To: Mary, Sexton, Director,

Montana Department of Natural Resources and Conservation

From: Michael McLane, Planner, Water Resources Divisions Montana Department of Natural Resources and Conservation

RE: Surface Water / Ground Water Working Group Recommendations. Statutory changes to improve ground water appropriation and protect senior water rights.

Date: March 3, 2006

Attached are the Surface Water / Ground Water Work Group recommendations. The six-page manuscript documents the Work Group's recommendations for statutory changes to the Water Use Act. Emphasis is placed on the appropriation of ground water in closed basins and exemptions allowed within a closed basin. The suggested language was carefully crafted and agreed-upon in keeping with the Work Group's goals of integrating the appropriation and management of ground / surface water and protecting of existing water rights, particularly senior surface water rights.

The Work Group last met on February 16, 2006. At this meeting Work Group participants finalized agreements on two of three work products. Several of the representatives noted that their constituents would not evaluate these work products until their annual meetings held in late summer or fall. Therefore, these representatives could not make a final commitment to support the legislative changes. However, they also stated that from their perspectives as a representative of their organization they also did not see any issues that would likely to be characterized as a "do-not-proceed" concern.

Three primary concepts were explored in an attempt to address growing concerns and conflicts related to future ground water development and management. The three concepts are:

- 1. The use of augmentation in water right permitting and a statutory recognition and definition of augmentation,
- 2. Appropriation of ground water in closed basins, and
- 3. Appropriations of ground water via the statutory processes that "exempt" certain developments from the standard water right permit evaluation.

The group finalized recommendations on two of the above concepts. Recommendations related to a) the use and definition of augmentation and b) appropriation of ground water in closed basins are both addressed in the attachment.

Proposals related to ground water appropriations that are "exempt" from the permit process did not advance out of the Work Group's dialog. A full committee agreement could not be reached on proposals to; a) further reduce the amounts of water allowed to be appropriated via this "exempt" process, b) limit the uses that are allowed under the "exempt" process or c) create an additional new ministerial process for subdivision wells that require augmentation. It is important to note that several entities wish to continue the dialog and find a better process to secure water rights for subdivision wells while protecting and respecting senior water rights and the resource. Such an effort should include representation from additional stakeholders.

Augmentation is not a new concept to water management or DNRC. DNRC required the use of augmentation as a mitigation requirement in the Larson Creek Controlled Ground Water Area under a 1988 Order. The augmentation concept was also added to the Upper Clark Fork River Basin Closure as an amendment in 1997. DNRC's new administrative rules also reference the practice of augmentation. However, the statute, with the exception of the Upper Clark Fork Basin Closure, does not address augmentation as water management / appropriation tool. The Work Group recommends that

- a. Augmentation be defined in the Water Use Act as a statewide tool to mitigate adverse affect to existing water users, and
- b. There be a statutory recognition of augmentation as a beneficial use of water.

The appropriation of ground water in closed basins resulted in several languagespecific and detailed recommendations. In concept, the recommendations are relatively straightforward. The Work Group recommends that the state, as a matter of policy,

a. Continue the appropriation of ground water,

b. Recognize that ground water is connected to surface water in virtually all of the state's aquifers;¹ and

c. Require new ground water development applications in closed basins to evaluate the potential for impact to surface water supplies and mitigate the associated depletion to surface water in commensurate amount, location, and timing through the use of an augmentation plan.

To implement these concepts, the Work Group recommends amending existing basin closure statutes. The most significant changes are:

- a. Elimination of the concepts of "immediately or directly connected" and "substantially connected" as a special test of ground water, and a
- b. Requirement for new ground water applications to include
 - i. a hydrologic report that evaluates the hydraulics of the ground water system and depletions to surface water and

ii. an augmentation plan to mitigate those depletions and adverse affects. The group also realizes that individual basin closure statutes have unique concerns and features that must be retained. As a consequence, the changes recommended are made to individual statutes, but include some degree of standardization.

The problematic language related to the appropriation of ground water is found in several sections. In the Teton River (85-2-329), Jefferson / Madison (85-2- 340), and Upper Missouri Basin Closures (85-2-342) is language limiting appropriation of ground water that is "immediately or directly connected to surface water". In the Upper Clark Fork Basin Closure (85-2-337) the appropriation of ground water where its source is "not a part of, or substantially or directly connected, to surface water" is currently allowed without augmentation. These phrases cause problems because they are not hydrologic terms. They actually contradict a fundamental characteristic of hydrology, which is the interconnectedness of water moving through the basin's geologic structures. The concept

for both a hydrologic report and an augmentation plan already exists in 85-2-337. Submission of a report is already a requirement for all ground water appropriations in the Upper Clark Fork Basin. The Work Group recommends expanding application of the Upper Clark Fork provisions to all statutorily and administratively created closed basins.

Each basin closure has provisions that allow some limited types of new appropriation. The Work Group is providing recommendations that add specificity, clarify and, in some cases, limit some of these basin closure exemptions. These recommendations are also intended to assure that the potential impacts from ground water appropriations are assessed. Please refer to the table below for a brief description of these statutory changes.

