

1B - BENEFICIAL USE OF WATER

The concept of beneficial use must necessarily evolve with changing conditions.

Discussion:

The concept of beneficial use is defined broadly, providing for the optimum use of the state's water resources. Except for the constitutionally protected beneficial uses, the concept of what constitutes a beneficial use of water evolves over time based upon societal needs. For example, use of water for the protection of fish and wildlife habitat, aquatic life, recreation, aesthetics, municipalities, navigation, water quality, and managed ground water recharge are recognized as beneficial uses.

Implementation Strategies:

- Review existing state policies and programs to ensure that traditional and emerging water use needs are recognized as beneficial uses of water.
- Establish or participate in local and regional advisory groups to formulate recommendations regarding traditional and emerging water use needs and priorities.

Milestones:

- Policies and rules revised to accommodate emerging water use needs.
- Reports submitted on advisory group recommendations.
- Statutory and/or regulatory changes made to accommodate emerging beneficial uses of water.

1C - TRANSFERABILITY OF USE

Changes in the nature of use of a water right should be allowed to meet emerging needs and to provide for optimum use of the state's water resources.

Discussion:

The demand for water increases every year while the volume of unappropriated water within the state continually decreases and many basins are at or near full appropriation. Allowing for transferability of water rights provides flexibility in water allocation to meet changing conditions. Idaho Code §§ 42-108 and 42-222 provide for changes in place of diversion, place of use, and period of use, while also providing for the protection of other water users, the agricultural base of a region, and the local public interest. Pursuant to state law, priority dates are retained where other water right holders are not injured.

Implementation Strategies:

- Review Department of Water Resources policies and procedures and revise as necessary to implement a more efficient water right transfer process.
- Review existing statutes and regulations and propose revisions to establish a more efficient water right transfer process.

Milestones:

- Number of transfers processed.

Recommendations:

- Revise Idaho Code to authorize the Idaho Water Resource Board to apply for a change in the nature of use of an acquired water right, where it has been determined that a minimum stream flow water right is in the best interest of the state.

1H – QUANTIFICATION AND MEASUREMENT OF WATER RESOURCES

Quantification and measurement of Idaho's water supply and use is essential for sound water resource planning, management, and administration.

Discussion:

The Director of the Department of Water Resources is required to maintain an inventory of the state's water resources. Idaho Code § 42-1815. The measurement of water availability and use is necessary to administer and regulate existing water uses and to promote optimal water resource planning and management.

Chapters 6 and 7, title 42, Idaho Code, provide for water use measurement and reporting throughout the state. New instrument technologies for the measurement of water availability and use will continue to improve the accessibility and reliability of data collection and interpretation. These new technologies, such as automated electronic data recording equipment and transfer of data through radio and satellite systems, provide transparency and instantaneous access to data, improve calibration of models used for administration and planning, and educate the public about water use by region and throughout the state.

Implementation Strategies:

- Assess existing measurement network and facilities and develop plan for improving data collection and reporting.
- Prioritize projects for conversion to automated electronic data collection and reporting systems.
- Provide technical assistance and participate in securing funding for improved measurement and reporting systems.

Milestones:

- Number of assessments completed.
- Number of automated data collection systems in use.
- Number of improved measurement and reporting strategies implemented.

11 - AQUIFER RECHARGE

Aquifer recharge should be promoted and encouraged, pursuant to state law.

Discussion:

Managed aquifer recharge: Managed recharge projects may be an appropriate means for enhancing spring flows, providing mitigation for junior ground water depletions, or to help maintain desirable aquifer levels. In addition, managed recharge may help optimize existing water supplies by changing the timing and availability of water supplies to meet demand. Managed recharge may also be used as an adaptive mechanism for minimizing the impacts of variability in climate conditions. Monitoring and evaluation of managed recharge projects is essential to document benefits and effects and to address specific questions concerning effects on ground water quality. Projects involving the diversion of natural flow water appropriated pursuant to Idaho Code § 42-234 for managed recharge in excess of ten thousand (10,000) acre-feet on an average annual basis must be submitted to the Idaho Water Resource Board for approval prior to construction. Idaho Code § 42-1737. The Idaho Water Resource Board supports and will assist in the development of managed recharge projects that further water conservation and increase water available for beneficial use, consistent with state law.

