BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF ACCOUNTING FOR DISTRIBUTION OF WATER TO THE FEDERAL ON-STREAM RESERVOIRS IN WATER DISTRICT 63	))))))	**AMENDED FINAL ORDER**

INTRODUCTION

This matter is before the Director ("Director") of the Idaho Department of Water Resources ("Department") as a contested case "[t]o address and resolve concerns with and/or objections to how water is counted or credited toward the fill of water rights for the Federal on-stream reservoirs pursuant to existing procedures of accounting in Water District 63." *Notice of Contested Case and Formal Proceedings, and Notice of Status Conference* ("*Notice*") at 6.

PROCEDURAL BACKGROUND

This proceeding was initiated because the United States Bureau of Reclamation ("BOR") and water users holding the right to storage space in the federal Boise River on-stream reservoirs questioned the Department's methods and procedures of accounting for the "fill" or "satisfaction" of the water rights authorizing storage in the federal Boise River on-stream reservoirs. A component of the controversy related to the accounting was litigated in the Snake River Basin Adjudication ("SRBA") in "Basin-Wide Issue 17." Basin Wide Issue 17 "arose out of disputes over the effect flood control releases have on storage water right holders." *In Re SRBA, Case No. 39576, Subcase No. 00-91017*, 157 Idaho 385, 390, 336 P.3d 792, 797 (2014) ("*Basin-Wide Issue 17*").

Basin Wide Issue 17 was a product of the SRBA subcases for the water rights for the BOR's American Falls and Palisades reservoirs in the upper Snake River Basin. *Id.* at 387-88, 336 P.3d at 794-95. The American Falls and Palisades subcases raised the question of how the filling of a reservoir after the release of flood control waters should be addressed on the face of the partial decrees for the reservoirs' water rights. *Id.* Ultimately both the BOR and the State of Idaho ("State") took the position that a "remark" was necessary on the face of the decree to authorize the right to refill. The BOR proposed a remark in the quantity elements of the decrees authorizing "the right to refill under the priority date of th[e] water right to satisfy the United

States' storage contracts." *Id.* at 388, 336 P.3d at 795. The State disagreed and proposed an alternative remark stating that after the water right was "filled for a given irrigation season[,] [a]dditional water may be stored[,] but such additional storage is incidental and subordinate to all existing and future water rights." *Id.* The conflicting proposed remarks triggered a dispute about authorization for refill of on-stream storage reservoirs after flood control releases. *Id.*

Several irrigation delivery entities in the Treasure Valley became concerned because the water rights for the BOR's Boise River reservoirs had been decreed without a remark regarding refill. *Id.* As a result, the Boise Project Board of Control ("Board of Control") and others filed a petition to designate a basin-wide issue, which was supported by the BOR and a group of Magic Valley irrigation districts and canal companies known as the "Surface Water Coalition." *Id.*

The SRBA District Court granted the petition and designated the following question as *Basin-Wide Issue 17*: "Does Idaho law require a remark authorizing storage water rights to 'refill,' under priority, space vacated for flood control?" *Id.* The SRBA District Court excluded from *Basin-Wide Issue 17* "issues pertaining to how a storage right is initially filled." *Id.* The SRBA District Court explained that "[a]n on-stream reservoir alters the stream affecting the administration of all rights on the source" and "some methodology is required to implement priority administration of affected rights." *Id.* The SRBA District Court also stated "how the State accounts for fill in each individual reservoir under its accounting program" and "the issue of fill is purely an issue of administration." *Id.* at 388-89, 336 P.3d at 795-96.

During the ensuing proceedings, the BOR and various water user organizations expressed concerns with and objections to Department's water accounting procedures in Water District 63.

The SRBA District Court issued its Memorandum Decision in *Basin-Wide Issue 17* on March 20, 2013. In the Memorandum Decision, the Court determined "a remark was not necessary because a storage water right that is filled cannot refill under priority before affected junior appropriators satisfy their water rights once." *Basin-Wide Issue 17*, 157 Idaho at 387, 336 P.3d at 794. The SRBA District Court again "declined to address when the quantity element of a storage water right is considered filled." *Id.* at 389, 336 P.3d at 796. The SRBA District Court held that "the authority and responsibility for measuring and distributing water to and among appropriators is statutorily conferred to, and vested in, the Idaho Department of Water Resources and its Director," and "[w]hen review of the Director's discretion in this respect is brought before the courts in an appropriate proceeding, the courts can determine whether the Director has properly exercised his discretion regarding accounting methodologies." *Memorandum Decision, Basin-Wide Issue 17, Subcase No. 00-91017* (Mar. 30, 2013), at 11-12.

The BOR, the Surface Water Coalition, and the Board of Control appealed the SRBA District Court's *Basin-Wide Issue 17* decision to the Idaho Supreme Court.[1] While the appeals were pending, water users and the BOR continued to express concerns with and objections to existing accounting methods and procedures in Water District 63. In an April 15, 2013, letter to the Director, for instance, the Chairman of the Board of Control asked, "[h]ow do you intend to define 'fill' of the storage rights in the Boise? . . . Does 'fill' include pass-through flood water when inflow equals outflow [or] water that is stored and then released for flood water?" and "[w]hat is the rationale for defining 'fill' as you have, and is there any rule, regulation, or written decision explaining this rationale?"[2] The BOR and water users also discussed their concerns and objections in informal meetings with the Director and Department staff. *Notice* at 3.

On, October 24, 2013, the Director initiated contested case proceedings in Water District 1 (upper Snake River basin) and in Water District 63 (Boise River basin) "to address and resolve concerns with and objections to how water is counted or credited toward the fill of water rights for the federal on-stream reservoirs pursuant to existing procedures of accounting." *Id.* at 6.

The Department notified the United States of the contested case. On December 4, 2013, the United States, through an attorney with the United States Department of Justice, submitted a letter to the Director stating the United States "will not be participating" in the contested case. Ltr. from David Gehlert, Trial Attorney, U.S. Dept. of Justice to Gary Spackman, Director, Idaho Dept. of Water Res., *In the Matter of Accounting for Distribution of Water to the Federal On-Stream Reservoirs in Water Districts 1 and 63* (Dec. 4, 2013).[3]

The Director stayed the contested case proceedings for both water districts in December of 2013 at the participants' requests pending the outcome of the *Basin-Wide Issue 17* appeal. *Order Staying Proceedings, in the Matter of Accounting for the Distribution of Water to the Federal On-Stream Reservoirs in Water District 63* (Dec. 27, 2013); *Order Staying Proceedings, in the Matter of Accounting for the Distribution of Water to the Federal On-Stream Reservoirs in Water District 01* (Dec. 27, 2013).

The Idaho Supreme Court issued its *Basin-Wide Issue 17* decision on August 4, 2014. *Basin-Wide Issue 17*, 157 Idaho at 385, 336 P.3d at 797. While the Court held the SRBA District Court "abused its discretion in designating the question of whether 'Idaho law require[s] a remark authorizing storage rights to 'refill,' under priority, space vacated for flood control," the Court also stated "we are not holding that the SRBA court abused its discretion in declining to answer the question of whether flood control releases count toward the 'fill' of a water right as a

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[1] The BOR ultimately withdrew its appeal.

[2] Ltr. from Richard Murgoitio, Chairman, Boise Project Board of Control, to Gary Spackman, Director, Idaho Dept. of Water Res. (Apr. 15, 2013), at 3.

[3] In the letter, the United States argues it will not be bound by the results of this contested case. The Department disagrees for the reasons set forth in the Director's *Order Denying Pre-Hearing Motions* (Dec. 16, 2014), at 7-12.

basin-wide issue. Nor will this court answer that question on appeal." *Id.* at 392, 336 P.3d at 799. The Idaho Supreme Court held that "[d]etermining when a water right is satisfied is within the Director's discretionary functions." *Id.* The Supreme Court stated:

> Idaho Code section 42-602 gives the Director broad powers to direct and control distribution of water from all natural water sources within water districts. That statute gives the Director a clear legal duty to distribute water. However, the details of the performance of the duty are left to the director's discretion. Therefore, from the statute's plain language, as long as the Director distributes water in accordance with prior appropriation, he meets his clear legal duty. Details are left to the Director.

Id. at 393, 336 P.3d 800 (citations omitted). The Court discussed the extent of the Director's discretion:

> Somewhere between the absolute right to use a decreed water right and an obligation not to waste it and to protect the public's interest in this valuable commodity, lies an area for the exercise of discretion by the Director. Thus, the Director's clear duty to act means that the Director uses his information and discretion to provide each user the water it is decreed. And implicit in providing each user its decreed water would be determining when the decree is filled or satisfied.

Id. at 393-94, 336 P.3d at 800-801 (citations omitted). The Court concluded:

> Here, the Director's duty to administer water according to technical expertise is governed by water right decrees. The decrees give the Director a quantity he must provide to each water user in priority. In other words, the decree is a property right to a certain amount of water: a number that the Director must fill in priority to that user. However, it is within the Director's discretion to determine when that number has been met for each individual decree. In short, the Director simply counts how much water a person has used and makes sure a prior appropriator gets that water before a junior user. Which accounting method to employ is within the Director's discretion and the Idaho Administrative Procedure Act provides the procedures for challenging the chosen accounting method.

Id. at 394, 336 P.3d at 801.

Following the Idaho Supreme Court's *Basin-Wide Issue 17* decision, the Director lifted the contested case proceedings stays, authorized discovery, and requested staff memoranda regarding the existing accounting methods and procedures in the water districts. *Order Lifting*

Stay and Notice of Status Conference, in the Matter of Accounting for the Distribution of Water to the Federal On-Stream Reservoirs in Water District 63 (Sept. 10, 2014); *Order Lifting Stay and Notice of Status Conference, in the Matter of Accounting for the Distribution of Water to the Federal On-Stream Reservoirs in Water District 01* (Sept. 10, 2014).

The Water District 63 contested case hearing was held over five days: August 27-28, and 31, and September 9-10, 2015. Post-hearing briefs were filed on September 28, 2015[4] by the Board of Control, the Ditch Companies,[5] United Water Idaho, and the City of Boise.

FINDINGS OF FACT

Overview of the Federal On-Stream Reservoir Water Rights

1. In 2007, 2008, and 2009, the SRBA District Court decreed water rights authorizing the storage of water in two on-stream storage water reservoirs located on the Boise River (Arrowrock and Lucky Peak), and one on-stream storage reservoir located on the South Fork of the Boise River (Anderson Ranch). The decreed water rights confirm earlier water rights authorized by the issuance of water right licenses by the Department or one of its predecessor organizations. The elements of the decreed on-stream storage rights[6] for each reservoir are summarized below, as reflected in the partial decrees:

Arrowrock Reservoir

Water Right	Priority	Quantity	Purpose
63-303	1/13/1911	271,600 AF	Irrigation Storage, Irrigation from Storage
63-3613	6/25/1938	15,000 AF	Irrigation Storage, Irrigation from Storage
Total Storage		286,600 AF	

[4] There was relatively little activity in the Water District 1 contested case proceeding after the Director lifted the stay, and that proceedings was stayed again in February 2015 at the participants' request, pending a proposed settlement filed in the SRBA. *Order Vacating Hearing, in the Matter of Accounting for the Distribution of Water to the Federal On-Stream Reservoirs in Water District 01* (Feb. 6, 2015).

[5] Ballentyne Ditch Company, Boise Valley Irrigation Ditch Company, Canyon County Water Company, Eureka Water Company, Farmers' Co-Operative Ditch Company, Middleton Mill Ditch Company , Middleton Irrigation Association, Inc., Nampa & Meridian Irrigation District, New Dry Creek Ditch Company, Pioneer Ditch Company, Pioneer Irrigation District, Settlers Irrigation District, South Boise Water Company, and Thurman Mill Ditch Company.

[6] The partial decrees contain essential conditions and elements that are not included in this summary.

Anderson Ranch Reservoir

Water Right	Priority	Quantity	Purpose
63-3614	12/9/1940	487,961 AF 5,200 AF* 493,161 AF 5,200 AF*	Irrigation Storage, Irrigation from Storage, Industrial Storage, Industrial from Storage, Power Storage, Power from Storage, Municipal Storage, Municipal from Storage
Total Storage *Total Industrial & Municipal Storage (Combined)		493,161 AF 5,200 AF	

Lucky Peak Reservoir

Water Right	Priority	Quantity	Purpose
63-3618	4/12/1963	111,950 AF 28,800 AF 152,300 AF	Irrigation Storage, Irrigation from Storage, Recreation Storage, Streamflow Maintenance Storage, Streamflow Maintenance from Storage
Total Storage		293,050 AF	

2. The Idaho Supreme Court has held that as a matter of Idaho constitutional and statutory law:

> [T]itle to the use of the water is held by the consumers or users of the water. The irrigation organizations act on behalf of the consumers or users to administer the use of the water for the landowners in the quantities and/or percentages specified in the contracts between the Bureau of Reclamation and the irrigation organizations for the benefit of the landowners entitled to receive distribution of this water from the respective irrigation organizations. The interest of the consumers or users of the water is appurtenant to the lands within the boundaries of or served by such irrigation organizations, and that interest is derived from law and is not based exclusively on the contracts between the Bureau of Reclamation and the irrigation organizations.

United States v. Pioneer Irr. Dist., 144 Idaho 106, 114, 157 P.3d 600, 608 (2007).

3. The partial decrees for reservoir water rights do not authorize flood control as a purpose of use. The partial decree for the Lucky Peak water right (63-3618) includes two remarks referencing flood control, however: (1) a quantity element remark that "Lucky Peak Reservoir has 13,950 acre feet of capacity for flood control purposes in addition to the volume of water authorized for storage under this right"; and (2) a remark in the "Other Provisions" stating "[t]he storage rights in Lucky Peak Reservoir are subject to the flood evacuation provisions which supplement irrigation storage contracts held in Anderson Ranch and

Arrowrock Reservoirs as defined by supplemental contracts with the Bureau of Reclamation." The partial decree for one of the two Arrowrock water rights (63-3613) includes a quantity element remark stating, in part, that the BOR "may temporarily store water in the surcharge capacity, which is above elevation 3216 during flood events or emergency operations."

Physical Setting of the Boise River On-stream Reservoirs

4. Water District 63 encompasses the Boise River watershed. The federal government operates the three large dams and associated on-stream reservoirs in Water District 63. Lucky Peak Reservoir is formed by Lucky Peak Dam and is located on the Boise River approximately 10 miles upstream (east) of the City of Boise and approximately 64 miles upstream of the confluence of the Boise and Snake Rivers. Arrowrock Dam is located on the Boise River approximately 12 miles upstream of Lucky Peak Dam and approximately 4 miles downstream of the confluence of the Middle and South Forks of the Boise River. Anderson Ranch Dam is located on the South Fork of the Boise River approximately 49 miles upstream from Arrowrock.

5. The portion of Water District 63 upstream from Lucky Peak Dam is mountainous and relatively sparsely populated. The portion of Water District 63 downstream of Lucky Peak Dam has a desert climate and is characterized by river bottoms, terraces, and some hills. In contrast to the upper portion of Water District 63, the lower portion of Water District 63 is more densely populated and extensively developed with a variety of urban and agricultural land uses. Water users located below Lucky Peak Dam in the Boise River Valley use most of the water diverted from the Boise River. For most agricultural crops in the Boise River Valley to fully grow and mature, the crops must be irrigated with water physically diverted from a water source such as the Boise River.

6. The water supply in Water District 63 largely derives from mountain snowpack upstream of Lucky Peak Dam. However, the timing and volume of runoff from the mountain snowpack varies greatly from year to year. High water from snowmelt flows in the Boise River between January and July. Typically, natural flow[7] is abundant in the spring and increasingly scarce during the summer and early fall months. In contrast, irrigation demand is low during the spring runoff and highest during the hot, dry summer months. In the driest years, the January to July runoff volume is insufficient to fill the reservoirs. In an average or above average year, however, the January to July runoff greatly exceeds the 1,072,811 acre-foot decreed storage capacity of the three on-stream reservoirs. This variability can result in damaging floods as well as prolonged droughts.

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[7] "Natural flow," for purposes of this Order, means "water that would be flowing in the river system absent reservoir operations and diversions." Exhibit No. 1, Memorandum from Liz Cresto, Technical Hydrologist, to Gary Spackman, Director, *Accounting for the distribution of water to the federal on-stream reservoirs in Water District 63* at 2. Subsequent citations to exhibits will consist of "Ex." and the exhibit number.

Construction of the Reservoirs

7. The reliable summer flow of the Boise River was fully appropriated by the early 1900s. Further agricultural development depended on building reservoirs to store winter and spring runoff for subsequent use during the summer. The BOR built Arrowrock Reservoir in 1915 and Anderson Ranch in 1950. Additionally, the United States Army Corps of Engineers ("Corps") built Lucky Peak Reservoir in 1955.

