

**Water Planning and Growth and Exempt Wells**  
**Updated Working Document for Discussion Purposes Only<sup>1</sup>**  
**Last Updated 12.15.2023**

**Problem Statement**

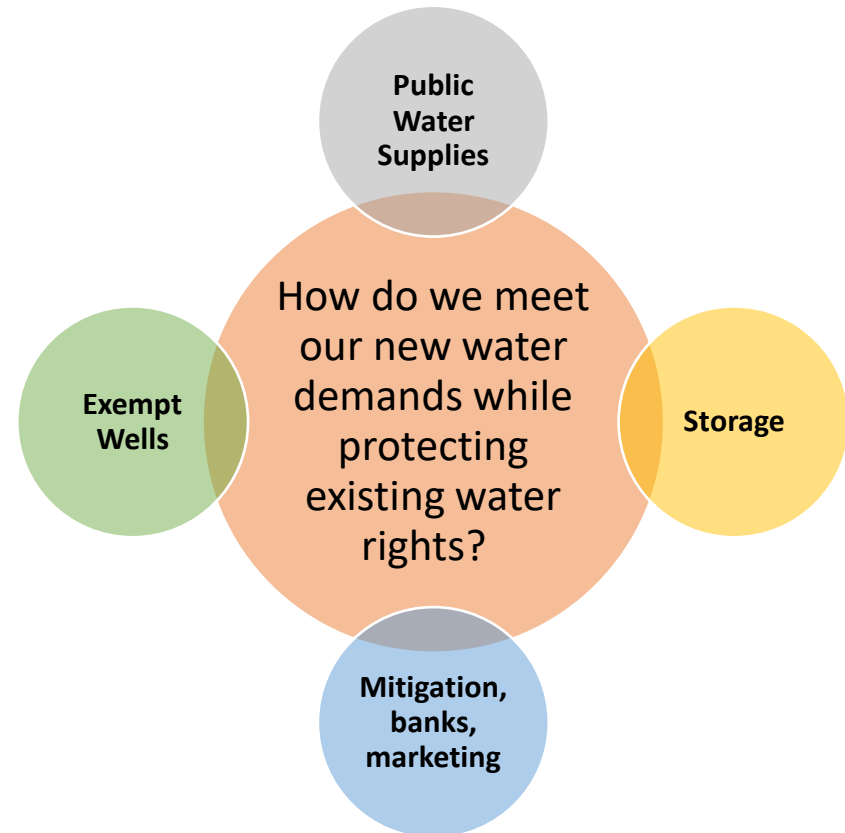
- Montana is challenged in our ability to meet new water demands, with a limited supply. We do not want to cause an adverse effect to existing water rights and watershed function/our water resources.

**Goals**

- Protect water resources existing water rights.
- Develop new-holistic policy solutions that address:
  - changing water needs,
  - increase demand,
  - decrease supply,
  - changes in the timing of need and use,
  - new and existing needs for water,

**Values**

- Equity- equal access to process
- Fairness (recognizing prior appropriations)
- Consistency
- Transparency
- Timely
- Maintain culture/tradition of Montana & incorporate growth
- Coordination of multiple regulatory agency authorities



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<sup>1</sup> This document captures the problems, goals, values, and needs to frame the conversation around how Montana is going to meet its changing water needs. These problems, goals, values, and needs are not specific to a particular outcome or policy but will be used to assess the holistic suite of policy options that this group will be exploring and recommending. This document also captures the potential solutions developed by working group members to date.

## Potential Solutions

**Action:** DNRC identify drought plan and state water plan recommendations

### 1. Public Water Supplies (in focus areas)

#### Context:

- Developers are incentivized to use more centralized services (public water and sewer) over individual wells and septic systems.
- Link to future water use planning and water use. Where are the people going to be. SMART growth
- Types of PWS
  - o Municipal
  - o County water and sewer
  - o HOA (not applicable here)- private entity
- Addresses both water quality and quantity
- Evaluate if tied to SB 382 or not- water quality, quantity, planning (**action: Kelly 101 on SB 382- January**)
  - o Data used to define these focus areas would tie into county planning processes.
- **Where this applies: “Focus areas- problem areas”**

