



Regional Water Supply Agreement Administration Advisory Committee MINUTES

Meeting date: October 29, 2025
Time: 12:00 – 2:00 pm
Location: 533 E Waterworks Drive, St. George UT
Participants: Administration Advisory Committee members Zach Renstrom, Justin Sip, Ben Billingsley, Kaden DeMille, Nannette Billings, Kyle Gubler, Kelly Wilson, Kress Staheli, Rick Rosenberg, John Willis, Michele Randall, Chuck Gillette, Chris Hart, Jean Krause, and Mark Meyers. Also, present was Washington County Commissioners Adam Snow. Advisory Committee member Jeremy Redd and Brock Jacobsen were not present. Other meeting attendees are noted on the attached sign-in sheet.

Zach Renstrom welcomed everyone to the meeting.

Discuss Leeds joining the RWSA

Bill Hoster, Mayor of Leeds, explained that over the last four years, one of our main efforts has been to identify opportunities for managed growth within Leeds. We have a small private water company that has provided water to about 300 homes for many years, but it simply cannot sustain any additional growth.

Many of you are familiar with the developers who have come before you and now have interlocal agreements with the Conservancy District. Those developers must work with the Conservancy in order to exercise their property rights and move their projects forward. That requirement originated with this Board and with the interlocal agreement involving Ash Creek, which the developers have complied with.

Mr. Hoster explained that what the Town of Leeds would like to ensure is that any other properties that also cannot be served by the private water company are able to do the same exercise their property rights and develop them with appropriate access to water. To support that, we submitted a declaration for your consideration. The feedback we received was that Ash Creek needs to be brought back into the system, which is completely reasonable. Since then, we have re-engaged in conversations with Ash Creek. Those discussions were held recently and were very productive. From the Town's perspective, we found no reason not to move forward.

Mr. Hoster clarified that LDWA, Angell Springs, and the other small water companies in the area have nothing to do with this proposal. They are independent entities with finite resources and are not connected to what we are discussing today. This entire effort is focused solely on allowing the developers within our town boundaries to exercise their property rights and obtain the water necessary for development.

Discussion:

Mayor Kelly Wilson asked if Leeds has agreed to join Ash Creek?

Mr. Hoster responded "yes, we have not adopted a formal resolution yet, but our work session showed strong support for moving forward. Once we receive approval here, and assuming the conditions are included, we will proceed with executing the agreement with Ash Creek."

Mayor Rick Rosenberg asked does a property currently served by one of the private water companies has the option to connect to the city system if they meet the Ash Creek requirements?

Mr. Hoster responded that they have proposed to that water company to try and allow them to sustain is that any forecasted properties within their jurisdiction are able to get a first rider refusal from them, and then, if they so, opt to come over to this other system, if they comply with all the requirements.

Mayor Chris Hart said that the District recently went through this with Virgin, and in that case the town held certain entitlements that they were able to bring back to the table and place back in with the district. What we are discussing here feels different, because we deal with private companies, so you are not really in a position to tell them they have to do anything.

But if I were sitting in Mayor Krause's seat, I would be asking: What is Leeds bringing back into the system? What resources or entitlements does the Town of Leeds have that can be returned to or integrated with the district as part of this process?

Mr. Hoster commented he had a conversation with Mayor Krause just prior to this. As you pointed out, this is a private water company, and it is not within the Town's authority to compel or negotiate on their behalf in the way that Virgin was able to with its own municipal system. What we can acknowledge is that, with any advancement of new hookups, there is an associated benefit both in terms of system growth and revenue to the organization. Those factors certainly support the advancement of this effort.

Mr. Hoster also said that in terms of providing an exchange or bringing resources back into the system similar to what Virgin was able to contribute, the Town of Leeds does not hold the same assets or entitlements. Because this involves a private water company and not a municipal system, we simply do not have that type of consideration to offer.

Mayor Hart said that he can see that all of your current residents are already being served, and if there were assurances that this service would continue indefinitely, that would be meaningful. The challenge the district has repeatedly faced with independent water companies is that eventually their systems fail, and then they turn to the district for help. So, there would be resources involved if that ever occurred.

Mayor Hoster said that is a strong point, and I appreciate raising it. Let me clarify that there is already an agreement in place that provides that assurance. The residents of Leeds have already paid to secure that backup arrangement with the Water Conservancy District, even though they currently receive service from a private water company. If a situation were ever to arise where the private company could no longer operate, the necessary infrastructure and mechanisms are already in place to allow the Conservancy to step in and provide service.

Mayor Nannette Billings said her question is more for the district. If impact fees are going to be charged, what additional infrastructure would be required to supply water to Leeds? Would those improvements benefit only Leeds, or the entire district? And would that lead to increased impact fees district-wide since we all share the same water system? What exactly needs to happen for Leeds to connect?

Mr. Renstrom responded that the district already has a main trunk line running through the center of Leeds. It has been upsized in anticipation of growth, and we are already participating in development in that area. In the foreseeable future, no additional improvements will be needed. That infrastructure is already in place. We are just finishing a few pump stations. Over a 15–20-year horizon, future needs will depend on where growth occurs, but for now, not much additional work would be required.

Mayor Rosenberg asked with the new system improvements that will be built to serve this development, who will be responsible for maintaining those facilities in the Town or the District.

Mayor Hoster responded that there are several options that could be explored further. The special district that currently exists out there has already begun discussions with the Conservancy District regarding allowing the Conservancy to take on and facilitate the system's ongoing maintenance. There is also flexibility built into those arrangements, meaning the responsibility could pivot, if needed. That option remains available and could be exercised if it proves to make the most financial and operational sense for all parties involved.

Mayor Staheli asked Mayor Hoster that you had a work session on this item, and your council is supportive of it, and is your council supportive of also meeting the water use, passing resolutions and ordinances to meet the new standards.

Mayor Hoster responded that will be part of the components included in the future development agreement approval, and those requirements are in.

Mayor Staheli asked, "do you have the staffing in place to handle the utility billing and are you able to manage it."

Mayor Hoster responded that it would be a dependent action. If we were to pivot toward taking on that responsibility, we would implement all the necessary staffing and processes. At this point, it has not been determined whether we want to take over the billing ourselves or allow the Conservancy to continue handling it. So, it remains to be seen who will ultimately do the billing. If the Conservancy continues to do it, the billing would be combined with Ash Creek on the same statement, and the appropriate administrative staff would be put in place.

Mayor Staheli said that the Water District has a duty to procure water and distribute it to its municipal partners. I am supportive of Leeds becoming a municipal partner, as long as the council and the town are supportive of it and willing to meet the standards.

Mayor Hoster thanked everyone for allowing him to speak to them.

Mayor Chris Hart made a motion that the district draw the town of Leeds into the agreement under the conditions that their City council would adopt the requirements of the water efficiency standards, Mayor Billings would like to amend the motion that they would need to be part of Ash Creek Special Service District, the motion was seconded by Mayor Sip, and all voted aye.

Mr. Renstrom said that we have a new individual here, and I forgot to introduce him at the very beginning. So, Mayor Krause, if you would like to introduce him.

Mayor Jean Krause stated that at the last Board AAC meeting she mentioned that the Town of Virgin now has a town manager for the first time in its history. She then introduced Mark Myers, noting that he is from the state of Michigan and had purchased property in Virgin prior to learning that the town was seeking a manager. Mr. Myers was already planning to move to the area and has 38 years of experience as a city manager, director of community development, and in other related leadership roles.

Consider recommending adoption of rules and regulations governing delivery of district water supplies and use of district water infrastructure to the Board of Trustees

Doug Bennett, Water Conservation Manager, explained that although there have been prior discussions about this policy, it has been substantially updated. Its overall purpose, however, remains the same. He noted that one of the items discussed earlier was a resolution that would regulate or restrict new development requiring more than 9 million gallons of water per year.

Mr. Bennett stated that the 9-million-gallon threshold was based on a study conducted with the City of St. George that examined the usage of the top 1% of commercial customers. When determining what constitutes an excessively large water user—one that likely warrants additional scrutiny before being added to the system—the focus was on this top 1%. The study showed that the average commercial user consumes less than 1 million gallons per year, with many using only a few hundred thousand gallons. Most businesses are small and have water demands comparable to a single-family home.

In contrast, the top 1% of commercial users consumes more than 9 million gallons annually. Mr. Bennett gave several examples of “one-percenters,” noting that every golf course falls into this category, as each one is among the highest water users. He also referenced a bottling plant discussed earlier in the week, explaining that such a facility would clearly qualify due to its high consumption and the fact that it would take local water, treat and bottle it, and then ship it out of the service area.

Mr. Bennett added that another example and a particular concern is data centers. Data centers are extremely large water users, and there is currently no system-wide review for such developments beyond the case-by-case evaluations conducted by municipalities. Some of these facilities could consume tens of millions of gallons per year.

Mr. Bennett emphasized that the 9-million-gallon threshold simply identifies the point at which an applicant enters that top tier of users and should therefore receive additional scrutiny.

Ben Billingsly asked how many of these users are there.

Mayor Randall responded to Ben that they had just had a meeting last week with a bottling company, and it was quite interesting. They are called Blue Core Labs, and they want to be located in the industrial park and use about 17 million gallons of water a year to bottle and export it out of the area. This policy is something we really need so that we can say, ‘No, that’s not an appropriate use,’ and have it stand. If we say no now, they might simply go to another city and try again, claiming it will bring in 100 high-paying jobs. But when you weigh those jobs against the amount of water they are requesting, it does not make sense. We told them we would bring the issue to this group and not in favor of it.

John Willis commented that the other issue that came up during that meeting was the concern that if a company asks, ‘What’s your threshold?’ and we say 9 million gallons, they might propose using 8 million to stay below the limit. Then, a few years later, their usage could increase and exceed the 9-million-gallon threshold. So, how do we regulate and monitor it to ensure applicants are not presenting one plan and then operating differently once they are established. In our discussion with the company, we identified that as a significant potential issue.

Mr. Bennett commented that the good news about this policy is that it establishes an initial prohibition. If someone approached the District, we would not accept an impact fee for any project expected to use more than 9 million gallons per year. Instead, that applicant would have to come before the AAC, and the AAC would vote on whether the proposed development is in the public’s interest and represents a good return on investment for the water required.

The proposed resolution that the Board would consider asks this committee to review several factors: the critical public interest involved, the applicants’ efforts to reduce water consumption, whether they are operating as efficiently as reasonably possible, and what economic productivity would be. We recognize the importance of job creation and community well-being, and the question becomes whether the applicant aligns with those principles.

This policy applies only to commercial, institutional, and industrial facilities. It is not a situation where someone could avoid the threshold by installing two meters one using 4.5 million gallons and the other 5 million. The usage cannot be split up to circumvent the policy.

It is also important to clarify that single-family or multi-family residential developments would not be subject to this rule. However, if a residential project included a water-intensive amenity such as a small golf course with three or six holes, that specific amenity could fall under this policy. We do not want to treat an entire subdivision of, for example, 500 homes as a single user; each home is considered a separate unique user for the purpose of this policy.

Mayor Wilson asked about recreation facilities in the area, noting that some already have plans moving forward.

Mr. Bennett responded that anything that has already been built or previously approved cannot apply this policy to those. This policy would apply only to new users coming into the community.

Chuck Gillette noted that it sounds as though there is no distinction being made between culinary and irrigation water in determining which types of water usage are of concern.

Mr. Bennett responded that we all understand that we are moving toward a ‘one water’ strategy meaning water is water. Muddy water, clean water, secondary water, reuse water all of it will be critical in the 20-year plan. So, regardless of the level of treatment, the 9-million-gallon regulation would apply.

Mayor Wilson asked what if they brought their own water.

Mr. Bennett responded if they were using private water and not relying on any of the District’s infrastructure to deliver it, then they would be exempt from this policy.

Mayor Billings said that Hurricane has in their ordinance states that if someone wants to bring their own water meaning they have their own shares they can use that to support a golf course, water park, or similar features. That is what the ordinance currently allows. So, are you suggesting changing that? Would those uses still be considered even if they brought their own water?

Mr. Bennett responded that they could do that if they were truly self-supplied. For example, Copper Rock Golf Course has its own wells located on the golf course. If an applicant said, 'I have my own water rights and I'll supply the water myself,' that would be outside this policy. However, if they said, 'I have my own water rights, but I want the District's system or an RWSA member's system to deliver that water,' then it would fall under this committee's approval.

Chuck Gillette asked whether a developer who purchased water rights, transferred them into the District's system, and then conveyed those rights to the District would fall under this policy.

Mr. Bennett responded that there are ways for that to happen. But this policy prohibits the use of District infrastructure or District water for any user exceeding the threshold, even if they bring their own water rights. Those types of conditions are exactly what an applicant would present to the AAC. The AAC could then evaluate whether they are bringing sufficient water, whether they are willing to pay a delivery fee, and whether the system has the capacity. This committee would ultimately make those decisions.

Ben Billings asked if the AAC be the final approval.

Mr. Bennett responded that the AAC would be the body that makes the determination about whether a project can proceed, and approval would require a supermajority vote, meaning two-thirds of the AAC would need to support it. The matter would not go to our Board unless there was another confounding issue that only the Board could address. If this committee determined that the proposal was in the best interest of our shared communities and our community water supply, then the District would accept the impact fee and move forward.

Mayor Hart said to translate into economic impact, I assume. It would depend entirely on the project and what it is expected to produce in terms of economic return.

Mr. Bennett responded yes. Mr. Bennett also explained three key considerations. The first is critical public interest. For example, if a healthcare facility were proposing to move into the area and we determined that these services were needed and beneficial for our community, that would satisfy the 'critical public interest' standard. I also included an image of a grocery store to illustrate that commercial businesses operating in the free market can also serve the public interest. There are cases where certain sectors are underserved, and additional commercial services would clearly benefit our residents. So healthcare, public safety, and essential commercial services can all qualify.