Aquifer storage and recovery: The use of managed recharge to store surface water in a confined underground area could be an important element in meeting future water use needs. Further understanding of the economic, legal, ecological, and technical feasibility of using confined underground aquifers for water storage in Idaho is required for the purpose of policy development and planning and to avoid injury to existing water rights.

Incidental aquifer recharge: The incidental recharge of aquifers occurring “as a result of water diversion and use that does not exceed the vested water right of water right holders is in the public interest.” Idaho Code § 42-234(5). Incidental recharge may be an important component of some aquifer water budgets.

Implementation Strategies:

- Cooperate with public and private entities to develop, implement, and evaluate managed recharge projects.
- Identify and propose changes to statutes, rules, and policies that will assist the development and implementation of managed recharge projects.
- Identify river basins where the use of managed recharge projects should be evaluated as a potential strategy for addressing increased demand on water supplies.
- Monitor and evaluate recharge projects to document effects on water supply and water quality.
- Appoint an Aquifer Storage and Recovery Task Force.

Milestones:

- Managed recharge projects that optimize water supplies implemented.
- Effects of managed recharge projects on water supply and water quality documented.

- **Aquifer Storage and Recovery Task Force recommendations submitted.**

1M – WEATHER MODIFICATION

Weather modification offers the possibility of augmenting water supplies.

Discussion:

Weather modification, primarily winter cloud seeding to increase snowpack, has been practiced in Idaho and across the western states for many years. Increasing challenges, including a changing climate, growing population, and water allocation conflicts related to the presence of threatened and endangered species magnify pressures on a variable water supply. While the specific water quantities resulting from weather modification remain unknown, additional investigation should be conducted and pilot projects implemented to determine where and under what circumstances weather modification is a feasible strategy for increasing water supplies. A number of cloud seeding programs and studies have been conducted in Idaho with positive overall results, including programs funded by the Idaho Water Resource Board and Idaho Power Company.

Weather modification has the potential to raise legal issues related to the effect of weather modification activities outside state boundaries, potential adverse environmental effects, and intergovernmental conflicts where projects occur on or near public lands. Addressing these issues through legislation, rulemaking, and interstate agreements will help avoid future conflicts and litigation.

Under Idaho law, any person who intends to conduct weather modification activities is required to register with the Department of Agriculture and file a log of activities upon completion of the program. Idaho Code §§ 22-3201, 22-3202. Idaho law also provides for the creation of weather modification districts. Idaho Code §§ 22-4301, 22-4302.

Implementation Strategies:

- Support the continued evaluation of existing weather modification projects.
- Develop criteria for the development and implementation of additional weather modification projects.
- Collect baseline data and continue effectiveness research.
- Coordinate weather modification research and pilot projects with neighboring states.
- Ensure that state-funded projects are scientifically sound and include robust monitoring and evaluation component.

Milestones:

- Number of weather modification projects implemented that increase water supply.
- Increase in annual runoff resulting from weather modification projects.
- Increase in baseline data and effectiveness research.
- Agreements in place with neighboring states and federal agencies addressing research and implementation of weather modification projects.

1N – HYDROPOWER

Appropriation of water for hydropower purposes shall be subordinated to all subsequent upstream depletionary beneficial uses.

The relationship of hydropower water rights to future upstream uses was the subject of an ongoing debate from statehood until 1985, when the Idaho legislature enacted Idaho Code § 42-203B to resolve the debate. Pursuant to section 3 of article XV of the Idaho Constitution, the legislature determined that it was in the public interest to specifically implement the state's power to regulate and limit the use of water for power purposes. Idaho Code § 42-203B directs that hydropower water rights in excess of state-established minimum stream flows are subordinated to future depletionary beneficial uses. In order to effectuate section 42-203B, all applications, permits and licenses for use of water for hydropower production shall be subordinated to future depletionary beneficial uses.

Implementation Strategies:

- Ensure that all future applications, permits and licenses for use of water for hydropower purposes contain a subordination clause.
- Establish minimum stream flows to protect base flows for existing hydropower users.
- Define, through agreements with the holders of existing hydropower water rights, the relationship between such rights and existing and future depletionary water rights.

Milestones:

- Execution of subordination agreements and/or implementation of minimum stream flows for existing hydropower facilities.

2B - FEDERALLY LISTED SPECIES AND STATE SPECIES OF GREATEST CONSERVATION NEED.

