

DRAFT

MANAGEMENT PLAN FOR THE BEAR RIVER GROUND WATER MANAGEMENT AREA

A. BACKGROUND AND PURPOSE

On August 12, 2001, the Director of the Idaho Department of Water Resources issued an order establishing the Bear River Ground Water Management Area and creating an advisory committee to provide guidance in the preparation of a management plan. The plan set forth herein incorporates the recommendations of the advisory committee to achieve the following purposes:

- To accommodate projected growth and water demand in the Bear River Basin in Idaho while protecting senior priority water rights from surface and ground water sources from injury.
- To simplify and expedite acquisition of water rights needed for new developments from ground water by providing guidance to developers and by assuring holders of existing rights and the public that water management procedures protect their interests without the need for filing protests.
- To encourage innovative and flexible strategies for making water available for new development. Water can be made available through projects to develop Idaho's allocation of water under the Bear River Compact through new surface storage or ground water recharge projects and by transfers of existing water rights assisted through water banking and other marketing mechanisms.
- To prevent unauthorized uses of ground water where a right does not exist to divert and use the water or the diversion and use does not comply with the elements of the water right authorizing the use.
- To encourage conservation and wise use of the available water supplies in the Bear River Basin.
- To continue the involvement of the local advisory committee in the development of management policies for the area.
- To increase public and water user awareness of water management policies and methods in the Bear River Area.

B. DEFINITIONS

1. Bear River Ground Water Management Area (or Basin). That part of the Bear River Basin included within the Department's Administrative Basins 11 and 13, excluding the Bancroft-Lund Ground Water Management Area as shown on Attachment A to this plan.
2. Board. The Idaho Water Resource Board.
3. Committee or Advisory Committee. The Bear River Ground Water Management Area advisory committee.

4. **Conjunctive Administration.** The combined administration of water rights from hydraulically connected surface and ground water sources under the prior appropriation doctrine as set forth in Idaho law recognizing the priorities of the rights, physical characteristics and significance of the source connectedness, and the differences in impacts occurring from surface water diversions versus impacts from ground water diversions.
5. **DCMI.** An acronym for domestic, commercial, municipal and industrial uses of water.
6. **Depletion.** The quantity of water depleted from the water supply of the Bear River Basin resulting from diversion and use of water or that would result from the diversion and use of water under a proposed project, as determined by the Director.
7. **Director.** The Director of the Idaho Department of Water Resources
8. **Department.** The Idaho Department of Water Resources.
9. **Hydraulically Connected Surface and Ground Water Sources.** A ground water source and a surface water source physically interconnected such that a portion of the ground water can become surface water, or a portion of the surface water can become ground water, and changes in water levels within the ground water source affect the amount of water exchanged between the ground water source and the surface water source.
10. **Injury.** Injury to a senior priority water right occurs when water diverted under a junior priority water right diminishes the amount of water that otherwise would have been physically and legally available for the use authorized under the senior priority water right.
11. **Mitigation.** The result of an action taken by or for the benefit of the holder of a junior priority water right to prevent injury to a senior priority water right or to provide compensation acceptable to the holder of a senior priority water right for injury caused by the diversion and use of water under the junior priority water right.
12. **Mitigation Plan.** A document submitted for approval of the Director that identifies actions to provide mitigation.
13. **Rental Pool.** A market for leasing stored water operated by a local committee appointed by the Board in accordance with Section 42-1765, Idaho Code.
14. **Transfer.** A change in the elements of an existing water right approved in accordance with Section 42-222, 42-222A, 42-1763, or 42-1765, Idaho Code.
15. **Watermaster.** The person elected and appointed as provided in Sections 42-605 and 42-801, Idaho Code. Unless otherwise stated, the term refers herein to the Watermaster of Water District 11.
16. **Water Supply Bank.** The water exchange market operated by the Board pursuant to Section 42-1761 through 42-1766, Idaho Code, including rental pools established to facilitate marketing of stored water.

