# IDAHO STATE WATER PLAN



**IDAHO WATER RESOURCE BOARD** 

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- Promote linkage of the models and their use in evaluation of impacts of various management decisions on Snake River flows, aquifer levels, and reservoir operations.
- Undertake measurement and monitoring of the combined river and aquifer system to facilitate water management and planning in the Snake River Basin above Milner Dam.
- Investigate, test, and adopt new water measurement and modeling methods and technologies that improve water management capabilities.
- Implement and maintain cooperative water resource agreements and partnerships with neighboring states, the federal government, and Indian tribes in managing the water resources of the Snake River above Milner Dam.

## **Milestones:**

- Process in place that provides recommendations to optimize the management of the water resources and the reservoir system above Milner Dam.
- A managed aquifer recharge program above Milner Dam implemented that recharges between 100,000 and 175,000 acre-feet on an average annual basis by 2019 and data gathered to assess the efficacy of the program.
- Projects implemented that enhance the water supply above Milner Dam.

# 4C - REALLOCATION OF SNAKE RIVER TRUST WATER

Water made available for reallocation to new uses in the Snake River trust water area pursuant to Idaho Code § 42-203B shall be allocated in accordance with criteria established by Idaho Code §§ 42-203A and 42-203C.

#### **Discussion:**

The term "trust water" refers to water made available for future development as a result of the 1984 Swan Falls Settlement, which resolved the long-standing conflict between use of the flow of the Snake River for hydropower purposes and for agriculture and other depletionary uses. The details of this century-long conflict are chronicled in two Idaho Supreme Court decisions and the SRBA District Court's Memorandum Decision and Order on Cross-Motions for Summary Judgment dated April 18, 2008, and therefore, are not repeated here. A brief overview of the trust created by Idaho Code § 42-203B(2), however, is provided as context for this policy.

A core principle of the Swan Falls Settlement is that flows of the Snake River downstream from Milner Dam in excess of the Murphy minimum average daily flow of 3,900 cfs during the irrigation season and 5,600 cfs during the non-irrigation season are available for future development in accordance with state law. The Settlement, however, recognized development would occur over time and that in the interim it was in the public interest to allow Idaho Power Company to continue to use such flows up to the licensed amount of the hydropower water rights "pending approval of depletionary future beneficial uses." These dual objectives were implemented through, a trust, established by Idaho Code § 42-203B(2), which operates for the joint benefit of Idaho Power Company and the people of the State of Idaho. The statutory trust consists of twenty-five hydropower water rights originally appropriated by Idaho Power Company for flows in excess of the Murphy minimum flow, and now held by the State, by and through the Governor. Idaho Power Company uses the flows available under the water rights held in trust for hydropower purposes until those flows are appropriated to new uses approved pursuant to state law, including Idaho Code §§ 42-203A and 42-203C. The "reallocation" is accomplished through subordination of the hydropower water rights held in trust to the new uses, pursuant to Idaho Code § 42-203B(2).

While the water made available for future development as a result of the trust is often referred to as "trust water," this term is a misnomer. The trust consists of "water rights" as opposed to "water." Trust Water is simply a shorthand term referring to flows above the minimum stream flow at the Murphy Gage, which were originally appropriated under water rights for hydropower generation at Idaho Power Company's facilities located between Milner Dam and the Murphy Gage. Additionally, the term refers only to water sources tributary to the Snake River below Milner Dam, as shown on Figure 2 (the "Trust Water Area").<sup>4</sup>

The Swan Falls Settlement and the implementing statutes did not attempt to define the

specific amount of trust water available for future development. Rather, the availability of trust water is linked to the Murphy minimum flow and a number of other statutory factors. "The actual amount of development that can take place without violation of the [Murphy] minimum stream flows will depend on the nature and location of each new development, as well as the implementation of new practices to augment the stream flow."



Figure 2 Trust Water Area

<sup>&</sup>lt;sup>4</sup> Pursuant to the Swan Falls Settlement and Idaho Code § 42-203B(2) "water rights for hydropower purposes on the Snake river or its tributaries downstream from Milner dam shall not place in trust any water from the Snake river or surface or ground water tributary to the Snake river upstream from Milner Dam." Thus, the hydropower water rights held in trust carry no right to seek administration of the rights to the use of the waters of the Snake or its tributaries upstream from Milner Dam.