The second factor is reduction in demand. We want to ensure applicants are using the best practices available in their industry to achieve their objectives with the smallest water footprint possible. Take a data center, for example: air-cooled data centers which we have in Utah use only a fraction of the water required by water-cooled facilities. So, we might consider a data center that uses 9 million gallons annually instead of 50 million, if they demonstrate they are using state-of-the-art practices and the facility provides meaningful public benefit, like improved regional Internet capacity. Those are just hypothetical examples, but the point is that prudent and efficient water use is a core criterion.

The third factor is to evaluate economic productivity. We recently received an update on the economic productivity of water in the region. One acre-foot of water provided by our municipal members supports approximately \$250,000 of county GDP, 4.8 residents, 1.8 households, two jobs, \$98,000 in wages, and \$256,000 in personal income. So, if someone is requesting a significant amount of water, this is the benchmark we would use. We would ask: How many jobs will this project create? What will those jobs pay? How will it benefit the region? How does it contribute to our GDP? This existing average sets a high bar, and applicants with a low value proposition.

Mayor Billings asked Mr. Bennett if he knew what the current hospitals are using.

Mr. Bennett responded when considering Intermountain Health collectively across all its local facilities the total water use is certainly in the tens of millions of gallons.

Mayor Billings noted that two hospitals could fall within that "top one percent" category. She explained that the new Intermountain Healthcare facility near Exit 16 is approximately 25,000 square feet, and another planned along SR-9 is 80,000 square feet and includes an aviation component. Ms. Billings emphasized that there are two such projects already underway.

Mr. Bennett responded that another condition the committee may want to evaluate is how much of the applicant's water use will be recovered through the reuse system. For example, an applicant might request 12 million gallons per year, but if the majority of that water returns through the sewer system and can be reclaimed, that significantly reduces the net impact. That would be an important factor for the committee to consider, as it means the project may have a relatively small consumptive use compared to its total demand. The overarching goal, however, is simply to establish a threshold at which an applicant must come before this committee and explain their project.

Mr. Bennett explained that staff believe this policy is fully within the scope of the district's responsibilities and consistent with the laws governing the district's role in the community. The purpose is to help ensure an adequate and reliable water supply both now and in the future. He emphasized that the policy has no effect on existing uses, no one will be required to return and justify water that has already been approved.

The policy would not apply to self-supplied developments using their own infrastructure. However, if a development wishes to use district infrastructure, it will still need to come before this committee. The policy also would not apply to housing developments.

Finally, it would allow the AAC to approve non-conforming projects based on the information provided and the three criteria previously outlined.

Mr. Renstrom stated that he frequently receives calls from individuals proposing new ideas or large projects, and he appreciates the concept of bringing those proposals before this committee. He explained that if someone has a major idea with significant economic potential, it should be presented to the cities, allowing the committee members to collectively evaluate it and decide whether it is in the community's best interest. Mr. Renstrom noted that the hospital example is a perfect illustration, it is a needed facility and would be an excellent use of water. However, he emphasized that he does not want the district to be the one making that determination. Instead, he wants the cities, through this committee, to make those decisions. That, he said, is why he has been strongly advocating for this policy.

Mr. Billingsley commented that he fully supports the policy. He asked why the threshold was set at the top 1% of users. Based on the earlier chart, a significant water user could also be defined within the top 5%, why not have a 4-million- or 5-million-gallon annual use level. He said that for smaller communities, a project of that size would still have a substantial impact and would require the same level of consideration and scrutiny. Mr. Billingsley also added that, given the size of facilities served by the transmission line that extends to Virgin and Toquerville, it might make sense to consider lowering the threshold, particularly to account for the needs and capacities of smaller municipalities, he also said he would support a furthermore aggressive approach.

Mr. Bennett commented that he previously served on a committee that included water districts from across the state, along with the Utah Waterways Program, working in coordination with the Governor's Office of Economic Development (GOED). Those familiar with municipal government know that GOED often sends prospective businesses to cities suggesting locations such as Hurricane or Ivins without considering the water footprint associated with those businesses.

Mr. Bennett explained that the committee discussed when water districts should be notified about potential high-demand users seeking to locate within their service areas. All of the districts, including those in northern Utah, agreed that an annual use of 3 million gallons constituted a significant water demand and warranted prior notification. While some districts suggested slightly different thresholds such as 2.7 million or 3.3 million gallons, the group standardized the notification level at 3 million gallons per year.

Mr. Bennett added that this committee is being asked to make a recommendation to the board, and if the committee feels a different threshold, or a lower level at which additional scrutiny should begin, is more appropriate, that could certainly be incorporated into the motion.

Adam Snow asked, there does not appear to be a clearly defined method for estimating a prospective user's water demand. He asked whether there is state data or another source the district relies on to calculate projected usage.

Mr. Bennett responded that estimating future water use especially for unique or "novel" developments is often challenging. It is not uncommon for applicants to provide engineering estimates that later prove to be significantly lower than the facility's actual water use once it is operational.

Mr. Bennett said that the proposed resolution includes a provision allowing the board to establish punitive measures for applicants who substantially misrepresent their projected demand. This could include an escalating cost for delivering water above the originally stated usage threshold.

Mr. Bennett also addressed the concern raised regarding facilities that enter below the threshold and then later expand. For example, a bottling plant that initially anticipates using 8 million gallons per year could later seek to double its operations. In such cases, an additional impact fee assessment would be required, and corresponding policy would need to be developed to manage those situations.

Mr. Bennett cautioned that lowering the threshold as had been suggested would increase the number of applicants required to come before the AAC. A threshold of 3 million gallons, for instance, would result in significantly more reviews than the proposed 9-million-gallon trigger, and the committee should consider the administrative burden that would accompany such a change.

Mayor Hart asked why the district resists the idea of approving a project at a fixed water allocation, granting a defined amount of water and no more. Under such an approach, if a user exceeded that allocation, their supply would simply be shut off or curtailed once they reached their limit. He said that water is a finite resource and the district has no ability to easily replace it.

Mayor Hart also asked whether there is a legal reason the district cannot impose strict enforcement of allocated amounts. He compared it to residential impact fees, which are based on an allotted amount of water per home, and questioned why that entitlement cannot be enforced more literally: That is what your impact fee paid for, and that is all you get.

Mr. Renstrom responded that, under current Utah State Code, the district does not have the authority to simply cut off a user's water supply for exceeding the approved allocation. That option is not available in statute at this time. What the district can do, however, is impose fees and surcharges. He explained that for large users, the district typically calculates expected usage based on the size of the meter. If the customer exceeds that threshold, the district can apply escalating surcharges to account for the additional demand.

Mr. Hart asked if the surcharges apply to commercial as well.

Mr. Renstrom responded that the largest surcharges the district issues are typically associated with commercial users. Mr. Bennett commented that one of the advantages of working with the commercial, institutional, and industrial (CII) sector is that these users are typically very technical and closely monitor their operating costs. Industrial users, in particular, tend to be highly efficient and cost sensitive. If an applicant represents that they will use 8 million gallons, for example, and the district approves that amount but imposes surcharges for any use above that level, it will force the applicant to seriously evaluate whether their estimate is accurate. The potential for significant financial penalties would make them much more cautious about underestimating their projected water use.

Mayor Hart asked if the amount of water returned to the system, particularly in relation to the long-term reuse plan, would the Board consider that return flow component as one of the key elements in evaluating a project.

Mr. Renstrom explained that the matter would be brought back to the AAC. The district would provide engineering estimates outlining the projected use and the anticipated depletion. If those estimates meet the applicable threshold, the proposal will then come before the AAC for review and a vote. He added that the intent is to remove the district from an awkward decision-making position and instead give the city and this advisory group greater control and authority in the process.

Mayor Randell said that the Intermountain campus uses about 35 million gallons of water a year. When I look at that and then compare it to the bottling plant that came in last week which said it will provide around one hundred jobs while using 17 million gallons a year that is half the water use for a fraction of the jobs. And then consider Wells Dairy, which uses about 68 million gallons annually. I am not even sure how many people they employ now.

Mr. Bennett commented that there would still be a significant amount of process development needed. If this resolution were to be passed, the burden would be on district staff to determine what the application should look like, what information we need from applicants, how they get placed on the agenda, and whether this committee would need to start meeting every other month instead of quarterly based on demand. There are still unanswered questions, but without clear policy direction, we do not want to invest time developing every detail in case the policy never moves forward.

Mr. Willis asked whether the district's attorneys would work on findings to ensure the committee does not end up in a position where one application is approved while another similar one is denied, creating potential legal issues. He also asked if time will be taken to ensure there are clear findings and consistency, so the committee does not put itself in a difficult position when making these decisions.

Mr. Bennett responded that the largest burden would fall on the district because no development can be approved unless the district has accepted the impact fee. Legally, he explained, the district will be the first line of defense and the initial obstacle in the process.

Mayor Hart said that most likely in hospitals, 90% of that water comes back into the system, whereas virtually none of the water used by the bottling plant is returned. So, should the threshold be based on total water used, or should it be based on depletion?

Mr. Bennett responded that the policy considers both the infrastructure required to meet a customer's needs and the associated water demands. He said that even if a user returns the majority of its water to the system, it is still appropriate to scrutinize the top 1% of users because of the potential impacts. As Ben noted, some areas have less robust or accessible infrastructure than others, so it is important to evaluate how the district would deliver 9, 10, 15, or even 18 million gallons to a user developing in a particular part of the county.

Mr. Bennett added that in cases where a user can return 90% of its water and the facilities can support it, and the project brings strong job creation those decisions will likely be straightforward for the committee. Over time, the committee will also learn what works and may determine whether the policy needs adjustments or it could be relaxed under certain conditions.

Mayor Billings commented that if a large-volume user were to be located in La Verkin, Toquerville, or Virgin, the pump station at the confluence park can handle only about half a million gallons. In those areas, reuse water could place a significant strain on the system. She emphasized that even if the water is ultimately returned, the district must ensure the infrastructure can handle both the delivery and the return flows.

Mr. Billingsley said that even with 0% depletion, a user can still have a significant impact on the system. He then asked whether the district has any sense of the volume or number of applications that might come in at the 1% threshold around 9 million gallons per year even just a rough estimate.

Mr. Renstrom responded that he receives at least one phone call each week that would fall into this category. Once a formal process is in place requiring applicants to submit an application along with engineering estimates he expects that number would narrow down to about two or three applications for each ACC meeting.

Commissioner Snow asked Zach. if you are already getting about one inquiry a week, in your opinion, how many more would we see if the threshold were lowered?

Mr. Renstrom responded that he gets around 5 a week. They would all get the same explanation, we have a process, it goes to the mayors and city managers, and they will need to fill out an application, pay the fee, complete the engineering analysis, and bring it forward. I think that process alone would weed out about 90% of them.

Mr. Snow responded to Zach, if you are saying you are already getting about five calls a week at the 9-million-gallon threshold. If we dropped it to 3 million gallons, what level of calls would you expect?

Mr. Renstrom responded that we would actually get fewer phone calls once we have a formal policy.

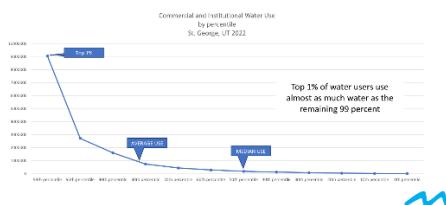
Mr. Bennett said that one option, given that we have never had a policy like this before and our water supply is now much more constrained, is to start with the 9-million-gallon threshold. Then, if needed, the board could later adjust to 7 million, 5 million, or whatever proves to be the most practical operating level. What we are really trying to address is that a very small number of users account for almost half of the water in this entire sector. So, my goal is to avoid these 'super users' who could break our 20-year plan, and this policy gives us a good strategy to do that.

Mayor Sipp commented that we can look at it the other way as well start at 3 million. If it results in too many meetings, then we can consider moving the threshold up to 5, 7, or even 9 million. That is the direction I am learning.

Scott Taylor responded that a typical fast-food restaurant uses around 600,000 gallons per year. A car wash generally uses between 5 and 7 million gallons annually. He added that he was not certain what the usage would be for an entire shopping complex.

Mr. Bennett explained this slide.

Top Water Users



You can see the top 5% here, and then the dramatic escalation that occurs, which is why we felt it warranted additional scrutiny. But that escalation is consistent across the entire top 5%. The 99th percentile, or top 1%, is here, and the 95th percentile is here. This also gives a clearer picture of how many applicants would be affected at different thresholds. For example, if you set the threshold at 4 million gallons, you would likely impact about 4% of the applicants seeking to establish a business here. So, think about your business permits within your jurisdictions, what would it look like if roughly 4% of new businesses were routed through this review process.

Mayor Staheli commented that he agreed with Mayor Randall's point that this is a good starting place. He noted that what the group is really looking at are the egregious users, and he does not believe this body wants to get into the business of reviewing numerous applications. To him, addressing the top 1% at the 9-million-gallon threshold makes sense. If the committee later feels the need to tighten it, they can revisit the policy and make an additional recommendation to the board.

Mr. Staheli also said that he feels staff have made a solid recommendation. Setting the threshold at the top 1% helps guard against the truly problematic users while still giving the private sector some room to operate. He sees it as a reasonable compromise for now, with the possibility of refinement in the future.

Mayor Hart commented that when looking at the graph, there is not a significant difference in the number of users who would come before the board once the threshold drops below 3 million gallons. He noted that if the threshold were lowered to 5 million gallons, for example, it would not substantially increase the volume of applications. He added that, for that reason, he finds himself leaning toward a lower threshold.

Mayor Sip commented that when considering communities like Toquerville, La Verkin, Leeds, Virgin, the Cottam line, and a few other smaller lines, even a single 5-million-gallon user could place a significant strain on those systems. He noted that locating a project of that size in Toquerville or Virgin, for example, could be challenging for the existing infrastructure. For that reason, he suggested that the threshold should be closer to 5 million, or even 3.5 to 4 million gallons, rather than 9 million.