8. Construction of Arrowrock Dam began in 1911 and ended in 1915. The dam was congressionally authorized and built for a single purpose: storing runoff during high flow periods and then delivering the stored water to downstream water users when natural flow supplies were insufficient to meet irrigation demands. After construction, Arrowrock Reservoir could incidentally control flooding, but flood control was not an authorized purpose of the dam and reservoir. During the period from 1935 to 1937 Arrowrock Dam was repaired and raised 5 feet, increasing Arrowrock's active capacity to 286,600 acre-feet. At present[8], spaceholders[9] have contracted with the BOR for all of Arrowrock's 272,200 acre-feet of active capacity.[10]

9. The Boise River flooded in 1936, causing significant property damage. After the 1936 flood, the Corps and the BOR recognized that Arrowrock Reservoir was not large enough to prevent flooding, nor did it have enough capacity to satisfy the growing demand for irrigation water. *See Wilder Irrigation Dist. Bd. of Dirs. v. Jorgensen*, 64 Idaho 538, 541, 136 P.2d 461, 462 (1943) (noting the water supply from Arrowrock "was not sufficient for the proper irrigation and reclamation of the lands within the district"). In 1940, the Secretary of the Interior approved construction of Anderson Ranch Dam as a multipurpose facility, providing irrigation storage, power, and flood control.

10. The BOR began construction of Anderson Ranch Dam in 1941 and completed the project in 1950. At completion, the "live" capacity of Anderson Ranch Reservoir was 464,178 acre-feet. Today, the live capacity is about 450,000 acre-feet. Of this total, 413,100 acre-feet is

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[8] The Boise River Watermaster's 2014 *Report on Canal Deliveries from the Boise River and Different Features Affecting These Deliveries for the Irrigation Season* (also known as the 2014 "Black Book"), is the source for the present-day storage allocations discussed herein.

[9] The term "spaceholders" is used in this order to refer generically to irrigation organizations that have contracted for storage in the reservoir system, even when the contracts in effect at the time were "water service contracts" rather than repayment or "spaceholder" contracts.

[10] The gross capacity of each on-stream reservoir is greater than the active capacity. The difference between a reservoir's gross and active capacity consists of "inactive" and "surcharge" storage. Inactive storage is that portion of the gross capacity that cannot be drained by gravity through the dam's outlet works. Surcharge storage is that portion of the gross capacity above the crest of the dam's spillway, which cannot be regulated. Thus, "active capacity" refers to that portion of the storage space that can be regulated through the dam's outlet works. Over time, siltation has reduced the active storage capacity of the three on-stream reservoirs in Water District 63. *See, e.g.*, Ex. 4 at 4 (noting siltation in Arrowrock Reservoir).

allocated to irrigation spaceholders pursuant to contracts with the BOR. The remainder of the live capacity is uncontracted.

11. Record flooding in the spring of 1943 resulted in the Corps studying the feasibility of additional flood control measures on the Boise River. Following the study, the Corps recommended construction of Lucky Peak Dam on the Boise River as means of controlling future flooding. In 1946, Congress authorized the Corps to build Lucky Peak Dam as a multipurpose facility primarily dedicated to flood control. The Corps began construction of Lucky Peak Dam in 1949 and completed the project in 1957, adding 264,400 acre-feet of active capacity to the Boise River system.

12. As with Anderson Ranch, not all of the storage space in Lucky Peak is contracted for irrigation use. The BOR allocates the majority of Lucky Peak's active storage capacity—about 193,000 acre-feet—to winter releases for streamflow maintenance downstream of the dam and flow augmentation for Columbia River salmonid fish. Moreover, the 71,017 acre-feet of Lucky Peak storage contracted for irrigation use is "[s]ubject to operations for flood control." Ex. 2190 at 70; *see also See Memorandum Decision and Order on Cross-Motions for Summary Judgment Re: Bureau of Reclamation Streamflow Maintenance Claim, In Re SRBA, Subcase No. 63-3618 (Lucky Peak Reservoir)* (Sept. 23, 2008) ("*Lucky Peak Decision*"), at 13 (discussing 2005 repayment contracts).

13. Together, the three federal on-stream reservoirs in Water District 63 have an active capacity of 949,700 acre-feet. Each dam is a river-wide structure that captures and regulates the entire flow of the river at that point. *See Lucky Peak Decision* at 22 ("[T]he entire flow of the natural stream has been diverted and stored and become subject to controlled releases. The storage and releases are made possible by the massive and costly structure known as the Lucky Peak dam and reservoir.").

Federal Agreements for Coordinated Operation of the On-Stream Reservoirs

14. While Lucky Peak was under construction, the Corps and the BOR recognized that operating the three reservoirs as a coordinated system would optimize both flood control and irrigation storage. *See* Ex. 2053 (Jennifer Stevens, Ph.D., *History of Boise River Reservoir Operations, 1912-1995* (Jun. 25, 2015) ("Stevens Report") at 17-33. Only Lucky Peak Reservoir was primarily dedicated to flood control, however. The BOR primarily operated Arrowrock and Anderson Ranch for irrigation storage. As a result, the BOR and the Corps sought an agreement with Arrowrock and Anderson Ranch spaceholders that would allow coordinated flood control operations at all three reservoirs while protecting the Arrowrock and Anderson Ranch spaceholders' entitlements of water for irrigation.

15. On November 20, 1953, the BOR and the Corps entered into "Memorandum of Agreement between the Department of the Army and the Department of the Interior for Flood

Control Operation of the Boise River Reservoirs" ("1953 MOA"). Ex. 2100 at 8–18. Important features of the 1953 MOA include the following.

a. Commitment of essentially all the active storage space in the three reservoirs for coordinated irrigation and flood control operations, and recognition that the active storage will be available for irrigation "except as such amount must be reduced by evacuation requirements for flood control." *Id.* at 11, Art. 3.

b. Provisions for periodically forecasting the amount of runoff that may be expected downstream of Lucky Peak Dam. *Id.* at 12, Art. 5.

c. Specification of a maximum regulated flow objective of 6,500 cubic feet per second ("cfs") on the Boise River, as measured at point downstream of Lucky Peak Dam and after taking into account diversions to the New York Canal. [11] *Id.* at 12–13, Art. 6.a.

d. Specification of flood storage allocation parameter curves (or "rule curves") to be used from January 1 through July 31 of each year in conjunction with the runoff forecasts to determine the total reservoir capacity required to control a flood to the 6,500 cubic foot per second objective or less. *Id.* at 13–14, Arts. 6.b–c.

e. Protection of the various spaceholders' rights to water stored in Arrowrock and Anderson Ranch: "No reregulation of storage or annual exchange of storage as provided in this plan, shall however, deprive any entity of water accruing to it under existing rights in Arrowrock, Anderson Ranch, and Lake Lowell reservoirs . . . In the event Anderson Ranch or Arrowrock Reservoirs are not filled by reason of having evacuated water for flood control, storage in Lucky Peak will be considered as belonging to Arrowrock and Anderson Ranch storage rights to the extent of the space thus remaining unfilled at the end of the storage season but not to exceed the amount evacuated for flood control." *Id.* at 12, 15, Arts. 4 & 6.d; *Lucky Peak Decision* at 6.

f. Allowance of releases greater than 6,500 cfs when the runoff forecast exceeds the active storage capacity of the system. Ex. 2100 at 15–16, Art. 6.e.

16. The coordinated operations were contingent upon the 1953 MOA's formal acceptance by the water users with interests in water stored in the on-stream reservoirs. *Id.* at 17–18, Art. 9. In 1954, the water users formally accepted the 1953 MOA through Supplemental Contracts between the BOR and the various water delivery entities having interests in water stored in the three on-stream reservoirs. "Among other things, the Supplemental Contracts confirmed to the contract holders [spaceholders] the use of storage water in Lucky Peak Reservoir for irrigation purposes in an amount equal to the unfilled storage capacity that results

[11] The 1953 MOA references the "Diversion Dam" as the point of reference for the "allowable release." 1953 MOA Art. 6.a. However, current practice sets the point of reference at the gauge located at the Glenwood Street Bridge in Boise.

from the water having been evacuated from Anderson Ranch and Arrowrock Reservoirs for flood control purposes." *Lucky Peak Decision* at 6. This agreement was set forth in a "Guarantee" in the Supplemental Contracts:

> Guarantee:
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> 7. Beginning the first full flood control period after the agreement . . . there shall be a determination for each storage season as of the end of the season
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> (a) of the amount of water to which the District would have been entitled under its storage rights in the reservoir system and Lake Lowell under its Government-District contracts had Anderson Ranch, Arrowrock and Lake Lowell reservoirs been operated in accordance with those contracts except for the provisions there of relating to the use of capacity for flood control benefits. . . and
>
> (b) of the amount of water which is creditable to the storage rights of the District under its Government-District contracts taking account of actual operations under the flood control operating plan in accordance with this supplemental contract.
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> If the amounts (a) exceeds the amount under (b), there shall be made available to the District, out of the water accrued to storage rights in Lucky Peak Reservoir, an amount of stored water equal to that difference.

Id. at 6–7; Ex. 2100 at 4–5.

17. The State of Idaho supported the plan for coordinated operations but was not a signatory to the 1953 MOA or the 1954 Supplemental Contracts.

18. In 1956, the Corps published a *Reservoir Regulation Manual for Boise River Reservoirs*, ("1956 Manual") which details operational guidelines derived from the policies and procedures established by the 1953 MOA. Ex. 2104. The on-stream reservoirs were operated as a coordinated system under the 1956 Manual until the mid-1980s.

19. In 1972, the Boise River flooded, causing significant damage to property along the river. Governor Cecil Andrus requested that the Idaho Water Resource Board independently study the cause of the 1972 floods and examine the possibilities for improved flood control operations. Two years later, the Department published a study, authored by Robert Sutter ("Sutter"), titled "Review of Boise River Flood Control Management," offering an analysis of operations under the 1956 Manual. Ex. 2182, *Review of Boise River Flood Control Management* (Nov. 1974) ("1974 Report"). A key finding of the Department's 1974 study was based on analysis of the Corps' flood control operations during 1971, 1972, 1973, and 1974. This analysis showed that during January and February, the Corps had released less water than required by the 1953 MOA and 1956 Manual, resulting in higher-than-required April reservoir levels and longer periods of high flow downstream from Lucky Peak. *Id.* at 43-50. The 1974 Report found that this type of operation provided a "greater assurance of total refill" but created a risk of losing control over late-spring floods. *Id.* at 51. In light of these and other findings, the study's

"principal recommendation" was that the 1956 Manual and 1953 MOA should be revised. *Id.* at 68. Although the 1974 study noted tension between the BOR's goal of assuring maximum reservoir refill and the Corps' goal of more adequate flood control, it also noted both agencies agreed that the 1956 Manual could be improved. *Id.*

20. General agreement on the need to revise and improve the 1956 Manual led to a multi-year effort to develop a new manual. That process culminated in the publication of the Corps' *Water Control Manual for Boise River Reservoirs* ("Water Control Manual") in April of 1985. The Corps completed approximately 85 percent of the work on the Water Control Manual, the BOR was responsible for a large part of the remainder, and the State performed some technical analyses and wrote a small portion of the manual's "Irrigation Water Supply Plan" pertaining to "Distribution of Irrigation Water." Tr. 458-459 (Sutter)[12], Tr. 620 (Cresto); Ex. 2053 at 47-56 (Stevens Report).

21. In September of 1985, the Corps and the BOR signed a Memorandum of Understanding ("1985 MOU") "to confirm, ratify, and adopt" the Water Control Manual. Ex. 2057. The State was not a signatory to the 1985 MOU or the Water Control Manual. The Water Control Manual recognizes a distinction between state water right administration, and federal reservoir operations and contract administration. The Water Control Manual states that the Department "is responsible for ensuring that Idaho water is regulated, stored, conserved, distributed, and used in an effective manner consistent with State of Idaho laws and policies." Ex. 2005 at 9-6. The Water Control Manual further recognizes that the Department staff "work[] very closely with the Boise River Watermaster to ensure that the Watermaster is distributing and accounting for Boise River water in accordance with Idaho codes and existing water rights." *Id.* 9-6 to 9-7.

22. The Water Control Manual clearly states that the BOR is responsible for "meet[ing the reservoirs'] storage contract obligations . . . and ensur[ing] that downstream demand water is supplied in a usable manner," and the Corps "is responsible for using storage spaces within the system for flood control to protect downstream life and property." *Id.* at 9-1, 9-5. The affidavit and testimony of Mary Mellema, the BOR's Supervisory Hydrologist, confirm this division of federal responsibilities remains in place today. Ex. 2004; Tr. 737-738, 746-747, 754 (Mellema). As a matter of fact, the State is not responsible for storing water in or releasing water from the reservoirs—whether to satisfy the BOR's contract obligations or to perform the Corps' flood control duties. Whatever input, approval, or "blessing" the State gave when the Water Control Manual was written, it does not change the fact that the Water Control Manual is a guidance document for the federal agencies responsible for operating the federal on-stream reservoirs in Water District 63.

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[12] The hearing in this proceeding took place over five days and the transcript is divided into five volumes, one for each day, with pages numbered as follows: Volume I, pages 1-310; Volume II, pages 311-639; Volume III, pages 640-987; Volume IV, pages 988-1311; Volume V, pages 1312-1608. Subsequent citations to the transcript will consist of "Tr." followed by page numbers.

Federal Operation of the On-Stream Reservoirs

23. The federal government owns and operates the three largest on-stream dams in Water District 63 and controls the amount of water stored in and released from the on-stream reservoirs. Since its adoption in 1985, the Water Control Manual has governed how the Corps and the BOR store and release water from the on-stream reservoirs. While the Water Control Manual contemplates operations for other purposes, such as power and recreation, the responsible federal agencies operate the on-stream reservoirs for two "primary" purposes—flood control and irrigation. Ex. 2005 at 7-2. However, the Water Control Manual expressly recognizes that the two purposes are in conflict:

> Use Conflicts. Because the Boise River reservoirs are managed as a multiple-purpose system, it is not possible to optimize regulation for each of the separate uses. Thus, this Water Control Plan represents compromises between the various uses as established within the priorities listed. Flood control use directly conflicts with all of the other system uses to some degree. Optimum flood control protection possible with the system would require the reservoirs be maintained empty and available to control floodwaters. Even with this type of regulation, past studies have shown that the existing system (with the limited downstream channel capacity) would not be adequate to control large spring snowmelt flood volumes (events of approximately 50-year magnitude or larger) to desirable levels of downstream flooding.
>
> Optimum irrigation use would require that the system be maintained as full as possible to provide carryover storage water for the drought years, and even this operation would not necessarily assure adequate water supplies for a series of drought years. Full refill of the system for irrigation does not conflict with recreation until the reservoirs have to be drawn down to meet irrigation requirements in the summer and fall. During the winter, refill for irrigation directly conflicts with the maintenance of minimum fish and wildlife and water quality flows. . . .
>
> [T]he key conflict is that of flood control versus refill regardless of the intended use of the stored water.

Id. at 7-2 to 7-3.

24. The Water Control Manual guides the Corps and the BOR in their effort to strike a balance between flood control and irrigation storage by operating the three on-stream reservoirs as a coordinated system with objectives and constraints that vary over the course of a water year.[13] Starting in November, the BOR and the Corps begin coordinating flood control

[13] "Water year," as used in this Order, is a hydrologic term of art referring to the period from October 1 through September 30 of the following year. Tr. 714-715 (Mellema). The water year is not to be confused with the related but distinct concept of the "irrigation year." For purposes of this Order, the term "irrigation year" means the period from November 1 through October 31 of the following year. Tr. 351-352 (Sutter), Tr. 540 (Cresto).

operations, and the Corps assumes "final authority" to order releases from the three reservoirs for flood control purposes. *Id.* at 7-20. Flood control operations continue until the Corps determines there is no longer a risk of exceeding the flood control objective downstream of Lucky Peak—6,500 cfs at the Glenwood Street Bridge in Boise. Depending on snowpack and weather, flood control operations can end as early as May or as late as July. At the end of flood control operations, the Corps turns operational control over to the BOR until flood control operations begin again. The BOR, in consultation with the Boise River Watermaster, operates the reservoir system to supply water to downstream water users in accordance with spaceholder contracts and natural flow water rights. *See generally* Ex. 2004.

Flood control

25. The Water Control Manual's Water Control Plan specifies the amount of space that must be left vacant at various times during flood control operations, as well as the distribution of this vacant space among the three on-stream reservoirs. For present purposes, the total amount of reservoir system storage space that must be left vacant at any given time of year, and its distribution among the individual reservoirs, is termed the "system flood control space requirement."

26. Throughout the year, the reservoir system is generally operated to store as much water as possible without violating the system flood control space requirement. Ensuring that the required amount of reservoir space is empty at the times prescribed by the Water Control Manual often requires the release of water that could otherwise be stored in the reservoir system for later use. These flood control releases can take the form of either "bypasses" or "evacuations."

27. "Evacuations" occur when the volume of water physically stored in the reservoir system must be reduced to satisfy the system flood control space requirement by releasing water from the system at a rate greater than system inflow. For example, after the irrigation season, stored water that otherwise would be carried over for the next season will be released if necessary to achieve the 300,000 acre-foot winter system flood control space requirement. Exs. 2004 ¶ 17, 2005 at 7-3 to 7-4. Another example is when, before or during the irrigation season, stored water that would otherwise be retained in the reservoir system for later use is released to "get back on the curve"—i.e., to achieve the flood control space requirement dictated by the rule curves. Tr. 725-726 (Mellema).

