

2023-2024 DNRC Comprehensive Water Review Stakeholder Policy Questions, Concerns, Recommendations

1. Water Storage

A holistic solution that addresses public and institutional concerns related to water planning, growth, and permit-exempt uses of groundwater in Montana must explore the optimization of both natural and built water storage to expand access to water and mitigate the impacts of drought. Enhancing water storability and exploring more innovative storage solutions are central topics that have long influenced the development of drought, flood, and other statewide planning strategies. The 2015 Montana State Water Plan recognized that large, traditional (built) water storage projects are "expensive to plan, construct, operate, and maintain" that are "limited by the availability of suitable locations, cost, public support, the need to mitigate environmental impacts, and the limited legal and physical availability of water." This plan endorsed ways to maximize built storage capacity through rehabilitation and modifying reservoir operation policies, as well as integrating natural storage to benefit water supplies and ecosystems. As described in the 2023 Montana Drought Management Plan (Drought Plan), building drought resilience in Montana will require the implementation of a broad range of proactive adaptive strategies to help water users prepare for future drought, and state agencies can play an essential role in providing tools and resources for planning, outreach, and project implementation. The Water Supply, Storage, and Delivery stakeholder-derived recommendations described in the Drought Plan received broad and enthusiastic support at every level, and while full implementation of the recommendations in this category will require long-term investment, moving forward with the initial steps is a clear near-term priority. Montana is a diverse state demographically, geographically, and ecologically, and a one-size-fits-all storage approach does not exist. Effective storage solutions will need to consider all beneficial uses of water equally while recognizing that prevention of adverse effect may require greater regulation of some solutions and less oversight for others. The water storage recommendations described below reflect the ideas generated by the DNRC Comprehensive Water Review Stakeholder Working Group over the course of nearly a year's worth of monthly all-day meetings and monthly interim sub-working group meetings. Each recommendation action item is intended to respond to the water storage-specific challenges illuminated by stakeholders.

Water Storage Recommendations:

1. What, if any, are the limitations in federal law for implementing the State Water Plan? Do current statutes reflect the needs of today? Federal limitations to State Water Plan implementation will be compiled and reviewed.
2. Issues and limitations exist related to changing water rights with places of use that are encompassed within service areas (e.g., municipalities, irrigation districts, water & sewer districts, etc.) that must be addressed, along with an exploration of the limitations related to water storage changes or additions in service areas. Places of use that are encompassed by service areas have unique considerations in that water use may be flexibly moved around for different purposes within the service area boundaries. When needed, adequate access to stored water is crucial for delivering water for the varied uses and to water users located within service area boundaries. An informational guidance document will be drafted to address service area storage limitations and update public and internal procedural guidance for reviewing/preparing changes to water rights with service area places of use.
3. Existing water policy does not allow secondary use of a water right for storage purposes (e.g., water losses during conveyance along a ditch that are purposefully infiltrated to groundwater). Some secondary uses of water should be reviewed as possible sources of mitigation water, or water that is marketed for mitigation. Does the state need new policies that allow for off-stream storage options or 'buckets' to hold water for a predetermined period of time for later use? If so and if a water right change authorization is required, should there be fewer roadblocks to allow for this? Options should be explored for allowing some entities like irrigation districts and ditch companies to store water without undergoing the water right change process or consider possible obstacle reductions for different entities and/or storage solutions.