Ben Billingsley made a motion that we recommend to the Board of Trustees the adoption of the resolution establishing rules and regulations governing the delivery of district water supplies and the use of district infrastructure, with one modification reducing the threshold from 9 million gallons to 5 million gallons for the communities of Toquerville, La Verkin, Leeds, and Virgin, Mayor Billings added a amendment to the motion to exclude hospitals and grocery stores from the 9 million threshold.

Zach Renstrom restated the motion with friendly amendment. The motion on the floor is to set a threshold of 9 million gallons per year, excluding hospitals and grocery stores. For the communities of Leeds, Toquerville, La Verkin, and Virgin, the threshold would be 5 million gallons per year, all voted aye, Mayor Hart voted nay.

Consider recommending adoption of a Water Shortage Contingency Plan to the Board of Trustees

Doug Bennett explained that the plan was developed with input from an 18-member task force representing all municipal partners. We also conducted a survey that reached more than 60 officials across all eight jurisdictions in the county. The draft has been posted on our website since October 1 for public and stakeholder review. We requested comments and received feedback from Washington City and St. George City. Those comments were constructive, and we made minor updates or added footnotes where needed.

Mr. Bennett said that one of the concerns raised about the original version of the plan was that it relied too heavily on a data tool to determine shortage stages. The revised plan still uses data to inform decisions, but it is ultimately the Board not the model that determines whether a shortage exists and what stage we are in.

Mr. Bennett clarified that adopting this shortage plan does not grant the District Board any new powers or authority. The plan simply acknowledges that if the budgeting approach is not sufficient in an emergency, the Board already has authority under state statute and the regional water supply agreement to take action to protect public health and safety.

Mr. Bennett said that shortages could be caused by drought, which is our most likely scenario, but also by other interruptions such as an earthquake, flooding that damages infrastructure, or even a cyberattack. Any of these events could trigger the use of this plan.

The plan outlines four shortage stages. Stage 1 would be around a 10% reduction, and reductions could go as high as 60% in a critical emergency. The Board still retains flexibility to set the exact percentage based on conditions. Under a declared shortage, each city would be assigned a water budget. Exceeding the budget would result in financial penalties only on district-supplied wholesale water not on a city's own water resources.

Budgets are calculated by identifying the most recent three years with no shortage in effect, determining the regional average use per ERC, and applying the appropriate reduction. For example, if the baseline average is 0.6 acre-feet per ERC, a 10% reduction would set the budget at 0.54 acre-feet per ERC. Each community would then receive a budget based on that figure multiplied by the number of ERCs it serves. If a city is already operating below the budgeted level, they would simply be expected to maintain that lower use.

Mr. Bennett explained these agreements were made with the TAC and the task force. We discussed which water resources actually make sense to conserve, and one category we agreed should not be relied on for conservation is reuse water. If we do not use our reuse water, it simply flows down the Virgin River and benefits Nevada and other downstream users. Since conserving it provides no benefit to our region, it did not make sense to include it. For the same reason, any other water supplies that do not provide regional benefit supplies we cannot store, cannot move, or cannot deliver to another nearby community would also be exempt. We have not identified every one of those sources yet; that will require another TAC meeting to determine exactly which supplies and locations fall into that category.

Additionally, any water source not governed by the RWSA would be exempt. For example, water from a third-party canal company or from a private well would not be subject to these restrictions unless a separate agreement specifically tied it in. Lastly, to avoid confusion, water budgets are not transferable between communities. A city performing better than its budget cannot trade or sell unused budget to another.

Mayor Wilson asked whether the plan excludes the water rights that each city already holds.

Doug Bennett responded that if a city's water rights are governed by the RWSA, and the city produces water under those rights, then that water would count toward its assigned shortage-stage budget. For example, if a city could meet its entire budget using only its own water rights, it could do so and avoid any potential financial penalties from the district.

However, if a city's water rights are tied to obligations under the RWSA, those rights would be included in the budgeting process unless reducing use of that source would produce no benefit to the region, such as when the water cannot be stored, delivered elsewhere, or otherwise used. In those cases, the water source may fall under the exemption category.

Mr. Bennett also said that the details vary across the county, and that is why the TAC will reconvene to review and identify which supplies qualify for exemption.

Mr. Bennett emphasized that cities would have autonomy to determine their own shortage-response measures.

Mr. Bennett reiterated that within existing statutory and RWSA authority, the Board could impose additional measures if necessary to ensure required reductions are met but adopting this plan does not create any new authority.

Mr. Bennett explained performance tracking, he stated that in shortage years the district would provide monthly reports on each city's ERC-level water use. Financial penalties would apply only to the portion of use exceeding the city's budget and only if that excess relies on district wholesale water.

The penalty structure would be:

- **1–10% over budget:** three times the wholesale rate
- **11–20% over:** four times the wholesale rate
- **21%+ over:** five times the wholesale rate

Although the multipliers are steep, they apply only to the over-budget portion. For a city entirely reliant on district water, exceeding its budget by more than 21% would equate to roughly a 70% increase in its total annual district water cost.

Mr. Bennett concluded by saying the intent is a cooperative, flexible plan that allows cities to select methods appropriate for their communities, encourages compliance, and supports learning across jurisdictions.

Zach Renstrom said that there have been extensive discussions on the topic and that the group has considered various perspectives. Because this approach is new and unique, he emphasized that it is appropriate and welcome for participants to voice different ideas or propose alternative ways of thinking.

Mr. Renstrom also said that current reservoir levels are strong for this time of year, so there is no imminent threat driving an urgent decision. For that reason, if any of the cities have additional ideas, concerns, or suggestions, including revisiting previous discussions he encouraged them. He stated that since this is a new process, it is important to take the time to get it right.

Discussion:

Kaden Demille said under Chapter Six, Response Action Plans, in the third paragraph it states that 'the Board may also call for a prohibition on new connections to the system, if conditions merit such action.' that sounds a little bit like a moratorium. Can you explain how that would work?

Mr. Bennett responded that the district would simply stop accepting impact fees and stop allowing new connections to the system. The intent of the plan is that, under normal shortage conditions, if everyone is meeting their water budgets, growth can continue and cities would receive additional budget for new ERCs as they come online. However, if conditions became extremely dire, the public would reasonably expect that we would not continue adding new demand to a system already in an emergency.

Mayor Billings said that in the plan we describe normal as a conservation mindset, and then the next step is dry, where we are asking for a 10% reduction. But it feels like we are always dry. So, if the plan assumes that as soon as we hit 'dry' we should automatically conserve 10%, I am not sure that is realistic unless we redefine what normal actually is. It is difficult to pin down a starting point because we have already reduced our

use significantly from 0.89 acre-feet per ERC to 0.59 and we have required lower amounts for many new developments. We have made progress, and we have lower use, but expecting every user to immediately be at or below 0.59 I am not sure that is a fair or workable baseline.

Mr. Bennett responded that it would not require that all of your users, in the example I gave where the target is 0.54, individually be at 0.54. It only requires that the average of all your users comes out to 0.54. Also, keep in mind that in the earlier version of the plan this is really a remnant of that original draft the model was effectively telling you, 'You're in Stage 2,' or 'You're in Stage 1.' My impression was that nobody liked that approach. Under this plan, the model will inform the discussion, but it is the Board that makes the decision.

Mayor Billings said that the challenge she is seeing is that our baseline puts us in 'dry' almost all the time. So, if we are essentially starting in 'dry' and immediately applying a 10% reduction, that is difficult. And then adding a fee on top of that, especially when many people feel fees are the only way to drive compliance creates another issue. Some residents are already using what I would call their normal baseline; they are not using extra, and they have been conserving. Under this system, those people could end up paying more money during a 'dry' stage even though they have not increased their use and have already been doing their part. I just want to make sure we are genuinely addressing that concern.

Mr. Bennett responded, under this plan, the Board may see conditions that, on paper, justify declaring Stage One, but they will still have the ability to hear from the public and other stakeholders and decide they do not want to declare Stage One. Or they may decide to declare Stage One but only aim for a 5% reduction. There is much more flexibility here than people felt the previous proposal allowed. We had a lot of comments about how the earlier plan essentially said, 'the model says we're in Stage Two right now,' which implied we would have to make that declaration practically upon adopting the plan. This version avoids that. We can adopt it, then wait to see how the snowpack develops and how the reservoirs perform. It is highly unlikely we will need to have any shortage discussion next year. But if we had a terrible snowpack year, then yes, there might be a discussion.

Mr. Bennett also said that the Board will also be able to adjust the financial penalties, there is a lot of flexibility built in for decision-makers, rather than everything being dictated by a data model.

Mayor Randall commented that they had a work meeting on this and it was presented to the council, and they were supportive of it.

Mayor Michele Randall made a motion to recommend the Washington Water Shortage Contingency Plan to the Board of Trustees of the Washington County Water Conservancy District; the motion was seconded by Rick Rosenberg and all voted aye.

Consider approval of 2026 meeting schedule

Zach Renstrom explained this committee meets quarterly, and because this is a public meeting, we are required to establish and notice a tentative schedule for the coming year. There are four quarterly dates for 2026 and depending on how many high-demand water requests we receive, we may need to make adjustments as the year progresses, but these dates serve as our baseline schedule for now.

Mayor Nannette Billings made a motion to adopt the 2026 meeting schedule; the motion was seconded by Mayor Justin Sip and all voted aye.

Consider approval of August 27, 2025, minutes

Mayor Michele Radall made a motion to approve August 27, 2025, minutes, the motion was seconded by Mayor Rick Rosenberg and all voted aye.

Update on the Regional Reuse Purification System

Reuse Program Manager Morgan Drake explained that the district is working with the Bureau of Reclamation on permitting for the entire system, but our current focus is the East Side Reuse System, which serves La Verkin and Toquerville. That includes the Confluence Park pipelines up to Chief Toquer Reservoir. Several components on the east side already have their permits and are under construction.

Reclamation has now released a draft Environmental Assessment (EA) for the remaining East Side components that still need permits. Those include the pipeline from the Confluence Park Water Reclamation Facility to a new pond in La Verkin, the pipeline from the La Verkin pond to the existing TSWS upper pond in Toquerville. As that pipeline moves from La Verkin into Toquerville, the EA evaluates three routing alternatives two road corridors and one existing power line corridor, all within previously disturbed areas. Public comments on this EA are due Friday October 31.

We are also actively coordinating with Reclamation on the Central System (the portion from Hurricane through St. George). These two systems are not yet connected. The East Side is moving ahead first because of the timing needs associated with Confluence Park coming online. I will continue to keep this group updated as the Central System permits progress. If anyone needs a copy of the EA or wants more detailed maps, please let me know. One additional facility included in the East Side system is the Advanced Water Purification Demonstration Facility, which will support education and potable reuse outreach including taste-testing opportunities.

Update on the Joint Agency Regional Water Conservation Plan

Doug Bennett explained that all eight jurisdictions have now adopted the Joint Agency Regional Water Conservation Plan. He will take care of submitting the required documents to the state unless any of you would prefer to handle your own submission. If so, I can send you the direct contact information.

Mr. Bennett explained that the state has a very thorough oversight process, we not only have to submit the resolutions, but we also must provide the approved minutes from the meetings where those resolutions were passed. Those minutes have to be formally approved by your councils before we can submit them. Once each jurisdiction has approved its minutes, I will download them from the public portal and include them in the submission to the state. After I send everything in, I will request that the state issue a confirmation letter to each city.

Mr. Bennett thanked everyone for moving so quickly several of you had your approvals completed before I even checked in. I really appreciate the promptness.

Next meeting Wednesday, January 28, 2026, from 12:00 pm to 2:00 pm

Zach Renstrom gave an update many of you joined the tour down in San Diego where we were able to see their reuse system firsthand. We have had a lot of additional requests for that tour, so we are working on arranging another one, likely in late January. I know several of you mentioned wanting to send some of your council members, so please start thinking about who from your community may want to attend. We ~~will start thinking~~ will ~~as soon as~~ ~~finalized~~ ~~finalized~~.

Mindy Mees

Secretary

**A RESOLUTION OF THE WASHINGTON COUNTY WATER CONSERVANCY
DISTRICT ADOPTING RULES AND REGULATIONS GOVERNING DELIVERY
OF DISTRICT WATER SUPPLIES AND USE OF DISTRICT WATER
INFRASTRUCTURE**

WHEREAS, Washington County Water Conservancy District is a wholesale water provider with a service area encompassing Washington County, Utah, and also serves some retail water service customers;

WHEREAS, the District owns water rights, water shares, and other water interests and owns or operates water facilities and supplies throughout its service area;

WHEREAS, the Utah Water Conservancy District Act (Utah Code Annotated Sections 17B-2a-1001, *et seq.*) provides that the district board of trustees may, among other things:

- Make and enforce all reasonable rules and regulations for the management, control, delivery, use, and distribution of water,
- Allocate and reallocate the use of water to lands within the district,
- Provide for and declare a forfeiture of the right to the use of water upon the failure to comply with an order, contract, or agreement for the purchase, lease, or use of water, and
- Resell, lease or otherwise dispose of water with respect to which such forfeiture has been declared

UCA §17B-2a-1005(8)(a).