Voluntary community-based conservation programs that benefit species listed under the Endangered Species Act (“ESA”) and Species of Greatest Conservation Need (“SGCN”) and resolve water resource issues should be the primary strategy for achieving species protection and recovery.

Discussion:

The intersection between state water rights and the ESA requires development of integrated solutions to water allocation conflicts. In enacting the ESA, Congress contemplated a state-federal alliance to advance the recovery of listed species and provided for the development of state-led recovery efforts. Congress has directed federal agencies to “cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species.” 16 U.S.C. § 1531(c)(2). Cooperative community-based conservation programs are more effective in providing on-the-ground habitat benefits than enforcement actions. With site-specific information about water and land use practices and habitat requirements, targeted and effective conservation strategies can be developed and implemented that protect private property rights and assure state primacy over water resources while, at the same time, providing natural resource protection.

The Idaho Water Resource Board holds minimum stream flow water rights for 205 river reaches important to ESA-listed species and established as part of the Snake River Water Rights Settlement Act of 2004 (“2004 Water Rights Agreement”). The minimum stream flow water rights provide significant protection for ESA-listed species in the Salmon and Clearwater River Basins. The water rights for streams in watersheds with substantial private land ownership and private water use were established after consultation with local communities. Where the minimum stream flow water rights are higher than existing flows, the state works with water users on a voluntary basis to rent or otherwise acquire water to return to the streams. The Water Supply Bank and Idaho Water Transactions Program are used to achieve these objectives. In conjunction with the minimum stream flows, the state agreed to work with local stakeholders and communities to address habitat concerns on a limited number of streams with degraded habitat. The work plans include measures to remove barriers to fish passage, revegetate stream banks, and restore wetlands to proper functioning.

The 2004 Water Rights Agreement also provides for the development of long-term habitat conservation plans to assist in the recovery of ESA-listed species, under section 6 of the ESA. The plans are to be developed in collaboration with local landowners and water users, affected Indian tribes, and state and federal natural resource agencies. Section 6 agreements will provide incentives for conservation through the granting of incidental take coverage to participants in the program. Such agreements would provide participating water users with protection against uncertainty and regulatory delays while contributing to the recovery of listed species. Section 6 of the ESA may also provide opportunities for the implementation of voluntary conservation plans developed in collaboration with local water users and stakeholders in other regions of the

state. It is in the interest of the public for the Idaho Water Resource Board to take a leadership role in the development of local and regional conservation strategies that contribute to the recovery of ESA-listed species and SGCN.

Implementation Strategies:

- Participate in the development and implementation of habitat conservation plans pursuant to section 6 of the ESA.
- Collaborate with Office of Species Conservation, state and federal agencies, affected Indian tribes, and local stakeholders to develop and implement habitat conservation programs that preclude the need for listing of species and contribute to listed species' recovery.
- Coordinate with Office of Species Conservation to integrate water resource programs with species protection and recovery, including the establishment of minimum stream flows, and state designation of protected rivers.

Milestones:

- Number of section 6 agreements implemented.
- Number of voluntary conservation agreements and measures implemented.
- Number of strategies implemented that preclude the need for listing under the ESA and result in listed species' recovery.

2C - INSTREAM FLOW

The Idaho Water Resource Board will exercise its authority to establish and to protect minimum stream flow water rights on those water bodies where it is in the public interest to protect and support instream uses.

Discussion:

Instream flows protect and support many nonconsumptive, beneficial uses of water such as fish and wildlife habitat, aquatic life, recreation and aesthetic values, transportation, navigation, hydropower generation, and water quality. These uses contribute to Idaho's economy and the well being of its citizens.

In 1971, the legislature authorized the first formal appropriation of minimum stream flows by directing the Idaho Department of Parks and Recreation to appropriate a specific reach of Niagara Springs in the Malad Canyon area for instream flow purposes. The 1976 State Water Plan called for, and eventually legislation was enacted, creating a state-wide minimum stream flow program. The ability to obtain state-based minimum stream flow water rights in Idaho lies exclusively with the Idaho Water Resource Board. Chapter 15, title 42, authorizes the Idaho Water Resource Board to appropriate the minimum flow of water required to protect designated uses if the appropriation is in the public interest and will not interfere with any vested water right, permit, or water right application with a senior priority. Idaho currently has 297 licensed or permitted water rights for minimum stream flow purposes, including 3 minimum lake level water rights. At the legislature's direction, 205 of the minimum stream flow water rights were adopted pursuant to the Snake River Water Rights Agreement which, as discussed more fully in Policy 6B, provided a programmatic approach to addressing the needs of species listed under the federal Endangered Species Act. Similarly, the legislature has authorized the Idaho Water Resource Board to appropriate minimum stream flow water rights in the Lemhi and Wood River basins where the rights are maintained through operation of a Water Supply Bank. These locally managed programs are used to maintain or enhance instream flow in a manner that respects water use practices and addresses community concerns.

