

# WPIC Findings & Recommendations

DRAFT -- 4/29/08

## Introduction

The 2007-08 Water Policy Interim Committee (WPIC) conducted a detailed study of water quantity, water quality, and water use in Montana. House Bills 304 and 831, both passed in the 2007 Legislature, defined the scope of the study. Many issues in the study related to issues in closed basins, but also could have statewide implications.

This document details how the WPIC addressed each assigned study tasks and what, if any, findings and recommendations the WPIC intends to make. The draft is meant as a starting point for the WPIC to focus its actions and is a work in progress. The WPIC also is free to make findings and recommendations on topics not addressed by the assigned study tasks.

## Assigned Study Tasks

**1. Study Task:** Review current Montana law related to mitigation, augmentation, or aquifer recharge.

**WPIC Response:** Reviewed staff research on HB831 issues and legal analysis of related cases. Received regular updates from the DNRC on rulemaking and implementation of HB831 provisions. Heard public comment on HB831 provisions, including presentations from applicants dealing with the new law.

**Finding:**

**Recommendation:**

**2. Study Task:** Analyze other states' laws and rules related to mitigation, augmentation, or aquifer recharge and the other states' experiences with applying and using mitigation, augmentation, and aquifer recharge.

**WPIC Response:** Reviewed staff comparison of water management in Arizona, Colorado, Idaho, and Washington. Panel discussion in July 2007 included presentations from DNRC, DEQ, consultants, hydrologists and attorneys involved in various aspects of water use in Montana.

**Finding:**

**Recommendation:**

**3. Study Task:** Compare mitigation, augmentation, and aquifer recharge options and alternatives

for applying the concepts in Montana water law.

**WPIC Response:** Panel discussion in July 2007 included presentations from John Tubbs of DNRC, David Schmidt of Water Rights Solutions, hydrologist Jim Potts of HKM Engineering, and Cindy Younkin, a water rights attorney.

**Finding:**

**Recommendation:**

**4. Study Task:** Analyze water quality testing requirements to ensure that the use of mitigation, augmentation, or aquifer recharge does not adversely affect ground water quality.

**WPIC Response:** Panel presentations in August 2007 from Tom Reid of the DEQ, Julie DalSoglio of the EPA, John Tubbs of the DNRC, MSU geologist Steve Custer, Kate Miller of the DEQ, MSU microbiologist Tim Ford, MSU civil engineer Warren Jones, research hydrologist Gary Icopini of MBMG, John Metesh of MBMG, and Tom Patton of MBMG.

**Finding:**

**Recommendation:**

**5. Study Task:** Analyze data developed to determine the type and amount of research, data, and analysis necessary to develop a scientifically defensible hydrogeologic assessment to be used in making informed decisions with regard to mitigation, augmentation, or aquifer recharge activity in Montana.

**WPIC Response:** Multiple presentations from the MBMG study regarding potential ground water withdrawal impacts on surface water and the adequacy of any additional recommended minimum standards and criteria for hydrogeologic assessments.

**Finding:**

**Recommendation:**

**6. Study Task:** Study appropriate monitoring requirements to determine the effectiveness of mitigation, augmentation, or aquifer recharge plans.

**WPIC Response:** Presentations in September 2007 from Dr. William Woessner, professor of hydrology at the University of Montana, Russell Levens, a DNRC hydrologist, Kate Miller from the DEQ, and a water user, Randy Overton of RLK Hydro. Presentation on cumulative impact on water quantity in September 2007 from Mike Roberts, a DNRC surface water hydrologist, Steve Fry of Avista, a senior appropriator, and an applicant, Marc Spratt of RLK Hydro, Inc.

**Finding:**

**Recommendation:**

**7. Study Task:** Identify gaps in data necessary to determine appropriate locations to conduct artificial recharge of ground water.

**WPIC Response:** Presentations from various experts.

**Finding:**

**Recommendation:**

**8. Study Task:** Examine other issues related to mitigation, augmentation, or aquifer recharge in Montana to facilitate continued economic development and growth while providing reasonable protections to senior appropriators and water quality of surface and ground water resources.

**WPIC Response:** Panel presentations in August 2007 from attorney Russ McElyea of Moonlight Basin Ranch, Moonlight Basin Ranch, Gallatin County Planner Greg Sullivan, Tim Roark, the Gallatin County director of environmental health, and Holly Franz of PPL Montana.

Multiple presentations from the MBMG study regarding potential ground water withdrawal impacts on surface water and the adequacy of any additional recommended minimum standards and criteria for hydrogeologic assessments.

**Finding:**

**Recommendation:**

**9. Study Task:** Study methods for the management of water to ensure compliance with closed basin law, including the artificial recharge of ground water.

**WPIC Response:** Reviewed staff research on the history of closed basins and legal issues, including implications of Trout Unlimited decision. Presentations in July 2007 from Rich Moy of the DNRC, Steve Kilbreath of the DEQ, consultant John Westenberg of PBS&J, hydrologist Michael Nicklin and attorney Bill Hritsco. Presentation in March 2008 from Michelle Bryan-Mudd, a UM law professor, on land use and water law.