WHEREAS, the Utah Legislature set forth its intent in enacting the Water Conservancy District Act, including to “provide for the conservation and development of the water and land resources of the state,” “provide for the greatest beneficial use of water within the state,” and to “promote the greater prosperity and general welfare of the people by encouraging the organization of water conservancy districts,” and found that water conservancy districts help accomplish this intent because they directly or indirectly benefit the state, its people, industries, taxable property, irrigated lands, and municipalities (by providing an adequate water supply), and irrigated lands; and promote the comfort, safety, and welfare of the people of the state (UCA §17B-2a-1002);

WHEREAS, like much of the Southwest United States, Washington County has been experiencing the worst mega-drought in recorded history lasting multiple decades with few reprieves;

WHEREAS, the district’s service area is in an arid region and is the hottest, driest area in the State of Utah; the service area is largely dependent on one fragile source of water (the Virgin River Watershed) supplemented by some groundwater to supply all of its domestic, agricultural, industrial and commercial water needs;

WHEREAS, an adequate water supply is essential to the comfort, safety and welfare of the people and to the future economic development in the county;

WHEREAS, water is a naturally finite resource, and local supplies in Washington County have been largely developed, leaving scarce options for developing additional water facilities and supplies to meet the demands of new development;

WHEREAS, the district is engaging in a broad range of activities to help existing users conserve water including implementation of an excess water use surcharges to discourage excessive water use that apply to existing users, a landscape conversion program for existing users, adoption of a water conservation plan, and public outreach programs to further water conservation;

WHEREAS, the rules and regulations set forth herein are intended to apply to new development activity so that the private infrastructure and facilities constructed by new development activity can be planned and designed to conform with the rules and regulations and avoid retrofitting or redesigning at a later date;

WHEREAS, a staff analysis determined the top 1% of non-residential water users (uses of 9 million gallons or more per facility) in the region account for a significantly disproportionate share of the total water delivered;

WHEREAS, large and/or highly consumptive water uses impede the district's ability to provide an adequate supply of water to existing and new development and, if not regulated, threaten the district's ability to provide an adequate water supply to support the health, safety and welfare of the people of Washington County, State of Utah;

WHEREAS, to help provide an adequate supply of water for existing and new development, and to extend available water supplies and infrastructure to meet the demands of new development, the board of trustees finds it necessary to adopt rules and regulations governing use of district water supplies and district water infrastructure as specified herein;

WHEREAS, the board of trustees finds that the rules and regulations set forth herein will help provide for the conservation and development of water and land resources, provide for the greatest beneficial use of water, and promote the greater prosperity and general welfare of the people of Washington County, State of Utah;

NOW THEREFORE, be it resolved that the following rules and regulations are adopted:

1. DEFINITIONS. The following terms have the following meanings:

- a. "District Water Infrastructure" means water facilities owned or operated by the Washington County Water Conservancy District and water supplies owned or administered by the Washington County Water Conservancy District.

- b. "District Water Supplies" means water delivered pursuant to any water rights, water shares, contractual rights to the use of water, or other water interests owned or administered by the Washington County Water Conservancy District.
- c. "Top User" means any commercial, institutional, industrial, or non-residential facility or facility complex with a projected annual demand of 9 million gallons or more per year, as calculated or reviewed and confirmed by the Washington County Water Conservancy District.
- d. "Demand" means any water use associated with a facility or facility complex, whether on one or more parcels and whether served through one or more points of connection.

2. **APPLICABILITY.** These provisions shall be effective as of the date of adoption of this resolution and shall be applicable to development activity applying directly or indirectly for use of district water supplies or district water infrastructure after adoption.

- a. These provisions do not apply to residential single-family home subdivisions and multi-family dwelling complexes. However, private amenities associated with residential dwellings are subject the policy. Examples include, but are not limited to private parks, ornamental water facilities, water recreation facilities, and golf facilities that have demands of 9 million gallons or more per year.
- b. These provisions do not apply to development activity receiving water supplies from non-district sources, provided that no district water infrastructure is used in the provision of the non-district water supply.
- c. These provisions do not apply to existing water users that are already connected to district water infrastructure or receiving district water supplies.

3. **DISTRICT WATER SUPPLIES AND DISTRICT WATER INFRASTRUCTURE.** Use of district water supplies or connection to district water infrastructure by a Top User is prohibited except where a the Administration Advisory Committee (AAC) determines that the related development activity substantially meets the requirements pursuant to section 5.

4. **ENFORCEMENT.** The General Manager of the district shall develop administrative procedures to enforce this policy. The municipal, retail, and other customers of the district shall ensure that the rules and regulations governing use of district water supplies or district water infrastructure as set forth herein are observed, and that any facility that does not comply with the rules and regulations set forth herein is in no way physically

connected to district water infrastructure, directly or indirectly, and does not receive any delivery of district water supplies. The district reserves all legal and equitable rights and remedies against any person or entity that violates these rules and regulations, including but not limited to the right to terminate or curtail water service for the duration of the violation, collect damages, seek injunctive relief and impose monetary penalties through service fees or other mechanisms. The district's rights and remedies shall not be mutually exclusive, and the exercise of one or more rights and remedies shall not preclude the exercise of any other rights and remedies.

5. APPLICATION FOR AN EXCEPTION. An application for exception to these rules and regulations may be made to the Administration Advisory Committee (AAC) by submitting forms provided by the district that include detailed information about the project and projected water use. After submittal, the applicant may speak to its application at a regularly scheduled meeting of the AAC. District staff will review the submitted forms and information and prepare an independent analysis for the AAC. The AAC shall consider the following factors in determining whether to grant an exception to these rules and regulations and may only grant an exception when two-thirds of its members determine that an assessment of the following factors warrants an exception:
 - a. Critical public interest. Does the proposed development activity substantially further a critical public interest such as health, safety or welfare?
 - i. The critical public interest must be clearly identified.
 - ii. The critical public interest must be applicable to the region's population or a significant fraction of the region's population.
 - iii. The proponent of the development activity must provide reliable evidence and data that the methods for furthering the critical public interest are effective in furthering that interest.
 - b. Reduction in water consumption. Has the proponent of the development activity proposed a plan for effectively reducing water consumption?
 - i. This factor may not be used as the sole basis for granting exception to these rules and regulations.
 - ii. The proponent must provide reliable evidence and data that the development will utilize highly efficient water management methods and technologies that reasonably reduce water consumption.
 - iii. The proponent must agree in writing to penalties for underestimating the reduction in water consumption of the development activity.
 - c. Economic productivity. Will the proposed development activity significantly increase the economic productivity of the use of district water supplies or district water infrastructure?
 - i. This factor may not be used as the sole basis for granting an exception to

these rules and regulations.

- ii. The proponent must provide reliable evidence and data that the proposed development activity will significantly increase the economic productivity of the use of district water supplies or district water infrastructure.

ADOPTED by the Board of Trustees and effective this 3rd day of November, 2025.

WASHINGTON COUNTY
WATER CONSERVANCY DISTRICT:

Ed Bowler, Chairman of the Board

ATTEST:

Mindy Mees, Secretary

VOTING:

Ed Bowler	Yea <u> </u> No <u> </u>
Adam Bowler	Yea <u> </u> No <u> </u>
Kress Staheli	Yea <u> </u> No <u> </u>
Victor Iverson	Yea <u> </u> No <u> </u>
Michele Randall	Yea <u> </u> No <u> </u>
Rick Rosenberg	Yea <u> </u> No <u> </u>
Clark Fawcett	Yea <u> </u> No <u> </u>



2025



Water Shortage Contingency Plan

Washington County Water Conservancy District

St. George, Washington, Hurricane, Santa Clara, Ivins, La Verkin, Toquerville and Virgin

EXECUTIVE SUMMARY

As one of Utah's hottest and driest regions, and one of the nation's fastest growing metropolitan areas, Washington County is vulnerable to impacts of reduced water supply and shortage. To prepare for emergency water shortage conditions, the Washington County Water Conservancy District (district) developed this Water Shortage Contingency Plan (plan). The plan was developed in partnership with its municipal partners to provide a collaborative system for prioritizing drinking water under circumstances of diminishing supply. The district's municipal partners are the cities of St. George, Washington, Hurricane, Santa Clara, Ivins, Toquerville, La Verkin, and the town of Virgin.

An established task force (Appendix A) guided and informed the planning process. In addition, guidance was sought from more than 60 elected officials and technical experts through a survey instrument. The plan includes mitigation measures, drought monitoring, identification of shortage stages, response actions, a vulnerability assessment, operational framework, and an update process.

While drought is an ever-present threat in the region, other circumstances can result in water shortages; earthquakes, power interruptions or necessary infrastructure repairs can interfere with the ability to deliver water. The measures in this plan may be used to curtail demand in any scenario that diminishes the supply or distribution of water.

Vulnerability Assessment

This assessment identifies areas of vulnerability in existing facilities, system capabilities, and water practices of the district and its customers. Additionally, the vulnerability assessment factors in climate, Utah state policy, supply, demand, and climate change.

Mitigation Measures

The district and municipal partners have invested more than \$70 million in conservation measures and programs to reduce water demand, successfully reducing per capita usage by nearly 50% from the year 2000. The county's ongoing conservation efforts serve to increase shortage resiliency and mitigate impacts of water supply issues.

Drought Monitoring

The district developed a drought monitoring tool for identifying drought and assessing drought severity. The tool processes historical and current data to classify water supply conditions into five categories of increasing drought severity. The tool will be used to inform decision-makers as they consider the potential necessity of declaring a water shortage condition.

Water Shortage Stages

The five shortage stages range from "0" (normal conditions) to "4" (extreme shortage). The descriptors for each stage were carefully selected with consideration of public perception, and response actions were set to best communicate desired responses to varying shortage conditions. The key words describe how the district, its municipal partners, and the public should respond to the shortage stage.

WATER AVAILABILITY AND RESPONSE STAGES					
Stage	0	1	2	3	4
Condition	Normal	Dry	Prolonged Shortage	Escalated Shortage	Extreme Shortage
Key Word	Conserve	Caution	Concern	Critical	Crisis
Response Target	0	-10%	-20%	-40%	-60%

Response Action Plans

If the district Board of Trustees (board) declares a shortage condition, water budgets will be issued to municipalities commensurate with the shortage response target. The municipalities are responsible for initiating a response plan to ensure operation within the water budget. Water use in excess of the budget will bear a substantial financial penalty.

Communication Plan

The task force will meet periodically to review technical information and make recommendations to the Administrative Advisory Committee (AAC) created by the Regional Water Supply Agreement (RWSA) and the district's board of trustees, which makes shortage determinations.

The district will coordinate with its municipal partners to provide information to the public via websites, social media, and newsletters. Public outreach will extend to include press announcements, advertising, signage, and enhanced collaboration as necessary.

Plan Maintenance and Updates

The district will evaluate and update the plan as needed. Evaluation of the plan will focus on the accuracy of the shortage model and associated dashboard, response actions, and the communication plan.

Chapter 1 Plan Introduction and Background

Introduction

Washington County is Utah's hottest and driest region and one of the nation's fastest growing metropolitan areas. Population projections estimate a 155% increase in the county by the year 2060. The sole water source for Washington County's population centers, the Virgin River basin, is a small desert tributary prone to drought and climate variability that is fully appropriated. As the county approaches full utilization of its annual reliable water supply, the need for more stringent water resource management increases. Local municipal partners depend on the district to manage water supplies and provide for current and future use.

Background

To prepare for emergency shortage conditions and comply with Utah's water conservation requirements, the Washington County Water Conservancy District (district) developed this Water Shortage Contingency Plan (plan) in partnership with municipal partners that include the cities of St. George, Washington, Hurricane, Santa Clara, Ivins, Toquerville, La Verkin, and the town of Virgin.

This collaborative process designed a system for prioritizing drinking water under circumstances of diminishing water supply. A task force was developed to help guide this system, which included 18 technical experts from the district and its municipal partners (Appendix A).

In developing the strategies for this plan, the district surveyed more than 60 stakeholders, including the elected council members, mayors, and city managers of all municipal partners.

Elements

The plan includes six elements: vulnerability assessment, mitigation actions, monitoring, response actions, operational and administrative framework, and plan development and update process.

Implementation

The task force reviews technical information and makes recommendations to the district's Administrative Advisory Committee (AAC) and Board of Trustees (board). The board is the body politic that makes shortage declarations and determines plan implementation.

The task force membership is comprised of representatives well-versed in water management and technical resources. The AAC is comprised of the mayor and city manager of each of the district's eight municipal partners. The board is comprised of appointed officials who represent various regions of Washington County and serve as the district's policy makers.

Chapter 2 Vulnerability Assessment

The goal of the vulnerability assessment is to identify areas in which the district and its municipal partners are vulnerable to shortage. The assessment quantifies the impacts of climate change, drought, and water demand on supply.

Climate

Washington County is an arid region subject to frequent and prolonged dry periods and is one of the fastest growing areas in the US. These dynamics make it challenging to plan, manage, and operate a water system. Climate uncertainty further compounds this challenge and presents additional vulnerabilities. Washington County is vulnerable to shortage for the following primary reasons:

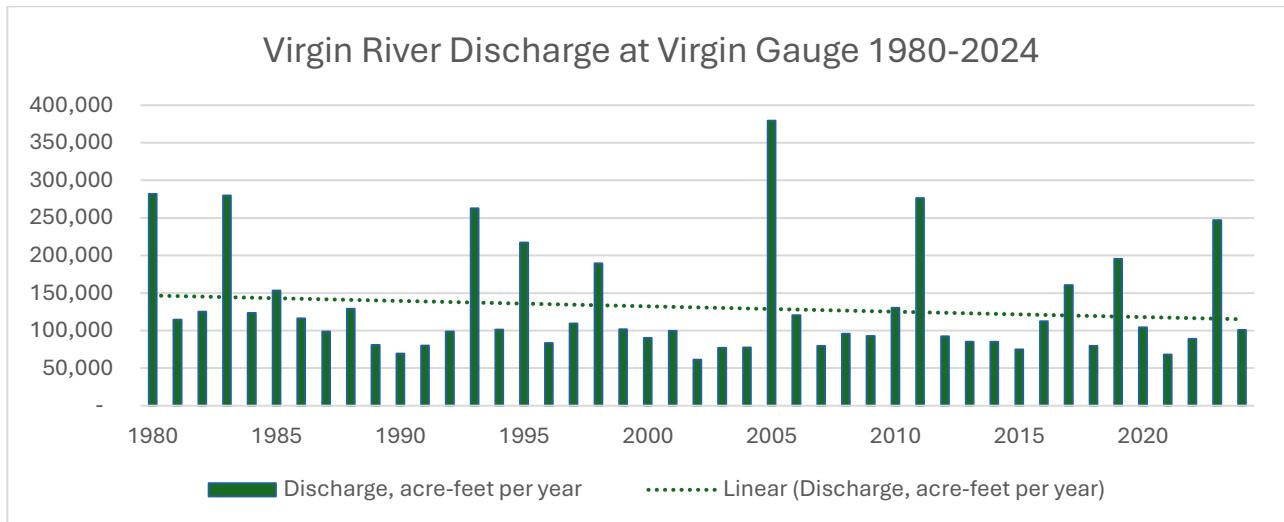
- Exclusive reliance on the Virgin River basin for its supply
- Prone to meteorological drought with long periods of drier than normal conditions
- Virgin River May-July streamflow is predicted to decline 20% based on the Bureau of Reclamation's 2014 climate analysis¹
- Population increases averaging nearly 3.5% per year over the past 10 years
- Current water demand is approaching the annual reliable supply

The district and the Utah Department of Natural Resources have taken a proactive approach to these challenges by frequently assessing water supplies, demand dynamics, and developing plans to improve resiliency. Visit wcwcd.gov for previous studies and reports related to this issue.

