

MINUTES

1. Call to Order

Mayor Daggett called the Joint Special Meeting of the Flagstaff City Council and Water Commission held October 23, 2025, to order at 3:31 p.m.

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this special meeting, the City Council may vote to go into executive session, which will not be open to the public, for discussion and consultation with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

2. Roll Call

NOTE: One or more Councilmembers may be in attendance through other technological means.

Present: Mayor Becky Daggett
Vice Mayor Miranda Sweet
Councilmember Austin Aslan (arrived 3:35 p.m.)
Councilmember Anthony Garcia
Councilmember Khara House
Councilmember Lori Matthews
Councilmember David Spence
Water Commission Chair Ron Doba
Water Commission Vice Chair Donald Bills
Water Commissioner Matthew Garcia
Water Commissioner John Nauman
Water Commissioner Robert Vane
Water Commissioner Karin Wadsack

Absent: Water Commissioner Haley Paul
Water Commissioner Ian Sharp

Staff Present: City Manager Greg Clifton; City Attorney Sterling Solomon

3. Pledge of Allegiance, Mission Statement, and Land Acknowledgement

The Council, Commission, and audience recited the pledge of allegiance, Mayor Daggett read the Mission Statement of the City of Flagstaff, and Councilmember Matthews read the Land Acknowledgement.

MISSION STATEMENT

The mission of the City of Flagstaff is to protect and enhance the quality of life for all.

LAND ACKNOWLEDGEMENT

The Flagstaff City Council humbly acknowledges the ancestral homelands of this area's Indigenous nations and original stewards. These lands, still inhabited by Native descendants, border mountains sacred to Indigenous peoples. We honor them, their legacies, their traditions, and their continued contributions. We celebrate their past, present, and future generations who will forever know this place as home.

Mayor Daggett acknowledged and thanked all the partners who were in attendance at the meeting. She then invited Dorothy Denetsosie Gishie to provide a Navajo blessing for the meeting.

4. Exploring a Regional Water Supply for Flagstaff and Partners: Presentation by the U.S. Bureau of Reclamation (BOR)

Water Resources Manager Erin Young, Sustainability Director Nicole Antonopoulos, and Del Smith with the Bureau of Reclamation provided a PowerPoint presentation that covered the following:

REGIONAL WATER SUPPLY PLANNING & WORK WITH BUREAU OF RECLAMATION
PURCHASE OF RED GAP RANCH
CITY INVESTMENT & DUE DILIGENCE
WATER PLANNING EVALUATIONS
TIMELINE AND TODAY'S PRESENTATION

Councilmember Matthews asked the percentage of water lost from the Pipeline Fire. Ms. Young stated that the Inner Basin water supply was typically used from April or May through September each year. During the summer months, it provided up to 20% of the city's total water supply. Following the Pipeline Fire, the city lost access to that supply for about two years, resulting in a loss of roughly 20% of summer water capacity each year during that period.

POWER GENERATION POTENTIAL
FUTURE REGIONAL WATER SUPPLY FOR NAVAJO NATION, FLAGSTAFF AND OTHER USERS
WATER SUPPLY SOURCES FOR THIS STUDY
PRESENTATION AGENDA
TEAM MEMBERS FOR THIS STUDY
BACKGROUND
PURPOSE OF ANALYSIS "GOAL"
NAVAJO NATION CONCERNS AND OPPORTUNITIES
FLAGSTAFF CONCERNS
FLAGSTAFF OPPORTUNITIES
REGIONAL OPPORTUNITIES AT RED GAP RANCH
RECLAMATION INVOLVEMENT
RECLAMATION'S VALUE PROGRAM -- PURPOSE
VALUE ANALYSIS (VA)
MAJOR BENEFITS
PHASE II: VALUE STUDY WORK SHOP JOB PLAN
WATER RESOURCES PLANNING
APPRAISAL STUDY
RECLAMATION'S VALUE PROGRAM -- OBJECTIVES
VALUE PLANNING PROCESS
PHASE I: SITE VISIT LOCATIONS
1-PREPARATION PHASE
2-INFORMATION PHASE
3-FUNCTION ANALYSIS -- RED GAP RANCH FAST DIAGRAM
4-CREATIVITY: 146 IDEAS GENERATED
5-EVALUATION: WEIGHTED CRITERIA MATRIX
6-DEVELOPMENT OF ALTERNATIVES: CONSIDERATIONS
ALTERNATIVES
ALTERNATIVE 1: BASELINE
ALTERNATIVE 1 -- ADVANTAGES AND DISADVANTAGES