28. "Bypass" occurs when it is not necessary to reduce the volume of water already physically stored in the reservoir system to satisfy the system flood control space requirement. The reservoir system is operated to maintain the volume of stored water or increase at a controlled rate. This is done by releasing water from the system at a rate less than or equal to the rate of system inflow. Bypass does not mean that the inflow is not diverted into the reservoir; it means the amount of water released is adjusted to satisfy the goal of maintaining a constant storage volume or controlling the rate at which storage increases.

29. The effect on irrigation storage from both evacuations and bypasses is less water being physically stored than would have been stored absent the need to meet the system flood control space requirement. In either case, water is released from storage for the purpose of adjusting the amount of water in the reservoir. However, the terms are useful for understanding aspects of the federal flood control operations.

30. The system flood control space requirement is not constant throughout the year; rather, it varies depending on the season and the forecasted volume of runoff. The Water Control Manual defines three somewhat overlapping sets of general requirements for flood control operations: (A) "Winter Requirements," (B) "Spring Evacuation Requirements," and (C) "Refill Requirements." Ex. 2005 at 7-3; Ex. 2004 ¶ 16. The three procedures are summarized below.[14]

a. The Winter Requirements are in effect from November 1 through March 1. From November 1 through December 31, the system flood control space requirement is fixed at 300,000 acre-feet "without consideration to either existing climatic conditions or refill potential." Ex. 2005 at 7-4.

b. From January 1 through March 1, the Corps determines the system flood control space requirement based on runoff forecasts and "flood control rule curves." According to the BOR's Supervisory Hydrologist, the flood control rule curves place greater emphasis on reducing flood risk than refilling the reservoirs and do not completely assure refill. Tr. 747 (Mellema). Depending on the forecasted runoff volume, the flood control rule curves may specify a system flood control space requirement that is greater or less than the winter requirement of 300,000 acre-feet. Generally, the larger the forecasted runoff, the larger the system flood control space requirement will be on any given day. In most years, water must be evacuated from the reservoir system to meet the system flood control requirement.

c. The Spring Evacuation Requirements govern when stored or storable water must be released to meet the system flood control space requirement between January 1 and March 31. In addition to computing the current-day system flood control space requirement using forecasts and rule curves, the Corps computes an April 1 target for system flood control space. The difference between the current-day requirement and the April 1 target establishes how much water must be evacuated from the reservoir system. The Corps schedules the releases necessary to meet the system flood control space requirement by April 1 without exceeding the 6,500 cfs flow objective and or

[14] This summary simplifies a complex flood control regime that requires the exercise of technical expertise, judgment, and sound discretion. The timing and volume of runoff in Water District 63 varies from year to year, month to month, and sometimes day to day. For those reasons, it is important to recognize that flood control requirements govern normal operations but the Water Control Manual allows temporary violations of the requirements in exceptional circumstances. Ex. 2005 at 7-22 ("[F]lood control criteria can be temporarily violated, but only with approval of both the Walla Walla District Engineer and the Pacific Northwest Regional Director.")

violating the minimum storage space distributions among the reservoirs. This procedure also provides criteria that allow releases in excess of the 6,500 cfs objective if necessary to achieve a 50 percent flood control probability.

d. The Refill Requirements govern the period from April 1 through July 31, but flood control operations may terminate earlier if the Corps determines the flood risk has passed. Flood control operations usually conclude between mid-May and mid-June. Ex. 2004 ¶ 22. When the Refill Requirements take effect, the operation shifts from evacuating to filling or "refilling" vacant space in the reservoir system. This is "normally the most difficult and most critical of the three flood control periods," Ex. 2005 at 7-11, not only because prematurely filling the reservoir system increases flood risk, but also because failing to fill the reservoir system reduces the supply of stored water available for later use. Accordingly, the process during this period for determining the system flood control space requirement, and thus the rate of refill, differs from the process under the Spring Evacuation Requirements. Under the Refill Requirements, the system flood control requirements depends on forecasts of the total runoff from the remaining snowmelt, flood control rule curves, space distribution curves, as well as short-term projections of reservoir inflow. Notwithstanding the overall goal of completely refilling of the system, the Water Control Manual designates the final 60,000 acre-feet of vacant reservoir space as having "last priority" for "refill" purposes. *Id.* at 7-16.[15] Because this 60,000 acre-foot space provides a degree of insurance against late-season rainstorms, underestimation of the remaining runoff, or emergency conditions, it is filled only when it is "deemed safe" to do so. *Id.* As will be discussed, the BOR reduces storage spaceholder allocations only if a flood control "failure to fill" exceeds 60,000 acre-feet.

31. The Water Control Manual's criteria for allowable releases from the reservoir system take into account diversions upstream of the Glenwood gauge. As a result, Lucky Peak Dam can release more than 6,500 cfs without exceeding the 6,500 cfs target at Glenwood Bridge, because diversions between the two points remove water from the river.

32. Releases from the reservoir system during the flood control operation period can serve multiple purposes. Such releases can satisfy the system flood control space requirement, irrigation demand, or streamflow maintenance. Tr. 859 (Sisco). BOR hydrologist Mary Mellema explained that water may be released during the flood control operations for myriad purposes: "to evacuate space to actually get back to the rule curve, if we're too high in storage"; "to maintain the space, the required flood control space"; "to maintain minimum streamflow through the City of Boise"; for "flow augmentation"; "for irrigation and other beneficial uses"; or for dam maintenance and safety purposes. Tr. 744, 754, 756, 765 (Mellema). Thus, a flood control release from the reservoir system—whether an evacuation or a bypass—can be intended for the purpose of meeting system flood control requirements and can also simultaneously be

[15] There is also 13,950 acre-feet of "exclusive" flood control space. Ex. 2005 at 7-16.

intended for a use authorized under the reservoir water rights. Even if water is released from Lucky Peak for flood control purposes, the release is not considered a loss to the system unless it passes Middleton. Ex. 1, (Memorandum from Liz Cresto, Technical Hydrologist, to Gary Spackman, Director, *Accounting for the distribution of water to the federal on-stream reservoirs in Water District 63*) ("Staff Memorandum") at 5-7.

33. The BOR does not make daily determinations of the amount of water released for flood control purposes pursuant to the Water Control Manual. These determinations are made after the fact, outside of the accounting programs. Tr. 199 (Cresto). The BOR also in its reservoirs operations uses data and procedures that were not described in the Water Control Manual, and Mellema acknowledged that there have been changes in operations since the Water Control Manual was issued that are not documented in it, such as releases for ESA flow augmentation purposes. Tr. 744 (Mellema). Flow augmentation releases are sometimes "feathered" into flood control releases at the BOR's discretion, and this information may or may not be communicated to the Department. Tr. 745 (Mellema).

34. One consequence of the coordinated flood control operations is that the BOR and Corps physically store water in the reservoir system without regard to which reservoir is in priority. Storage in priority would result in Arrowrock filling first, Anderson Ranch second, and Lucky Peak last. Consistent with Article 6.d of the 1953 MOA, however, the Water Control Manual contemplates a three-reservoir-as-one-reservoir physical storage operation: "To provide for efficiency and flexibility in reservoir operations, storage under the Arrowrock, Anderson Ranch, and Lucky Peak [storage water] rights can physically occur in any of the three reservoirs without regard to the reservoir specified in the right as long as the capability of any other right to be exercised remains unaffected." Ex. 2005 at 7-25. For example, natural flow can be stored in Anderson Ranch even though Arrowrock is in priority. Tr. 343, 399 (Sutter).

35. Although the flood control procedures were designed to ensure a high probability of refill and an even higher probability of preventing or minimizing flood damage, no procedure based on human judgments and predictions of future events is infallible. Indeed, the Water Control Manual recognizes that "situations may arise in the future where it may not always be possible or practical to exactly follow the [Water Control Manual's] criteria." Ex. 2005 at 7-22. The record establishes that flood control releases have at times exceeded the target of 6,500 cfs at the Glenwood Bridge. *E.g.*, Tr. 715, 736 (Mellema); Tr. 1364 (Barrie). Moreover, due to changing forecasts and unforeseen weather events, it is not uncommon to have too much or too little water in the reservoirs relative to the system flood control space requirement. Tr. 725-726 (Mellema); Ex. 2007. And, due to the difficulty of predicting daily runoff patterns, the reservoir system does not always completely refill after flood control operations, despite the statistical refill assurances built into the flood control procedures. Tr. 554-55 (Cresto).

36. The evacuation or bypass of stored water or water that would be stored absent system flood control space requirements creates a risk that the reservoir system will not fill

completely in flood control years. When coordinated flood control operations were first proposed in Water District 63, both the BOR and the irrigation spaceholders recognized this risk. Mutual recognition of that risk led to the contractual "Guarantee" in the 1954 Supplemental Contracts. *E.g.*, Exs. 2039 (Nampa & Meridian Irrigation Dist.), 3026 (Wilder Irrigation Dist.). Pursuant to this contractual "Guarantee," the BOR has agreed to dedicate to Arrowrock and Anderson Ranch irrigation spaceholders water out of Lucky Peak "in an amount equal to the unfilled storage capacity that results from the water having been evacuated from Anderson Ranch and Arrowrock Reservoirs for flood control purposes." *Lucky Peak Decision* at 6-7.

37. The BOR makes good on the flood control "Guarantee" by allocating Lucky Peak storage to Arrowrock and Anderson Ranch spaceholders to cover shortfalls resulting from flood control operations. The BOR's Lucky Peak water "streamflow maintenance" account protects the irrigation spaceholders from the first 60,000 acre-feet of any flood control shortfall, as previously discussed. The BOR covers shortfalls in excess of 60,000 acre-feet by proportionally allocating water from all Lucky Peak spaceholder accounts to the Arrowrock and Anderson Ranch spaceholders. *Id.* at 12. This "Guarantee" has completely protected the Arrowrock and Anderson Ranch spaceholders from any reduction of their storage allotments due to flood control operations. Tr. 1052, 1057-1058 (Case); Tr. 1080 (Murgoitio); Tr. 1149 (Zirschky); Tr. 1189 (Durrant); Tr. 1222 (Coon); Tr. 1254 (Platt). And in only one year since 1985 —1989—have Lucky Peak storage spaceholder allocations been reduced because a "failure to fill" due to flood control exceeding 60,000 acre-feet. Tr. 535 (Cresto).

Irrigation Water Delivery Operations

38. The irrigation season in the Boise Valley starts as early as April 1 and may extend as late as October 31. Tr. 1345 (Barrie); Ex. 2008. From April 1 until the end of flood control operations, water delivery needs and the flood control "Refill Requirements" overlap. Ex. 2005 at 7-26. During this period, the Corps controls releases from Lucky Peak and consults with the BOR and the Watermaster to determine how much water can be released without violating the 6,500 cfs target. The Watermaster's assessment of irrigation demand between Lucky Peak Dam and the Glenwood Bridge is important to the release decision, "because these diversions help reduce mainstem Boise River flows to meet the 6,500 cfs flood control objective." Ex. 2008 ¶ 21.

39. Once the Corps determines that flood control operations are complete, the Corps transfers responsibility for releases from the reservoir system to the BOR. The BOR relies on the Boise River Watermaster to determine water demand downstream of Lucky Peak Dam. While the BOR controls the releases from the reservoirs after flood control operations, the Watermaster plays an essential role:

> [T]he Watermaster defines irrigation releases which are needed at the Lucky Peak Dam. The Bureau in turn transfers water from Anderson

> Ranch and Arrowrock Reservoirs as necessary to provide water for irrigation releases.

Ex. 2005 at 7-26.[16] This general mode of operation has been in place since at least 1956, when coordinated reservoir operations under the 1956 Manual first began. *See* Ex. 2049-48.

40. The Watermaster is responsible for distributing natural flow in accordance with licensed and decreed water rights and stored water in accordance with contractual entitlements. This distribution process requires the Watermaster to determine the demand for natural flow, the amount of natural flow in the river, which natural flow rights are in priority, and the amount of storage to which each diversion is entitled. The Water District 63 water right accounting and storage allocations programs were implemented in 1986 to assist the Watermaster in this process.

41. Each year, the natural flow entering the reservoir system declines until releasing the equivalent amount of flow from Lucky Peak Dam no longer satisfies irrigation demand. This decline in natural flow usually coincides with the highest reservoir storage contents of the year. Beginning on the date when passing natural flow through the reservoir system will not satisfy downstream natural flow water rights, reservoir levels tend to decrease until the end of the irrigation season, as irrigators begin relying on their yearly allocations of stored water to supplement the dwindling supply of natural flow. On or about the date when natural flow will not satisfy irrigation demands, and the physical storage starts to decline, the storage available to the storage spaceholders must be determined, or allocated to the spaceholders. The date of determining the storage available is referred to as the "day of allocation."

42. On the day of allocation, the BOR consults with the Department and determines each spaceholders' share of the water in the on-stream reservoirs. The methodology for this determination is addressed below in the findings on the water rights accounting. The Watermaster receives a report detailing the year's storage allocations, informs the spaceholders of their allocations, and tracks the spaceholders' storage use for the remainder of the irrigation season. Each morning, from the day of allocation through the end of irrigation season, the Watermaster tallies the spaceholders' demand for stored water and places orders with the BOR for the corresponding release from Lucky Peak Dam. The BOR then moves water between the reservoirs as necessary to meet the daily storage demand and other objectives, such as in-stream flows downstream of Anderson Ranch and summer recreation on Lucky Peak Reservoir.

43. Storage is released from the reservoir system for the rest of the season in amounts necessary to meet water users' demands. Due to a variety of climatic, economic, and practical factors, water users may not use all of the storage water allocated to them in a given year. This unused water is often called "carryover," as it is credited toward spaceholder allocations in the

[16] In contrast to the detailed procedures for flood control operations, the Water Control Manual only provides a generalized narrative describing water delivery operations during the irrigation season. Ex. 2005 at 7-23 to 7-27.

subsequent irrigation season. However, to the extent the volume of carryover exceeds an applicable system flood control space requirement, the excess water will be evacuated for flood control purposes. Ex. 1019.

Reservoir Water Right Accounting and Administration Before 1986

44. There is no dispute that in 1986, Water District 63 began using computer programs to account for the distribution of natural flow to licensed and decreed water rights, and for the allocation and use of stored water. The Director requested that staff prepare a memorandum for this proceeding to explain (1) how and why water is counted or credited to water rights for reservoirs in Basin 63 pursuant to the existing accounting methods and procedures; and (2) the origin, adoption, and development of existing accounting methods and procedures in Water District 63. *Scheduling Order; Notice of Hearing; Order Authorizing Discovery* (Oct. 15, 2014).

45. The Staff Memorandum stated that prior to 1986, there was a reservoir accrual or non-regulation season (November 1 to April 1) and an irrigation season (April 1 to October 31). Water was distributed according to priorities on a daily basis only during the irrigation season, or the regulation season. During the non-regulation season, accruals to reservoir water rights were not determined daily but rather only on the date of maximum total reservoir fill, and the BOR determined the fill of the reservoir rights. Ex. 1 at 12; *see also* Ex 2 ¶ 18; Tr. 1478-79 (Shaw). While United Water agrees with the Staff Memorandum, *United Water's Post-Hearing Brief* at 16 & n.9, the Ditch Companies, the Board of Control, and the City of Boise argue that before 1986, the reservoir water rights were interpreted and administered as being in priority during the "fill" or "refill" of flood control space. They also argue that the existing Water District 63 procedures of accounting for the distribution of natural flow to the reservoir water rights and the allocation and use of stored water are inconsistent with pre-1986 administration.

46. While pre-1986 administration of the reservoir water rights is arguably outside the purpose of this proceeding, i.e., to address and resolve concerns with and/or objections to the existing procedures of "counting" or "crediting" water to the "fill" of the water rights for the federal on-stream reservoirs in Water District 63, *Notice* at 6, a review of pre-1986 administration of the reservoir water rights provides context for understanding the parties' positions and for evaluating the existing accounting systems.

47. The Water District 63 Black Books[17] prior to 1986 do not document or address the distribution of water to the federal reservoirs according to their water rights. According to the Black Books, before 1986, diversions from the Boise River were administered on the basis of water right priorities and quantities only during the "canal regulation" period or season. The

[17] The term "Black Books" refers to the annual Watermaster reports for Water District 63. They are referred to as "Black Books" because historically they have been bound with a black cover.

regulation period started when the natural flow supply dropped below water users' demands and they began drawing down their storage supplies. *See, e.g.,* 1942 Black Book at 4 ("It was not necessary to draw on Arrowrock Reservoir and consequently to begin cutting rights in the Bryan Decree until July 4th. Cuts were not made in the Stewart Decree until July 16th.")

48. In low water years, regulation began as soon as irrigators began diverting in April; in high water years, irrigators diverted without regulation until the end of high runoff or "flood" period. *See* 1939 Black Book at 5 ("Canal regulation began when the flood runoff was passed"), 1922 Black Book at 7-8 (describing the "Flood Water Period" and the "Low Water Period," with the latter being "the time at which actual distribution began."). More often than not, "canal regulation" did not begin until sometime after the start of the irrigation season. Irrigation always began in early April (often on April 1). In "normal" and high water years the regulation period often would not begin until weeks or even months later.