C. AUTHORITY FOR ADOPTION OF THE PLAN

This plan is adopted pursuant to Section 42-233b, Idaho Code, which authorizes the Director to approve a ground water management plan to "provide for managing the

effects of ground water withdrawals on the aquifer from which withdrawals are made and on any other hydraulically connected sources of water." The plan is premised upon provisions of statutes and rules implementing the prior appropriation doctrine. Specific reference is made to the following statutes and rules:

1. Sections 42-203A and 42-222, Idaho Code, require consideration of potential injury to existing water rights in the processing of applications to appropriate water or to change the use of existing water rights.
2. Water Appropriation Rule 40.04 (IDAPA 37.03.08) identifies the applicant as having the burden to show that the criteria of approval are satisfied, including the consideration of potential injury to other water rights.
3. Conjunctive Management Rule 20 (IDAPA 37.03.11) provides for the conjunctive administration of the hydraulically connected surface and ground water sources.

D. OVERVIEW OF PROVISIONS OF THE PLAN

The prior appropriation doctrine (i.e., first-in-time, is first-in-right) guides the allocation and use of water in Idaho. The laws implementing this doctrine provide that anyone seeking to appropriate water for a new use has the burden of showing that unappropriated water is available and that the new diversion and use can occur without injury to earlier priority rights to use the water supply. For decades, Bear River and its surface tributaries have been managed to recognize the priority of rights in Idaho and, through the provisions of the Bear River Compact, prior rights in Wyoming and Utah. Until recently, ground water has been administered as a source separate from surface flows in the Bear River basin and throughout Idaho. However, Idaho's water management policies have evolved to require conjunctive administration of water rights from hydraulically connected sources as needed to recognize priority of the rights from the sources.

Conjunctive administration requires that the effect of a proposed new use from ground water on existing rights from hydraulically connected surface water sources be determined before a permit is issued for the proposed new use. If a new use depletes the supply of water available to existing prior rights when water is needed to satisfy the beneficial use authorized under a prior right, a new use cannot be permitted unless the injury to the prior right is fully mitigated.

This plan is premised upon available information indicating that ground water and surface water is generally hydraulically connected throughout the Bear River basin in Idaho. Because of this interconnection and because the Bear River and its surface tributaries are appropriated to the extent that flows are not adequate to fully satisfy all existing rights during all or part of every year, an applicant for a new use from a ground water source must provide the information needed to evaluate the impact of the proposed new diversion and use on existing surface rights and offer mitigation appropriate to fully offset injury to other rights. Holders of water rights from Bear River have been routinely protesting approval of all applications to appropriate ground water for new consumptive uses, and applicants have found that the evaluation needed to allow conjunctive

administration of a proposed new diversion and use can be arduous and expensive. As a result, a backlog of applications to appropriate ground water for irrigation, municipal, industrial and other consumptive uses has developed.

A key element of this plan, adopted from the recommendations of the advisory committee, is to shortcut the evaluation of injury to existing rights by providing a simplified method (herein termed the "simplified method") of determining the mitigation necessary to allow approval of a permit to appropriate ground water. The simplified method allows approval if the applicant submits a plan that will augment the flow of Bear River by an amount equal to the estimated annual depletion that will result from the new use. While the amount of the mitigation water determined by this method may be larger than would be required based upon a technical review of the amount of water needed to prevent injury to other water rights, the applicant is freed from making a detailed evaluation of the amount, location and timing of mitigation that would be required to prevent injury to all existing surface and ground water rights as long as other water right holders do not protest approval and provide information to overcome the presumption that the simplified method does not adequately protect their rights.

As shown graphically in Attachment B, adoption of the simplified method in this plan provides an alternative to a complex injury analysis but does not preclude the applicant from making a more complete analysis to base a mitigation plan on injury as determined on a case-by-case basis. Before the Department will issue a permit for a new use from a ground water source, the applicant must either offer a plan that will fully mitigate depletion as determined in the simplified method or provide a technical evaluation on a case-by-case basis to show either: (1) that a mitigation plan is not needed because the use will not increase consumption of water, (2) the ground water source sought by the applicant is not hydraulically connected to surface flows in the Bear River Basin, or (3) that a mitigation plan based upon a technical evaluation for the particular case is adequate to prevent injury to existing rights.