ALTERNATIVE 1A -- PUMPING MUNICIPAL WELLS AT RGR WITH TREATMENT AT RGR
ALTERNATIVE 1B -- PUMPING MUNICIPAL WELLS AT RGR WITH TREATMENT AT TWIN ARROWS
ALTERNATIVE 1C -- PUMPING MUNICIPAL WELLS AT RGR WITH TREATMENT AT FLAGSTAFF
ALTERNATIVE 2 -- ALTERNATIVE 1 (A, B, OR C) WITH AQUIFER STORAGE AND RECOVERY (ASR)

Councilmember Matthews asked if piping brine 40 miles was an issue. Doug Smith with Jacobs Engineering stated that the piping would likely be a steel pipe with a cement mortar lining. They evaluated the water chemistry and it was not going to be that aggressive to the cement mortar lining.

ALTERNATIVE 2 -- ADVANTAGES AND DISADVANTAGES
ALTERNATIVE 2A -- ALTERNATIVE 1 WITH ASR AT RGR
ALTERNATIVE 2B -- ALTERNATIVE 1 WITH ASR AT FLAGSTAFF
ALTERNATIVE 3 -- EXPAND CITY OF FLAGSTAFF WELLS NEAR FLAGSTAFF
ALTERNATIVE 3 -- ADVANTAGES AND DISADVANTAGES
ALTERNATIVE 4 -- COLORADO RIVER WATER
ALTERNATIVE 4 -- ADVANTAGES AND DISADVANTAGES
ALTERNATIVE 4A -- COLORADO RIVER WATER -- LAKE POWELL (UPPER BASIN WATER)
ALTERNATIVE 4B -- COLORADO RIVER WATER -- BULLHEAD CITY/LAKE MOHAVE (LOWER BASIN WATER)
ALTERNATIVES SCORING MATRIX
ALTERNATIVES RANKED IN ORDER
7. PRESENTATIONS
8. IMPLEMENTATION (NEXT STEPS): POTENTIAL APPRAISAL STUDY
ALTERNATIVE ELEMENTS RECOMMENDED FOR APPRAISAL LEVEL INVESTIGATIONS
DISCUSSION

Ms. Antonopoulos clarified that when she referenced Red Gap Ranch coming online, it would more than double the municipal organization's energy use.

Water Conservation Program Manager Tamara Lawless asked if there was a reason why reclaimed water treatment was not included. Mr. Smith stated that advanced water treatment, likely through reverse osmosis, would be required to bring Red Gap Ranch water up to quality standards. That process was very energy intensive and would be one of the largest energy demands of the project. Ms. Young added that advanced water purification was also being considered as part of the city's broader water portfolio, though it would not meet the total water demand at full buildout. The city had pledged the volume of water it could dedicate to advanced water purification but still needed to decide which treatment methods to use and whether the purified water would be used for drinking or groundwater recharge. The source would only serve Flagstaff, not regional partners, but would still be included in the appraisal study of future water sources.

Councilmember Matthews asked for more information on why expanding city wells was ranked so low within the group. Mr. Smith stated that the team had concluded that expanding city wells would not provide a resilient or sustainable water source. Existing wells already struggled to meet yield requirements, and the local aquifer showed significant annual drawdown, around 10 feet per year since the 1970s and 1980s which indicated that it was not a long-term or reliable option. The wells would need to be drilled very deep, resulting in high energy demands, though water quality from these sources was generally good. Expanding beyond the forest into state land could increase costs, as the city would have to pay for water rights and pumping fees, and the water availability in those areas remained unproven. Developing new wellfields on various landownerships would also require extensive new infrastructure, such as additional pipelines. By contrast, Red Gap Ranch had already undergone extensive hydrogeologic studies confirming higher-yielding wells, especially farther east. Because of its proven reliability and established data, Red Gap Ranch was viewed as a more resilient and economically justifiable option compared to further local well expansion.