49. Under this system of administration, which prevailed until 1986, the water rights for the federal reservoirs were rarely if ever administered on a priority basis at any time of the year. There was no priority administration during the storage or non-regulation period when surplus water was available for storage. When "canal regulation" began under the Bryan and Stewart decrees, the water rights for the reservoirs by definition were no longer in priority.[18]

50. It appears that the only documented exception to this system of administration was in a somewhat low water year (1942),[19] when "[c]anals were regulated during the early Spring months and particularly the flow of the River at Notus was watched to see that no water was wasted until it became evident that Arrowrock would be filled." 1942 Black Book at 5. But even then the "early spring" regulation apparently consisted only of preventing canals from diverting in excess of their water rights,[20] because "cutting" diversions did not occur until July 4th, when it became "necessary to draw on Arrowrock Reservoir." 1942 Black Book at 4.

51. There is no evidence in the Black Books that in high water years before 1986, diversions under water rights junior to the reservoir water rights were curtailed by the watermaster when the reservoirs were physically filling or "refilling" after flood control releases. To the contrary, an analysis of Black Book data prepared by Department hydrologist Elizabeth Cresto in response to a request by Pioneer Irrigation District showed that water rights junior to the reservoir water rights had diverted during the flood control "refill" period in three flood control years prior to 1986. Ex. 3 (Memorandum from Liz Cresto, Technical Hydrologist,

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[18] The *Bryan Decree* authorized storage under the Arrowrock water right "during the flood water season only." Ex. 2023 at 13. The remaining water rights for the federal reservoirs are junior to all water rights in the *Bryan Decree*.

[19] The runoff in 1942 was recorded as 1,680,172 acre-feet, which at the time was "a little more than 80 per cent of the average runoff." 1942 Black Book at 4.

[20] Prior to 1986, canals in the "lower valley" frequently exceeded their natural flow rights. Ex. 4, attachment titled "Water Delivery Accounting, Boise River, WD-63" at 1.

Analysis of junior diversions during flood control years limited to those periods when the Boise Reservoirs were physically filling (Feb. 4, 2015)).[21] In these years "[t]he start of the regulation season corresponded with declining reservoir contents." *Id.* at 2, 5, 7.

52. While the pre-1986 Black Books did not address the distribution of water to the reservoir water rights, in 1963 the Black Books began documenting spaceholders' annual storage allocations and use. Had the watermaster been accounting for priority distributions to the reservoir water rights, it would have been logical to begin including that data in the Black Books in the same year that storage allocations and use data were first included. Further, the storage allocation and use tables in the Black Books from 1963 through 1985 show that, in each year, spaceholders' storage use began in the same month that "canal regulation" began. This is consistent with the conclusion that prior to 1986 there was no water right accounting or priority water right administration before the regulation period began.

53. Other records support the conclusion that the watermaster did not administer the water rights for the federal reservoirs on a priority basis before 1986. As discussed below, BOR and Department documents show that from 1969 to 1985, the "total storage" in the reservoir system on the date of "maximum storage" was "accrued" and "distributed" to the three individual reservoirs on a priority basis, but this was a priority-based allocation of storage within BOR's reservoir system rather than priority administration of the reservoir water rights with respect to other water rights in Water District 63.

54. Each year from 1969 to 1979, the BOR's Boise Project Superintendent sent a memorandum to the BOR's Regional Director, usually in June or July, that addressed "accruals of new inflow" to the Boise River reservoirs. The memoranda identified the date of "maximum storage" in the reservoir system, set forth the amount of storage in each reservoir on that date—i.e., the "physical fill" of each reservoir—and proposed how this "total storage" would "be distributed to the three reservoirs." *See* e.g. Exs. 2123, 2124, 2126, 2146.[22]

55. According to the BOR memoranda, the total system storage on the day of maximum storage was distributed to the reservoirs on the basis of priority without regard to the physical fill of the individual reservoirs: water was distributed first to Arrowrock, then to Anderson Ranch, then to Lucky Peak. The BOR distributed the storage after the conclusion of flood control operations, and any failure to fill the reservoir system as a result of flood control

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[21] These years were chosen for the analysis because they fit the criteria of Pioneer Irrigation District's analysis request and followed the development of the reservoir system: in 1943 the only reservoir was Arrowrock; in 1952 Anderson Ranch had also been completed; and in 1956 all three reservoirs were in operation. Ex. 3 at 1.

[22] Prior to 1969, the BOR may not have had an established procedure or practice for determining accruals to the reservoir water rights. Allocating reservoir system storage to water users according to their contracts was undoubtedly much easier for the BOR prior to the construction of Lucky Peak; and before 1966 Lucky Peak storage was not under contract, but rather was allocated and used on an informal basis, without charging for it. *Lucky Peak Decision* at 8. Thus, it may be that prior to 1969, the BOR had no need for a procedure of determining accruals to the reservoir water rights.

operations was accounted to Lucky Peak, either by "disregarding" its carryover or by charging the shortfall against the "uncontracted" space in Lucky Peak. Under the BOR's methodology, the Arrowrock and Anderson Ranch water rights "filled" each year from 1969 to 1979 except 1977,[23] but the Lucky Peak water right never filled during this period. The Boise River Watermaster and the Board of Control were copied on the BOR memoranda.

56. The BOR allocated water stored in the reservoir system under this methodology among spaceholders in accordance with their contracts. Tr. at 373 (Sutter) (agreeing that the water in the reservoirs "at the point of maximum fill" was allocated to the spaceholders "in proportion to their contract entitlement").

57. The BOR methodology was based on the physical fill of the reservoir system as a whole, rather than on the physical fill of individual reservoirs in accordance with their water right priorities. This was consistent with the longstanding plan of coordinated operation of the three individual reservoirs as a single system, which often resulted in water diverted under one reservoir's water right being physically stored in a different reservoir. Ex. 2053, Exhibit A, at 26-27.

58. While the BOR methodology distributed the "total storage" among the three individual reservoirs on a priority basis, the BOR memoranda do not suggest that the agency was acting as watermaster or administering the reservoir water rights with respect to other water rights on the system. Further, the BOR apparently viewed its methodology as an "allocation" of system storage among the three reservoirs rather than priority administration of the reservoirs' individual water rights for purposes of distributing water within Water District 63. Ex. 2146. The Black Books support this conclusion because the watermaster received copies of the BOR memoranda but they were not referenced or included in the Black Books, and as previously discussed, the Black Books did not otherwise document or address the distribution of water to the federal reservoirs under their water rights.

59. The BOR methodology for determining accruals to the reservoir water rights and water user storage allocations was well established when Henry Koelling became watermaster in 1975. Koelling and his predecessor (Daniel L. "Roy" Musselman) received copies of the annual BOR memoranda, and there is nothing in the Black Books during their tenures suggesting they disagreed with the BOR's methodology or that a different methodology was adopted during the period from 1980 to 1985. Sutter testified at the hearing that Musselman "was not an extremely technical person so he relied very heavily on the Bureau of Reclamation Engineers" and "Mr. Koehling [sic] adopted the same procedures." Tr. 368 (Sutter). Further, a 1987 Water District

[23] 1977 was a record drought year and none of the on-stream reservoir water rights were filled. In 1973 the Anderson Ranch water right was also just short of filling (99.4%) under the BOR's methodology, but apparently it could have been. A hand-written note in the margin next to these figures in the 1973 memorandum stated, "Advised Bob this could be raised to 100%. He preferred to leave as is. REL." The margin note's reference to "Bob" may have meant Robert J. Brown, who signed the memorandum; "REL" may have been a reference to BOR engineer Richard E. Lindgren. Ex. 2053 at 37 n. 84.

63 accounting paper Sutter prepared to explain the new procedure of accounting for distributions to the reservoir water rights supports an inference that the BOR's methodology remained in place until 1985. The accounting paper characterized "[t]he former method" as "allocat[ing] the total physical fill based upon the overall right sequence: Arrowrock, Anderson Ranch and Lucky Peak," Ex. 4 at 7, which was consistent with the methodology of the BOR memoranda.

60. Further, the Black Books for 1980 through 1985 are consistent with those from 1969 to 1979 in that they do not document or address the accrual of water to the federal reservoirs under the federal on-stream reservoir water rights. To the contrary, the Black Books establish that priority administration of water rights was limited to the "canal regulation" period. The record supports an inference the BOR methodology remained in place from 1980 to 1985, even if after 1979 the watermaster rather than the BOR performed the calculations.[24] *See* Tr. 370-77 (Sutter) ("[Mr. Musselman] used the physical fill of the reservoirs. And I think this was done in conjunction with the Bureau of Reclamation.").

61. The arguments of the Board of Control, the Ditch Companies, and the City that prior to 1986 the reservoir water rights were interpreted and administered as authorizing priority fill or "refill" following flood control releases is based primarily on the expert report and testimony of Dr. Jennifer Stevens, a 1974 Department report regarding Boise River flood control management, and testimony of former Water District 63 Watermaster Lee Sisco ("Sisco"). For the reasons discussed below, the Director finds that this evidence does not support a conclusion that, prior to 1986, the reservoir water rights were interpreted and administered as authorizing priority fill or "refill" following flood control releases.

62. Dr. Stevens prepared a report titled "History of Boise River Reservoir Operations, 1912-1995." Ex. 2053. Dr. Stevens testified that in her research she did not find any records stating or implying that prior to 1986, fill or refill of the reservoirs following flood control releases would <u>not</u> take place under the priorities of the reservoir water rights. Tr. 797, 799, 802, 805. Dr. Stevens testified that as far as she understood the record, storage spaceholders "believed that the water rights would fill, refill in priority," Tr. 791, and that while she was not sure where this was "specifically" stated in her report, it was "part of what I say throughout the whole report." Tr. 791-92.

63. While Dr. Stevens' report discusses the importance of physical "refill" of the reservoirs following flood control releases under the coordinated operation of the reservoirs, the report rarely addresses the reservoir water rights. Further, while Dr. Stevens' report sets forth a detailed history of the development and operation of the federal reservoir system, it does not state or conclude that prior to 1986 the state-issued reservoir water rights were interpreted or

[24] Director Allred had suggested in 1980 that the upcoming Water Control Manual should include a description of the procedure for determining "[a]ccrual of storage water to the respective rights under the priority system." Exs. 4, 2155 (Ltr from A. Kenneth Dunn, Director, to Lee Sisco, Watermaster, Water District 63 (Mar. 19, 1987) (stating the attached paper "provides an expanded discussion of the published procedure" in the Water Control Manual).

administered as being in priority until the reservoirs had filled or "refilled" following flood control releases.

64. The only references to the "priority" of "refill" in Dr. Stevens report involve BOR assignments of refill "priorities" for discrete allocations of space within a reservoir. Ex. 2053 at 41-42, 49, 52-54.[25] The BOR's designation of refill "priorities" to various space allocations within the reservoir system, however, was a matter of contract between the BOR and its spaceholders rather than a question of the administration of the state-issued water rights for the reservoirs. This was communicated to the BOR by Department Director Dunn in a March 7, 1983 letter after the BOR had written that a proposed amendment to the Lucky Peak water rights permit was based on "equal refill" priority of all Lucky Peak space allocations.[26]

65. Further, Dr. Stevens testified that the "storage rights" and "water rights" addressed in her report were the spaceholders' contractual storage allocations rather than the state-issued water rights for the reservoirs. Tr. 784-85, 788-89. This testimony further supports the conclusions that to the extent Dr. Stevens' report and/or testimony address the question of "priority refill," that term refers to spaceholders' "storage water rights" under their contractual storage allocations rather than the administration of licensed or decreed "storage water rights" for the reservoirs. While the distinction between the two types of "rights" is important from an accounting and administration perspective, the same terminology often is used to refer to both, and in some contexts the distinction is not particularly important. The distinction may not have been clear in the documents Dr. Stevens reviewed, and from her testimony it appears that she may not have appreciated the significance of the distinction to the questions raised in this proceeding.

66. Dr. Stevens is a historian and prepared her report and offered testimony only as a historian. Ex 2052 (Stevens CV); Tr. 783 (Stevens). Dr. Stevens has no technical expertise or

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[25] The report's principle discussion of refill "priority" involves the BOR's "Boise Project Power and Modification Study," and the BOR's decision to allocate the "uncontracted" space in Lucky Peak to "streamflow maintenance," and to apply for a corresponding amendment to the Lucky Peak water right permit. Ex. 2053 at 47-54.

[26] Letter from A. Kenneth Dunn, Director, to L.W. Lloyd, Regional Director, Bureau of Reclamation (Mar. 7, 1983); *see* Ex. 2171 at 3 ("the Department does not normally become involved in storage space negotiations between the Bureau of Reclamation and its contractors as long as there is no injury to other water right holders.") Dr. Stevens' report did not cite this communication, although her report did cite and discuss several related communications on the same subject during the same timeframe. Ex. 2053 at 47-54. The Corps was critical of the BOR's proposal to make all Lucky Peak "equal refill" priority because the Corps was concerned it would mean that if "the system failed to fill" as a result of flood control operations, irrigators "would now have to share the shortages, whereas they historically have not." Ex. 2169 (Letter from Robert B. Williams, Colonel, Corps of Engineers, to John W. Keyes III, Acting Regional Director, Bureau of Reclamation); *see* Letter from Robert B. Williams, Colonel, Corps of Engineers, to L.W. Lloyd, Regional Director, Bureau of Reclamation (Feb. 25, 1983) ("If priority assignments resulted in shortages to present irrigation users each time Lucky Peak failed to fill, an unacceptable climate for flood control operations could develop.") The Corps and the Bureau eventually compromised by agreeing the Water Control Manual would provide that 60,000 acre-feet of space would be "lesser refill priority." Letter from John W. Keyes III, Acting Regional Director, Bureau of Reclamation, to Colonel Robert B. Williams, District Engineer, Corps of Engineers (Oct. 26, 1983).

personal experience in water rights administration, and has not interpreted watermaster instructions regarding the distribution of water. Ex. 2052 (Stevens CV); Tr. 783, 792 (Stevens). In preparing her report, Dr. Stevens did not review the Water District 63 Black Books, the files for the reservoir water rights, or the water rights themselves except for the Lucky Peak water right. Tr. 770, 782-83, 785 (Stevens); Ex. 2053 at 5-6 (sources). Dr. Stevens' report and testimony do not support the conclusion that before 1986 the reservoir water rights were interpreted and administered as authorizing priority fill or "refill" following flood control releases, particularly when this conclusion is contrary to the Black Books and other accounting records discussed above.

67. The assertion that prior to 1986 the reservoir water rights were historically interpreted and administered as authorizing priority fill or "refill" following flood control releases is also inconsistent with the water rights permits and licenses, which did not reference flood control operations, or fill or "refill" following flood control releases. The water right permits and licenses also did not reference the 1953 MOA, the 1954 Supplemental Contracts, the 1956 Manual,[27] or the 1985 Water Control Manual. Had the reservoir water rights been interpreted or administered as authorizing priority fill or "refill" following flood control releases, it is likely these understandings would have been reflected in the original water right permits and licenses, or added to them by amendment; but they were not. Further, in 1983 the BOR filed a separate claim for Arrowrock Reservoir pursuant to Idaho Code § 42-243 for "refill or second fill of reservoir capacity during some water years." *Notice of Claim to a Water Right, Claim No. 63-5262* (Jun. 30, 1983). This filing would not have been necessary had the BOR interpreted the Arrowrock water rights as already authorizing priority fill or "refill" following flood control releases.

68. The Department's 1974 Report also does not support a conclusion that prior to 1986 the reservoir water rights were interpreted and administered as authorizing priority fill or "refill" following flood control releases. The 1974 Report focused on reservoir system flood control operations rather than water rights administration. While the 1974 Report included a brief description of the reservoir water rights and stated the water rights were administered by the watermaster pursuant to state law, it did not discuss or describe water rights administration, and also did not discuss or reference "fill" or "refill" in terms of water right priorities. Ex. 2182 at 13-15, 27 (1974 Report). With respect to the question of the effects of flood control operations on water rights, the 1974 Report simply recognized that the 1953 MOA between the BOR and the Corps regarding coordinated flood control operations provided "[p]rotection of space allocations in Arrowrock, Anderson Ranch, and Lake Lowell against water loss as a result of flood control operations." *Id.*

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[27] The Board of Control cites the 1956 Manual as supporting the assertion that "Anderson Ranch and Arrowrock spaceholders were allowed to refill, in priority, after flood control releases." *Boise Project's Post-Hearing Brief* at 8. The 1956 Manual does not refer to "refill" in terms of water right priorities, however, and does not discuss or describe priority administration of the reservoir water rights. Ex. 2104.

69. The arguments of the Board of Control and the Ditch Companies that the 1974 Report implicitly or necessarily recognized that the reservoir water rights were interpreted and administered as authorizing priority fill or "refill" following flood control releases is not supported by the testimony of Robert Sutter, who was the lead author of the 1974 Report. Tr. 374. Sutter testified that the 1974 Report only discussed "physical" fill and refill. Tr. 414. Sutter also testified that he viewed the flood control "rule curves" discussed in the 1974 Report as "mathematical" or "engineering" expressions rather than "legal requirements," Tr. 403-04, and agreed that "[f]lood control rule curves are not used to determine how water accrues to a federal on-stream water right," and reservoir operations are not taken into consideration in determining how water accrues to a reservoir water right. Tr. 473-74. Sutter testified the 1974 Report did not "even touch" the "area" of accounting or "paper fill," and that its reference to "reservoirs reaching maximum content for the year" did "not pertain to the actual water right storage process. This is simply a computed volume of water, irrespective of water rights operation—or water rights administration." Tr. 415, 482. Further, Sutter wrote the Water District 63 accounting programs, and testified they did not recognize a priority right to fill or "refill" flood control space once a reservoir water right had "filled on paper," but obviously saw no inconsistency between his 1974 Report and the Water District 63 accounting programs. Tr. 337, 345-47.