Figure 3 shows the portions of the hydrograph at Murphy deemed to be "minimum stream flows" and "trust water." <sup>5</sup> A similar hydrograph was prepared in 1988 in connection with the implementation of the Swan Falls Settlement, and included the 1961 average daily flow at the Murphy Gage as representative of the then-existing low flow year. Figure 3 includes average daily flow data from 1984 through 2011 to show the relative change in flow at the Murphy Gage since implementation of the Swan Falls Settlement.



Figure 3 Swan Falls Trust Water Flows

While flows are beginning to approach the minimum average daily flow at the Murphy Gage at certain times in low flow years, Snake River flows in most years are significantly above the Murphy minimum average daily flow.

<sup>&</sup>lt;sup>5</sup>Figure 3 updates Figure 3 contained in the IDWR Policy and Implementation Plan for Processing Water Right Filings in the Swan Falls Area, dated November 3, 1988, which depicted water made available for appropriation above the Murphy Gage as a result of the Swan Falls Settlement. The 1988 graph plotted average monthly flows, but since that time, technology has made it easier to graph average daily flows. Thus, Figure 3 uses average daily flows as reported by the USGS to provide a more accurate depiction of flow conditions at the Murphy Gage. Specifically, Figure 2 shows average daily flows for 1961 and 2003 and the average of the average daily flows for the years 1928 through 1983 and 1984 through 2010. (The Swan Falls Settlement excludes fluctuations resulting from the operation of Idaho Power Company facilities from the calculation of the minimum average daily flow at Murphy. The methodology for calculating the minimum average daily flow is currently being refined.) The upper limit of the "trust water" portion of the hydrograph at any given location between Milner and Murphy is defined by the hydropower water rights held in trust by the State for the corresponding Idaho Power Company facility. Figure 3 applies only to Murphy, where trust water is limited to that flow between the Murphy minimum stream flow and 8,400 cfs, the amount of the Swan Falls hydropower water right held in trust. The "trust water" available at locations upstream from Murphy is the difference between the Murphy minimum stream flow and the amount of the water rights held in trust for each upstream facility.

The opportunity for further development of trust water is currently limited by three factors. First, there is uncertainty regarding the administration of surface and ground water rights other than hydropower. While the Swan Falls Settlement subordinated the use of the flows of the Snake River for hydropower purposes, it did not address the rights of other senior water right holders. Second, the amount of trust water that remains to be developed is uncertain because some trust water rights were issued for a term of years. Those permits are nearing the end of their terms and are subject to review by the Director. Third, in almost all cases, a moratorium precludes issuance of new water rights within the trust water area. Until these issues are resolved, it is not possible to make informed decisions regarding the allocation of any remaining trust water.

#### **Implementation Strategies:**

- Conduct hydrologic studies to determine the amount of additional development possible within the Murphy minimum stream flow constraint.
- Develop a conjunctive management plan setting forth measures necessary for future development of trust water.
- Review term limited trust water rights.

## **Milestones:**

- Quantification of the amount of additional development possible within the Milner to Murphy reach of the Snake River consistent with maintaining the Murphy minimum stream flow.
- Adoption of a conjunctive management plan for the Milner to Murphy reach of the Snake River.
- Complete review term limited trust water rights.

## 4D - CONJUNCTIVE MANAGEMENT OF THE ESPA AND SNAKE RIVER

The Eastern Snake Plain Aquifer and the Snake River below Milner Dam should be conjunctively managed to provide a sustainable water supply for all existing and future beneficial uses within and downstream of the ESPA.

#### **Discussion:**

The ESPA is approximately the size of Lake Erie and underlies more than 10,800 square miles of southern Idaho, stretching from St. Anthony to King Hill. It is one of the largest and most productive aquifers in the world, estimated to contain 1 billion acre feet of water. Most of the ESPA is in direct hydraulic connection with the Snake River. The Snake River alternately contributes water to and receives water from the ESPA.

The volume of water stored in the ESPA derives from natural inputs (precipitation, tributary underflow, seepage from rivers) and from irrigation related inputs (seepage from canals and farm fields). The volume of water stored in the ESPA increased dramatically during the first half of the 20th century as large irrigation canals transported millions of