Commissioner Nauman offered that if the pipeline from Red Gap Ranch was built, the city would not use its full capacity right away. He asked how costs were incorporated without building something without using full capacity. Ms. Young stated that water delivery would gradually increase over a decade or two as demand grew. During that time, the system could operate in phases, each pump station would

include multiple pumps, and only some would initially be active. The same approach applied to water treatment facilities, which could expand modularly by adding units as needed.

Water Services Director Lee Williams added that they would be faced with building a full-size project now and not utilize it for decades or building two smaller pipelines to phase in. Mr. Smith explained that building two smaller pipelines in stages would ultimately cost more than constructing one full-sized pipeline at the start, since reopening trenches and duplicating work was inefficient. Therefore, the pipeline itself would likely be built at full capacity from the beginning, even if it was not fully utilized for several years. Operationally, the city would integrate the new supply while phasing out older, less efficient wells and maintaining some for safety and sampling requirements. Advanced water treatment was also noted as a complementary, drought-resilient supply that could be scaled up within the city, but it would still require a reliable base water source to function effectively. These considerations would all be part of the upcoming appraisal study.

Chair Doba asked if it was anticipated that Red Gap Ranch would be utilized on a year-round basis or partially. Mr. Williams stated that whether Red Gap Ranch operated year-round or seasonally would depend on the final project scope. If developed as a regional pipeline in partnership with the Bureau of Reclamation, serving multiple communities, it would likely operate continuously year-round. However, if it were developed solely for Flagstaff, the system could potentially run only during high-demand months, such as summer, to offset costs associated with its energy use, staffing, and operations. Currently, the regional, year-round approach was the direction being pursued.

Further discussion acknowledged that developing Red Gap Ranch was likely at least 15 to 20 years away, raising questions about how to protect existing water infrastructure from wildfire risks in the meantime. Mr. Williams noted that some mitigation was already underway, including forest thinning around wellfields like Woody Mountain and Mormon Mountain, and a project to bury city-owned power lines at Woody Mountain to reduce vulnerability. However, fires could still damage other components such as well houses and underground piping. Additional wells were also being sited within city limits to enhance local resiliency.

The discussion shifted to the upcoming appraisal study, which would analyze costs, feasibility, and funding options for Red Gap Ranch and alternative water sources. John Rasmussen with the Bureau of Reclamation explained that the study would provide appraisal-level cost estimates, not highly precise figures but enough to make "apples-to-apples" comparisons between alternatives. It would likely include an estimated delivered cost of water and explore potential funding mechanisms, such as federal, state, or regional cost-sharing opportunities.

The importance of conducting parallel studies on non-regional alternatives (such as city-only or advanced treatment options) was important so that the Council had meaningful comparisons when making future decisions. The appraisal study would also include a "no action" alternative to evaluate the consequences of not pursuing Red Gap Ranch.

Darrell Marks addressed Council and asked about the potential health and environmental impacts of using an evaporative brine pond at the Red Gap Ranch site. There were concerns on how brine concentration could affect nearby residents, especially if it released elements such as uranium or arsenic, which had been issues in other regional water sources connected to past fracking activity. He noted the importance of considering coordination with the Navajo Nation's pipeline from Lake Powell, since its route could present opportunities for shared infrastructure. However, water access and delivery elevations under the Navajo Nation's agreement could limit how much water was available or how it could be distributed in relation to Flagstaff.