**Finding:**

**Recommendation:**

**10. Study Task:** Review drinking water standards and effluent treatment standards in other jurisdictions and recommend appropriate treatment standards for the purposes of aquifer recharge and mitigation.

**WPIC Response:** Presentations in September from Randy Overton of RLK Hydro, Kate Miller from the DEQ.

**Finding:**

**Recommendation:**

**11. Study Task:** Identify research necessary, if any, to determine alternatives and options for conducting water management through artificial recharge of ground water.

**WPIC Response:** Presentation in August 2007 by Tom Reid of the DEQ. Presentations in September from Randy Overton of RLK Hydro, Kate Miller from the DEQ.

**Finding:**

**Recommendation:**

**12. Study Task:** Conduct a water quality analysis associated with storage or introduction of surface water to ground water resources.

**WPIC Response:** Panel presentations in August 2007 from Tom Reid of the DEQ, Julie DalSoglio of the EPA, John Tubbs of the DNRC, MSU geologist Steve Custer, Kate Miller of the DEQ, MSU microbiologist Tim Ford, MSU civil engineer Warren Jones, research hydrologist Gary Icopini of MBMG, John Metesh of MBMG, and Tom Patton of MBMG..

**Finding:**

**Recommendation:**

**13. Study Task:** Identify the extent to which cumulative impacts are analyzed from a water quantity and a water quality perspective and whether or not the two findings are assessed jointly and determine the appropriate level of coordination.

**WPIC Response:** Presentations in September 2007 from Dr. William Woessner, professor of hydrology at the University of Montana, Russell Levens, a DNRC hydrologist, Kate Miller from the DEQ and a water user, Randy Overton of RLK Hydro. Presentation on cumulative impact on water quantity in September 2007 from Mike Roberts, a DNRC surface water hydrologist, Steve Fry of Avista, a senior appropriator and an applicant, Marc Spratt of RLK Hydro, Inc.

**Finding:**

**Recommendation:**

**14. Study Task:** Determine an appropriate, accurate, and time-efficient process for coordinating water quality requirements with the water appropriations process.

**WPIC Response:** Presentations in September 2007 from Bonnie Lovelace of the DEQ, land use attorney Myra Shults, Sanders County sanitarian Barbara Woodbury, Jim Carlson, the

environmental health director for Missoula County. Multiple presentations from DEQ and DNRC. Convened a work group of interested parties.

**Finding:** The DNRC averages 245 days to issue a water right, based on a six-year average.

**Finding:** Subdivisions have 60 days to be approved if there are no denials. Over the last five years, 25 percent were approved in 60 days, 28 percent within 120 days and 18 percent within 180 days.

**Finding:** Both agencies express a desire and willingness to work with each other.

**Recommendation:**

**15. Study Task:** Evaluate how the department of environmental quality and the department of natural resources and conservation issue permits that affect ground water or surface water quality and whether or not the water appropriation process and the water quality process are coordinated.

**WPIC Response:** Presentations in September 2007 from Bonnie Lovelace of the DEQ, land use attorney Myra Shults, Sanders County sanitarian Barbara Woodbury, Jim Carlson, the environmental health director for Missoula County. Multiple presentations from DEQ and DNRC. Convened a work group of interested parties.

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**Finding:** Both agencies express a desire and willingness to work with each other.

**Recommendation:**

**16. Study Task:** Determine if potential applicants are provided with a clear process to follow that ensures the protection of water quality and prior appropriators while allowing development in Montana.

**WPIC Response:** Panel presentations in August 2007 from attorney Russ McElyea of Moonlight Basin Ranch Moonlight Basin Ranch, Gallatin County Planner Greg Sullivan, Tim Roark, the Gallatin County director of environmental health, and Holly Franz of PPL Montana. A January 2008 presentation from Lee Wolfe of East Gate Village in East Helena. Multiple presentations from DEQ and DNRC. Convened a work group of interested parties.

**Finding:**

**Recommendation:**

**17. Study Task:** Determine the number of exempt wells in Montana and estimate of the number of exempt wells expected to be developed by 2020.

**WPIC Response:** Presentation in September 2007 from Curt Martin of the DNRC.

**Finding:** DNRC records show 38,372 exempt well certificates since 1991 when the 35 gpm, 10 acre feet a year limit was implemented.

**Finding:** DNRC estimates that by 2020, there could be between 32,000 and 78,000 additional exempt wells.

**Finding:** Officials from the DNRC and the DEQ concede that not all new wells are filed with the DNRC.

**Recommendation:**

**18. Study Task:** Determine the types of beneficial uses to which water from exempt wells is applied.

**WPIC Response:** September 2007 report from Curt Martin of the DNRC.

**Finding:** DNRC records show that there are thousands of purposes listed for wells. Some of the most common include domestic (75%), stock watering (32%), lawn and garden (24%); irrigation (6.5%), commercial (2.6%), multiple domestic (1.9%), and fish, waterfowl wildlife, recreation-related purposes (1.7%).

**Finding:** Domestic and multiple domestic purpose automatically include one-quarter acre of lawn irrigation per household. Therefore when the purpose lawn and garden or irrigation appears on the certificate, it is for more than one-quarter acre of irrigated area.

