A snapshot of Moab’s water issues

Workshop held at city council meeting provided a look at current, future needs

“The community, the council, the city staff, are all very concerned about our water supply and how to manage it responsibly,” said Moab City Manager Carly Castle at a water rights and resource management workshop with the Moab City Council on April 25.

“This concern is a good thing—it’s a scarce resource, and we live in a desert where we’re confronting climate change and changes in the Colorado River. It’s an issue that should be taken seriously. We need to proactively manage this resource,” she said.

The community’s concerns about water mostly stem from a worry that Moab will deplete its aquifer, which Castle said the city is working to create solutions to avoid—the overarching solution being the creation of the Water Utility Resource Management Plan, expected to be completed by October. Multiple water studies have been completed in the region, but all say different things about how much water the valley can use. The management plan will pull all of those
Water policy balances four things: physical/scientific reality, engineering, legal framework, and political considerations, Castle said.

The last three items are very interwoven: water has been fought over in the West for a long time, Castle said, and in the Utah state legislature, “there is a lot of money behind dismantling the ability of municipalities to keep and spend their water how they want to.” But, she added, the legislature has become more educated about the water crises in the Great Salt Lake and Colorado River, and are becoming “more open to giving us tools to solve our water issues.”

During the workshop, the council heard from the city’s attorney, Nathan Bracken, and the city’s water attorney, Jeff Gittins, who talked the council through an overview of water law and policy in the State of Utah. Marc Stilson of the Utah Division of Water Rights went over studies of Moab’s aquifers. The council then heard from City Engineer Chuck Williams about Moab’s current water resource management plan.

As the meeting concluded, Councilmember Rani Derasary said the workshop wasn’t what she wanted to see: her specific questions about how much water is still in Moab’s aquifers went unanswered, and she said she felt “used.”
Moab specifics

There are three water agencies that manage water use in the valley: the City of Moab, the Grand Water & Sewer Service Agency (GWSSA), and the San Juan Spanish Valley Special Service District (SJSVSSD). The City of Moab gets its water from five wells and seven springs, and stores that water in four storage tanks; GWSSA from six wells and Mill Creek (via Sheley Tunnel), with three tanks and Ken’s Lake for storage; and SJSVSSD from one well, with storage in one tank.

The city owns 19 water rights, giving it access to a total of 9,473.7142 acre-feet per year. The city uses around 2,500 acre-feet per year. The city has rights to ground and spring water, meaning the battle over water rights to the Colorado River likely won’t impact Moab, Bracken said.

Stilson gave the city council an overview of the most recent aquifer study completed in 2019 by the U.S. Geologic Survey. The study estimated that the amount of water available for future use in the Moab Valley aquifers—the Glen Canyon and Valley Fill aquifers—is between 1,300 and 3,500 acre-feet.

The study has a notable fault, Stilson said: it doesn’t differentiate between the two aquifers, meaning there is no current knowledge about how much water is in each. There is a distinct lack of data on the Glen Canyon aquifer, Stilson
One way to determine an answer is through a groundwater management study, but the state engineer determined Moab’s aquifers are still within “safe yield,” and decided to not pursue the study.

“I recognize that there are many people in the community that think differently ... but the state engineer made a decision that she’s not going to do a groundwater management plan,” Bracken said. “But that’s not necessarily a bad thing: we can still work together with other surrounding water providers to do something else, and in many ways, that would be preferable.”

Stilson said it’s up to municipalities to create effective solutions for water management.

“It’s up to the water users to come in with creative solutions and say, here’s how we want to manage this groundwater resource in a way that either brings us back to safe yield or keeps us from exceeding safe yield,” Stilson said. “You can still do that, and you don’t need us to lead the effort ... I applaud Moab City and Grand and San Juan counties for moving forward and being proactive in this manner.”

Bracken too said that solving water issues will have to be done at the municipal level. But since the drying Great Salt
Lake seems to have spurred statewide water conservation efforts into action, Bracken said, he’s “never been more optimistic about our ability at the municipal level to create good water policies.”

Derasary asked questions about how to specifically know when Moab is approaching the end of its aquifers, but the guest speakers and city staff agreed there’s no exact way to know—yet.

“To the question of, how do we determine whether we’re hitting safe yield, and what do we do about it? I think we do want that question to be answered, but the way to address it is to develop a water resource management plan, which is what we’re doing now,” Castle said.

**Water resource management plan**

Since July 2021, the city, GWSSA, and the SJSVSSD have been working on creating a “water utility resource management plan,” which would analyze past studies, like the 2019 USGS study, and create options for how to best manage current water resources in the valley. The plan considers “engineering, public involvement, and water rights.”

The goals for the plan are to: address sustained population growth and tourist visitation; address increasing water
demand; agency coordination and cooperation; create consistent water policies; consider sharing water resources to maximize individual agency resources; and ultimately create “resilient water resource management for the next 100 years.” The plan has thus far pulled together 47 documents, including master plans, impact fee analyses, conservation plans, and historical water usage.

Williams presented the current status of the plan. He also spent time going over the projected water demands for the valley, finding that demand will likely exceed supply around 2035, if nothing changes. The demand was calculated using population and development estimates; supply was estimated by using historic numbers. In 2022, the entire valley (water used by the city, GWSSA, and SJSVSSD) used just over 7,200 acre-feet of water for indoor and outdoor use.

Williams’s projections showed that the City of Moab’s total water demand will likely be 2,801 acre-feet in 2030; 3,505 acre-feet in 2050, and just over 7,000 acre-feet in 2120. Due to that growing demand, the plan will also evaluate potential alternative sources for water, like groundwater development, aquifer storage and recovery, conservation (like landscape ordinances and landscaping restrictions), and wastewater treatment reuse.

There will be two opportunities for residents to chime in and
learn more: there will be a focus group meeting on May 22 via Zoom and a public open house on May 24 (information on how to join those meetings can be found on the city’s website).

**Not good enough**

Councilmember Rani Derasary has been vocal about wanting to discuss water issues more during city council meetings; she said she believed she was the impetus for this water workshop.

However, the workshop did not reflect what she wanted to see, she said.

“This whole thing has been misrepresented, and what you’re seeing here tonight is not what I asked for, so I just don’t want the mayor to present this as exactly what I’ve asked for,” Derasary said.

She felt like she had been “used,” she said, adding that she “will not keep anybody’s secrets, and I am not covering up for bad things said about people who work on water in the community anymore.”

Derasary did not elaborate during the meeting; her comments were not responded to, aside from Mayor Joette Langiaese saying, “I think this was a wonderful, excellent workshop.”
In a later conversation with the Moab Sun News, Derasary said she felt the meeting had put her in an awkward position—she’s been advocating for more water meetings for a while, she said, because she believes the full council should be more informed. Important decisions should not only be left to the city manager and city engineer, she said.

“We can’t make informed decisions if we don’t have a good, basic understanding of the watershed in the valley, and of how different systems interact with different players,” Derasary said. “It was my understanding and expectation from the beginning that we would be having regular meetings. I don’t believe that water is a responsibility that should fall on one individual council member or no council members at all.”