Water Supply

The region's water supply is approximately 70% surface water and 30% groundwater, all derived from the Virgin River watershed. Surface water storage is highly dependent on annual flow in the Virgin River. While precipitation, snowmelt, and soil moisture that determine the flow in the Virgin River are variable, there has been a demonstrable drop in available yield over the last century.

¹ Utah Board of Water Resources. 2016. *Lake Powell Pipeline: Final Climate Change Study Report*. April 2016



Water Demand

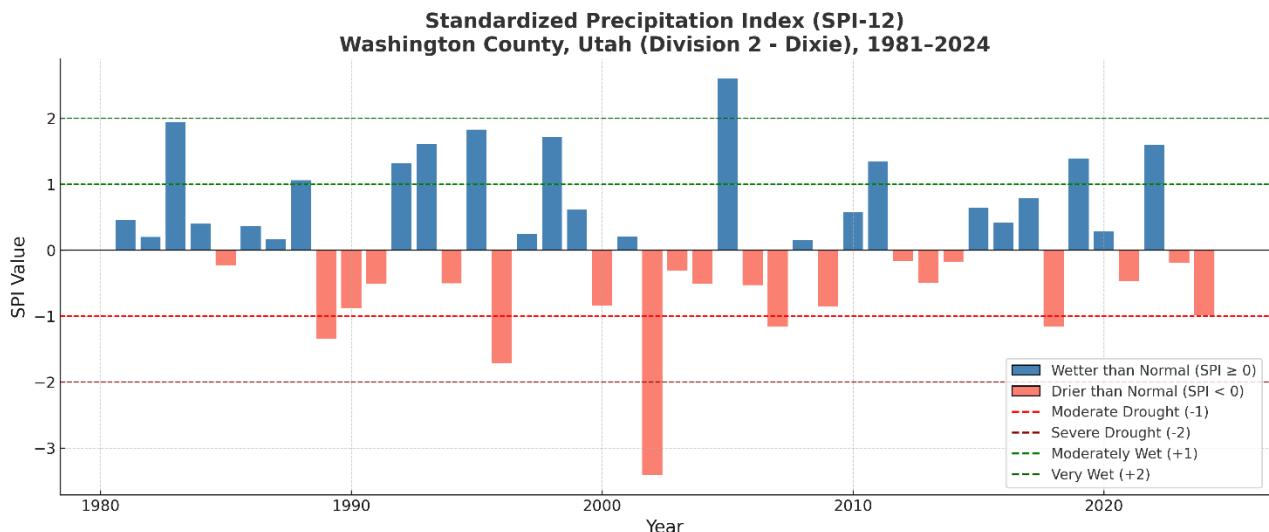
The district is a wholesale water provider to its municipal partners. In 2024, combined monthly production of the municipal partners and the district averaged approximately 2,200 acre-feet during winter months (Dec-Feb), and approximately 6,500 acre-feet during peak growing season (Jun-Sep).

Drought History

The district is within a drought-prone region. The Standardized Precipitation Index (SPI) for Washington County from 1980 through 2024 demonstrates high variability in precipitation.

The district's reservoir and groundwater supplies provide drought resilience; however, future climate scenarios² predict more extreme drought conditions, in both magnitude and duration.

² Reclamation. 2011. SECURE Water Act Section 9503(c) – Reclamation Climate Change and Water 2011. April



Source: Western Regional Climate Center (<https://wrcc.dri.edu/wwdt/time/>)

Climate Impacts

Recent studies³ suggest the Colorado River Basin will likely see hotter and drier patterns in the future. Climate models for the Virgin River predict a reduction in streamflow of 20% from May through July – coinciding with peak water demand.

In addition, future climate trends⁴ are predicted to cause the runoff season to arrive one month earlier in the year. With temperatures in the Virgin River Basin anticipated to be 4.5 to 5°F warmer from 2050 to 2079 compared to the 1950 to 1979 historical mean, precipitation in Washington County may shift from snow to rain. Whereas snowmelt moderates the flow of the Virgin River, intense rainstorms could hinder diversion through the Quail Creek pipeline, diminishing the district's ability to capture runoff. This issue cannot be resolved by increasing water storage.

Chapter 3 Mitigation Measures

Drought mitigation refers to actions and strategies outside of regular water management activities that reduce the risks and impacts associated with shortage. Proactive mitigation is more efficient than reactive strategies. The mitigation strategies described here are intended to reduce the risk of water shortage and increase the district's shortage preparedness. The current and planned mitigation measures support the plan's primary goals to:

- Protect and extend the region's limited water resources
- Prepare for a rapidly expanding population
- Provide regional economic resiliency

³ United States Bureau of Recreation. 2014. *Virgin River Climate Change Analysis Statistical Analysis of Streamflow Projections*

⁴ Reclamation. 2009. Technical Memorandum 86-68210-091. *Literature Synthesis on Climate Change Implications for Reclamation's Water Resources*. Prepared by Technical Service Center, Water Resources Planning and Operations Support Group, Water and Environmental Resources Division

- Preserve the natural environment
- Prolong longevity of water infrastructure

The mitigation measures are compatible with the district's Joint Agency Regional Water Conservation Plan and Best Management Practices suggested by the Utah Division of Water Resources. These include current, in-progress, and future or planned mitigation strategies, which are broken down into two general categories:

Institutional Strategies: These are non-engineered, administrative or legal strategies that include economic incentives, education and outreach, and development standards. Mitigation measures in this category reduce water demand.

Water Supply Augmentation Strategies: These are engineered strategies that increase the district's water supply resiliency to water shortages. These may include new water sources, increased storage capacity, and expanded distribution systems for both potable and secondary supplies.

Water Supply Augmentation Strategies

The district and its municipal partners have projects underway to increase the resiliency of the water supply. These projects include:

- Recharging 5,000 to 18,000 AF per year to the Sand Hollow Aquifer, as available
- Adding storage for Cottam, Sand Hollow, Quail Creek, and Sullivan wells
- Expanding well fields in the Cottam, Sullivan, and Sand Hollow regions
- Expanding surface water storage in Graveyard Wash, Chief Toquer, and Kolob reservoirs
- Expanding Quail Creek Water Treatment Plant from 60 to 90 million gallon per day (MGD)
- Performing groundwater studies in the Gunlock region
- A regional reuse purification system to produce an additional 24,000 AF per year
- Enhancing system connectivity between Toquerville Springs, the town of Virgin, and wells in the Sand Hollow region
- Constructing the Lake Powell Pipeline

Detailed project information is available in the district's *20-Year Plan to Secure New Water Supplies for Washington County, Utah* and the *Regional Water Master Plan* on wcwcd.gov.

Summary of Current Shortage Mitigation Measures

Mitigation Measures		Description
Institutional Strategies		
CURRENT	Tiered Water Conservation Rate	Increased charges for higher use customers to incentivize conservation.
	Excess Water Use Surcharge	Substantial surcharges of up to \$10/1,000 gallons for accounts with excess water use.
	Financial Incentives for Conservation Efforts	Weather-based irrigation controllers, water-efficient fixtures, and water-wise landscaping.
	Education and Outreach	Provide education on outdoor water use to the public, municipalities, and schools.
	Water Loss Reduction	Water Loss Management Committee identifies projects to minimize non-revenue water throughout the system.
	New Development Standards	Coordinate with municipalities to enact new construction standards requiring water efficient fixtures and landscapes.
	Advanced Metering Infrastructure (AMI)	Most municipal connections have AMI meters. Completion is underway.
	Advanced Water Modeling	Refinement of the Virgin River Daily Simulation Model for increased real-time data on the impact of river changes on the overall water supply.
Water Supply Augmentation Strategies		
CURRENT	Aquifer Recharge at Sand Hollow Reservoir	Recharge of the Navajo Sandstone Aquifer by the Sand Hollow Reservoir to supplement supply.
	Water Reuse	The St. George Water Reclamation Facility produces Type I reuse water for agricultural, commercial, institutional and residential irrigation. Capacity is 7 MGD but may expand to more than 20 MGD.
PLANNED	Additional Storage, Wells, and Pipelines	Addition of several new wells, pipeline, and water storage to increase distribution system flexibility.
	Secondary Water System Expansion	Replace irrigation connections to secondary water sources from potable water sources.
	Quail Creek Water Treatment Plant Expansion	Expand treatment plant capacity and storage to capitalize on high flows to offset periods of drought.
	Gunlock Groundwater Optimization Study	Study Gunlock aquifer recharge and define the actual sustainable yield for supply optimization.
	Regional Reuse Purification System	Expand non-potable reuse. Exchange reuse water for high quality agricultural water. Purify and store reuse water for production into potable water.
	System Connectivity Strategies	New interconnections to enhance redundancy and reliability.
	Lake Powell Pipeline Project	Utilize a portion of Utah's Colorado River water allocation.

Mitigation Measure Prioritization

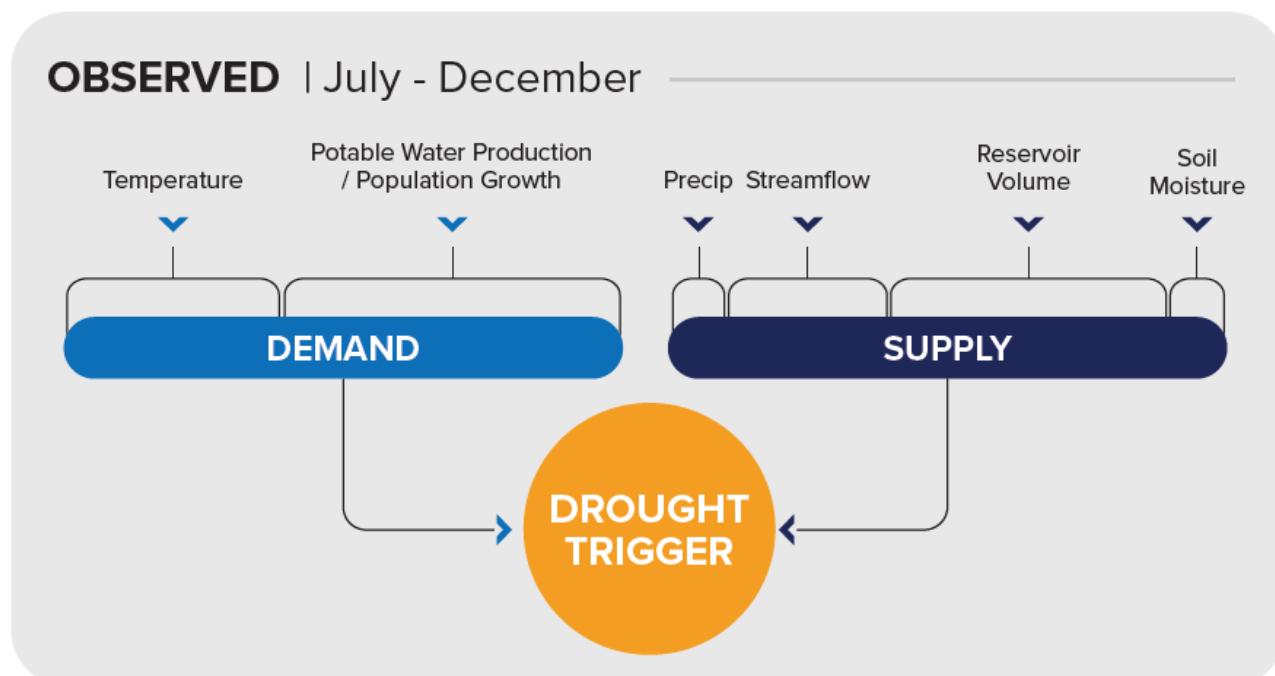
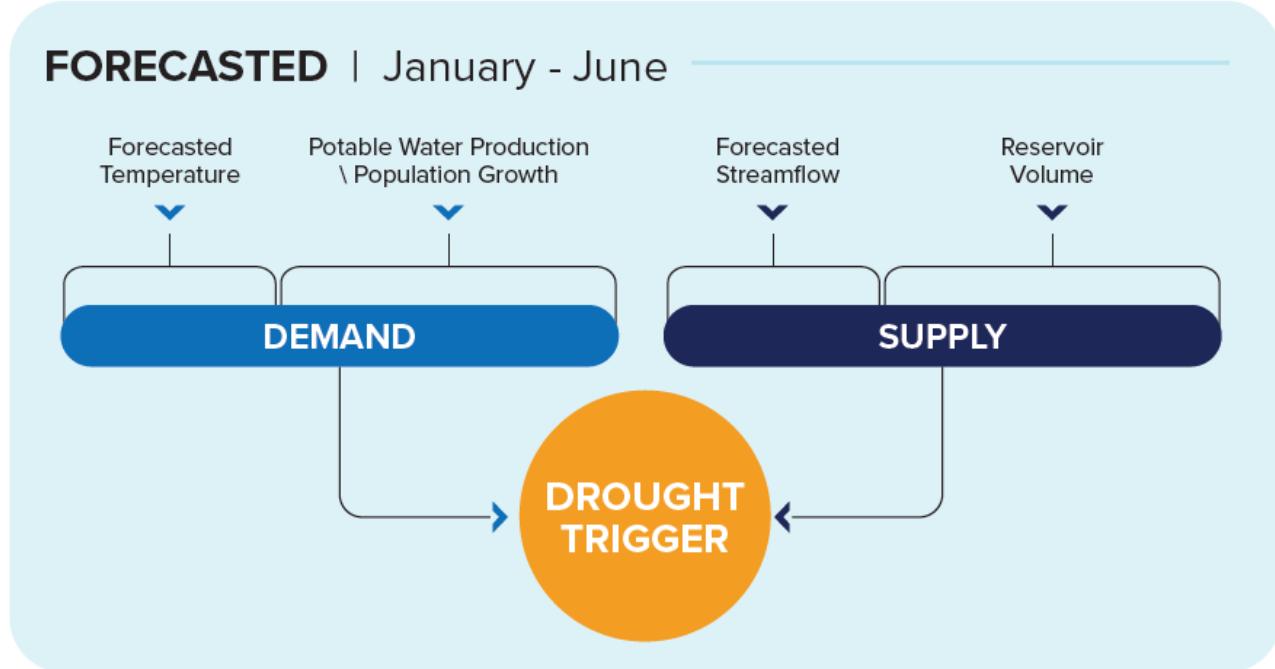
Mitigation measures are prioritized based on three evaluation criteria: water savings/addition, ease of implementation, and drought tolerance. Criteria were scored on a 5-point scale. The sum of criterion scores for each strategy determined overall priority. Scores of 10 and above are high priority, 8-9 are medium priority, and 7 or below are low priority. The results are displayed below.