Concept:	Affected Statute
1) Continue to allow the appropriation of ground water in closed	No changes
basins.	needed
2) Eliminate language related to "immediate or direct" and	85-2-329
"substantially connected."	85-2-340
	85-2-342
	85-2-337
3) Require a hydrologic report with all ground water applications in	85-2-337 and
all closed basins. ²	85-2-330
	85-2-341
	85-2-343
	85-2-344
4) Require an augmentation plan with all ground water applications. ³	85-2-330
	85-2-341
	85-2-343
	85-2-344
5) Make clear that the "exemptions" listed for each closed basin	85-2-330
allow an application to appropriate <i>surface</i> waters, should it be	85-2-336
demonstrated to be available through the permit process.	85-2-341
This requirement would not apply to storage nor the specific	85-2-343
exemption for the ground water. ⁴	85-2-344
6) Maintain the existing exemptions for the creation of new water	High spring
storage projects. However, as a matter of policy, assure that such	flows:
projects are meaningful storage projects and that appropriation is	85-2-336
limited to the most likely period of surplus water – high spring	
flows. ⁵	> 50 ac. ft.
	85-2-330
	85-2-336
	85-2-341
	85-2-343
7) Make clear that the surface water exemption for municipal use is	Amend
limited to municipalities defined as "incorporated cities and towns".	Exemptions in
Change the stated exemption for "municipal use" provided in some	85-2-330
basin closure statutes to municipalities ⁶	85-2-341
	85-2-343
	85-2-344

Define municipalities in the Water Use Act.	Create a statutory definition of municipal use in 85-2-102.
 8) The Work Group found that: a) Most domestic uses are supplied by ground water, b) Water rights for most of these individual water users are developed via an exemption to the permitting process, c) Domestic exemptions may also be used to provide public water supply systems, and d) The purpose of the basin closure is to protect senior water rights. Therefore, the Work Group recommends that the exemption allowing new domestic uses from surface water be eliminated. 	Amend Exemption in 85-2-330 85-2-341 85-2-343 85-2-344
 9) Narrow the exemption of "nonconsumptive uses" to only nonconsumptive hydropower use.⁷ 	85-2-330 85-2-341 85-2-343
10) Create an exemption that would allow appropriation of available water supply when state or federal law required mitigation, restoration or remediation, such as that required under the Federal Clean Water Act for wetland mitigation.	For wetlands 85-2-336 For all : 85-2-330 85-2-341 85-2-343 85-2-344
11) Many of the exemptions to a basin closure allow one to apply for a water right for some specific purpose. That policy decision was typically not created in response to water availability. The Work Group recommends that subsequent "Changes in Purpose of Use" for a new permits created under a basin closure exemption be prohibited to prevent a loophole to he closure from being created.	85-2-330 85-2-336 85-2-341 85-2-343 85-2-344
This does not include the exemptions for storage of high spring flows. In this instance appropriable water may still be available. Further, storage is not a water right in and of itself but an action to catch water for beneficial use purpose or multiple beneficial uses.	

Two pieces of legislation that were introduced and debated, but not passed, last legislative session were frequently focus points during the Work Group dialogs. Legislation referenced included

- House Bill 269, "An Act Clarifying the Definition of Ground Water", and
- House Bill 403, "Protecting Existing Ground Water Resources and Users".

¹ The nature of ground water occurrence in Montana's closed basins is in some regions complex but is predominately interconnected. Surface water to ground water connection may be regional rather than reach-specific. Further, it is likely that the timing may be delayed. That interaction may be measured in days or months. Further, while the effects may be more measurable as cumulative impacts, individual

ground water appropriations are an interactive part of the water budget. The Work Group believes that advancing this policy of "interrelated resources" is a significant and timely policy response. Montana may still be able to avoid many future conflicts. Other Western States who addressed this concept later in their water development process are facing considerable conflict and are finding mitigation "after the fact" and extremely difficult proposition.

² Currently only the Upper Clark Fork Closure requires such a report to be submitted as part of the ground water application.

³ The Work Group has agreed that depletions should be mitigated. Some group members believe that there may be some proposed appropriations in some aquifers where it is conceivable that an augmentation plan may require little or no augmentation water. Therefore an augmentation plan, in some possibly rare instance, may state that "no mitigation water is need".

Currently only the Upper Clark Fork Basin Closure explicitly provides this mitigation option. In several of the basin closures an application for "connected ground water" is simply not allowed to proceed.

⁴ The most Common exemptions are for surface supplies use to supply stock water, municipalities, domestic, and emergency appropriations. The Bitterroot and Upper Clark Fork Closures have fewer exemptions and may be considered the most restrictive

⁵ High spring flows is already referred to in all but one currently closed basin. To define a meaningful storage project it is recommended that these projects be 50 acre feet or larger in size. Only one closed basin, the Bitterroot, currently uses both conditions to define storage)

⁶ Some interests have been attempting to advance an argument that municipal water use, an exemption in five closed basins, should mean any public water supply system. The Work Group disagrees. Members have indicated that such an interpretation essentially negates the basin closure concept. Public water supply systems, as defined by statute for DEQ, may be simply water supply to a bar, or even five trailer houses. Such a broad interpretation of municipal use could mean that only the development prohibited by basin closure for surface water were new irrigation, industrial use, and some instream uses.

⁷ The Work Group was not able to identify a truly nonconsumptive use of surface water, with the possible exception of in-channel hydropower generation. This exemption was frequently used in the past to create ponds and pools. Applicants argued that these structures were non-consumptive since the loses were "instantaneously immeasurable". The department evaluation, however, have noted that these did have significant cumulative evaporative losses.