans had yet been incorporated into the Land Development Code. He said the approach developed by the consultant team for the Study was based on the productivity of the aquifers in the county since the various aquifers had different groundwater availability. He stated they have proposed applying production factors for each aquifer that would reduce the allowable annual withdrawals by 27 to 71 percent, depending on the aquifer source. As an average for the four aquifers, the production factor was only 59 percent of the state's calculations. He concluded these different "rules" had implications for the density of development. He gave an example, if a hypothetical parcel for development consuming groundwater was developed based on:

	<ul style="list-style-type: none"> a. The state’s “100-year” rule, 100 residential units could be developed; b. The consultant’s recommended allocation of 59 percent, 59 residential units could be developed, which would translate into a “170-year” rule; c. A “200-year” rule, 50 residential units could be developed; and d. A “300-year” rule, 33 residential units could be developed. <p>Mr. Mugler said following this and the BOCC study session, the draft Water Supply Study would be posted on the project website (www.arapahoeco.gov/waterstudy) for review and comment by the public during the month of October. He said staff sought the Planning Commission’s comments on the draft Water Supply Study before the public review period in October and given the detailed nature of the Study, he realized that more time might be needed for review of the Study, and the Commission’s comments could be provided at the end of September.</p> <p>There was discussion regarding the following:</p> <ul style="list-style-type: none"> • How would we at the county reconcile rights to the water? • How does the county see these recommendations with respect to affordability? • What about the existing well-septic systems? • Would the county consider increasing lot size for well/septic? Would there be a zoning change required? • Was there currently any state-level assistance available? <p>Mr. Mugler said we could reduce the effect on rights by recommending a lesser rate of withdrawal which could mean limiting the number of units to be developed within the confines of the aquifer production factors. He qualified this to mean what could be drilled and produced with today’s technology. He said that regarding affordability we should be encouraging our developers to find renewable resources and reserve existing groundwater as a drought backup. The representative from Pure Cycle affirmed that existing well-septic systems would be allowed but not required nor would they be discouraged at the county level. Mr. Mugler responded to the lot size and zoning questions by stating at this point the study was more focused on the output, not the input but agreed the County should be taking a further look and encouraging deeper community wells rather than deeper individual wells. He noted that state-level assistance was currently available for xeriscaping and turf removal. He thanked the PC for their input and stated their comments would be noted and shared with the BOCC at the time of the next study session with them.</p>
<p>ANNOUNCEMENTS</p>	<p>Ms. Orkild-Larson announced the next PC meeting on October 1, 2024, was canceled. She reminded the PC that the Landscaping LDC Amendment Public Hearing and Oil & Gas Regulations Amendment Study Session would be held on October 15th at the Prince St. Administration Building East Hearing Room at 6:30 p.m.</p>

ADJOURNMENT	There being no further business to come before the Planning Commission, the meeting was adjourned.
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