#### Policy changes that need to be addressed:

- **How to make it easier for cities to grow into their water rights and systems**
  - i. Not be limited to the focus problem areas, they are applicable statewide.
  - ii. Hooking into the system is already the developer’s first choice – barriers like service areas, DEQ public water supply restrictions, limitations in wet water, make it difficult for municipalities to actually add subdivisions to the system
- **Water available (DNRC)- needing a new permit.**
  - Ability for cities to grow into the water decreed or permitted and not have incremental changes needed.
    - Does this mean grow into the diverted volume or consumed volume?
  - When cities need more water
    - Some public water systems do not have any additional supply, how to deal with this?
    - Adverse effect at the basin scale and irrigation conversion (consumptive use)
    - What is historic use for a municipality for a change?
    - Is there a consideration of looking at consumptive use differently for municipalities.
    - Challenge: for the city to serve the development, mitigation plan is not working, HCU- location requirements mitigation, mitigation standards are too high. (zone of impacts?)
    - Mitigation challenges

- Ability to annex
  - Make it so that policies related to irrigation salvage water do not prevent municipalities from getting the benefit of implementing efficiencies/reducing irrigated areas/etc).
- **Service areas changes made easier**
  - Service areas/water rights need volume limitations
  - Cut out going through change application or municipal service areas to be recognized.
  - The adverse effect analysis when the area is expanded by pipe
  - Determination when you don't have to go through a change (e.g., when the cities do this through SB 382, don't have to go through a change for new boundary)
- **Requirement for water measurement for any municipal system (and generally in policy)**
- **(hold) Growing communities' doctrine exploration– get more water as they grow**
- **Action: Brian, Ryan, Nate, Spencer** – draft ideas

Water Quality & Quantity coordination and permitting challenges:

- **Flow rate and volume quality (DEQ):**
  - Permitting review, subdivision review process, concurrent review
  - Statue- have to have discharge permit in hand for a water right permit
  - Timing of permitting between DNRC and DEQ
  - Requirement for developers meet with DNRC and DEQ prior to preliminary platt approval (county planning); help developers understand the water quality/quantity planning (is this a county requirement).
  - Continuing to reapply for greater flow rates.
  - Existing location of wells and DEQ flow rate requirements over their population
  - Water quality/DEQ requirement waste water treatment
  - (e.g., mitigation plan and DEQ changes amount of water treated; larger flow rate needed for entire system)
  - E.g., discharge for mitigation, then the nutrient water quality std changes, then no longer have mitigation and discharge will have to be taken out of river
  - There are infrastructure needs to divert, treat and transmit that water to end users. E.g., treatment plan capacity limitation. Need additional sources of supply to meet the capacity needs.
  - Water quality regulations; make return the source not always true; discharge.
  - Disconnect between water rights permits and water quality std. change method of effluent treatment, land apply, water right does not allow them to do that (communication between DNRC and DEQ on limitations of waste water use).
- **(Action: DEQ/DNRC discussion barriers and Incentives)**

## Funding and incentive needs

- **Cost of hooking up to PWS for the developer, passed on to end users, affordability challenges.**
  - Impact fees – paid to municipalities for capacity expanding improvements (e.g., master plans, water mains, sewer collection pipes, stormwater)
  - Local/developer share of infrastructure cost- cost of extending water and sewer to development to meet minimum standards
    - Late comer fees- if developer does extensions in a place or at a size that serves future development
  - Pay your way for water fee- Municipality runs out of water, cost to get it (water right in hand or cost to get more)
    - Infrastructure to serv municipalities
  - Updates to growth/cities plans (municipality bears cost)
- **Buckets of money that can be used to offset/structured approach for developers to rely upon**
  - Special improvement districts- you build streets, water and sewer, parks, creates a district around this development, people who by that property, that cost is on their property tax. can impact fees be rolled into these?
  - Special purpose districts- for improvement in services, generally city wide, not generally counties, set up an assessment fee. Create city wide districts. Pays for infrastructure.
  - Tax increment financing – urban/industrial develop districts. Tax snap shot of the tax value, any increase in taxes goes to the district for ~15 years, then do a bond for big infrastructure improvement. Specific to urban renewal district.
  - Targeted economic district- generally in counties,
  - Influx from state government- new program influx of HB2 (e.g., 355), MCEP- difficult for big communities to get.
  - Board of investments- impact fee loan program, buy down interest rate on developer’s capitol to make affordable house pencil out
  - Montana Chamber is looking at TIF to protect it as a tool
  - Bonding and levee by cities for infrastructure
- **What happens when only a water district? Goal to have domestic and sewer together.**
  - One challenge to thinking holistically about water supply/wastewater management is that districts are sometimes created simultaneously with new development, but can also be created piecemeal later to address issues that emerge
  - HB 435 doesn’t address the sewer component
- **ACTION (Kelly, Mark, Clayton, Anna)**
  - What does a financing package look like?
  - What worked from last session and didn’t work
  - Future forward what do we need?
  - Coordination with other efforts
- **Access – property owner can block access to public water and sewer.**
  - Relying on easement approvals Easements, etc. to extend across private prop

– ACTION:?