The Idaho Water Resource Board supports efforts to obtain storage and natural flow rights to improve and maintain instream flows when in the public interest. The Water Supply Bank and local rental pools are tools that can be used to improve instream flows through voluntary cooperation and to meet local needs. To facilitate their use throughout the state for use in improving and sustaining minimum stream flows, statutory changes are needed authorizing the Idaho Water Resource Board to establish local rental pools at the request and in cooperation with local communities. Statutory changes are also needed to authorize the Idaho Water Resource Board to apply for a change in the nature of use of an acquired right, where it has been determined that a minimum stream flow water right is in the best interest of the state.

Implementation Strategies:

- Establish local rental pools to meet instream flow needs as requested.

- Submit applications for minimum stream flow water rights that are in the public interest.
- Coordinate with state and federal agencies and stakeholders to identify potential minimum stream flow needs.
- Revise chapter 15, title 42 to authorize the Idaho Water Resource Board to establish local natural flow rental pools.
- Revise chapter 15, title 42 to authorize the Idaho Water Resource Board to transfer acquired water rights to minimum stream flow water rights.

Milestones:

- Minimum stream flow water rights established.
- Annual inventories of instream flow water rights completed.
- Statutory changes authorize the Idaho Water Resource Board to establish local natural flow rental pools.
- Statutory changes authorize the Idaho Water Resource Board to transfer acquired water rights to minimum stream flow water rights.

2D- STATE PROTECTED RIVER SYSTEM

The Idaho Water Resource Board will exercise its authority to protect the unique features of rivers where it is in the public interest to protect recreational, scenic, and natural values.

Discussion:

Idaho Code § 42-1734A(1) authorizes the Idaho Water Resource Board to protect highly-valued waterways as state protected rivers. The authority to designate “protected rivers” derives from the state’s ownership of the beds of navigable streams and the state’s right to regulate all waters within the state. The Idaho Water Resource Board has consistently recognized the value of free-flowing waterways by designating specific streams and rivers as natural or recreational rivers.

Although rivers can be protected under the federal Wild and Scenic Rivers Act, the Idaho Water Resource Board encourages federal officials to seek protection of streams and rivers through the Comprehensive State Water Planning process. The state planning process ensures coordinated and efficient water planning for Idaho rivers and streams and avoids potential state/federal sovereignty conflicts.

Implementation Strategies:

- Coordinate with local governments and federal agencies to identify specific waterways for consideration as protected rivers.
- Develop priority list of potential rivers for consideration in comprehensive basin planning
- Establish agency policy and procedures to ensure requirements of protected rivers program are addressed when the Department of Water Resources reviews water right permit applications and stream channel alteration permits.
- Ensure that permits issued include provisions for the protection, restoration or enhancement of designated river reaches.

Milestones:

- Ongoing review of state rivers and streams for determination of whether they should be designated as part of the protected river system.
- Number of state/federal agreements to coordinate river planning implemented.
- Designation of streams or rivers determined to warrant protected status.

3A - REVIEW OF FEDERAL RESERVOIR WATER ALLOCATION

It is in the state's and the federal government's interest that federal reservoir allocations be consistent with the Comprehensive State Water Plan.

Discussion:

Historically, the Idaho Water Resource Board has reviewed federal water allocations proposed by the United States Bureau of Reclamation to determine whether the proposed allocations are consistent with state water resource planning and management objectives. In 1988, this cooperative arrangement was formalized through an agreement providing for Idaho Water Resource Board review of allocations of water in excess of 500 acre-feet annually within an existing approved water right not otherwise reviewable by the Idaho Department of Water Resources. This state and federal partnership ensures that water resource and management issues are addressed in a comprehensive way, thereby providing for optimal use of the state's resources. It will become even more important to coordinate state and federal management strategies as demands on the state's water supply increase. The Idaho Water Resource Board will pursue additional opportunities for review of proposed allocations to determine if they would be consistent with the Comprehensive State Water Plan.