70. The Board of Control and the Ditch Companies, in asserting that before 1986 the reservoir water rights were interpreted and administered as authorizing priority fill or "refill" following flood control releases, also rely on Sisco's testimony regarding how his predecessor, Koelling, distributed water to the reservoir water rights. Sisco testified that Koelling accrued water to the reservoir water rights on a daily basis by subtracting Lucky Peak outflow from the volume that had accumulated in the reservoir system, "convert[ing] that to cfs," and then crediting that natural flow to the reservoir that was in priority. Tr. 846. Sisco also testified that as part of this daily procedure Koelling tracked flood control releases and did not accrue them to the reservoir water rights. Tr. 850-51.

71. Distributing water to water rights based on their priorities and quantities is a core responsibility of a watermaster. The priority-based distribution methodology attributed to Koelling by Sisco, and/or a tabulation of the results of this distribution, would likely have been documented, summarized, or referenced in the Black Books; but they were not. The Black Books prior to 1986 do not document or address the distribution of water to the federal reservoirs according to their water rights, and Sisco did not reference or cite records supporting his testimony regarding the priority distribution methodology he attributed to Koelling. Further, Sutter, who was also familiar with Water District 63 administration prior to 1986, testified that in 1986 "doing a year-round accounting" was "a new concept." Tr. 322; *see* Ex. 6 (Second Sutter Affidavit, Subcase 63-33732 et al) ¶ 7 ("Prior to the adoption of the Boise River accounting system there was no year around accounting.")

72. Moreover, Sisco's testimony that Koelling's daily calculations "converted" reservoir contents and outflows "to cfs" for purposes of determining priority accruals to the reservoir water rights, Tr. 846, is not consistent with the elements of the reservoir water rights. Three of the four water rights for the federal reservoirs (63-3616, 63-3614, 63-3618) were (and remain) quantified in terms of acre-feet per year and were not limited or defined by a "cfs" diversion rate. Further, while Arrowrock water right no. 63-303 was at that time quantified in terms of a diversion rate of cubic feet per second (8,000 cfs),[28] it would not have been necessary or accurate to "subtract the outflow [from] Lucky Peak," Tr. at 846, for purposes of distributing water to the Arrowrock water right. Distributing water to the 8,000 cfs Arrowrock water right would only have required measuring the inflow to Arrowrock and subtracting from it the amount necessary to satisfy downstream senior rights.

73. In sum, Sisco's testimony regarding pre-1986 administration of the water rights for the reservoirs is contrary to the documentary record, the testimony of Sutter, and is inconsistent with the elements of the water rights. The Director rejects Sisco's testimony regarding pre-1986 administration of reservoir water rights and makes the following findings.

74. The Director finds that prior to implementation of the Water District 63 computerized accounting system in 1986, there was no year-round accounting of water distributions in Water District 63. The Director further finds that prior to 1986, water rights in Water District 63 were not administered or regulated on the basis of priority or quantity until the "canal regulation" period or season. The Director finds that prior to 1986, the regulation period or season began when water user demands exceeded the natural flow supply, which was after the conclusion of reservoir system flood control operations and/or after the amount of water stored in the reservoir system had reached its maximum for the year. The Director further finds that in years prior to 1986, the water rights for the federal on-stream reservoirs in Water District 63 were rarely if ever administered in priority at any time during the year.

75. The Director finds that prior to 1986, spaceholder storage allocations were determined by the BOR on the basis of the physical contents of the reservoir system on or near the date of maximum storage in the system, which was also on or near the date when regulation began, and after the conclusion of flood control operations. The Director further finds that, in years prior to 1986, if the reservoir system failed to fill following flood control operations, the BOR allocated Lucky Peak storage to Anderson Ranch and Arrowrock to the extent necessary to ensure that Arrowrock and Anderson Ranch spaceholders received full storage allocations, even if this resulted in reduced storage allocations to Lucky Peak spaceholders. The Director further finds that in some circumstances prior to 1986, such as when the BOR determined that flood control releases were "excessive," the BOR would use Lucky Peak "uncontracted" storage to provide Lucky Peak spaceholders with full storage allocations even if the reservoir system had failed to fill following flood control operations.

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[28] Water Right no. 63-303 was decreed in the SRBA with an annual volume limit (271,600 AFY) but no diversion rate limit.

Implementation of the Water District 63 Computerized Accounting Programs

76. Water District 63's computerized water rights accounting and storage allocations programs were implemented in 1986, at the request of the then-new Watermaster, Lee Sisco. 1986 Black Book at 1; Tr. 336, 430 (Sutter); Ex. 2176. Sisco felt the previous watermaster's method of accounting for water in the reservoir system was not the correct procedure and requested guidance from the Department. Tr. 869-70. The 1986 Black Book states that "[s]everal small additions were made by Mr. Sisco, one of these was the computerized storage accounting program that was developed by Bob Sutter of the Department of Water Resources. This program, once implemented, should provide an accurate up-to-date accounting of not only storage use, but of reservoir accrual." 1986 Black Book at 1. The "Storage Water" section of the Black Book stated "[t]he storage for 1986 was figured using a computerized water right and storage accounting program." *Id.* at 42-42. This statement has appeared in the "Storage Water" section of every subsequent Black Book for Water District 63 (with the year changed to reflect the Black Book year).

77. The Water District 63 accounting programs were derived from similar programs implemented in 1978 in Water District 1 (upper Snake River basin). Exs. 4, titled *Water Delivery Accounting, Boise River, WD-63* at 1; Tr. 427 (Sutter). As in Water District 63, the federal reservoirs in Water District 1 were (and are) operated as a "consolidated" system in which the water accrued under one reservoir's water right can be physically stored in a different reservoir. Tr. 453, 465-67 (Sutter).[29] Prior to becoming the Water District 63 Watermaster, Sisco had been an employee of the Department. Ex. 2008. When Sisco contacted Sutter to request similar accounting programs for Water District 63, Sutter said the programs could be ready quickly because some work had already been done on them. Tr. 430 (Sutter).

78. The Department had been working on a water right accounting program for Water District 63 even when Koelling was watermaster because after implementation of the Water District 1 programs, the Department envisioned that similar programs would eventually be implemented in other water districts as well. Tr. 430 (Sutter). Computerized accounting systems enabled more accurate and precise distribution of water than previous methods. Tr. 244 (Dunn); Tr. 431, 488 (Sutter); Tr. 873 (Sisco).

79. The Department's practice, however, was not to implement accounting programs "unless the Water District asked for it. . . . we did not want to force this on the canal districts." Tr. 430 (Sutter). After Sutter informed Sisco that accounting programs could be ready quickly, Sisco "went to his board of directors, and we were requested to do this by the Water District." Tr. 430 (Sutter); *see also id.* 336 (Sutter) ("We had anticipated that at some date the Boise River would have an automated accounting system similar to what we had done in the Upper Snake. And an opportune time came when Lee Sisco became watermaster and requested that the

[29] Two of the upper Snake River reservoirs—Jackson Lake and Palisades—were (and are) operated for both irrigation and flood control under Corps of Engineers regulations.

Department assist him in automating the watermaster operations."). Sisco acted as the "liaison" between the Department and the Water District 63 water users during implementation of the accounting programs. Tr. 461 (Sutter); Tr. 808 (Stevens).

80. In early 1987, Sisco asked the Department for guidance on the accounting program procedures for determining accruals to the water rights for the federal reservoirs. Tr. 869 (Sisco). In response to this request, then-Director Ken Dunn on March 19, 1987, forwarded to Sisco a paper prepared by Bob Sutter, titled *Water Delivery Accounting, Boise River, WD-63* ("1987 Accounting Paper" or "Paper") that described the accrual methodology and its implications. *Id.*; Ex. 4. Director Dunn's cover letter stated that the 1987 Accounting Paper was based on the storage accrual procedure described in the Water Control Manual and provided "an expanded discussion" of that procedure. Exs. 4, 2178.

81. Director Dunn's letter also stated the storage accrual procedure was based on the priority date of the water rights associated with the reservoirs and recognition of the location of a reservoir relative to the source of water being stored, and therefore Lucky Peak would accrue water "at times when the older reservoirs are not full, simply because some water can only be stored at its downstream location."[30] The Director's letter further stated that while the procedure "cannot accurately be described as new because it simply applies the prior appropriation doctrine, it is a modification from procedures applied from time-to-time in the past." Director Dunn encouraged Sisco "to review the procedure and its possible effects" with the BOR and the storage spaceholders. Ex. 4. Sisco met several times with the water users regarding the adoption and operation of the Department's computerized accounting systems. Tr. 871. Sisco testified that he did not recall the BOR or the water users voicing any concerns with or objections to the new system. Tr. 875.

82. The BOR's Boise Project Superintendent received a copy of Director Dunn's letter and the 1987 Accounting Paper, and forwarded them to the BOR's Regional Director under a BOR memorandum. The BOR Project Superintendent's memorandum cc'ed the BOR's Field Solicitor, and stated the Field Solicitor "has suggested that we go on record as being notified of the Director's decision" and that he would "work with the Field Solicitor on the preparation of a letter to the Director of the Department of Water Resources." Ex. 4 at 1.[31]

83. The 1987 Accounting Paper stated that the new accounting process in Water District 63 was "similar" to that in Water District 1 but was modified to include "certain unique

[30] This was apparently a reference to the fact that under the new procedure, Mores Creek water could accrue only to Lucky Peak because More Creek is downstream of Arrowrock and Anderson Ranch. Ex. 4 at 9. The previous methodology accrued water to the reservoir water rights on the basis of priority alone, which sometimes "had the effect of crediting natural flow upstream. Mores Creek water was moved to Arrowrock and Anderson until they filled. After Arrowrock filled, gain below Anderson Ranch was moved into Anderson until it filled." *Id.*

[31] The record does not appear to include a copy of the BOR response to Director Dunn, and there is no indication of whether the contemplated response was prepared or sent.

features" of the Boise River and began by discussing the reservoir rights and their limits. *Id.* The Paper summarized the priorities and quantities of the reservoir water rights, which were "the primary diversion rights in effect during the non-irrigation season," and stated that "when natural flow is sufficient to meet some or all of these rights, the storage rights are considered equal in stature to all other rights subject to priority date and other conditions imposed by state law." *Id.* at 3. The Paper also stated that "[t]o provide for efficiency and flexibility in reservoir operations, storage under these rights can physically occur in any of the three reservoirs without regard to the reservoir specified in the right as long as the capability of any other right to be exercised remains unaffected." *Id.* Further, "the volume stored per annum" beginning November 1 each year "cannot exceed the volume specified by the water right or the physical capacity of the reservoir unless all subsequent rights have been met," and "cannot, on any given day, exceed the specified or physical volume of the reservoir." *Id.* The Paper stated that "[p]reviously unused storage (carryover) released during the non-irrigation season for a specified beneficial use"—presumably a reference to winter uses such as "streamflow maintenance"—could be replaced "within the constraints of the right(s) governing that space." *Id.* at 3-4.

84. In addressing the "Accounting Procedures," the Paper stated "[t]he 1987 accounting year" would begin with "a determination of carryover from 1986" which would be made "in accordance with prior practice" of assigning carryover sequentially to Lucky Peak, Anderson Ranch, and Arrowrock "because use is charged in the reverse order." *Id.* at 4-5. The Paper stated the accounting process "determines natural flows at each reservoir and at seven valley locations" and "[a]ccrual occurs by assigning the natural flow at each reservoir in order of the respective priorities." *Id.* at 5. The Paper stated "[a]ccrual ceases when the reservoir rights are all filled or when the natural flows are all credited to earlier irrigation rights. Allocation of the storage is then made to the respective space holders," with "canal accounts" for each reservoir determined by the "previous year's carryover" for each account, plus "their proportion of the reservoir's computed accrual. (Arrowrock carryover is redistributed at the end of each year.)" *Id.*

85. It is undisputed that since 1986 storage allocations have been made on the "day of allocation." Tr. 435; *see* Tr. 438 (Sutter) (agreeing that water is not allocated to the spaceholder accounts "at the point of paper filling of the reservoirs"). The date of the "day of allocation" varies each year depending on water supply conditions and flood control operations, Ex. 1 at 10-11, and may or may not be determined by when "accrual ceases." While accruals to the reservoir water rights must cease before storage can be allocated, there are two other conditions that also must be satisfied before the "day of allocation" can occur: diversion demand must be equal to or greater than the available natural flow; and the reservoir system must have reached its maximum total physical content. Ex. 1 at 10-11; Ex. 2 ¶ 20; Ex. 6 ¶ 4. The dates on which these latter two conditions are satisfied depends upon water supply conditions and reservoir system operations (including flood control operations) rather than water right accounting. *See* Tr. 446 (Sutter)

(agreeing that "the Corps and the BOR will control releases from Lucky Peak until the point of maximum fill and the flood season is over").

86. The 1987 Accounting Paper addressed the water right accounting procedures for determining accruals to reservoir storage in years of flood control operations:

> Flood control releases occur in more than seventy percent of all years. These do not affect accrual. Accrual continues in accordance with the rights in effect, but the released water is water that was stored earlier. Actual storage may continue to occur after the storage rights are all filled 'on paper' as a result of flood control releases. The second fill, called 'unaccounted for storage,' may, but usually does not, result in a total system fill. Any such fill deficit is assigned first to the top 73,900 acre feet in Lucky Peak, and if greater, proportionally among the Lucky Peak irrigation users (111,950 ac ft), Idaho Fish and Game use (50,000 ac ft) and the remaining non-contracted space (42,350 ac ft). If the deficit were greater than the Lucky Peak capacity, the remainder would be proportionally shared by the Anderson Ranch contractors.

Ex. 4 at 7-8.

87. Sutter testified that this system of determining reservoir water right accruals and storage spaceholder allocations in flood control years was adopted from the Water District 1 accounting system:

> This approach was first implemented in the Upper Snake, and it was chosen so that any particular reservoir could not, in and of themselves choose on any particular day whether they were exercising their storage right, because—and this was a ruling by the Director of the Department of Water Resources.
>
> And that was done to prevent a reservoir with an older storage right from affecting the fill of reservoirs who had a junior storage right. In other words, they could—by choosing whether or not they were diverting, they could reduce the subsequent fill on a junior upstream or downstream reservoir.

Tr. 350. Sutter testified that this method allowed actual storage or a "second fill" to occur after the reservoir rights had filled "on paper," but only if all other water rights were being met. *Id.*[32]

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[32] The 1978 Water District 1 Black Book provided a similar explanation of the flood control water right accounting and storage allocations procedures of the computerized systems adopted in Water District 1 in 1978:

> If . . . a decision is made to allow water to flow past the reservoir and exercise the right in a different period, the water supply for junior water rights will be diminished. Since it is clearly the intent of the Idaho Code that any interference between water rights be prevented, the Water District 1 accounting process credits all available natural flow to the reservoirs according to priority of right, until each storage right is filled. This procedure is complicated by BOR flood control obligations. This dilemma is handled by allowing the reservoir to refill as long as there is water in excess of all other rights. This second fill is defined as "unaccounted for storage" and is credited back to the reservoirs pursuant to the instructions of the storage right holder, i.e., the Bureau of Reclamation.

Water Distribution and Hydrometric Work, District No. 01, Snake River, Idaho, 1978 at 30.

88. The 1987 Accounting Paper stated that "[p]robably the most significant effect of the accounting change results from computation and allocation of natural flow at each reservoir," because "[t]he former method" had allocated "the total physical fill" based on priorities. *Id.* at 7. "The new method will always result in some accrual to Lucky Peak because of its location." *Id.*

89. The 1987 Accounting Paper stated that "[s]tored water use will be charged whenever a diversion exceeds the right it is entitled to exercise at that time," but also that "if flood control releases occur after these stored water charges, the stored water account use will be returned to zero." *Id.* at 6.

90. In 1993, David Tuthill ("Tuthill"), then the manager of the Department's Western Regional Office,[33] responded to an information request by Kenneth Henley, then the manager of the Board of Control. Tuthill responded that while in Idaho it was "common" in BOR systems for water stored under one reservoir's water right to be physically held in a difference reservoir, "this type of storage is subject to three limitations." Ex. 7 at 1. The first limitation Tuthill identified was that "each water right is allowed to be filled under its priority one time only. Subsequent filling can occur only if all other storage rights on the system have been filled and all natural flow water rights are being satisfied." *Id.* The letter was copied to Sisco and to Jerrold D. Gregg of the BOR. Tuthill did not receive a response from Henley or any other representative of the Board of Control. Tr. 655-56 (Tuthill).