E. ALTERNATIVES TO DEVELOPING NEW GROUND WATER RIGHTS

Before filing an application for a new permit to appropriate ground water, developers are encouraged to first consider alternate sources of supply or strategies that may avoid the need for the new appropriation. Some alternatives are:

1. **Transfers.** An alternative to obtaining a permit to appropriate ground water for a new use is to transfer an existing water right to serve the new use. Usually, a transfer will involve obtaining and changing an existing right to use ground water for the new use. Transfers proposing to change the source of water for an existing surface water right to a ground water source do not satisfy the requirements for approval unless: (1) water from the surface water source is used to directly recharge and replace the water taken from the ground water source, or (2) the ground water source and surface water source are so directly interconnected that pumping from the well has an immediate impact on the surface water source (e.g.,

at least 50 percent depletion in the original source from depletion at the proposed point of diversion in one day).

2. Tie into a municipal provider system. Municipalities and municipal providers as defined in Section 42-202B, Idaho Code, are authorized to extend the boundaries of their service areas and can hold water rights for reasonably anticipated future needs. A developer should consult with nearby municipal providers to determine the availability of water for new development, particularly for DCMI purposes.
3. Conservation and reuse of waste flows. The need to develop additional water supplies can be reduced or avoided by implementing conservation practices to extend the use of existing supplies. Municipal providers and other DCMI users are generally allowed to use conserved water or redirect waste flows to meet expanded needs for the purposes authorized under their water rights. Water conserved from irrigation uses or captured as waste flows cannot be used to expand the irrigated area outside of that authorized under the original right. However, improvements to the efficiency of diversion, conveyance and application of water used for irrigation may indirectly free up storage water that may be allowed to be used for new development.

F. PROCESSING APPLICATIONS TO APPROPRIATE GROUND WATER

Applications now pending and those filed after adoption of this management plan will be processed in accordance with the following procedures:

1. Pending applications. Within 60 days after the order adopting the management advise them of the opportunity to develop a mitigation plan based upon the simplified method. Applicants will be given 60 days to indicate whether or not they opt to submit a mitigation plan based upon the simplified method and an additional 120 days thereafter to submit a mitigation plan. Applications for which notice has been published will not be readvertised unless the proposal is changed to seek an enlargement in diversion and use of water (Ref. Section 42-211, Idaho Code). For applications for which notice needs to be published, the notice will include a brief description of the mitigation offered. At the time the proposed mitigation plan is submitted to the Department, the applicant shall provide a copy of the proposed mitigation plan to each person or entity that filed a protest against approval of the application and submit to the Department a certificate of mailing documenting service of the proposed mitigation plan to the protestants. The protestants will be given 30 days to provide written comments on the proposed mitigation plan to the applicant and the Department. The Department will review the proposed mitigation plan, along with any comments received and issue a preliminary order approving the application and associated mitigation plan, with conditions of approval the Department determines to be necessary to satisfy the requirements of Section 42-203A, Idaho Code or denying the application if the criteria of Section 42-203A, Idaho Code are not satisfied.

If an applicant fails to respond to the notification of opportunity to propose a mitigation plan based upon the simplified method, the Department will issue a

preliminary order rejecting the application. If the applicant declines to propose a mitigation plan based upon the simplified method and indicates his or her intention to proceed with a mitigation plan based upon an analysis of injury for the project proposed in the application, a schedule will be developed for the applicant to submit a proposed mitigation plan to avoid injury and to provide a contested case hearing on the matter.