Mr. Smith explained that the project had not yet reached the stage of determining how to manage brine disposal or whether evaporation ponds would be used. He noted that such ponds could pose risks to wildlife and may need to be covered or netted for protection. While no known public health impacts had been identified so far, he agreed it would be important to conduct a literature review to assess potential risks based on experiences elsewhere. He also acknowledged that brine disposal impacts must be considered wherever treatment occurred, whether at Red Gap Ranch or within Flagstaff, emphasizing the need for careful design and mitigation measures to protect both residents and wildlife.

Bryan Bates, an environmental scientist and member of the Flagstaff Water Group, addressed Council and emphasized the importance of diversifying water sources for system resilience, noting that relying on multiple sources provides energy and information critical for functioning systems. He highlighted that reclaimed water treated to potentially potable levels could serve as an immediate supplemental source while larger projects, like the Red Gap Ranch pipeline, were being developed. He raised concerns about repumping reclaimed water, including potential health risks from synthetic organic chemicals and uncertainties about water quality during transport and reuse. He also questioned the long-term impacts of Red Gap Ranch withdrawals on the aquifer, suggesting that pumping from lower levels could alter water movement throughout the system. He stressed the need for long-term aquifer evaluation, ideally over a century-scale timeframe, to understand the ecological and hydrological consequences of large-scale water extraction.

Mr. Smith offered that water quality was a major focus during the weeklong study, particularly regarding how reclaimed treated effluent could be used, whether for landscape irrigation or to recharge the aquifer. The chemistry of the water, including concerns about PFAS, required in-depth evaluation, and those issues were still being explored. Additionally, the ecological impacts of brine disposal, especially on wildlife, would need careful assessment as part of any future planning. Ms. Young added that extensive groundwater modeling had been conducted, indicating it could take up to a thousand years of pumping before local impacts were observed. Those long-term effects would be further evaluated and addressed in the appraisal study.

Michael McCauley raised concerns for fee simple landowners, those who owned their property outright, and how large-volume pumping from the aquifer might impact them. Specifically, as the aquifer's water levels dropped due to extraction, there was a potential effect on private wells used by those landowners, depending on the aquifer's recharge rate.

Mr. Smith noted that the concern was shared by the Navajo Nation. He noted that the planned two-mile buffer was expected to prevent significant drawdown outside that area. Ms. Young confirmed that the appraisal study would include modeling of all local wells, including those on fee simple land and within the buffer, to assess potential impacts. Even though not legally required outside Active Management Areas, the city intended to act as a steward and carefully evaluate effects on wells owned by the Navajo or Hopi under NAIWRSA protections.

Lee Storey, the city's outside legal counsel, explained that the NAIWRSA agreement restricted new well drilling in Buffer Zone 1, two miles south of the reservation, and set legal limits on pumping in Buffer Zone 2 for existing municipal wells, including those acquired with Red Gap Ranch. The agreement also provided groundwater and water quality waivers benefiting the city and other parties, establishing important legal and operational boundaries. The value planning study and groundwater modeling would adhere to those limits. Protecting the aquifer and ensuring partner acceptability were key criteria in the study, accounting for nearly 40% of the weighting, highlighting the city's commitment to follow those protections.

Commissioner Nauman asked about the high salinity water from reverse osmosis. Staff noted that any evaporation ponds would likely be lined to prevent groundwater contamination. Using reverse osmosis treatment would also reduce total dissolved solids in the water supplied to the city, benefiting areas with naturally high-salinity water.

Commissioner Vane asked about renewable energy development at Red Gap Ranch. Ms. Antonopoulos clarified that such projects were being explored independently of water development. She noted that opportunities existed to advance renewables, potentially as a funding mechanism, while navigating regulatory complexities in Arizona.

Council and the Commission gave direction to move forward with the appraisal study.

Council thanked staff, the Water Commission, and all those involved.

5. Informational Items To/From Mayor, Council, Commissioners and Staff; future agenda item requests

None

6. Adjournment

The Special Meeting of the Flagstaff City Council and Water Commission held October 23, 2025, adjourned at 5:28 p.m.

MAYOR

ATTEST:

CITY CLERK