91. In 2002, Tuthill responded in an email to staff questions regarding the BOR's SRBA claim for Arrowrock water right no. 63-303, which, as previously discussed, had been decreed for 8,000 cfs in the *Bryan Decree*. Ex. 8. In addressing a question regarding the diversion rate, Tuthill stated that "[r]egarding the fills per season, we have used the policy throughout the state for these large reservoirs that they get one fill under their priority—more can be stored if water is available to fill all priorities. This prevents a senior reservoir continuing to fill and release all season long." *Id.*[34]

92. In 2008, the Water District 63 water right accounting and storage allocation programs became a subject of witness testimony and attorney briefing in the SRBA proceedings under Subcase No. 63-3618, which involved the BOR's claim for "streamflow maintenance" as a purpose of use of Lucky Peak storage. *See generally Lucky Peak Decision.* Several irrigation entities, including most of the irrigation entities participating in this proceeding, argued that the BOR's "streamflow maintenance" claim threatened irrigation interests and could undermine the "Guarantee" of the 1954 Supplemental Contracts. *See id.* In response, the BOR submitted and

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[33] Tuthill subsequently served as Director of the Department, from 2007 to 2009.

[34] Arrowrock water right no. 63-303 was decreed in the SRBA without a diversion rate and with an annual volume of 271,600 acre-feet.

relied upon an affidavit signed by Sutter regarding the Water District 63 accounting programs in responding to the irrigation entities' objections. Ex. 5. The City of Boise also appeared in these proceedings and supported the BOR's "streamflow maintenance" claim.

93. Sutter's 2008 affidavit stated that the programs were "essentially the same" as when he left the Department in 2002. Ex. 5 ¶ 2. Sutter's affidavit explained that the term "paper fill" refers to the "storage credited" to a reservoir, and contrasted "paper fill" to "the measured contents of the reservoir" or "physical fill." *Id.* ¶ 4. Sutter's affidavit also stated that "physical fill in a reservoir seldom equals the paper fill" for two reasons: (1) the system "storage fill and use is not reconciled until the end of the irrigation year," and (2) the three Boise River reservoirs "are operated as a system and therefore storage credited 'on paper' to one reservoir can physically be stored in a different reservoir." *Id.* Sutter's affidavit also stated that the water right accounting program "tracks the amount of natural flow stored during the refill phase of a flood operation as 'unaccounted for' storage. When the accumulation of 'unaccounted for' storage ends, the flood operation is completed." *Id.* ¶ 8.

94. Sutter's affidavit stated that "at the end of a flood operation, ideally the amount of 'unaccounted for' storage will be equal to the amount of storage released for flood control so that the amount of water physically stored in the reservoirs will be equal to the paper fill." *Id.* Sutter's affidavit stated that, in flood control years, Arrowrock and Anderson Ranch reservoirs and spaceholders were always given full storage allocations, and any "failure to refill due to flood control" was subtracted from Lucky Peak storage; the first 60,000 acre-foot shortfall was charged to the BOR "streamflow maintenance" entitlement, and any shortfall in excess of 60,000 acre-feet is taken proportionally from all Lucky Peak storage entitlements. *Id.* ¶¶ 9-11.

95. While the SRBA District Court's Lucky Peak decision did not specifically address the Water District 63 accounting systems, the court found as follows:

> Since 1985 there have been three years that Arrowrock and Anderson Ranch reservoirs did not fill due to flood releases. In only one of these years did the shortfall exceed the 60,000 acre-feet. The shortage beyond the 60,000 acre-feet was allocated proportionality among all uses in Lucky Peak. Contract holders in Anderson Ranch and Arrowrock received their full allocation of storage water under their respective contracts for those reservoirs. Since the coordinated reservoir operations began in 1955, there have been seven (7) years in which the flood control operations resulted in a shortfall.

Lucky Peak Decision at 12-13, 34.

96. The Water District 63 accounting programs became a subject of dispute in the 2012 proceedings that led to *Basin-Wide Issue 17*, as previously discussed, which in turn led to this proceeding.

Review of the Water District 63 Accounting Programs

97. The accounting programs are not limited to determining accruals to the water rights for the federal reservoirs; the programs were and are intended to account for distributions of both natural flow and stored water to all regulated diversions in Water District 63. Ex. 2 ¶¶ 8, 17; Ex 6 ¶ 4. A preliminary discussion of the overall accounting system is helpful for purposes of understanding the procedures of accounting for accruals to the reservoir water rights.

98. The Water District 63 accounting programs are a "set of computation tools" that "quantify natural flow availability and use" and also "track storage use." Ex. 1. at 2. Distinguishing between "natural flow" and "stored water" is fundamental in accounting for the distribution of water in Water District 63. Ex. 2 ¶ 10. "Natural flow" is the flow that would be present in the river "absent reservoir operations and diversions." Ex. 1 at 2. "Stored flow" is water in excess of the computed natural flow. *Id.* Two separate but related computer programs are used in the accounting process: the water rights accounting program and the storage program. Ex. 1 at 2; Ex. 2 ¶ 9; Ex. 6 ¶ 4.

Water Right Accounting Program

99. The water rights accounting program calculates the natural flow available for distribution within each of the thirteen "reaches" on the river, distributes the natural flow to the water right holders in accordance with the elements of their water rights, and charges water users' diversions in excess of their natural flow entitlements against their storage accounts. The storage program calculates water users' annual storage allocations, that is, the amount of storage in their storage accounts. *Id.*

100. The amount of natural flow available for distribution within each reach is determined as a function of a number of measured quantities via a formula known as "the reach gain equation," Tr. 342 (Sutter):

Reach gain = Outflow – Inflow + Diversions + Reservoir Change in Content + Reservoir Evaporation

Where:

Outflow is the river discharge at the end of the reach;
Inflow is the river discharge at the beginning of the reach;
Diversions is the sum of canal and pump diversions from the reach;
Reservoir Change in Content is the daily increase (positive value) or decrease (negative value) in physical content of any reservoirs in the reach; and
Reservoir Evaporation is the calculated evaporative losses from the reservoir.

Ex. 1. at 3

101. The individual gains (or losses) for each reach are summed from upstream to downstream, and the amount of natural flow available for distribution in a given reach is the sum of the gain (or loss) for that reach plus the gains (or losses) for all upstream reaches. Ex. 2. ¶ 16; Ex. 6 ¶ 4. To reduce natural flow variations caused by imprecise water travel times and inaccurate measurement data, reach gains are averaged over multiple days. Ex. 1. at 4. The water rights accounting program distributes the available natural flow to water rights on a daily basis[35] according to the priority, point of diversion, flow rate, volume, period of use, and/or other limitations on the water right. Ex. 1 at 4, 6; Ex. 2 ¶¶ 14, 19; Ex. 6 ¶ 4.

102. When a diversion exceeds the natural flow available under the priority of its water right(s), the excess diversion is deemed storage use and charged against the water user's storage account, Ex. 1 at 2, 4, although charges for storage uses early in the season are "cancelled" if (a) diverted before or during flood control releases or (b) the reservoir system subsequently fills as a result of high spring runoff, such as during flood control "refill." Ex. 1. at 11.

103. Accounting for the distribution of water to individual water user diversions such as canals and pumps under these general principles and procedures is relatively straightforward, and there is general agreement that for these purposes the water rights accounting programs implemented in 1986 have been a significant improvement over previous methods.

104. Accounting for the distribution of water to the federal on-stream reservoirs is less straightforward, for several reasons. For instance, while canals and pumps only divert the amount of water to be used, the federal dams and reservoirs physically divert and regulate all flows, Ex. 1012 at 19, 22, and storage use can occur before peak storage is reached, Ex. 4, at 11, i.e., the reservoirs can be simultaneously storing and releasing water. In addition, because the BOR and the Corps operate the federal reservoirs as a coordinated system, the reservoirs are not physically filled in order of priority, and water that belongs to one reservoir may be physically stored in another. Ex. 1 at 6-7; Ex. 2 ¶¶ 11, 15, 33; Ex. 6 ¶ 4; Tr. 399 (Sutter). Moreover, the BOR and the Corps store and release water for purposes that are not authorized by the reservoir water rights, such as flood control. Ex. 1 at 7-8. Further, and unlike water rights for canals and pumps, the reservoir water rights are quantified in terms of annual volumes, are not limited by diversion rates, *Id.* at 6, and authorize diversions for the entire year. *Partial Decrees, Water Rights Nos. 63-303, 63-3613, 63-3614, 63-3618.*

105. These considerations had little effect prior to 1986, because as previously discussed, there was no year-round accounting or priority administration of water rights, and the Watermaster did not account for the distribution of water to the water rights for the reservoirs. Because the 1986 water rights accounting program introduced year-round accounting and

[35] While the program makes calculations for each calendar day based on that day's data, the program is actually executed or run only when necessary. Tr. 141 (Cresto). During the summer or periods of shortage it may be run several times a week, while during the winter or times of high flows there may be several days or weeks between program runs. The programs are tools and run when needed.

priority administration, procedures had to be developed to account for the distribution of water to the federal reservoirs in accordance with their water rights. Ex. 2 ¶ 9; Ex. 6 ¶¶ 4, 7; *see Basin-Wide Issue 17*, 157 Idaho at 388, 336 P.3d at 795 ("An on-stream reservoir alters the stream affecting the administration of all rights on the source. Accordingly, some methodology is required to implement priority administration of affected rights.") (quoting the SRBA District Court).

106. Under the accrual procedures of the Water District 63 water rights accounting program, any natural flow available under the priority of an on-stream reservoir water right at its point of diversion (the dam), or that would have been available at the dam if the water had not been stored in an upstream reservoir, is accrued (distributed) toward the satisfaction of the reservoir's water right until the cumulative total reaches the water right's annual volume limit. Ex. 1 at 5-6; Ex. 2 ¶ 14; Ex. 6 ¶ 4. Accruals are a "computed number based on the reach gain equation that counts toward the water right for that particular reservoir when it's in priority." Tr. 342 (Sutter). While the "computed number" is obtained by summing a series of physical measurements, computed accrual is "not an amount of water that you can actually measure," such as reservoir inflow, but rather is a "calculated" quantity. Tr. 342-43 (Sutter); *see* Ex. 1 at 8 ("The natural flow accrual to reservoir water rights in the water rights accounting is calculated from actual flow measurements at real gages."). Once cumulative accruals have reached the reservoir water right's annual volume limit the water right has been satisfied or "filled" from an accounting standpoint and therefore is no longer in priority, and natural flow can begin to be distributed to junior water rights. Ex. 1 at 5-6; Ex. 2 ¶ 12; Ex. 6 ¶ 4.

107. Because the reservoir water rights are not limited by diversion rates, when a reservoir water right is in priority, all natural flow determined to be available under that priority date is accrued to the reservoir water right in the accounting until the annual volume has been reached or the water right goes out of priority because of diminishing natural flow. Accruals to the reservoir water rights are "reset" after the "day of allocation" so accruals can begin under the priorities of the water rights toward the annual volume for the next year's allocation. Ex. 1 at 7.

108. Under these procedures, accrual to a reservoir water right is not based on the physical fill or contents of the reservoir, and the cumulative accrual to a reservoir water right is not reduced when storage is released from the reservoir or "bypassed." Ex. 1. at 6-7; Ex 2 ¶¶ 10, 11, 13, 19; Ex. 6 ¶ 4. This means that a reservoir's water right can be satisfied or "filled" from an accounting standpoint before (or after) the Corps or the BOR allows the reservoir to physically fill with water. Ex. 2 ¶ 12; Ex. 6 ¶. The accounting term used to describe this concept is "paper fill." Ex. 1 at 8; Ex. 2 ¶ 12; Ex 6. ¶ 4, 5.[36]

[36] The term "paper fill" does not appear in the program code or the printouts; the cumulative annual accruals under a reservoir right are recorded in printouts under a column titled "Stored."

109. When a reservoir water right has reached "paper fill" it means the water right is no longer in priority and may not be asserted against junior priority water rights. Ex. 2 ¶ 13, Ex. 6 ¶¶ 4-5. "Paper fill" of a reservoir water right does not mean the reservoir is physically full, although it may be and/or may have physically filled prior to "paper fill" of the water right. Ex. 2 ¶ 12; Ex. 6 ¶ 4. "Paper fill" of the water right has no effect on reservoir operations and does not mean that the reservoir must stop storing water. Ex. 2 ¶ 13; Ex. 6 ¶¶ 4-5.

110. The reservoirs often store additional water after the reservoir water rights have "filled on paper" when there is empty space in the reservoir system and the inflow to the system exceeds the demand under downstream rights. Ex. 1 at 9; Ex. 2 ¶ 13, Ex. 6 ¶¶ 4-5.[37] The water rights accounting program does not attribute this additional storage to the reservoir water rights after they have "filled" from an accounting standpoint; the additional storage, rather, is tracked as "unaccounted for storage" or "unallocated storage" that is not associated with or credited to any water right. Ex. 1 at 9; Ex. 2 ¶ 13; Ex. 6 ¶¶ 4-5; Tr. 346-47, 444-45 (Sutter).

111. In flood control years, the reservoir water rights often reach "paper fill" relatively early in the year due to the high runoff, and as a result a significant portion of the water stored during the flood control "refill" period may consist of "unaccounted for storage." The "unaccounted for storage" is credited back to the reservoirs in order of priority on the "day of allocation," and otherwise made available to storage water users. Ex. 2 ¶ 23; Ex. 6 ¶ 7; Tr. 457 (Sutter). This allows spaceholders to receive full storage allocations despite reservoir system flood control operations, and/or allows early-season charges against storage accounts to be "cancelled" when storage allocations for the upcoming season are determined. Ex. 2 ¶ 23; Ex. 6 ¶ 7.

Storage Program

112. The amount of stored water allocated to water users' storage accounts each year is calculated by the storage program. Spaceholder storage allocations are defined by BOR contracts, Ex. 1 at 10; Ex. 2 ¶ 9; Ex. 6 ¶ 4, and are determined based on the volume of storage water available for allocation to storage spaceholder accounts as of the "day of allocation." Ex. 1 at 11. The "day of allocation" is when three requirements have been met: (1) no more water is accruing to the reservoir water rights in the water rights accounting[38]; (2) diversion demand is

[37] It is also possible for there to be "unaccounted for storage" in the reservoir system even if the Anderson Ranch water right has not "filled on paper." This can occur when runoff from the South Fork of the Boise River after the Arrowrock water rights have been satisfied is insufficient to satisfy the Anderson Ranch water right, and the Lucky Peak water right has been satisfied with runoff from the Middle Fork of the Boise. Under such circumstances, any additional runoff from the Middle Fork captured in Arrowrock or Lucky Peak would be "unaccounted for storage" even though the Anderson Ranch water right had not yet been satisfied, because Middle Fork flows are not tributary to Anderson Ranch and may not be accrued to its water right. Ex. 2 ¶ 23.

[38] Accruals to a reservoir water right will end for one of two reasons: cumulative accruals have reached the annual volume authorized by the water right; or the natural flow supply has diminished to the point all upstream natural flow is being distributed to senior water rights.

equal to or greater than the available natural flow; and (3) the reservoir system has reached its maximum total physical content. Ex. 1 at 10-11; Ex. 2 ¶ 20; Ex. 6 ¶ 4. While every year is different and the date of the "day of allocation" varies based on supply and demand, Ex. 1 at 10-11, in recent years the "day of allocation in Water District 63 has usually been in May or June. Tr. 86 (Cresto). The volume of storage water available for allocation to storage spaceholder accounts as of the "day of allocation" is determined on the basis of a number of factors, including: the satisfaction or "fill" of the reservoir water rights, the amount of water in the reservoir system, early season storage use, reservoir evaporation, ESA flow augmentation releases, and operational losses from the reservoir system—i.e., any storage released past Middleton, including flood control releases—and potentially other factors. Tr. 131-34; 167-69; 215; 587-88 (Cresto); Ex. 1 at 5, 9, 11. Each year is different and storage allocations depend on the facts in that year. Tr. 131-34; 167-69; 215; 587-88 (Cresto).

113. Storage releases past Middleton for any purpose, including flood control, are considered operational losses to the system. Ex. 1 at 9-10. If operational losses result in a failure to physically fill the reservoir system, the BOR determines the reason for the losses and spaceholder storage allocations are reduced according to BOR contracts and/or instructions. *Id.* If the BOR determines that flood control operations resulted in a failure to physically fill the reservoir system, the first 60,000 acre-feet of the shortfall is charged exclusively to the BOR's "streamflow maintenance" storage account. Ex. 1 at 11; Ex. 2 ¶¶ 10, 21, 24; Ex. 6 ¶ 4. Any shortfall due to flood control operations in excess of 60,000 acre-feet is allocated proportionately among Lucky Peak spaceholders. *Id.*[39] There has been only one year since 1986 that the Lucky Peak spaceholder storage allocations have been reduced or "charged" as a result of flood control operations (1989). Ex. 2 ¶ 24; Ex. 6 ¶ 4. Since 1986, Anderson Ranch and Arrowrock spaceholder storage allocations have never been reduced or "charged" as a result of flood control operations. *Id.*

114. The water right accounting and storage allocations programs in Water District 63 and other water districts are capable of producing various printed reports and/or summaries that are sometimes called "green bar sheets." Interpreting the printouts requires training.[40] The water rights accounting printouts, for instance, do not include the term "paper fill." The water rights accounting printouts, rather, record the cumulative accruals to the reservoir water rights under a heading entitled "stored." Further, the priority in effect on the river at any given time is recorded in yet another location on the printouts, and depending upon the "stored" quantities may or may not correspond to the priority of one of the reservoir water rights.