2. Applications Received after Adoption of the Management Plan. Applicants will be given written notice of the opportunity to propose a mitigation plan using the simplified method or to file a mitigation plan based upon an analysis of the impacts of their application. Published notice of applications will include a brief description of the proposed mitigation. Applications received after adoption of the management plan will be rejected unless the application includes a proposed mitigation plan meeting the requirements of either Subsection 3 or 4 of this section, as selected by the applicant.
3. Requirements for a Proposed Mitigation Plan (Simplified Method). A proposed mitigation plan using the simplified method shall include the following:
 - a. A calculation of the average annual depletion expected from diversion and use of water for the project proposed in the application. The depletion estimate shall be calculated using: (1) the procedures adopted by the Bear River Commission if the use is for irrigation; (2) the Department's "Dairy Spreadsheet" if the use is for dairy; and (3) a procedure using the methods set out in "Procedures for Estimating Depletion in the Lower Bear River Basin in Idaho" by Robert W. Hill, a draft dated January 7, 1998, or a similar procedure acceptable to the Department, if the use is for DCMI or other uses.
 - b. The plan must identify the source of water that will be used to supply water to the Bear River in Idaho in an amount that equals or exceeds the estimated average annual volume of depletion for the project proposed in the application. Potential sources of water for mitigation are listed in Section G. The arrangements for obtaining and assuring the mitigation water shall be described in the plan. Copies of deeds, contracts or other documents necessary for procuring the mitigation water supply shall be included with the mitigation plan submittal.
 - c. Mitigation offering replacement water for a new ground water permit must result in the required quantity of water delivered into the Bear River or its tributaries in Idaho. Mitigation for development in the Central Division must originate from sources in the Central Division in Idaho and be delivered into Bear River or its tributaries in the Central Division in Idaho, as these divisions are defined in the Bear River Compact.
 - d. The approved mitigation plan must be in place and operative before ground water diversion and use begins and must be continued and operating anytime that ground water is diverted and used.
 - e. For applications for municipal purposes that will be developed over a planning horizon as defined in Section 42-202B, Idaho Code, a schedule for implementation of the mitigation requirement will be developed to match use

increasing over time. The implementation schedule must be included as part of the proposed mitigation plan for review and approval.

- f. For applications seeking to appropriate water for development of subdivisions and other uses that once developed cannot reasonably be subject to curtailment, a short-term lease or transfer may not be used solely as a source of mitigation without a long-term source of mitigation being identified and ready to approve as a condition of the new permit. A contract is needed to provide certainty of a long-term mitigation measure before a short-term lease or transfer may be utilized.
4. Requirements for a Mitigation Plan prepared to Address Injury on a Case-by-Case Basis. An applicant choosing to submit a mitigation plan based upon an estimate of injury to other water rights shall provide the information required for the Director to make the applicable determinations set forth in Rule 43 of the "Rules for Conjunctive Management of Surface and Ground Water Resources" IDAPA 37.03.11. Note that monetary compensation or other forms of compensation rather than replacement water can be an acceptable form of mitigation with the agreement of the holders of the affected water rights.
 5. General Requirements Applicable to any Mitigation Plan
 - a. Implementation and maintenance of a mitigation plan and compliance with any permit conditions are the responsibilities of the permit holder. Permits and licenses issued to divert ground water will be conditioned to required control of the watermaster to monitor compliance with permit conditions, the effectiveness of mitigation measures, and the cumulative effect of individual permits.
 - b. Failure of the holder of the right to implement and continuously comply with the requirements of an approved mitigation plan constitutes a violation subject to enforcement action under Sections 42-311, 350, 351 and/or 1701B, Idaho Code. In addition the permit or license will be conditioned to provide for the Department to instruct the watermaster to curtail diversion and use of the ground water right until such time as the Department determines compliance with the mitigation plan is occurring.
 - c. Permits and licenses issued in accordance with this management plan will include conditions requiring installation and maintenance of measuring devices on the ground water diversion and to assure that the mitigation water is being delivered in accordance with the approved mitigation plan. Permits and licenses will be conditioned to require measuring and reporting in accordance with Chapter 7, Title 42, Idaho Code, as necessary to document compliance with conditions of the water right and the associated mitigation plan.
 - d. If a mitigation project is developed by or on behalf of a specific permit or licensed water right holder, ongoing maintenance of that mitigation project is the responsibility of the permit or water right holder.

G. SOURCES OF WATER FOR MITIGATION

The following section describes categories from which water supplies may be obtained to mitigate withdrawal and use of ground water for new consumptive purposes. No assurance is intended by this listing that water supplies will be available for purchase or lease from these sources. However, the Department does intend that the identification of the sources as viable for the purpose of mitigation of new consumptive ground water uses will encourage holders of water rights to identify quantities of water available for this purpose to aid applicants in obtaining the needed mitigation water. The options discussed below are not all-inclusive, and the suggestions are listed for illustration purposes. If an applicant proposes a mitigation plan using a water supply not listed here, he or she should discuss it with the Department in advance.