Implementation Strategies:

- Review status of existing cooperative agreements related to review of proposed allocations and revise accordingly.
- Identify opportunities for additional agreements providing for review of proposed allocations.
- Work with the United States Army Corps of Engineers to determine if cooperative agreements addressing allocations at the Albeni Falls and Dworshak facilities would be in the state's interest.

Milestones:

- Existing agreements maintained and revised accordingly.
- Additional cooperative agreements executed that promote optimal use of the state's water resources.

3B - HYDROPOWER SITING

The expansion of hydropower capacity and generation consistent with the state water plan can help meet the need for affordable and renewable energy resources.

Discussion:

Hydropower provides a clean, efficient, and renewable energy source and has contributed significantly to the state's energy supply. The state and region's power demand is expected to increase substantially over the next several decades as the population continues to grow. Although most cost effective and flexible sites have been developed, there will be opportunities for increasing hydroelectric generating capacity, while preserving environmental protection. These include enhancing incremental capacity at existing sites through new technologies that yield greater energy efficiency, adding generation capacity at existing dams, and the development of generation capacity in conjunction with the construction of new water storage projects.

The 2007 Idaho Energy Plan recommends that conservation, including energy efficiency and demand management, should be the highest priority resource. The 2007 Idaho Energy Plan also recommends development of in-state renewable resources that will contribute to a secure, reliable energy system for the state. The Idaho Water Resource Board supports the promotion of a more efficient use of energy throughout Idaho's economy, implementation of efficiency improvements at existing sites, and retrofitting existing dams. Hydropower development should be considered when planning new water storage projects. Feasibility studies for new storage projects should include evaluation of the costs, benefits, and adverse consequences of hydropower generation.

Under 16 U.S.C. §803, the Federal Energy Regulatory Commission must determine that proposed projects are consistent with Idaho's comprehensive water plans when making licensing decisions. The Idaho Water Resource Board will review hydropower development proposals to determine whether they are consistent with the comprehensive state water plan, including the comprehensive basin and river plans, which address region-specific siting issues. The Idaho Water Resource Board agrees with the 2007 Idaho Energy Plan recommendation to establish an Energy Facility Site Advisory Team that would provide technical expertise and assistance upon request from local officials considering energy facility siting proposals.

As provided by Idaho Code § 42-203B, all applications, permits, and licenses for the use of water for hydropower production shall be subordinated to future depletionary beneficial uses. Any base flows for hydropower generation must be established by the Idaho Water Resource Board pursuant to the requirements set forth in chapter 15, title 42 of the Idaho Code.

Implementation Strategies:

- Provide information and technical assistance to local communities through participation in an Energy Facility Site Advisory Team.
- Include evaluation of hydropower generation potential in feasibility studies for water storage projects.

- Provide information and technical assistance to proponents of projects that increase energy efficiency, increase generation capacity, or retrofit existing dams for hydroelectric generation.

Milestones:

- Hydropower siting proposals and projects comply with the Comprehensive State Water Plan.
- Efficiency improvements implemented at existing hydropower facilities.
- Generation capacity increased at existing hydropower projects, while protecting the environment.
- Existing dams retrofitted with generation capacity, while protecting the environment.

3C - RESEARCH PROGRAM

Focused research is necessary to support water resource planning and collaborative solutions that address the increasing demands on the state's water supplies.

Discussion:

Research and data gathering are essential to the state's efforts to meet future water challenges in a sustainable way. Adequate data on water availability, use and efficiencies, surface and ground water interaction and relationships, and emerging water management technologies is needed to help water managers and end-users make sound decisions and develop adaptive strategies for responding to the impacts of climate variability. Data collection and research is conducted by numerous public and private entities. A cooperative exchange of information contributes to more efficient use of limited financial resources for research and monitoring necessary to further the state's water supply objectives. Research priorities include: water use efficiency; water use monitoring; ground and surface water relationships, specifically the timing and spatial distribution of pumping and recharge efforts; ground water flow models; and system operation modeling methods for Idaho river basins.

Implementation Strategies:

- Facilitate coordination and dissemination of research and data among state and federal agencies, universities, and private entities.
- Identify and prioritize research needs.
- Identify dedicated funding sources for basic and applied research.