**Recommendation:**

**19. Study Task:** Evaluate the hydrogeologic analysis necessary to determine consumptive use on a per-acre or fraction of an acre basis and on a per-use basis.

**WPIC Response:** October 2007 presentations by John LaFave of the Montana Bureau of Mines and Geology and Bill Uthman, a DNRC hydrogeologist

**Finding:** Consumptive use is water removed from the immediate water environment - evaporated, transpired, incorporated into products or crops, consumed by humans or livestock. The amount of water consumed is used in conjunction with hydrogeologic analysis to assess impacts to stream flow.

**Recommendation:**

**20. Study Task:** Analyze the amount of water reasonably necessary for the various beneficial uses and compare the reasonable use standard with current statutory limits, including volume, flow rate, and other criteria that the committee determines are necessary to provide for accurate and

adequate measurement of water use through exempt wells.

**WPIC Response:** Presentations in October 2007 from Eric Regensburger of the DEQ, Larry Dolan of the DNRC and Dr. Steve Custer, professor of geology at MSU.

**Finding:** For DEQ subdivision review, the average in-house diversion is about .22 acre-feet per year and much of that is non-consumptive. Based on an 18 week irrigation season, a quarter acre lawn takes .55 acre feet annually.

**Finding:** According to the DNRC, the limiting factor to irrigation from an exempt well would probably be the annual volume, not the rate. It may be possible to irrigate four acres with an exempt well; enough to feed three horses.

**Finding:** Exempt wells in Colorado are 15 gpm for up to one acre of irrigation; Idaho is 18 gpm for one-half acre; North Dakota 7.6 gpm up to 12.5 acre feet a year for one acre; and Wyoming is 25 gpm for up to one acre.

**Recommendation:**

**21. Study Task:** Examine options and alternatives for enforcing statutory limitations regarding exempt well usage.

**WPIC Response:** October 2007 presentations from Tim Hall, DNRC legal counsel, Dustin Stewart of the Montana Building Industry Association and John Youngberg of the Montana Farm Bureau.

**Finding:** The DNRC does not check the usage of exempt wells.

**Finding:** The DNRC has statutory authority to investigate unlawful use of water.

**Finding:** A user may file a court action if the user believes an exempt well is affecting the user's water.

**Recommendation:**

**22. Study Task:** Determine the necessity and reasons for providing a process that is exempt from the permitting.

**WPIC Response:** October 2007 presentations from Dustin Stewart of the Montana Building Industry Association, Glenn Oppel of the Montana Association of Realtors, John Youngberg of the Montana Farm Bureau Federation, Rich Moy of the DNRC, and Laura Ziemer of Trout Unlimited.

**Finding:**

**Recommendation:**

**23. Study Task:** Analyze water marketing and water reallocation options available in Montana, including the leasing water rights, water banking, water trading, and water sales; the

lease-to-sale ratio of water rights; the number of market purchases completed; the purposes for which water trades or sales; the feasibility of creating and operating a water bank; and the administrative procedures and costs necessary to establish and operate a water bank.

**WPIC Response:** Reviewed staff research on applicable Montana laws as well as overview of water banking options. Presentations from the departments of Natural Resources and Conservation and Fish, Wildlife and Parks as well as from Property and Environment Research Center, the Montana Water Trust, Trout Unlimited, the Farm Bureau and the Bureau of Reclamation.

**Finding:**

**Recommendation:**

**24. Study Task:** Gather appropriate information that the committee determines is necessary to make sound and well-reasoned policy decisions to guide the management and use of Montana's ground water resource into the future.

**WPIC Response:** The WPIC held 10 meetings over the interim. In addition to Helena meetings , the WPIC visited Dillon, Bozeman, Thompson Falls, Choteau, and Hamilton. Each meeting included testimony from various water experts, agency personnel and interested members of the public. The WPIC addressed each study task assigned by the Legislature and delved into other areas not specifically referenced by the enabling legislation.

**Finding:**

**Recommendation:**

**25. Study Task:** Present long-term goals and policy proposals for water management related to ground water resources.

**WPIC Response:** The WPIC held 10 meetings over the interim. In addition to Helena meetings , the WPIC visited Dillon, Bozeman, Thompson Falls, Choteau, and Hamilton. Each meeting included testimony from various water experts, agency personnel and interested members of the public. The WPIC addressed each study task assigned by the Legislature and delved into other areas not specifically referenced by the enabling legislation.

**Finding:**

**Recommendation:**

**26. Study Task:** Submit a report to the 61st legislature that provides clear policy direction and necessary legislation to guide Montana's water policy and that ensures fair and reasonable use of Montana's water resource as demands on water increase while supplies remain the same or decrease.

**WPIC Response:** Held meetings in closed basins where demands on water supplies are highest in an effort to elicit concerns about water management from those who deal with the issue daily. Reviewed research, solicited expert opinions and debated policy options throughout the interim.

**Finding:**

**Recommendation:**

**Other Study Tasks**

Enforcement?  
MDT Water Reservations?  
MBMG funding?