1. **Stored Water.** A mitigation plan may identify a quantity of stored water from an existing reservoir with documentation that the applicant has obtained the right to use the water by purchase or lease. If the authorized purpose of use for the stored water does not provide for use for mitigation purposes, an application for transfer should be filed pursuant to Section 42-222, Idaho Code, or the stored water should be assigned to the Water Supply Bank to allow the change in use.

The mitigation plan must provide for the stored water to be available to the watermaster to release under a schedule approved by the Department to mitigate reductions in flow caused by diversion and use of ground water by the applicant. The quantity of stored water made available through the mitigation plan must equal or exceed the quantity of depletion estimated under the simplified method.

2. **Natural Flow.** All or part of the water available from a valid existing right to divert the flow of Bear River or its surface tributaries may be identified as a source of water to mitigate reductions in flow resulting from diversion and use of ground water in the basin. The annual volume of water made available from the water right offered for mitigation to augment the flow of Bear River shall equal or exceed the annual volume of depletion resulting from diversion and use of ground water sought under the application. The annual volume of depletion made available from the natural flow right used for mitigation shall be calculated using depletion rates as described in Section F3a, taking into consideration the availability of water under the priority of the water right, the existence and use of other water rights and water supplies for the same beneficial use, and other factors influencing the historic use of water under the right.

The proposed mitigation plan shall include either an application for transfer filed pursuant to Section 42-222, Idaho Code, to change the use of the natural flow water right to mitigation purposes or an application to place the water right into the Water Supply Bank for purposes of mitigation. Section 42-108, Idaho Code, requires the consent of the irrigation company or district if a transfer of water right is represented by shares. The Department will encourage flexibility in the

use of shares to allow transfers of irrigation company shares to new uses pursuant to company-enacted policy.

The previous use of the right or part of the right offered for mitigation shall be terminated and not be resumed while the mitigation plan is operative; i.e., for a natural flow right used for irrigation, the place of use shall not be irrigated unless another water right is obtained authorizing irrigation to be resumed. The proposed mitigation plan shall include authorization for the watermaster to distribute water under the right authorized for irrigation as directed by the Department to prevent injury to other water rights caused by diversion and use of ground water.

H. MANAGEMENT OF WATER RIGHTS.

Diversion and use of ground water under new and existing rights will be monitored and regulated in accordance with applicable law to prevent unauthorized uses.

1. **Measuring and Reporting of Ground Water Use.** New and existing rights to divert and use ground water for diversions greater than 0.24 cfs and/or greater than 5 acres of irrigation will be required to measure and annually report diversions. The requirement will be a condition of approval on newly issued rights and the holders of existing rights will be required to do so after entry of an order as provided in Section 42-701, Idaho Code or upon the creation of a water measurement district as described in Section I.2. The installation and maintenance of measuring devices will be required as appropriate, but alternatives to measuring devices such as estimates of diversion based upon power consumption coefficient, hour meters, and SEBAL (Surface Energy Balance Algorithm for Land) will be authorized whenever practicable.
2. **Enforcement of Diversion and Use of Existing Rights from Ground Water.** The Department will, with the assistance of the hydrographer of the water measurement district if a district is created, utilize available information, including reported diversion data, aerial photography and satellite data to compare water diversion and use to authorized water rights. The Department will investigate diversion and use that appears to be unauthorized and take appropriate enforcement actions in accordance with the procedures of Sections 42-351 and 42-1701B, Idaho Code.

I. RELATED ACTIONS

There are several actions that the Department will take as appropriate to provide for effective management of water resources in the Bear River Basin. Several of the actions recommended by the advisory committee that, while not directly related to the management of ground water and which, therefore, cannot be accomplished through

adoption of this plan, are important and necessary to encourage water marketing, conservation and water management.