Milestones:

- Establishment of teams representing public and private organizations to compile and coordinate research activities.
- Completed research projects.
- Application of research results to planning and management

3G - CLIMATE VARIABILITY

Preparedness goals should be developed to account for the impact of climate variability on the state's water supplies.

Discussion:

Evidence suggests that currently the Earth's climate is warming and that warming may continue into the foreseeable future. While recognizing the uncertainties inherent in climate prediction, it is important to anticipate how a warming climate can potentially affect water supplies and plan accordingly.

Climate experts are less confident about how continued warming will affect the overall amount of precipitation Idaho receives, but changes in seasonal stream flows and increased annual variability have been documented. It is expected that seasonal flows in snowmelt-fed rivers will occur earlier, summer and fall stream flows will be reduced, and water temperatures will increase. Increased precipitation in the form of rain and fewer, but more intense, storm events are expected to result in more severe droughts and greater flooding. Potential impacts could also include more evaporation, reduced ground water recharge, water quality challenges, reduced productivity of hydropower facilities, and irreversible impacts on natural ecosystems. Water resource managers must evaluate and plan for these possibilities.

Planning for the potential impacts of climate variability requires increased flexibility in water administration and the identification of existing tools that can be adapted to address climate-induced changes in water supplies. Increased monitoring and data collection as well as conducting an initial vulnerability analysis for watersheds will help managers develop adaptive approaches to changes in the hydrologic regime that may accompany an increase in climate variability. Increasing public awareness and strengthening community and regional partnerships to manage shared water resources are proactive steps that should be taken now to provide for the optimum use of Idaho's water resources.

Implementation Strategies:

- Evaluate existing legal and institutional tools and constraints that can be adapted to provide flexibility for water resource managers.
- Implement a collaborative approach to the analysis of reservoir operation rule curves that adequately considers more recent hydrologic data.
- Pursue expansion and diversification of water supplies, including increased surface and ground water storage.
- Develop and update flood-risk assessments and environmental impact mitigation measures.
- Identify and implement adaptive mechanisms to address the impact of climate variability on water supplies.
- Establish stakeholder forums involving state and local water supply managers, scientists, state and federal agencies, and water users to enhance understanding about the science of climate variability, to share information about existing and potential tools for ameliorating the impact

of climate variability, and to increase understanding of the challenges facing water users and managers.

Milestones:

- Completion and implementation of updated flood control rule curves.
- Construction or expansion of water supply projects.
- Finalization of risk assessment studies.
- Documentation of legal and institutional framework and water management tools that anticipate and respond to climate variability.
- Establishment of regional forums that encourage the development of collaborative programs and decision making.
- Funding mechanisms in place for climate variability preparedness and risk assessment.

PANHANDLE RIVER BASINS

7A - INTERSTATE AQUIFERS

Completion of comprehensive aquifer management plans and the Northern Idaho Adjudication and implementation of interstate agreements are central to are key to the optimum use of the Panhandle Basin's water resources.

Discussion:

The Panhandle's rivers and lakes are key to continued economic development and provide for multiple uses of water including irrigation, domestic supplies, mining, and commercial uses. These lakes and rivers also provide significant recreation, fish and wildlife, and aesthetic resources important for the region's economy. In average water years, Idaho's Panhandle region has an abundant water supply. A growing population and the urbanization of agricultural lands, however, have resulted in increased ground water use which has resulted in conflicts over water quantity and quality within the region and across state boundaries.

• Spokane Valley-Rathdrum Prairie Aquifer

The Rathdrum Prairie Aquifer (RPA) extends south from Bonner County through Kootenai County toward the cities of Coeur d'Alene and Post Falls and west to the Idaho-Washington state line. The aquifer extends into Washington and becomes part of the larger Spokane Valley-Rathdrum Prairie (SVRP) Aquifer. The area includes the rapidly growing cities of Spokane, Washington and Coeur d'Alene and Post Falls, Idaho. The SVRP Aquifer was designated a "Sole Source Aquifer" by the U.S. Environmental Protection Agency in 1978 and a sensitive source aquifer by the state of Idaho.