## 2. Water Storage & regional water storage (need sub-working group review/refinement & Action Items)

### Context:

- Stop blowing water out of the bottom; we need to keep water from leaving the state enhancing availability
- Develop an implementation plan for the state water plan and state drought plan to develop storage.
- Implementation-State Water projects 2.0 to take this on. Implementing via state water plan.
- Suite of storage tools:
  - Opportunity to store high spring flow water; different color of water
  - Groundwater, aquifer recharge, Storage and Recovery
    - Recharge aquifer using surface water in priority to fill a mitigation bank serving a defined geographic area
    - Aquifer storage and recovery model - class 3 injection well - meets standards (WA state does this)
  - New storage
    - Not new big projects.
    - Old model of relying on feds to spearhead large projects untenable now due to magnitude of environmental assessments and other roadblocks
  - Small scale storage, such as former gravel pits, Impoundments
  - Building on existing storage; first priority to increase functionality of existing facilities.
  - Rainwater harvesting
  - Use exiting storage & contracting:
    - Regional storage
    - Contracting for existing storage (Federal and State)
      - Opportunity for DNRC to pre-load contracting out of canyon ferry for use
  - Natural storage:
    - Wetlands and undeveloped or agricultural riparian areas where floodwaters can spread out and recharge aquifers
    - Flooding easements. Allow flooding to occur and reimburse.
  - Pre-capture water
    - on big projects so we are not paying to pipe back upstream (policy question)
  - Ditches:
    - Ditch companies selling shares to HOAs or subdivisions
    - Incentivizing ditch companies and irrigators to keep water flowing through (leaky) ditches that recharge “man-made” aquifers such as West Billings
    - Infiltration gallery - Irrigator takes an acre, digs a pit. Some lined, some not. Staying out of ground water.

### Funding and incentive needs

- Other states have incentivized water storage – lessons learned/models
- ACTION: identification of the suite of incentives
- Access to funding (state and federal) challenges. Not being regional water
- Actual dollars in specific areas to do real work
- Funding – match federal dollar with state?
- Permitting and infrastructure cost for proof of concept.
- Funding on the science needed (other state models)
- SWAMP (MBMG) funding for data and information.
- Need stable funding for existing storage facilities
- ACTION: Funding proposal for legislature/WPIC

### Policy changes that need to be addressed:

- How do we address ownership of new stored water?
- Existing transferred to the state
- New stored water – what is purpose?
- How do you get new water through storage? Mitigation purpose limited to changes. Marketing? Broaden mitigation in statute? Use augmentation terminology instead?
- Basin closure high spring flow exceptions for this new storage, where allowed?
- Does new storage have to be off-stream?
- If it is on-stream on navigable waters, how does ownership work?
- Legal availability analysis for storage and new water. Trigger flows/exceedance probabilities used
- Irrigation districts/ditch companies ability to store water
  - i. Is it ok to let them skip the change process for water storage?
- Storage as a beneficial use. Storage not listed as a beneficial use (Case Law)

### Study & knowledge base:

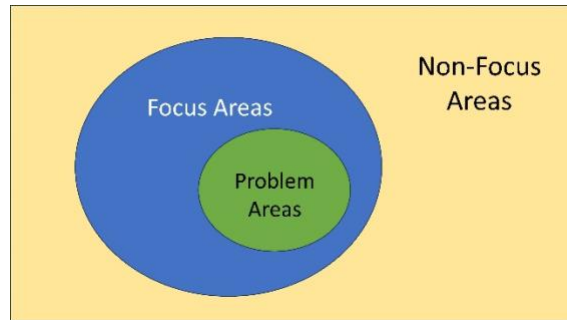
- No more book reports, i.e., studies that sit on a shelf
- Locate previous studies conducted in focus areas, potential locations that have been previously identified
- SW Storage:
  - i. Need to understand physical/operational constraints around existing storage, i.e.,: winter releases, minimum pool, legal/policy constraints, etc..