Mitigation Measure Prioritization Matrix

Mitigation Measures	Resource Improvement	Ease of Implementation	Drought Tolerance	Total Score	Priority
Institutional Strategies					
Water Loss Reduction	4	3	4	11	High
New Development Standards	3	3	3	9	Medium
Advanced Water Modeling	2	3	3	8	Medium
Advanced Metering Infrastructure (AMI)	3	2	2	7	Low
Water Supply Augmentation Strategies					
Regional Reuse Purification System	5	3	4	12	High
Gunlock Groundwater Optimization Study	4	3	4	11	High
System Connectivity Strategies	3	3	4	10	High
Additional Storage, Wells, and Pipelines	3	3	4	10	High
Lake Powell Pipeline Project	5	1	3	9	Medium
Quail Creek Water Treatment Plant Expansion	2	2	3	7	Low

Chapter 4 Drought Monitoring

Drought is likely to be the most common cause of shortage. The district's drought monitoring tool quantifies conditions to recognize drought and assess its severity. The tool processes historical and current data to characterize conditions. These assessments inform the district's board, which is responsible for making shortage declarations. The drought tool uses inputs for past conditions and attempts to project future conditions. The inputs are illustrated in the following figures.



Supply Data Sources

Precipitation

The precipitation record used consist of measurements taken from nearly 13,000 stations owned by COOP, SNOTEL, Snowcourse, RAWS, CDEC, Agrimet, and EC (Canada). The data period of record ranges from January 1895 to the present.

Reservoir Volumes

Reservoirs used in the model include Gunlock, Ivins, Kolob, Quail Creek, and Sand Hollow. Quail Creek and Sand Hollow Reservoirs constitute 86% of the district's reservoir storage and are used as an indicator of total capacity.

Observed Streamflow

Monthly streamflow volumes are calculated from daily average flow and then ranked against the period of record.

Forecasted Streamflow

Winter streamflow forecasts are used to predict water supply in the spring. Forecasts for the Santa Clara River near Pine Valley (USGS 09408400) and Virgin River at Virgin, UT (USGS 09406000) stations come from the Natural Resources Conservation Service (NRCS) Web Service tool. The NRCS uses statistical models to produce streamflow forecasts.

Soil Moisture

Modeled soil moisture information is obtained from NASA's North American Land Data Assimilation System (NLDAS).

Demand Data Sources

Air Temperature

Air temperature data are used to calculate the irrigation component of the demand score. Temperature data are accessed using the same methodology as precipitation data. The period of record covers January 1895 to the present day on a monthly timestep.

Forecasted Air Temperature

Forecasted air temperatures in winter are used to predict irrigation-driven demand in spring. Seasonal temperature forecasts are available in 3-month increments and provided by the National Weather Service's Climate Prediction Center. Forecasts are given in terms of percentages above and below normal. Seasonal temperature forecasts are based on climate and weather models, recent trends, and historical records.

Population

Annual Washington County population estimates are used to calculate the component of the demand score until 2020. Historical population data from 1900-1940 were linearly interpolated

from available U.S. Census Bureau decennial census data. Population estimates from 1941-2020 were collected from the Kem C. Gardner Policy Institute of the University of Utah. The model uses percentage change from the rolling 3-year average as the population indicator.

Production

Production data refers to water pumped and diverted by the district and its municipal partners. The historical record for production data consists of monthly volumes beginning in 2017.

Monthly production volumes are uploaded each month by the district. The model uses percentage change from the rolling 3-year average as the production indicator. Production data is used to estimate the component of the demand score after 2020.

Chapter 5 Shortage Stages

The AAC may make shortage recommendations to the board, but only the district's board may make a water shortage declaration or advance or repeal a shortage stage.

Shortage stages range from "0" for wet or normal conditions to "4" for extreme shortage. These stages communicate the severity of shortage and water supply conditions to district partners and the public. Stage descriptions help communicate conditions and necessary response actions (see Chapter 6).

To declare shortage, or transition from one stage to another, the Task Force recommends the condition persist for ninety days. This is intended to avoid messaging "whiplash" that could be disruptive to response actions. This guidance is advisory; the district board may advance or repeal a stage declaration at any time and for any duration if conditions merit such action.

Each stage is intended to produce enough water savings to abate the shortage and decrease the likelihood of worsening conditions. The key words and color schemes for each stage are intended to communicate the desired response and influence public understanding.

WATER AVAILABILITY AND RESPONSE STAGES					
Stage	0	1	2	3	4
Condition	Normal	Dry	Prolonged Shortage	Escalated Shortage	Extreme Shortage
Key Word	Conserve	Caution	Concern	Critical	Crisis
Response Target	0	-10%	-20%	-40%	-60%

Stage 0 – Normal (No reduction required)

Water supply meets current demands and is adequate to maintain or increase stored supplies. In this stage, normal conservation efforts are sufficient.

Stage 1 – Dry (10% reduction advised)

Water demands are depleting supplies faster than they can be replenished.

Stage 2 – Prolonged Shortage (20% reduction advised)

Water supply has been diminished (e.g. reservoir levels are low) and the meteorological conditions have failed to replenish the supply. This may occur if Stage 1 actions were ineffective, or due to below normal precipitation for an extended time. Responses become more aggressive to conserve available water in case the dry meteorological conditions persist.

Stage 3 – Escalated Shortage (40% reduction advised)

Significant deterioration in water supply, approaching critical levels. This stage may occur due to abnormally dry meteorological conditions for an extended time. Response actions reflect prioritization of water uses. Water may be rationed and redistributed to maintain human health and safety, including fire protection. Due to robust storage and infrastructure, a period of escalated shortage has not occurred within the past 50 years.

Stage 4 – Extreme Shortage (60% reduction advised)

The region is in a state of water emergency. Stored supplies have been substantially diminished, and water use is limited to what becomes available in each season. Non-essential water use may be terminated, and human health and safety will be the highest priority. A period of extreme shortage has not occurred within the past 50 years.

The following table shows the results of applying the shortage model to 30 years of past conditions in Washington County. A historic review of the model for a period of more than 50 years showed the region would have been in stage 0 (normal) conditions 62% of the time, stage 1 conditions 29% of the time, and stage 2 conditions 9% of the time.

Historic Frequency and Severity of Drought Conditions (1996-2025)

Chapter 6 Response Action Plans

Despite relying upon the same primary source of water, each of the district's eight municipal partners have unique demands and resource scenarios. To allow municipal partners to select a suite of response actions that best fit their community, the district's board may call for municipal-scale water budgeting. In this approach, each municipality will be provided a water budget based upon the number of Equivalent Residential Connections (ERC) within the municipal service area. An ERC is an amount of water capable of serving a single-family home for one year. Commercial, industrial, and institutional customers have been allocated multiple ERC's based upon their water demands.

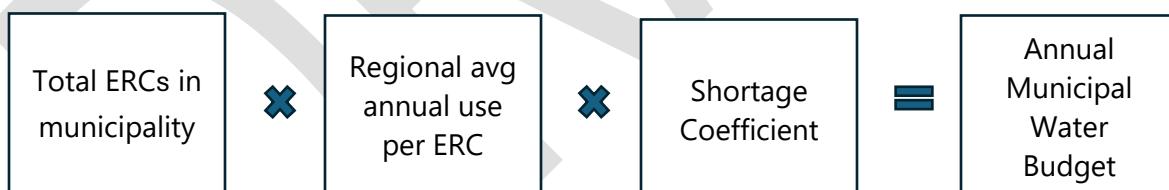
Each municipality must devise its own strategies to reduce water demand. In some cases, a municipality with a culture of conservation may already have lower than the per-ERC allocation provided by the district. If this occurs, the municipality will be expected to sustain the current average use per-ERC within their community.

In lieu of, or in addition to, water budgets, the board maintains discretion to direct municipalities to implement specific measures. The board may also call for a prohibition on new connections to the system if conditions merit such action.

Water Budget Methodology

Water budgets will be based upon the region's average annual water demand per ERC for the most recent three calendar years in which no shortage had been declared. This value will become the baseline for normal conditions.

During a shortage declaration, each municipal partner will be allocated a water budget calculated as follows:



Total ERC – The number of ERCs submitted to the district by the municipality as part of a surcharge collection report. Because communities are growing, the average of ERC in each of the twelve months will be used as the ERC served in any calendar year.

Regional Average Use per ERC – Calculated as an average use per-ERC for the most recent three calendar years in which no shortage was declared. All municipal and district water deliveries subject to the Regional Water Supply Agreement (RWSA) will be included. The three-year total water use will be divided by the total ERC reported by all municipal partners in July of each reference year.

Shortage Coefficient – A number less than 1 used to calculate the desired water use reduction per ERC. For example, if the intent was to reduce water demand by 20%, the shortage coefficient would be calculated within a model to reduce the average water use per ERC by 20%. It is important to note that because most end users demand less than the average, achieving a reduction in the regional average may require a coefficient that is more aggressive. If the coefficient is not achieving the desired demand reduction, the district and the municipal partners may calibrate the coefficient to be more effective.

The RWSA requires municipalities to apply all available municipal sources toward their demands before accepting augmentation from the district. For example, if a municipal partner was issued an annual water budget of two billion gallons and had a municipal capacity to produce 1.1 billion gallons, the district would augment the remaining 0.9 billion gallons.

On recommendation of the Task Force, water supplies deemed to be unrecoverable if conserved will be exempt from the water demand calculation. For example, Type I reuse water is currently used for urban irrigation. If the facilities served reduced their water use, the conserved water would become effluent discharged to the Virgin River and lost from the regional system.

Water budgets are non-transferable. If a community uses less water than their budget, they may not allocate excess to another municipal partner.

Performance Monitoring and Adjustments

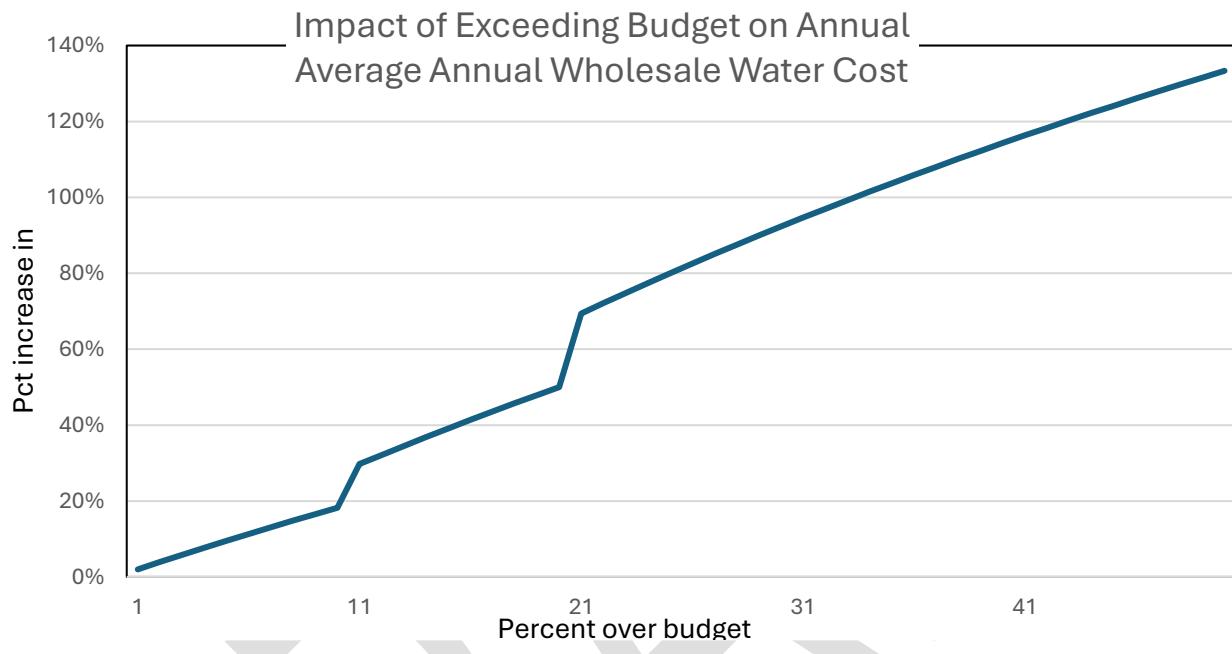
For purposes of monitoring performance, the district may establish monthly targets using historic monthly demand profiles or evapotranspiration data. This approach allows for frequent performance feedback to the district board, municipal partners and the public.