In 2002, the Director of the Idaho Department of Water Resources, pursuant to Idaho Code § 42-233b, designated the Rathdrum Prairie Ground Water Management Area and created the Rathdrum Prairie Ground Water Management Area Advisory Committee, composed of members representing the interests of citizen groups, municipalities, counties, and other irrigation, commercial, and industrial water users within the designated area. On September 15, 2005, the Director issued a final order adopting the Ground Water Management Plan for the Rathdrum Prairie Ground Water Management Area. The plan, based in large part on the recommendations of the advisory committee, sets forth goals, strategies, and actions for managing the ground water resources of the SVRP Aquifer. Goals include obtaining adequate technical data and quantification of water availability and water use, managing the ground water resource efficiently and fairly for all users, and encouraging planning and water conservation efforts.

Although the states of Idaho and Washington have primary responsibility for water allocation and water quality, local governments are increasingly being called upon, however, to consider water supply and water quality implications in land use planning. To address these challenges, a study of the SVRP Aquifer was conducted jointly by the Idaho Department of Water Resources, the Washington State Department of Ecology, and the United States Geological Service. Begun in 2003 with broad community support, the purpose of the project is to provide a scientific foundation to

assist the states in water administration. The SVRP Aquifer study established a collaborative modeling committee of experts from both states. Significant new information from the study refined earlier estimates of hydrologic information. The data, computer model, water budget, and other information are available to the public and provide a detailed, up-to-date basis for assessing all aspects of ground water use, including water development, establishing well head protection zones, and local and regional land use planning. A 2007 agreement between the Idaho Department of Water Resources and the Washington State Department of Ecology establishes a collaborative framework to maintain and enhance the model to inform state management decisions.

Pursuant to Idaho Code § 42-1779, which established the Statewide Comprehensive Aquifer Planning and Management Program, a comprehensive aquifer management plan is being developed for the Rathdrum Prairie Aquifer. The Idaho Water Resource Board has appointed an advisory committee to develop and recommend an aquifer management plan that addresses future water supplies and demands. Once adopted, the Idaho Water Resource Board will be responsible for implementing the plan to obtain sustainable water supplies and optimum use of the region's water resources.

- **Palouse Basin Grande Rhone and Wanapum Aquifers**

The development of a comprehensive aquifer management plan for the Palouse ~~River~~ Basin is also a priority. The Grande Rhonde and Wanapum aquifers underlie the Palouse ~~River~~ Basin. The Pullman-Moscow area of eastern Washington and northern Idaho relies almost entirely on ground water for its supply of municipal, institutional, and domestic water. The Palouse Basin Aquifer Committee consists of representatives from the cities of Moscow, Pullman, Colfax, Latah, and Whitman counties, the University of Idaho and Washington State University and was formed to address concerns about declining ground water levels and coordinate studies to further inform water management decisions. In 1992, with the assistance of the states and pursuant to several intergovernmental agreements, a Pullman-Moscow Ground Water Management Plan was completed. The plan provides technical information about the general response of the Wanapum and Grande Rhonde aquifers to pumping withdrawals and recommendations for future use that limit ground water depletion and protect water quality through conservation practices and other measures. Additional studies are needed to better understand the hydrology of the aquifers.

Managing cross-boundary conflicts requires an accounting of the state's water resources. Adjudication of water rights in the Panhandle region should therefore be completed to fully define and quantify existing water rights. The determination of all existing water rights from the river basins in northern Idaho will provide the basis for administration of water rights in accordance with the prior appropriation doctrine, as established by law, and for interstate cooperation. Pursuant to Idaho Code § 42-1406B, the Director of the Idaho Department of Water Resources filed a petition in the district court to commence an adjudication for northern Idaho. On November 12, 2008, the district court ordered the commencement of adjudication in the Coeur d'Alene Spokane River water system. The estimated date for completion of the adjudication is 2012.

Idaho Code § 42-1734(3) authorizes the Idaho Water Resource Board to appear on behalf of the state in negotiations with the federal government. Consistent with state law, the Idaho Water Resource Board should serve as the lead agency for coordinating state participation in the Northern Idaho Adjudication.

7B - MINIMUM STREAM FLOWS

The Idaho Water Resource Board will establish and protect minimum stream flow and lake level water rights to preserve the scenic and recreational water bodies in the Panhandle river basins.

Discussion:

The Panhandle contains some of the most significant scenic and recreational water bodies in the state. The Idaho Water Resource Board holds 19 minimum stream flow water rights on reaches of the Pend Oreille, St. Maries, Pack, Moyie, St. Joe, Coeur d'Alene, and Spokane rivers that protect approximately 17,600 cfs total flow. In 1927, the state established minimum lake levels for Priest, Pend Oreille and Coeur d'Alene lakes. These water rights protect and support many beneficial uses of water such as fish and wildlife habitat, aquatic life, recreation and aesthetic values, and navigation in the Panhandle basins and make a significant contribution to the economy of the region and the state.