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[39] The top 13,950 acre-feet of Lucky Peak is considered exclusive flood control space. *See Partial Decree, Water Right No. 63-3618* ("Lucky Peak Reservoir has 13,950 acre feet of capacity for flood control purposes") (remark in quantity element). This means the reservoir system can be 73,950 acre-feet short of physically filling before spaceholder storage allocations are reduced. Ex. 4 at 7-8.

[40] Ms. Cresto trains new watermasters on accounting operations and how to read the outputs. Tr. 80 (Cresto).

115. The following is an explanation of the principles of the accounting program and the storage program as detailed above, but considered chronologically with an emphasis on the accrual of storage to the water right and distribution of the storage water to the water users.

Water Right Accounting Program for Storage (Chronological)

116. During the late summer or early fall, after most irrigation deliveries cease, the natural flow in the Boise River begins to exceed diversion demand. In this time period, accrual of water for the satisfaction of the reservoir water rights for the next season begins. The date when accruals may begin is referred to as the "reset date." Water begins to accrue toward satisfaction of the reservoir water rights after the reset. Accrual during this period of time is referred to as "late season fill."

117. If water flowing into the reservoir of one of the three on-stream reservoirs, plus water that would have been flowing into the reservoir if not for upstream storage, could be physically stored in one of the on-stream reservoirs, and that specific reservoir's water right is in priority, the in-priority water is accrued to the satisfaction of the maximum volume of water authorized to be stored by the water right.

118. The water right accounting program is operated for each irrigation year (November 1 – October 31). The accruals of water to each reservoir right are determined for the purpose of initiating the water right accounting program starting on November 1. The individual carryover storage for each reservoir is extracted from the storage program and is added to the late season fill to determine the November 1 reservoir accruals.

119. After November 1, water continues to accrue towards satisfaction of the federal on-stream reservoir water rights in priority as described above.

120. When the cumulative accrual of water for satisfaction of an individual reservoir water right equals the total maximum volume of water authorized by the reservoir water right, the water right is fully satisfied.

121. When the accrual of water for satisfaction of the water rights for all of the on-stream reservoirs as described above equals the total maximum volume of water authorized by the reservoir water rights, all of the reservoir water rights are fully satisfied.

122. During the period of accruals to satisfy the reservoir water rights when the BOR physically holds all in-priority water in the reservoirs, the physical content of the three Boise River on-stream storage reservoirs equals the volume of water accrued to the on-stream storage reservoirs' water rights. During the period of accruals to satisfy the reservoir water rights when the BOR does not physically hold in the reservoir all the water available to be held pursuant to the priority of the on-stream reservoir water rights, the reservoirs' physical contents are less than

the total accrual to satisfy the water rights. The failure to hold water flowing into the reservoirs, and release of the water through the on-stream dams is a federal activity, and is not authorized by any state water rights.

123. The accrual of water for satisfaction of the water rights for storage in the Boise River on-stream storage reservoirs is unaffected by the failure to physically hold water flowing into the reservoirs. Water that could be physically held in the on-stream storage reservoirs because it is "in priority" for storage is accrued toward satisfaction of the water right.

124. In flood control years, the on-stream reservoir water rights are often satisfied relatively early in the year due to the high runoff. Any water in excess of all other water rights that is physically held in the on-stream reservoirs after flood control releases is characterized as "unaccounted for storage" or "unallocated storage."

The above process is accomplished by the Department's water right accounting program.

Storage Program (Chronological)

125. On or near the date of maximum physical fill of the reservoirs, for each reservoir, the Department determines the total volume of water available to spaceholders, including storage water already delivered and beneficially used. This date is referred to as the "date of allocation." The BOR instructs the Department how to allocate the total volume of water available to the spaceholders according the storage contracts of each of the water-delivery-entity space holders.

126. In some years, part of the period for flow augmentation coincides with the period of holding water in the reservoirs following a flood control release. As a result, shortfalls in physically filling the reservoirs are accounted to flow augmentation storage water held by the BOR, pursuant to BOR instructions.

127. If the shortfall of available stored water exceeds the combination of 60,000 acre-feet plus any water credited to flow augmentation, additional shortfalls are proportionally borne by all storage accounts in Lucky Peak Reservoir. The portion of the shortfall borne by each spaceholder is determined by the BOR.

The above process is accomplished by the Department's water storage program

Water Right Accounting Program for Storage (Chronological) (For Distribution During Irrigation Season)

128. If storage water is delivered to space holders prior to the date of allocation, the storage use is excused in two situations: (1) If storage water is used prior to or during flood control releases, the storage use is excused; or (2) if all of the on-stream reservoirs physically fill following the flood control releases, the charge against the storage space holder's account for

storage water is excused if the spaceholder/user receives a full allotment of storage water. This practice is referred to as "storage cancelling."

129. The volume allocated to each space holder is entered into the accounting program. The accounting program tracks, on a daily basis, how much natural flow is delivered to natural flow water right holders, and how much storage is delivered to each of the spaceholders. The water right accounting program accounts for satisfaction of the natural flow water rights and for delivery of storage water quantities for the remainder of the irrigation season.

The above process during the irrigation season is accomplished by the Department's water right accounting program.

130. Liz Cresto ("Cresto"), Department Technical Hydrologist, in her staff memorandum, listed several reasons for the accounting procedures as described above. They are:

- Natural flow accruing to a reservoir water right may physically be captured in another reservoir.
- Storage water may be moved from one reservoir to another.
- Storage water may be delivered to diversion at the same time natural flow is being accrued to the reservoir's water right.
- Stored water may be released from federal reservoirs for operational purposes at the same time natural flow is being accrued to the reservoir's water right.

Ex. 1 at 7.

Reservoir Water Right Accounting and Administration After 1986

131. While the accounting programs implemented in Water District 63 in 1986 have been updated and improved over the years, the core algorithms and procedures of the existing accounting systems remain the same as those of the 1986 programs, including the procedures of accounting for accruals to the water rights for the federal reservoirs and allocating "unaccounted for storage" to storage spaceholders on the "day of allocation." Ex. 2 ¶¶ 26, 30, 31 & Exhibit E; Ex. 6 ¶ 4; Tr. 357-58 (Sutter); Ex. 1 at 1-2, 5-6.[41] Sutter and Cresto testified that the existing

[41] For current purposes, it is also important to recognize what the water rights accounting and the storage allocations programs do <u>not</u> do. The programs do not define water rights or storage entitlements but rather are intended to facilitate the distribution of water consistent with licensed and decreed water rights and contractual storage allocations. Ex. 2 ¶ 8; Ex. 6 ¶ 4. The accounting programs are not defined by reservoir operations, do not control or dictate reservoir operations, and do not preclude the storage of water after the reservoirs water rights have "filled on paper." The accounting programs do not track the physical location within the system of the water stored under each individual reservoir water right, and do not track or determine the water right or reservoir from which a system release originates.

accounting programs have been used to determine water distributions to the reservoir water rights and to allocate storage to the spaceholders since the programs were implemented in 1986.

132. The three former Department Directors who testified at the hearing, Kenneth Dunn, Karl Dreher, and David Tuthill, stated that the computerized water right accounting and storage allocation systems were in place during their tenures. Dreher and Tuthill testified that it had been long standing practice to allow additional storage in the reservoir system after the reservoir water rights had been satisfied if there was water in excess of all other water rights, and to allocate the additional storage to spaceholders.

133. Sisco was Water District 63 Watermaster from January 1986 until January 2008. Tr. 830-31 (Sisco). Sisco testified that the computerized water right accounting programs were used to administer water rights during his tenure, Tr. 893, 927, that Department hydrologist Cresto regularly provided him with water rights accounting reports, and that he relied on the reports for purposes of water accounting and water right administration. Tr. 940. Sisco testified that the "basic" water rights accounting program is "sound," Tr. 941, and that with one exception he administered water rights in accordance with the water right accounting program. Tr. 894.

134. Sisco testified he believed accruals to the reservoir water rights should be reduced if water was released for flood control purposes because flood control is "a public service, something that helped the citizens of the valley" and the spaceholders should not be "punished or take a reduced amount because of flood control." Tr. 899. Sisco testified he would therefore "disregard" the water right accounting program's determination of distribution priorities when the reservoir system was "backfilling" following flood control releases, and the "backfill" occurred under "the priority dates of the reservoirs." Tr. 894, 906-07, 941. Sisco testified that he did not allow junior water rights to divert during the flood control "backfill" or "refill" period. Tr. 863.

135. The Black Books do not support Sisco's testimony that flood control releases from the reservoir system reduced accruals to the reservoir water rights during his tenure as watermaster. The "Storage Water" section of each of the Black Books during his tenure stated that "[t]he storage for 1986 was figured using a computerized water right and storage accounting program," but the Black Books do not document or imply a policy or practice of computing accruals differently than the computerized method during flood control years. The Black Books also do not document any instance of flood control-based reduction in computed accruals to the reservoir water rights. Further, Sisco admitted he never objected to the accrual methodology for flood control years, and never notified the Department that he was following a different procedure. Tr. 899, 903. This is consistent with Sisco's testimony that he could not identify "a specific circumstance where [he] didn't administer consistent with the water right accounting program." Tr. 906.

136. Rather, when asked if he "would change something" in the accounting in flood control years, Sisco testified that "no, not the daily accounting during flood control." Tr. 941. Sisco testified that "[a]ll I knew is at the end of the season, when we went in and looked at the date of allocation, I wanted as much physical water up there as possible. And we juggled water around, made sure that we filled as many holes, or anything that was not full up there, for the benefit of the water user," Tr. 906, and "[w]e backfilled those spaces using the basic water right premise of the water rights that belonged to the three reservoirs, and their respective priority." Tr. 941. This testimony is consistent with, rather than contrary to, the water rights accounting and storage allocations programs instituted in 1986. Under these programs, the "unaccounted for storage" is credited back to the reservoirs in order of priority on the "day of allocation," and otherwise made available to storage water users. Ex. 2 ¶ 23; Ex. 6 ¶ 7; Tr. 457 (Sutter).

137. This testimony shows that Sisco's concern that flood control operations "punished" the spaceholders was misplaced. As Sisco recognized, the Corps released water from the reservoir system for flood control purposes only when the forecast predicted that additional runoff would refill the system, and even if the "refill" water was tallied as "unaccounted for storage" it was available for allocation to the spaceholders. Further, the BOR's "Guarantee" fully protected Arrowrock and Anderson Ranch spaceholders from flood control operations; and Lucky Peak spaceholders were protected by the 60,000 acre-feet of "last priority" space. The only flood control risk borne by the Water District 63 spaceholders was that Lucky Peak storage allocations could be proportionally reduced to the extent a flood control "failure to fill" exceeded 60,000 acre-feet. But this has occurred only once since 1985, and in any event was a result of the Lucky Peak storage contracts rather than a "punishment."[42]

138. The Black Books during Sisco's tenure also do not document or imply that he routinely regulated or curtailed water rights junior in priority to the reservoir water rights during flood control "refill" or until the reservoir system reached its maximum contents. It is likely that this practice would have been documented had it been Sisco's practice, however, because it would have been a significant departure from prior administration. As previously discussed, the reservoir water rights were rarely if ever administered in priority prior to 1986, and in flood control years priority regulation of canal diversions did not begin until after the reservoir system had reached its maximum contents. Sisco's testimony that he did not allow junior water rights to divert during the flood control "refill" period is also contrary to the statement in his affidavit that when the reservoir system is "filling during flood control operations" there is "sufficient river flow for diversion by water rights with priorities that are junior to the Boise River Reservoir storage rights." Ex. 2008 ¶ 22.

139. Sisco's testimony that he did not allow water rights junior to the reservoir water rights to divert during the flood control "refill" period is also contrary to the fact that in 2006

[42] Further, the spaceholders do not bear the financial burden of flood control operations. The costs of flood control operations are "nonreimbursable" and not part of the storage spaceholders' repayment obligations or O&M charges. Ex. 2071 (1953 Report).

United Water diverted under junior water rights in May and June, while the reservoir system was physically filling. Junior water rights also diverted during the flood control "refill" period in other years after implementation of the computerized water rights accounting system. Ex. 1019 at 13 (juniors diverted 690 acre-feet while reservoirs filled between April 15 and July 3, 1999); Ex. 9; Tr. 548-549 (Cresto).

140. Rex Raymond Barrie ("Barrie"), the current Water District 63 watermaster, became watermaster in 2008. Barrie testified that the water rights accounting program determines "who's in priority, who's not in priority," Tr. 1339, and that he relies on the computerized water rights accounting program to determine what water rights are in priority. Tr. 1424. Barrie testified that when a reservoir water right is satisfied from an accounting standpoint, that is, it has reached "paper fill," that the water right is no longer in priority. Tr. 1395, 1402. Barrie agreed that "unaccounted for storage" or "unallocated storage" is surplus natural flow captured in the reservoir system after all water rights, including the reservoir water rights, have been satisfied, and that the "unaccounted for storage" is allocated to spaceholders on the "day of allocation." Tr. 1418-23.

141. Barrie testified that he agreed with the Staff Memorandum's explanation of how accruals to the reservoir water rights are determined and that the Staff Memorandum was an accurate representation of water rights administration in Water District 63. Tr. 1418-20. Barrie testified that most of the data in the Black Books is derived from the water rights accounting program, and that he works closely with Cresto in gathering that information. Tr. 1347.

142. There is some conflict in Barrie's testimony. For instance, Barrie also testified that the reservoir water rights remain in priority until the reservoirs have physically filled, regardless of computed accruals in the water rights accounting program. Tr. 1402-03. There may be other conflicting statements as well; Barrie's testimony was at times confusing and self-contradictory. To the extent there are conflicts in Barrie's testimony, the Director finds that on balance Barrie's testimony as a whole supports the conclusion that water distributions, storage allocations, and priority water right administration in Water District 63 have been consistent with the water rights accounting and storage allocations programs as previously described above and as explained in the testimony of Sutter and Cresto during Barrie's tenure as watermaster.

143. Representatives of several water user entities testified that they had been aware of the use of computer programs to account for water rights distributions and storage allocations, but had always believed the reservoir water rights were in priority during the filling or "refilling" of the reservoir system following flood control releases. The water users expressed concerns that the accounting systems had been changed or re-interpreted in 2012 to subordinate the reservoir water rights and/or to provide that flood control "refill" occurred without a water right.

144. The record is clear, however, that there were no significant changes to the Water District 63 water right accounting and storage allocations programs made or proposed in 2012

with respect to the accrual or allocation methodologies. For all practical purposes, the current procedures are the same as those implemented in 1986. Ex. 2 ¶¶ 26, 30, 31 & Exhibit E; Ex. 6 ¶ 4; Tr. 357-58 (Sutter); Ex. 1 at 1-2, 5-6. The water users' belief that the accounting systems had been changed or re-interpreted in 2012 appears to be related to the events that led to *Basin-Wide Issue 17*, and in particular the "refill" remark the State proposed in SRBA subcases for the American Falls and Palisades reservoir water rights as an alternative to "refill" remark proposed by the BOR. The "refill" remark proposed by the State in those proceedings, however, was consistent with water distribution and water rights administration in Water District 63 since 1986. Ex. 2 ¶¶ 26, 30, 31 & Exhibit E.

145. The record establishes that since implementation of the Water District 63 water rights accounting and storage allocations programs in 1986, the distribution of water to the reservoirs water rights and the allocation of storage to spaceholders has been consistent with the procedures and operations of the accounting and allocations programs as described earlier in this order under "Review of the Water District 63 Accounting Programs."

The Water District 63 Water Rights Accounting and Storage Allocation Programs are Consistent With Pre-1986 Accounting

146. As previously discussed, before 1986, the reservoir water rights were rarely if ever administered in priority. Further, in flood control years, flood control operations had ended and the reservoir system had reached its maximum physical content before priority regulation began, and water rights junior to the reservoirs were not regulated or curtailed during the flood control "refill" period. Water in the reservoir system at the point of maximum storage in the system was allocated to storage spaceholders in accordance with the contracts, including the "Guarantee" of the 1954 Supplemental Contracts.

147. While the water rights accounting and storage allocations programs implemented in Water District 63 in 1986 recognize and enforce the priorities of the reservoir water rights, in flood control years the reservoir water rights often are no longer in priority during all or part of the "refill" operation because they "filled on paper" earlier in the year. Water rights junior to the reservoirs are not regulated or curtailed in favor of the reservoir water rights after they have "filled on paper." Storage is allocated to spaceholders on the "day of allocation," which falls on or near the day of maximum reservoir system contents. The water in the reservoir system on the "day of allocation," including "unaccounted for storage," is allocated to the spaceholders in accordance with their contracts, including the "Guarantee" of the 1954 Supplemental Contracts (which has been decreed in the Lucky Peak water right).

148. Sutter agreed that the adoption of the accounting and allocation programs "would not have changed the experience of those water users pre-1986 as opposed to after 1986." Tr. 440. Arrowrock and Anderson Ranch storage spaceholders regularly received full storage allocations in flood control years prior to 1986, and the same has been true since 1986. Ex. 2 ¶

27. While prior to 1986 Lucky Peak spaceholders' storage allocations regularly were reduced by "disregarding" Lucky Peak carryover if flood control operations resulted in a "failure to fill" the reservoirs system, since 1986 Lucky Peak storage allocations have been reduced only once because the accounting systems recognize the 60,000 acre-feet of "last priority" fill space designated in the Water Control Manual.