4. How can the DNRC address the ownership and allocation of new and existing stored water for all beneficial uses? Other states have statutory provisions that enable the institutional management of stored groundwater; are similar statutory provisions appropriate for Montana? If so, which ones? Existing [aquifer storage/dominion and control statutes in Colorado](#) should be reviewed.
5. Storage is especially difficult in basins that are closed to new appropriations of water; should exceptions for storing water during high spring runoff events in large river systems or in groundwater focus areas and closed basins be utilized more where in statute and added when modifying statute? Such exceptions may require legal availability analyses for the storage of new water while considering trigger streamflows and exceedance probabilities.
6. The state does not currently recognize aquifer recharge with the sole intent of increasing or improving storability as a beneficial use of water unless it is specifically required to mitigate other new uses. The storage of water with nature-based solutions or known aquifer recharge methodologies should be explored as a standalone beneficial use that is not directly tied to the mitigation of new water uses elsewhere due to the known human and environmental benefits associated with these methods. Groundwater restoration policy could also be explored.
7. With regard to natural water storage, questions arise regarding ownership of water stored with nature-based methods and infrastructure (e.g., beaver dam analogs to slow the flow of surface water and promote groundwater infiltration, or floodplain & wetland restoration to reconnect streams to their floodplains which also promotes aquifer recharge), the level of 'control' required in physically managing the source of stored water, and under what circumstances natural water storage projects may require a water right change or beneficial use permit application. [Existing wetland restoration water right policies](#) should be reviewed, updated, and clarified, and additional considerations for other types of nature-based water storage methods will be explored.
8. What, if any, are the policy options for transferring existing federal contracts (e.g., Hungry Horse, Canyon Ferry contract water) to the state to provide mitigation water for future development? *Can* the state consider federal facilities for mitigation water contracting? Could federal facilities be transferred to the state?

2. Mitigation

Mitigation is required for new water right permits and water right changes when water is not legally available. Legal availability is equal to the total legal demand of water (i.e., the sum of water right flow rates in a surface or groundwater source) subtracted from the physical availability of water. Mitigation water is required to offset any net depletions to surface water that may result from either new beneficial water use permits for (surface or ground) water, or changes to ground water rights that are tributary to surface water sources. Net depletion is considered to be any reduction in the flow rate or monthly timing of depletion to surface water, or a change in the location of depletions of surface water. All three components of net depletion (flow rate, timing and location) must be offset by mitigation water when surface water is not legally available. Mitigation water may be secured by changing the beneficial use of an existing water right to offset a proposed new use of water or net depletion; however, this approach presents challenges in that existing water rights proposed to be changed to mitigation purposes must have priority dates of sufficient seniority to adequately and reliably offset the proposed new use of water during the time when mitigation is needed, and in the location where it is needed. An additional challenge is that mitigation water is often needed to offset new uses of water or net depletions to surface water that occur outside of the irrigation season, yet many water rights of sufficient seniority are used for irrigation purposes with only seasonal periods of use; thus, water rights with seasonal periods of use (e.g., April 15 to October 10) cannot be used to mitigate net depletions to or new uses of surface water that occur outside of their decreed or permitted periods of use (e.g., October 11 to April 14).

Mitigation Recommendations:

DNRC recommends formation of a technical working group to further explore the challenges and potential solutions to making mitigation a more effective tool to meet the needs of a growing state.

3. Municipalities

Municipal water rights are different than most others in that they have places of use comprised of a "service area" within which the redistribution of water does not require pre-approval by DNRC. Other types of water right-owning entities (e.g., irrigation districts, ditch companies) also have service areas; however, the nature of the municipal beneficial use listed on municipal water rights is unique because municipal water encompasses a wide variety of uses such as domestic, commercial, fire protection, street cleaning, industrial, and recreation, among others. Water rights listing a "municipal" purpose can be held by municipalities, as well as unincorporated cities and towns and water and sewer districts. The municipal purpose cannot be used by individual water right owners regardless of the number of purposes on their water rights (i.e., a rancher would not have a municipal water right even though he/she may have a water right for domestic, lawn and garden, stock, and irrigation uses - those purposes must be individually listed on their water right). Municipalities may own any type of water right for any purpose including and other than "municipal", and if a municipality owns water rights for specific purposes, those water rights may only be used for the identified purposes.

Municipalities cannot always predict where and at what rate future development within or directly outside of their service areas will occur, and recurrently changing their service area places of use to accommodate new or anticipated development is challenging, especially in the face of unpredictable future water availability. Meeting future water demand for growing populations while preparing for the impacts of future drought were ongoing challenges described by municipal water users interviewed during development of the Drought Plan. According to [Drought Vulnerability Assessment](#) completed as part of the Drought Plan, cities with larger populations, higher rates of growth, and municipal dependence on surface water tend to have higher vulnerability scores.