1. **CREATION OF A BEAR RIVER RENTAL POOL.** The Idaho Water Resource Board is authorized by Section 42-1765, Idaho Code, to create a local rental pool to facilitate marketing of stored water by a local committee appointed to administer it. A rental pool provides the advantage of being locally managed and controlled, allows for the development of procedures adapted for conditions existing in the basin, protects water rights held in the rental pool from forfeiture and provides a source of funding for improving water management. The Department will facilitate creation of a rental pool.
2. **CREATION OF A WATER MEASUREMENT DISTRICT.** Idaho law provides that monitoring and enforcement of use of water will be accomplished through water districts. In the Bear River Basin, Water District 11 is the entity that directly monitors and regulates use of water from the Bear River and surface tributaries (with the exception of independent water districts on surface tributaries considered to be separate from the main stem of Bear River for watermaster regulation purposes). A water district cannot be established or enlarged to provide regulation of existing rights to ground water until the rights are adjudicated (Ref. Section 42-604, Idaho Code). Idaho law (Chapter 7, Title 42, Idaho Code) provides for creation of a water measurement district to measure and report diversions from sources that have not been adjudicated. The Department will begin the process of creating a measurement district to include diversions from ground water for purposes other than domestic uses as defined in Section 42-111, Idaho Code and stock watering use as defined in Section 42-1401A, Idaho Code.
3. **DIRECTION TO WATERMASTER TO ADMINISTER SURFACE TRIBUTARIES.** Water District 11 includes the Bear River and its surface tributaries in all of the Bear River Basin in Administrative Basins 11 and 13 with the exception of certain tributaries covered by separate water districts. However, Water District 11 has not routinely involved water right holders from the tributary streams and the watermaster has regulated uses on these streams only as needed to address disputes between water users. The Department will evaluate the need to involve water users from tributaries not designated as separate water districts in Water District 11 and to instruct the watermaster to expand routine regulation to these tributaries.
4. **DEVELOPMENT OF A STATE WATER PLAN.** The advisory committee recommended preparation of a comprehensive state water plan for the Bear River Basin in Idaho. A water plan could recommend feasibility studies for new storage facilities and other water supply enhancements. Additional storage could facilitate development of the first 125,000 acre feet of depletion allowed to Idaho in the Bear River Compact. New storage could be in surface reservoirs or

underground as managed aquifer recharge. The advisory committee's recommendation will be forwarded to the Board for consideration.

5. **CONTINUING ROLE OF ADVISORY COMMITTEE.** The advisory committee should be continued to provide assistance and guidance to the Department as the management plan and related actions are implemented. The Director will schedule annual meetings of the advisory committee and at other times as deemed necessary and useful. At the annual meeting (generally to be held about April 1), the advisory committee will review data from reports of the various water users and shall submit to the Director any recommendations, in writing, regarding administration of the water rights, changes in the diversion monitoring and reporting requirements, and changes to the management plan. In addition, the advisory committee is requested to develop and recommend a public participation process to address concerns expressed about the drilling of exempt domestic wells. Public participation may include involving local government, groups and entities involved with similar issues. The recommendations should include any procedures for giving notice to and gathering input from the public, including the need for seeking participation by other interested persons outside the boundary of the management area; any recommendations for changes in laws or rules; and how the Department should make a final determination regarding this issue.
6. **BANCROFT-LUND GROUND WATER MANAGEMENT AREA.** The advisory committee recommended including the Bear River portion of the Bancroft-Lund Ground Water Management Area in the Bear River Ground Water Management Area. Because the ground water rights in this area have been adjudicated, this area is now regulated as a water district under a separate watermaster. The ground water diversions in the Bear River portion of the area are hydraulically connected to the Bear River, but are also closely associated with nearby ground water diversions from the portion of the area in the Portneuf Basin. Because of the interconnection of ground water to both river basins, conjunctive management of the ground water rights in the Bancroft-Lund area will ultimately require coordination of management between water districts or other local management entities. The Department will continue to evaluate the appropriate designation for the area.

ALTERNATIVES FOR OBTAINING WATER SUPPLIES FOR DEVELOPMENT IN THE BEAR RIVER BASIN