- ii. Potential Surface Storage locations and projects that have previously been identified
- GW Storage for Recovery or Mitigation
  - i. Science around when and how you create groundwater storage, what quantity is available for extraction and when and where it may show up.
  - ii. Aquifer studies – No full aquifer studies have been completed for 5 focus aquifers; however, numerous partial aquifer studies exist as a starting point
  - iii. Potential Groundwater Storage locations need to be identified
- Missing technical expertise to implement ASR. What are all the right questions that need to be answered? Both SW & GW
  - i. Water physical and legal availability analysis needed.
  - ii. High spring flow analysis is needed in key drainages.
- Science around when and how you create storage and when and where it shows up.
- Aquifer studies

– ACTION:



### 3. Exceptions to the permitting process (problem, focus, and statewide policies) (need sub-working group review/refinement)



#### Focus/problem areas:

##### *Policy:*

- Explore use of Controlled Ground Water Areas (DNRC Action Item)
- If you're in a *problem* area, you need to go through the permitting process
- Requirement to go through the SB 382 process

##### *Criteria or trigger to be focus/problem area (DEQ and DNRC):*

- ?

##### *Studies needed and monitoring needed (DNRC):*

- Monitoring and study criteria

#### Focus/non-problem areas:

##### *Policy:*

- Explore the use of stream depletion zones
- Possible exception for de minimus?
- Possible exception for development/uses that are covered under an umbrella mitigation bank/plan: State Water Project?
- Curtail consumptive uses during drought conditions?
- Decrease authorized volumes/restrict types of uses; exclude large lot development; \*MT does not prioritize by uses
- Metering & enforcement requirement and ability to make call

- a. Who collects and stores the data? Is it public data? Is it readily available?
- b. Current law does not provide an adequate process for existing water users to protect themselves.
- Requirement to go through the SB 382 process

*Triggers/criteria (DEQ and DNRC):*

*Studies needed and monitoring needed (DNRC):*

#### Non-focus area

##### *Policy:*

- Metering/measurement/enforcement requirements
  - a. Notice and opportunity for water rights holders to protect themselves
  - b. Futile call challenges ability to protect right
- Prevent non-problem areas from becoming problems: How to identify when a non-focus/non-problem area becomes a focus area/trigger?
- Stock tank carveout
- Address phased development loophole and combined appropriation challenges
- Consider reducing volumes down to what is reasonable and necessary for domestic use
- Evaluate DNRC standards and update them for accuracy
- Status quo for exempt wells

#### 4. Mitigation, mitigation banks, and marketing for mitigation (still needs to be reviewed)

- Timing, place and priority of mitigation needs. Policy gaps.
- As under adverse effect, are instances where more flexibility in timing and location needed?
- Mitigation: Challenges with changing seasonal irrigation rights to year-round municipal
- Marketing for mitigation challenges. Strike contract language.
- Mitigation needs a plan of use
- Cannot market to yourself
- Divert water when in priority and put it in the ground “Prospective” mitigation (contrast with reactive)
- Ability to move water across the landscape
- Create a bank of water for future permits to draw from for mitigation
- 831 – offset or mitigation for adverse effect
- Water users need the ability to object - guarantee or insurance that you get that water back if you share the water amount with neighbor on your off year
- How do these get documented
- Date base, water measurement
- Defining Time/location/amount of adverse effect & mitigation.
- Defining geographic extents for mitigation zones given GW/SW interactions
- Reliable solution for other people, surface water mitigation, going through change process to do that isn’t going to be practical

## 5. Other Policy challenges (still needs to be reviewed)

- Adverse effect definition.
  - Return flows that takes current use into consideration
  - Are instances where more flexibility in timing and location needed?
  - Waiver of adverse effect. look at other state models.
- Enforcement
  - What policy questions are being asked here on illegal use vs. Commissioners powers via statute?
- Change process: Historic consumptive use conversation; wet water vs paper water. Do we want to change it? Land use has changed, but that water still sit on the books. Nonuse? How can use that water, without haircut.
  - Remote sensing to get a better consumptive number
  - Look-back period change?
  - Need for accurate wet water use on paper
- Calculation of consumed water (Remote sensing)
- Municipal service areas do not account for growth; must file a change; expedited process.
- Transfer water from historic ag to municipal uses. Challenging in closed basins
- Legal and physical availability
- How do you go through the change process
- Claims that don't have a decreed volume - without using historic consumptive use
- Going through change, is doing something different. Other users on that source aren't changing anything. Consumptive use analysis
- **Enforcement of property rights**
  - 'unties' DNRC's hands
  - Advancing science of small storage
  - Working with individual producers who have access, or using state land
  - Reframe from few massive structures to many small ones
- **Bring Back Waiver of Adverse Effect and Temporary Leasing Statute**
  - Need to get information out to people who don't understand the limitations of exempt wells
- **Education & Outreach**
- **Weather modification**
  - Feasibility study just contracted with NCAR; next step would be a potential pilot project if feasibility modeling demonstrates promise in MT