As described in Section 2 of the Drought Plan, a holistic drought management approach requires the identification and implementation of proactive programs, policies, and strategies that will reduce future drought impacts. This preparedness (or "drought adaptation") is key to building resilience at local, regional, and state scales, with effective adaptation strategies differing by scale. Increasing flexibility and options for municipal water restrictions and evaluating strategies to increase conservation through incentives or regulations can help local governments implement programs and strategies more effectively. During Drought Plan development, water users who self-identify as members of the community development and municipal water supply sector expressed support for water (especially groundwater) supply monitoring as important parts of community planning and water management. Most local governments, however, do not have the funding or capacity to conduct extensive groundwater monitoring without state or federal support. Water use measurement, monitoring, and reporting are limited, as is state oversight, and a platform for the public to readily access water supply measurements is essentially nonexistent. The extensive gap between actual water use and public access to water use records - along with potentially extensive opposition to measurement requirements and monitoring - has made determining water availability and adverse effect difficult.

The municipal use recommendations described here reflect the ideas generated by the DNRC Comprehensive Water Review Stakeholder Working Group over the course of nearly a year's worth of monthly all-day meetings and monthly interim sub-working group meetings. Each recommendation listed below is intended to respond to the municipality-specific water resource and water right challenges discussed by and amongst working group stakeholders.

Municipal Water Use Recommendations:

1. A streamlined process for changing municipal water rights to address municipal service area expansion could be accomplished legislatively. Such a solution would limit streamlined change processes to 1) municipality service areas, 2) entities operating a public water supply exclusively, entities with separate statutory authority to annex and incorporate municipal growth, entities with

established growth plans, or 3) other statutory criteria specifying use thresholds (e.g., water right volume).

2. To promote water conservation and system efficiency, legislation may be drafted to mirror or amend existing statute which states that upgrades to irrigation methods do not require prior authorization by DNRC as irrigation method upgrades are not considered changes to water use (§ 85-2-102(7)(b), MCA).
3. Isolated water rights that are disconnected from municipalities and municipal water supplies via annexation need to be addressed. Legislation can be drafted to stall questions of non-use or abandonment of such water rights until they can be changed and brought into compliance with the Montana Water Use Act.
4. Statutes and administrative rules concerning municipal intent to appropriate water for future use (i.e., municipal water reservations) need to be clarified to 1) distinguish between pre- and post-July 1, 1973, uses of water within municipalities, 2) specify existing and anticipated water use volumes and service area changes, and 3) reduce speculation when quantifying and qualifying anticipated growth.
5. Replacement well legislation can be amended to increase flow rate limitations, clarify and improve administrative rules defining "same aquifer", and allow for the re-drilling of wells within the same ¼ ¼ section, so long as they are drilled in the same aquifer.
6. Points of friction between DEQ water supply and DNRC water right regulations must be identified (e.g., increased 'emergency' flows of water required for groundwater public water supply systems as municipal populations grow, water rights dictating certain wastewater discharges that differ from actual changes in Montana Pollutant Discharge Elimination System [MPDES] permitting of discharge location and amount, or cistern and water tank storage regulation).
7. Stakeholders expressed general support of measurement of all uses of surface and groundwater. This scale of water use measurement and monitoring requires access to operable measuring devices, even in sources with no appointed water commissioners. Recommended solutions that could be introduced in phases include identifying initial water right types and sources where monitoring is most needed (based preliminarily on water commissioner records), improving accessibility to water measurement devices and automatic dataloggers, and improving water use records reporting and technology.

4. Notification and outreach plan for exempt wells

The DNRC Comprehensive Water Review Stakeholder Working Group spent significant time considering how the use of permit exemptions currently impacts water planning and growth in Montana and whether policy changes are needed moving forward. The group developed a number of policy recommendations, including one providing for the formation of Controlled Groundwater Areas (CGWAs) within which the use of exempt wells would be greatly restricted. Successful implementation of this proposal would require clear and effective public education on the boundaries of and restrictions associated with each CGWA. DNRC recommends development of an outreach plan to inform landowners and developers of how they may be impacted. This effort should leverage key partners including well drillers, realtors, title companies, city/county planners, and partner agencies. In addition to general outreach (newsletters, mailers, digital campaigns), the strategy should target multiple common development touchpoints (e.g., property purchase, project planning, subdivision review).