Each municipal partner's water budget will be augmented periodically as the number of ERCs increase. ERCs added during a budgeted period will receive a pro-rata allocation.

In the event there is a stage change during a water budgeted year, the district will recalibrate budget amounts appropriately. Whereas this process hasn't been used before, calibration methodology may be subject to change as experience is gained. Calibrations will be made in consultation with the municipal partners.

Because suspension of deliveries for a municipality that exceeds its water budget could negatively impact public welfare, the district will first apply an aggressive rate structure to water deliveries in excess of the budget. In calculating overages, the percentage excess will be the actual use divided by the budgeted amount, including both municipal and district sources. Only the district water in excess of the budget will be assessed the amplified price.

Percent Excess	District Wholesale Water Charge
1-10% over budget	300% of standard cost
11-20% over budget	400% of standard cost
21% or more over budget	500% of standard cost



Chapter 7 Communication Plan

During a shortage declaration, the Task Force will engage monthly to review technical information. Information will be conveyed to the district board and AAC at all regular public meetings. The AAC is comprised of local municipalities' Mayors and City Managers who meet quarterly and may make recommendations to the district board. The district board is responsible for deciding if, and when, to declare shortage or change the shortage stage based upon supply and demand conditions. Stage changes will be communicated to municipal partners and the district's website will reflect the updated stage.

The district will maintain information on its website to allow access to shortage information for all eight communities. Because each municipality may have selected different response actions, a significant communication burden will be upon the cities to inform and guide their residents.

Public awareness and adoption are vital to the plan's success. The district will coordinate with its municipal partners to provide information regarding water supply availability and response stages to the public via the following sources:

- **Website** – the district will have dedicated pages on wcwcd.gov with information; the district will encourage the county and all municipal customers to link their website

- **Social media** – the district will post information on its various social media platforms and encourage the county and all municipal partners to do the same
- **E-newsletter** – the district will distribute information in its electronic newsletter and share content with county and municipal partners for distribution to their subscribers
- **Press announcement**– the district will distribute information to media representatives with the intent of generating news coverage
- **Advertising** – the district has a robust media campaign that includes online, social media, broadcast production and billboard advertisements that will be used
- **Speakers' bureau** – District representatives will speak at community and civic events

Chapter 8 Plan Maintenance and Updates

The district will update the plan as needed. These changes will consider recommendations from stakeholder committees, as well as any new federal or state requirements.

Evaluation of the plan will center around three main topics to assure it is working effectively. These topics include:

Plan Performance – Individual and collective performance will be measured monthly.

Shortage Response – Response actions will be reviewed to determine which measures are effective and concepts for amplifying effectiveness.

Communications - Ongoing evaluation will allow stakeholders to revise or implement additional strategies to communicate more effectively.

Appendix A – Task Force Members

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Appendix B – Shortage Response Guidance for Municipalities

Whereas water is critical to the region's economy, response plans should seek to protect core economic functions to the extent possible. This is accomplished by focusing heavily upon discretionary water uses, consumptive water uses and large water users. Plans should use incremental measures to moderate user impacts and negative economic consequences.

Plans should anticipate water use reductions across every sector: residential, commercial, industrial and institutional. Some sectors may be more impacted than others due to the nature of water use (landscape vs. domestic), the relative value of the use (ornamental lawns vs. active spaces), or the enormity of the demand (top tier water users).

Landscape

Almost 70% of urban water in the region is used consumptively, meaning it is lost to the atmosphere after use. Consumptive uses include, but are not limited to, landscape irrigation, evaporation from water surfaces, mist cooling systems, water system leakage and evaporative cooling systems. Collectively, consumptive uses are estimated at 12 billion gallons annually. Irrigated landscape is estimated to be 75% of consumptive use, or 9.4 billion gallons.

Irrigated lawn areas consume about 75% of all landscape water use, or about 7 billion gallons. A 2023 analysis conducted by

Type of Landscape	Estimated Annual Water Use	Percent of total water supply (2023)
All landscape types	9.4 billion gallons	54%
All lawn grass	7.0 billion gallons	40%
Functional lawn grass	4.2 billion gallons	24%
Ornamental lawn grass	2.8 billion gallons	16%
Other landscape types	2.4 billion gallons	14%

the district estimated there are 180 million square feet of lawn in the region and as much as 70 million square feet are primarily ornamental.

Ornamental lawns provide no recreational function, either because of their size, shape or accessibility. Whereas irrigated lawns use four times as much water as drip irrigated plantings, spray irrigation and ornamental lawns should be restricted before drip irrigated plantings. Where development has been allowed, the installation of irrigated lawn areas may be deferred or prohibited.

Prohibiting irrigation of ornamental lawns could yield up to a 16% reduction in water demand without sacrificing active areas or risking loss of mature trees and shrubs.

For purposes of shortage response, ornamental lawns could include decorative lawns at businesses and homeowners' associations and front lawns of residential homes. Areas that don't meet a municipality's definition of an active recreation area should also be considered.

Allowing drip irrigated landscape to be installed and sustained is critical to sustaining the region's mature plants and trees and will help sustain economic activity in the landscape industry. By converting lawn areas to drip irrigated plantings during water shortage, the region will also improve long-term water security.

Water Recreation

Water recreation is a discretionary use. Residential swimming pools are typically 400 to 700 square feet in surface area and require 20,000 to 40,000 gallons annually to maintain. Homes with pools may use 20% more water than those without. Most of a pool's water demand is attributable to evaporation, however, estimates suggest 30% of pools have leaks that lose water into the surrounding soil.

Municipal plans may consider improved management practices on existing pools and a reduction of new pools during a declared shortage condition. Because swimming pools may not be left empty without damage to the shell, and unmanaged pools pose health and safety hazards, it may be appropriate to allow the water level to be maintained in existing pools but call for more efficient operational practices, such as the use of a vapor barrier (cover) to reduce evaporation and a prohibition on draining and refilling.

Community swimming pools provide recreation for hundreds or even thousands of people. In areas where a community pool exists, homeowners are less likely to install private swimming pools. Due to the economy of scale, municipalities may consider allowing new community swimming pools to be constructed to a conservation standard during some shortage stages. This allows community pools to serve as a viable option to private swimming pools and helps sustain employment.

Commercial water parks use 15 to 30 million gallons annually, which places them among the top one percent of commercial and industrial users in the region. Water parks typically operate for just 4-5 months each year and cater to a limited sector of the population. During shortage, permits for new water parks may be suspended and operations of existing parks may be curtailed in later stages of shortage.

Splashpads are water-play areas, most of which are associated with municipal parks. These facilities use about 300 gallons per square foot of play area annually and typically operate 5 months of the year. Most splashpads operate as single-pass water use, where water delivered through nozzles sprays onto bathers and then flows to the wastewater system where it may be recovered for reuse. Some splashpads recirculate water through a swimming pool filtration system or recover water for landscape irrigation on-site. Seventy percent of splashpad use is estimated to be captured to the drain, while the remaining 30% is lost to evaporation from the play surface and bathers. Operations of these facilities may be curtailed or suspended with little or no concern about damaging infrastructure.

New Development

Increasing water demand during a water shortage is precarious. New permits for non-critical facilities may be restricted at various stages of shortage, but projects with existing water commitments and appropriate permits that have already initiated construction may have a legal basis to proceed. Allowing previously permitted projects to advance while simultaneously restricting issuance of “non-essential” new permits creates a “glide path” for reduction of activity in the construction and development industries. This approach can soften economic impacts as compared to sudden and absolute prohibition.

In some cases, the shortage plan may merit district or municipalities to prohibit new service for certain types of water-intensive facilities.

Even in shortage, there may be necessity to construct facilities that meet a critical need for the community. There are also benefits in approving the construction of facilities that have nominal water demands during and after construction. Municipalities will determine what constitutes a critical facility, a low water use project, or a project that merits additional permits to reach completion.

Municipalities should consider the following guidelines for determining whether a project merits the additional water demands:

- The most conspicuous critical facilities are those that meet a pressing need for the general population, such as health care facilities or public safety infrastructure.
- Depending upon supply conditions, housing may be deemed a critical facility, but preference should be given to multi-family dwellings and ultra-water efficient (UWE) communities intended to serve as primary residences. Where UWE housing development is occurring, communities should be afforded consideration to develop community parks or swimming pools subject to the UWE design standard.
- Construction already permitted may proceed, subject to specific direction or intervention by a municipality. For example, if building lots have been prepared and transportation and utility infrastructure installed, construction of homes may be a nominal part of the total water demands of the project. However, if a permitted project has substantial water demands, a municipality may determine water shortage is a compelling reason to suspend or defer the project, within the scope of the jurisdiction’s legal authority.
- Permits for facilities that require nominal water to construct or operate may be approved, even if they are not critical facilities.
- Permits issued should include clear stipulations that allow the municipality to suspend construction if water supply shortage becomes more severe.

Water Rates

Water rates are a powerful tool. An aggressive increasing block rate structure helps ensure affordable water to meet basic needs for health and safety and moderate landscape demands. Higher water use blocks may be priced to send a strong conservation message, but they also allow property owners to make their own decisions about strategies to reduce use without specific regulatory intervention.

Having high monthly service fees mutes the financial benefit of a customer reducing their water use. If possible, lower the monthly service fee and move the revenue requirement. A volume of water should not be included in the service fee, as this discourages conservation.

A small percentage of heavy users typically accounts for a disproportionate fraction of water demand. For example, in the commercial sector, the top one percent of customers account for almost half of all commercial demand. In the residential sector, it is not uncommon for the top 25% of customers to use more water than the remaining 75%.

Since these “super users” may cause a municipality to exceed a district-mandated water budget, thus incurring additional cost for the utility’s entire customer base, an appropriate strategy may be to implement a water shortage rate structure that strongly discourages high water use. This approach incentivizes heavy water users to choose their own conservation measures without imposing a regulatory burden or cost upon low and moderate water users.

The following guidance are suggested measures that may be commensurate with the severity of conditions and the targeted water use reduction. In the absence of a specific resolution from the district board, municipalities are not required to follow the guidance and may make their own policy determinations.

Shortage Stage 0: Conserve

- Implement Conservation Plan

Shortage Stage 1: Caution

- Promote Stage 1 watering guidelines
- Reduce irrigation of public facilities by 10%
- Implement Stage 1 water rate structure
- Stage 0 actions plus:
 - Leverage smart metering systems to strengthen messaging
 - Prevent lawn installations May through September
 - Limit residential swimming pool permits to 500 square feet or less surface area
 - Reject new connections for non-critical facilities with demands over 9 MGY
 - Increase enforcement of municipal water waste policies

Shortage Stage 2: Concern

- Deploy Stage 2 communications
- Promote Stage 2 watering guidelines
- Reduce irrigation of public facilities by 20%
- Implement Stage 2 rate structure
- Stage 1 actions plus:
 - Defer new grass installation. Drip irrigated, water-efficient plants only
 - Prohibit irrigation of ornamental lawns in all sectors
 - Defer new private swimming pool permits
 - Require new housing to meet ultra efficient water standard
 - Reduce operation of public splashpads
 - Reject new connections for non-critical facilities with demands over 3 MGY
 - Restrict car washing frequency
 - Prohibit ornamental fountain operation
 - Prohibit comfort mist cooling systems
 - Implement golf water budgets for 20% reduction
 - Increase incentives for water efficient landscape 50%

Shortage Stage 3: Alarm

- Deploy Stage 3 communications
- Promote Stage 3 watering guidelines
- Reduce irrigation of public facilities by 30%
- Implement Stage 3 rate structure
- Turn off outdoor water features, including splashpads
- Stage 2 actions plus:
 - Spray irrigation prohibited except for communal active recreation areas
 - Watering limited to drip irrigation or hand-held hose with positive shut-off nozzle
 - Implement water budgets for golf courses to reduce demand 30%
 - Planting only allowed for conversion of lawn areas to water-efficient landscape
 - No new connections approved except critical facilities or low-water demand facilities
 - Swimming pools covered when not in use. Only make up water allowed
 - Recreational water parks and splashpad operations suspended

Shortage Stage 4: Crisis

- Deploy Stage 4 communications
- Deploy Stage 4 watering guidelines
- Reduce irrigation of public facilities by an additional 20% (60% total)
- Implement Stage 4 rate structure
- Golf course irrigation budgeted at 60% reduction
- Stage 3 actions plus:
 - Outdoor irrigation prohibited except communal active recreation areas which are budgeted at 40% of average.