Population growth and new water demands may increase the need to obtain additional minimum stream flows in the Panhandle region. The establishment and use of local water supply banks and rental pools should be considered as a strategy for addressing the need for meeting minimum stream flow water rights or new rights in the Panhandle region, including minimum lake levels for the protection of navigation and transportation, fish and aquatic resources, and aesthetic and recreational values.

Implementation Strategies:

- Coordinate with state and federal agencies and stakeholders to identify potential minimum stream flow needs.
- Submit applications for minimum stream flow water rights that are in the public interest.
- Monitor activities that could impair minimum stream flows.
- Evaluate the need for establishment of local water supply banks.

Milestones:

- Minimum stream flow water rights established.

Implementation Strategies:

- Complete and implement comprehensive aquifer management plans for the Rathdrum Prairie and Palouse River basins that establish goals, objectives, and strategies to address the increasing demand on water supplies, reduce cross-boundary conflicts, and provide for effective conjunctive management of hydraulically connected water resources.
- Complete the Northern Idaho Adjudication.
- Implement and maintain the cooperative agreement between Idaho and Washington for maintenance of the SVRP Aquifer ground water model.
- Advise and provide technical support to Palouse Basin Aquifer Committee and other stakeholders to promote the wise use of the region's water supply.
- Provide technical support for the completion of aquifer studies that will assist in water management.

Milestones:

- Cooperative agreements approved and implemented by Idaho and Washington.
- Rathdrum Prairie and Palouse comprehensive aquifer management plans completed and implemented.
- Northern Idaho Adjudication completed.
- Aquifer studies completed.

7C - NAVIGATION, FISHERIES, AND RECREATION

Water management decisions in the Panhandle Region should minimize, where feasible, adverse effects on navigation, fisheries, and recreation.

Discussion:

The Panhandle's lakes and rivers provide for commercial and recreational navigation and important habitat for numerous fish and wildlife species. These resources are also affected by the operation of private and federal hydropower projects. Avista's Clark Fork projects, located in Montana and Idaho, are operated pursuant to a Federal Energy Regulatory Commission license based upon a comprehensive settlement agreement executed by Idaho, Montana, federal agencies and Indian tribes, and other stakeholders. The Post Falls project license is also based, in part, upon a settlement agreement between Avista, the Idaho Department of Fish and Game and the Idaho Department of Parks and Recreation. The Post Falls license requires a summer full-pool elevation and fall draw-down protocol for Lake Couer d'Alene that is protective of fishery needs, while providing adequate lake levels for summer recreation activities and navigation.

On the Pend Oreille River, the U.S. Army Corp of Engineers operates Albeni Falls Dam, which controls the level of Lake Pend Oreille. Lake Pend Oreille has been designated a Special Resource Water, a special body of water recognized by the state as needing intensive protection. Since 1996, consistent with a U.S. Fish and Wildlife Service Biological Opinion on the operation of the Federal Columbia River Power System, winter lake levels have been managed for the protection of the lake's kokanee population, an important forage base for ESA-listed bull trout. Winter lake level management also directly affects the amount of erosion and sedimentation that occurs, waterfowl habitat, water quality, navigation, and shoreline infrastructure. Cooperation between the state and federal government and community stakeholders is essential for making sound management decisions regarding the operation of Albeni Falls Dam.

In 2003, the Idaho legislature created the Lake Pend Oreille, Pend Oreille River, Priest Lake and Priest River Commission (Lakes Commission) to address water quantity and water quality issues affecting the state's and local communities' interests, while recognizing existing authorities. The Idaho Water Resource Board supports the Lakes Commission's participation in regional water management decisions and efforts to minimize adverse effects on navigation, water quality, and fish, wildlife, and recreational resources.

Implementation Strategies:

Identify proposed actions that may affect navigation, water quality, and fish, wildlife, and recreation resources, in coordination with state and federal agencies and stakeholders.

Provide technical assistance to assist the Lake Commission's participation in regional water management decisions.

Milestones:

Collaborative water management decisions made that minimize adverse effects on navigation, water quality, and fish, wildlife, and recreational resources.