- All outdoor water recreation suspended
- Car washing prohibited, except dry wash products

DRAFT



2026 Regional Water Supply Agreement Administration Advisory Committee

**Meeting Schedule
533 E Waterworks Drive
12:00 pm – 2:00 pm**

**January 28, 2026
May 27, 2026
August 26, 2026
October 28, 2026**



AAC Meeting

October 29, 2025

Agenda

- Discuss Leeds joining the RWSA
- Consider recommending adoption of rules and regulations governing delivery of district water supplies and use of district water infrastructure to the Board of Trustees
- Consider recommending adoption of a Water Shortage Contingency Plan to the Board of Trustees
- Consider approval of 2026 meeting schedule
- Consider approval of August 27, 2025, minutes
- Update on the Regional Reuse Purification System
- Update on the Joint Agency Regional Water Conservation Plan
- Next meeting Wednesday, January 28, 2026, from 12:00 pm to 2:00 pm



1. Discuss Leeds joining the RWSA

- Zach Renstrom, WCWCD General Manager
- For discussion

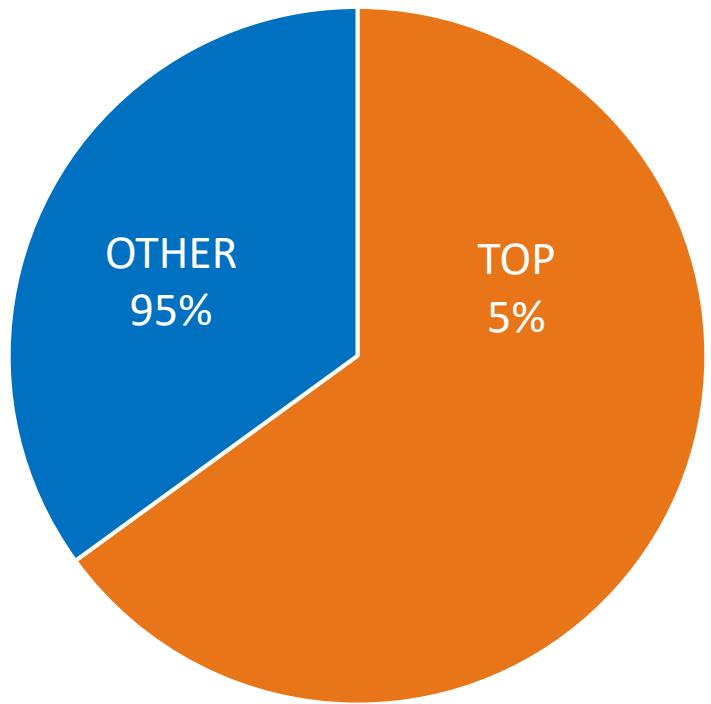


2. Consider recommending adoption of rules and regulations governing delivery of district water supplies and use

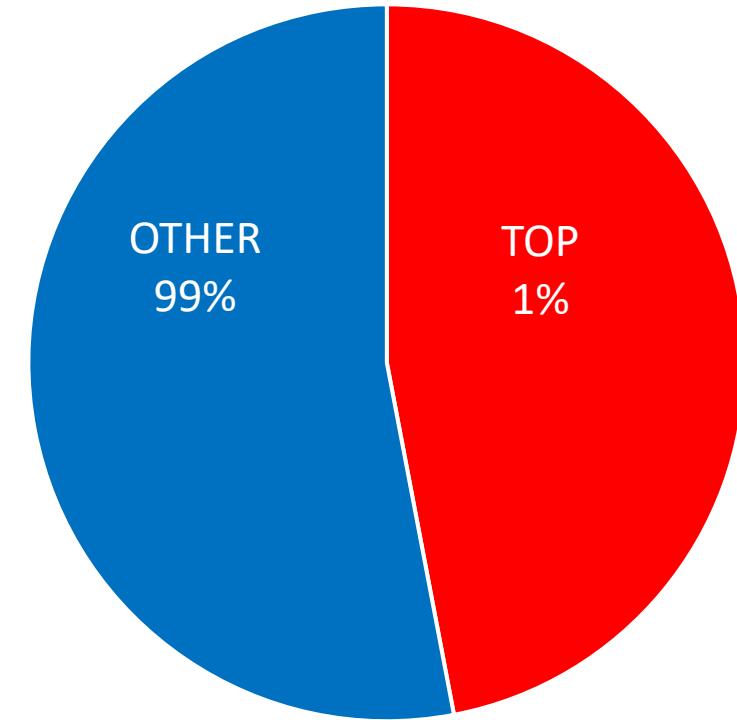
- Doug Bennett, Conservation Manager
- Jodi Richens, General Counsel
- For action



Top CII Water Users



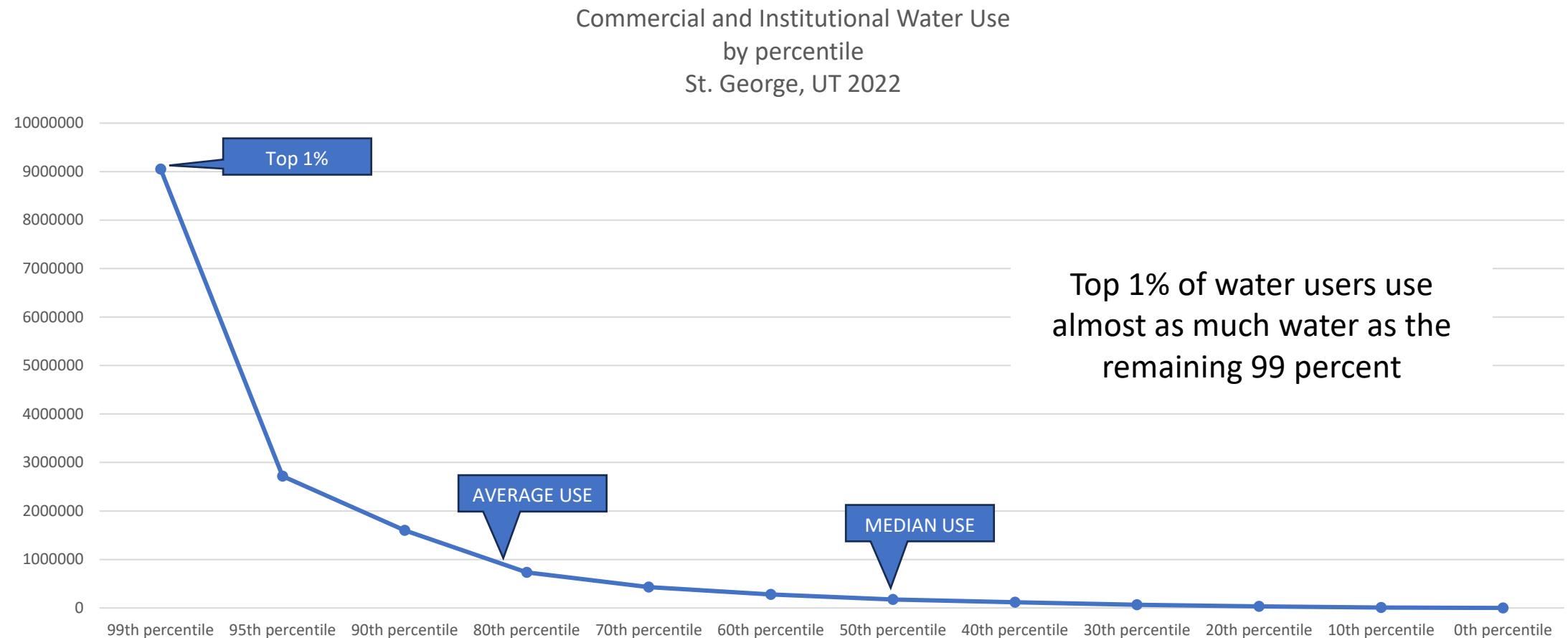
Top 5% of CII users account for 65% of total



Top 1% of CII users account for 47% of total



Top Water Users



The Process

- Proposed projects with demands of more than 9 million gallons per year are prohibited.
- The AAC may approve an exemption.
- In making a determination, the AAC must consider:
 - Critical public interest
 - Applicant's efforts to reduce water consumption
 - Economic productivity



Applicability

Applies to any commercial, institutional, industrial, or non-residential facility or facility complex with a projected annual demand of 9 million gallons or more per year, confirmed by the Washington County Water Conservancy District.

Single-family home subdivisions and multi-family dwelling complexes are exempt.

Private amenities associated with residential dwellings are subject the policy. Examples include private parks, ornamental water facilities, water recreation facilities, and golf facilities with demands of 9 million gallons or more per year.



Critical Public Interest

Does the proposed development activity substantially further a critical public interest, such as health, safety and well-being for a large segment of the local population?

- Healthcare
- Public safety
- Necessary services



Reductions in demand

Has the proponent implemented significant measures to reduce the water demand for the proposed development?



Economic Productivity

One acre-foot of water in Washington County supports:

- \$250,052 as GDP
- 4.8 county residents in 1.8 households
- 2.0 jobs and \$98,000 in wages
- \$256,000 in personal income



The Resolution...

- Is within the scope of district responsibilities
- Helps ensure an adequate, reliable water supply for current and future uses
- Does not impact existing uses
- Does not apply to self-supplied development
- Does not apply to housing
- Allows the AAC to approve non-conforming projects



Item 2 - Recommendation

Move to recommend that the Board of Trustees adopt the resolution adopting rules and regulations governing delivery of district water supply and use of district infrastructure



3. Consider recommending adoption of a Water Shortage Contingency Plan to the Board of Trustee

- Doug Bennett, WCWCD Conservation Manager
- For action



About the Plan

- Developed with input from an 18-member panel representing all municipal partners and a survey of more than 60 officials.
- Publicly available for review and comment since Oct. 1.
- Data will help assess severity of shortage conditions and serve to advise decision-makers.
- Does not grant authority to the district board not already within state statute or the Regional Water Supply Agreement.



Shortage Declarations

- Shortage could be declared due to sustained drought or an interruption in water delivery (earthquake, flood, cyberattack).
- There are four stages of shortage with reductions of 10 to 60%.
- The WCWCD Board of Trustees is responsible to declare shortage or change a shortage stage.
- In shortage, cities will be assigned a water budget. Exceeding the budget carries substantial financial penalties.



Water Budgets

- 3-year average regional water use per equivalent residential connection (ERC) will be used to establish the baseline.
- The baseline use will be reduced to meet the shortage stage objective.
- The per-ERC budget will be multiplied by the number of ERC's in a city to derive a water budget. Bigger cities will have larger budgets.
- If a water budget is greater than a city's baseline, that city will sustain their baseline level of use.



Water Budgets

- Water sources which would otherwise be lost from the region if conserved, will be exempt. This includes reuse water and some secondary supplies.
- Water sources not governed by the Regional Water Supply Agreement will be exempt. This includes water from private companies.
- Water budgets are not transferable between cities.



Implementation

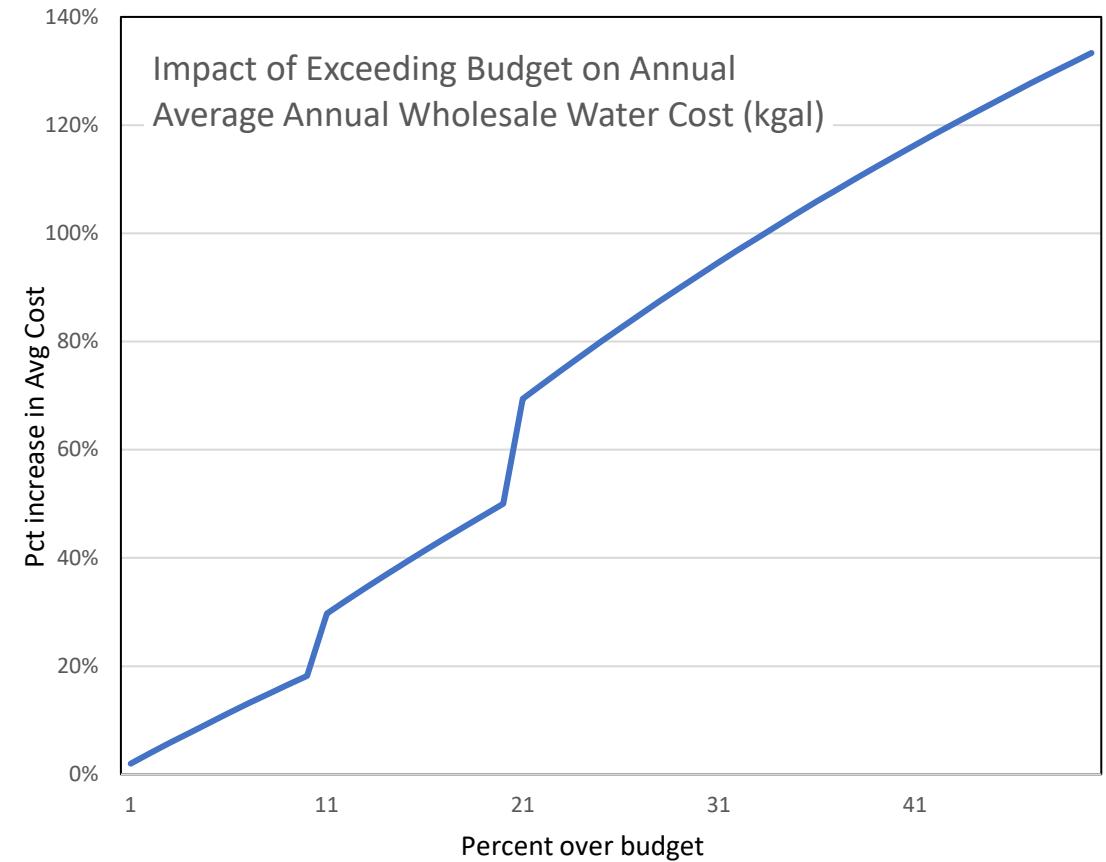
- Cities have the autonomy to devise their own shortage response measures.
- Within the scope of the board's authority within statute and the RWSA, it may impose additional conditions to meet necessary reductions.



Performance Monitoring

- Performance of each city will be presented in the Board of Trustees meeting monthly.
- Cities exceeding their water budget will be subject to penalty rates for district water.

Percent Excess	District Wholesale Water Charge
1-10% over budget	300% of standard cost
11-20% over budget	400% of standard cost
21% or more over budget	500% of standard cost



Item 3 - Recommendation

Move to recommend the Water Shortage Contingency Plan to the Board of Trustees of the Washington County Water Conservancy District



4. Consider approval of 2026 meeting schedule

- Zach Renstrom, WCWCD General Manager
- For action



2026 Regional Water Supply Agreement AAC Meeting Schedule

- Meeting Schedule
- 533 E Waterworks Drive
- 12:00 pm – 2:00 pm

- January 28, 2026
- May 27, 2026
- August 26, 2026
- October 28, 2026



Item 4 - Recommendation

Move to approve the 2026 meeting schedule



5. Consider approval of August 27, 2025, minutes

- Zach Renstrom, WCWCD General Manager
- For action



Item 5 - Recommendation

Move to approve the August 27, 2025, minutes



6. Update on the Regional Reuse Purification System

- Morgan Drake, WCWCD Reuse Program Manager
- For discussion



7. Update on the Joint Agency Regional Water Conservation Plan

- Doug Bennett, WCWCD Conservation Manager
- For discussion



8. Next meeting Wednesday, January 28, 2026 from 12:00 pm to 2:00 pm

- Zach Renstrom, WCWCD General Manager



Thank you for participating in this AAC meeting



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