149. Before 1986, the flood waters captured in the reservoir system during flood control "refill" operations often included unappropriated flows that were allocated to storage spaceholders for subsequent use. The same remained true after implementation of the 1986 water right accounting and storage allocations systems. These facts illuminate the basis for the statements of Director Dunn in his March 19, 1987 letter to Sisco, and Sutter's statements in the 1987 Accounting Paper, that the most significant change under the then-new water right accounting and storage allocation programs was administration based on "source and priority" rather than just "priority." From a water user standpoint, the new programs resulted in little if any change in water distributions and storage allocations outside of the fact that from 1986 onward, Mores Creek water could accrue only to the Lucky Peak water right water; whereas under prior practice it was sometimes credited upstream, to Arrowrock or Anderson Ranch. Thus, while the water right accounting system implemented in 1986 was significantly more sophisticated and precise than the previous system and introduced new methods and procedures—such as year-round accounting and administration—it resulted in very little change in water distributions or storage allocations.

The Water District 63 Water Rights Accounting and Storage Allocation Programs are Consistent With the Water Control Manual

150. The Water Control Manual assumes that flood flows captured in the reservoir system during "refill" operations will be available for allocation to storage spaceholders after the conclusion of flood control operations. The Water District 63 water rights accounting and storage allocation programs incorporate the same assumption insofar as the "unaccounted for storage" captured in the reservoir system during flood control "refill" operations is included in the calculation of the volume of storage available for allocation to the spaceholders on the "day of allocation."

151. Director Dunn in his March 19, 1987, letter to Sisco stated that the 1987 Accounting Paper attached to the letter provided an expanded discussion of the same procedures discussed in the Water Control Manual. As previously discussed, the water right accounting procedures discussed in the 1987 Accounting Paper are for all practical purposes the same procedures used today, and the same procedures that have been used consistently since 1986. Cresto's affidavit stated that the Water Control Manual included language recognizing that under state water rights administration additional physical storage in the reservoir could occur after the reservoir water rights had reached "paper fill." Ex. 2 ¶ 13; *see* Ex. 6 ¶ 4.

152. Sutter testified at the hearing that the Water District 63 water rights accounting program does not conflict with the Water Control Manual, Tr. 484, and that the Water District 63 water right accounting program has no effect or influence on reservoir operations. While the BOR is not participating in this proceeding, in the *Basin-Wide Issue 17* proceedings the BOR took the position that reservoir system flood control operations are independent of state water rights and priority administration.

153. Further, the Water Control Manual expressly recognizes that the distribution of water under licensed and decreed water rights is governed by state law as administered by state officials. The Water Control Manual does not state or imply that reservoir system flood control operations govern the distribution of water under state water rights and state law. Further, the hearing testimony of Mellema (BOR hydrologist), Cresto (the Department's hydrologist), Sutter, and former Directors Dreher and Tuthill, and previously cited documents, support the conclusion that state and federal officials have consistently viewed reservoir system flood control operations and state water rights administration in Water District 63 as distinct and separate matters, albeit related; and that the Water Control Manual has not been interpreted as defining or governing water rights, water distributions, or priority administration.

154. While Sisco referenced the Water Control Manual in testifying that he "disregarded" the water right accounting, for reasons previously discussed that testimony does not support a conclusion that the Water District 63 accounting programs were or are inconsistent with the Water Control Manual. Sisco's testimony that the only unappropriated flows in the Boise River system are those released in flood control operations pursuant to the Water Control Manual is incorrect from a factual standpoint. The existence of unappropriated high flows in flood control years is a product of the snowpack. Flood control operations, in short, are a response to unappropriated high flows, not the cause of them.

Non-Flood Control Years

155. There are apparently no concerns with or objections to the Water District 63 water right accounting and storage allocations programs with respect to low water years, or years without flood control operations.

156. The only concerns with and/or objections to the Water District 63 water right accounting and storage allocations programs pertained to high water years and/or years when the reservoir system is operated for flood control purposes.

Future Appropriations

157. Concerns were expressed that the "unaccounted for storage"—that is, the "refill" water—could be appropriated in the future because it had been stored in the absence of a water right, and thus would no longer be available for allocation to storage spaceholders in flood

control years. The record establishes that there is limited potential for future appropriation of the "refill" water, however.

158. The "unaccounted for storage" consists of excess flows captured in the reservoir system on the receding end of the flood period in high water years when the forecasted runoff volume is greater, often significantly greater, than the capacity of the reservoir system. These excess flows were also unappropriated waters before implementation of the 1986 water rights accounting and storage allocations systems. These flood waters have remained unappropriated since coordinated reservoir operations began with Lucky Peak in the mid-to-late 1950s—approximately 60 years. They have remained unappropriated because they are not dependable: some years are flood years, some are not, and even in flood years, the flood period ends relatively early in the year. The Boise River system is fully appropriated during most of the irrigation season.

159. Further, future appropriations of "unaccounted for storage" downstream of the reservoir system would likely be of such small quantities as to have few or no effects on the quantity of water available to "refill" flood control space. Tr. 447 (Sutter) ("that's so minor that it just gets lost in the noise in the Boise…it would be almost unmeasurable."). Future downstream appropriations would be more likely to have a beneficial impact on reservoir system flood control operations by providing the Corps with additional margin or flexibility in determining flood control releases from the reservoir system.

160. Future water rights upstream of the reservoir system are even less likely to appropriate significant quantities of "refill" water because of the mountainous terrain and limited amount of irrigable land. While a future storage project upstream of the reservoir system could conceivably appropriate a significant quantity of the "refill" water, it would also add flood control capacity to the system and reduce the need for flood control releases from the existing reservoir system, which in turn would reduce the need to "refill" in the first place. Moreover, the water users supported the concept of future storage projects, despite their concerns about future appropriations in the general sense.

Priority Refill

161. If the accounting system were modified to keep the reservoir water rights in priority until the reservoir system physically filled or reached maximum contents, the period of priority administration of the reservoir water rights would be extended until the end of reservoir system flood control operations. Because reservoir system flood control operations last longer during years of high runoff, the duration of priority administration of the reservoir water rights under such a system would also last longer during high water years. Junior water rights that have historically been considered in priority and allowed to divert during high flow periods would no longer be in priority under such a system.

162. For the same reasons, such a system would make priority administration of state water rights dependent on federal flood control operations. This would be contrary to historic administration both before and after 1986.

163. An accounting system that considered the reservoir water right to be in priority until the reservoir system physically filled or reached its maximum contents would not provide any significant additional benefit or protection to storage spaceholders in flood control years because the physical filling of the system is determined by runoff forecasts, flood control rules curves, the best judgment of the reservoir system operators, and other operational considerations. Junior water rights are not the cause of a "failure to fill" the reservoir system following flood control releases and regulating or curtailing junior water rights will not measurably enhance the likelihood of physically filling the reservoir system following flood control releases.

164. An accounting system that considered the reservoir water right to be in priority until the reservoir system physically filled or reached its maximum contents is not necessary to protect "refill" water from future appropriations for reasons previously discussed. Under such a system, however, the priorities of the BOR's reservoir water rights could be exercised or asserted to block, condition, and/or control future use and development of excess flood water. Similarly, reservoir system flood control operations would be determinative of what flows in the river were "natural flow," "stored water," and/or "unappropriated water."

Assertions of Barriers to Water Use, Conflict with the Manual, and Alternative Accounting Proposals

165. Dave Shaw ("Shaw"), expert for the Boise Project, cited to page 7-26 of the Water Control Manual and stated that this particular section was written by the Department. Tr. 1473-1476. On page 7-26, the water control manual reads:

> When the rate of diversion of a user is greater than the credited natural flow, the remainder is charged by the Watermaster to the user's stored water supply, or lacking storage, the rate of diversion must be reduced.
>
> . . . When Lucky Peak flood control releases are equal to or greater than the demand for irrigation water (all users are receiving an adequate supply), the entire release is considered surplus to the Boise River and the above computation of natural flow diversion by user is not necessary. During this period, no charges are made against stored water supplies.

166. The water control manual was finalized in April 1985. The first year Lee Sisco delivered water was 1986. The language in the water control manual predated the establishment of the water right accounting program in 1986. This passage simply recognized the method of accounting that had been in place prior to 1986 – when there is excess flow, particularly when

there are flood control releases – the flows are unregulated in the unregulated season, and no storage charges were made. Nonetheless, this passage does not conflict with the existing water right accounting program, which allows for "storage cancelling." Cresto testified this passage is "related to storage charges to individuals," Tr. 634-35 (Cresto), and Sutter testified that the accounting program does not conflict with the Water Control Manual. Tr. 484 (Sutter).

Contents-Based Accounting

167. The Boise Project, through Shaw, proposed accounting for storage for irrigation and other uses by adjusting the amount of water that has satisfied the irrigation storage and other beneficial use storage components of the reservoir water right to equal the physical volume of water stored in the reservoirs on any given day. This is sometimes referred to as "content-based accounting."

168. Page 11 of Exhibit 1019, is a hydrograph depicting volumes accrued toward cumulative satisfaction of all the on-stream reservoir water rights for the Boise River and also depicting the physical cumulative storage for most of the storage and storage use period for 1999.[43] The exhibit page also contains descriptive text identifying dates in 1999 important for both satisfaction of the on-stream reservoir water rights and important for determining physical content and allocation. This example hydrograph demonstrates that, even though the BOR stored water for irrigation, once it was released for flood control, the previous value of physical storage declines, but water accrued to satisfy the reservoir water right is not reduced but continues to accrue water for satisfaction of the on-stream reservoir water rights.

169. Referring to the hydrograph depicted on page 11, Exhibit 1019, on November 1, 1998, the Boise River on-stream storage reservoirs held about 550,000 acre-feet of water. By February 16, 1999, the BOR had approximately, physically held another 200,000 acre feet of water in the on-stream reservoirs, raising the physical storage in the reservoirs to about 750,000 acre-feet. On February 17, 1999, the BOR began flood control releases from the reservoirs. Between February 17, 1999, and April 16, 1999, the BOR emptied approximately 350,000 acre-feet of stored water out of the reservoirs to vacate empty reservoir space for anticipated flood runoff. The lowest total reservoir storage in 1999 was approximately 400,000 acre feet. From April 7 until July 3, the BOR physically refilled the vacated storage space with approximately 600,000 acre-feet of additional water held in the reservoir. The actual physical water held in the on-stream reservoirs in 1999 was 750,000 acre-feet on February 17, 1999, plus the additional 600,000 acre-feet to physically fill the vacated storage. The BOR actually physically stored 1.35 million acre feet of water, about 350,000 acre-feet in excess of the approximately 1 million acre-feet water authorized to be stored by the on-stream Boise River reservoir water rights.

[43] This same hydrograph was a page in Exhibit 2049. During witness examination, the attorneys referred the witnesses to Exhibit 2049-88 (page 1098). Unfortunately, despite multiple references to Exhibit 2049-88 (page 1098) in the transcript, none of the parties offered Exhibit 2049-88 (page 1098) into evidence. As a result, the Director referred to an almost identical copy of the hydrograph on page 11 of Exhibit 1019.

Contents-Based Accounting Would Result in More Water Being Stored Than Is Authorized by the Water Right.

170. A basic tenant of the contents-based accounting proposal is an adjustment of the accruals to the on-stream reservoir water right to match the physical contents of the reservoir. Shaw states that the BOR should be able to determine whether it wants to exercise its water right to store water and turn the water on and off like any water user. As previously discussed, however, the Corp and the BOR are not like "any other user." The reservoir system physically controls and regulates the entire flow of the watershed above Lucky Peak for multiple purposes, some of which are not authorized in the reservoir water rights. Further, applying this principle to the 1999 facts would result in the following: The BOR started the storage season with approximately 550,000 acre-feet of storage. The BOR decided in November 1998 it wanted to physically store more water in the on-stream reservoirs for beneficial use. In other words the BOR chose to exercise its reservoir water right. The BOR stored an additional 200,000 acre-feet in the on-stream reservoirs, consciously exercising its water rights to store water. On February 17, 1999, the BOR decided it had stored too much, and released storage for flood control. Nonetheless, the BOR previously exercised its reservoir water right (stored water for beneficial uses) and had physically stored 750,000 acre-feet. On April 17, 1999, the BOR started filling the 350,000 acre-feet vacated for flood control plus the additional 250,000 acre-feet that had not physically filled in 1999. If the BOR was able to simply turn storage on and off at will, the BOR would only have had another 250,000 acre-feet of water that could be physically stored before the approximately one million acre-feet authorized by the on-stream reservoir water rights has been physically stored. The simplistic "physical contents stored" analysis above would leave 350,000 acre-feet of empty space in the on-stream reservoirs.

171. In order to physically fill the remaining 350,000 acre-feet of remaining space pursuant to the decreed on-stream reservoir water rights, it must be assumed that, although the BOR determined it needed to physically store 750,000 acre-feet of water prior to February 17, 1999, and actually physically stored the water, in hindsight, BOR didn't need to store the water, and as a result, the exercise of the storage component of the water right should be excused after the fact. In short, the BOR and spaceholders would argue at the time of the original storage: "I need the water and I will store it." Later, after the storage right had been exercised by physically storing water, but then releasing it for flood control, they would argue: "I didn't need the water, don't count my previous diversion of water (physical storage) against my on-stream reservoir water right, and reset the numerical volume I can store to the vacant space in the reservoir." The reset results in more water being stored in priority than authorized by the water right. The spaceholders justify zeroing out previous water physically stored and then released for flood control by arguing that the water wasn't beneficially used.

172. Each water right is defined by multiple elements. Each of these elements of the water right act as boundaries that determine the upper limits of use for exercise of the water right. If one of these elements is completely satisfied, the diversion authorized by the water right ceases. For instance, if the annual volume authorized under a water right has been completely diverted, the flow rate element cannot continue to be diverted because the water right authorizes diversion of a flow rate without a specific limitation that links to the flow rate. For an irrigation water right, if the acreage identified as the place of use is fully irrigated, the irrigation of additional acreage cannot be justified because there is a portion of the annual volume that has not been diverted and beneficially used.

173. The argument that only water actually allocated to spaceholders or actually applied to beneficial use "counts" in distributing water to a reservoir water right is not true. If a reservoir water right holder, after storing water to the full extent of the storage component, was required to release the water for safety of dams purposes or for a mechanical problem with the dam structure, the storage right holder would not be entitled to store additional water equal to the quantity of water released based on the argument that the water was not beneficially used at the expense of junior water right holders. Finally, in the delivery of water, if a delivery system, like the New York Canal, failed, and water diverted for irrigation flowed to the Snake River or the Boise River without being beneficially used, the water right holder could not divert an additional amount of water equal to the water lost. It is the appropriators' responsibility to make beneficial use of the water distributed to them under their water rights. *See Rayl v. Salmon River Canal Co.*, 66 Idaho 199, 209, 157 P.2d 76, 80 (1945) ("Application to a beneficial use is an individual matter not collective. Each user must apply his water to a beneficial use and is solely responsible therefore."); *United States v. Pioneer Irr. Dist.*, 144 Idaho 106, 110, 157 P.3d 600, 604 (2007) ("the appropriator must apply the water to a beneficial use").

174. Again, the boundaries of the water right establish the upper limits of when the right can be exercised. When the decreed storage volume authorized by the water right has been satisfied, additional storage of water in the on-stream reservoir is beyond the limits of the water right. To allow the additional storage of water under the water right is not water right administration, but is, instead, water right enlargement.

Diversion of Flood Control Releases by Holders of Junior Priority Water Rights

175. In addition, Shaw referred to the 1999 hydrograph depicted on page 11 of Exhibit 1019, and identified two possible benefits to changing from paper fill accounting to contents-based or "physical fill" accounting: (1) greater ability for diversion by holders of junior priority water rights to divert flood control releases if the junior water right holders do not have any storage; and (2) during periods of refill, juniors would be able to divert water because the historical records at the Middleton Gage show junior water right holders would not be shut off.

176. Exhibit 1019, page 11, depicts reservoir contents and paper fill accruals for the satisfaction of all the on-stream reservoir water rights on the Boise River in a cumulative hydrograph. Recounting the numerical highlights of the hydrograph, on November 1, 1998, the reservoir system held about 550,000 acre-feet of water. By approximately February 16, 1999, the BOR had physically, approximately stored another 200,000 acre feet of water, raising the physical storage in the reservoir system to about 750,000 acre-feet. On February 17, 1999, the Bureau began flood control releases. Between February 17, 1999, and April 16, 1999, the BOR emptied about 350,000 acre-feet out of the reservoir system to make empty reservoir space for anticipated flood runoff. The lowest total reservoir system storage in 1999 was approximately 400,000 acre feet.

177. On February 17, 1999, when the BOR started releasing water from the reservoirs to vacate space for flood control, the water right accounting continued to accrue water flowing into and impounded in the reservoirs (although water was being released) to satisfy the reservoir water right. On April 14, 1999, the reservoir water rights were satisfied by the present water right accounting, even though approximately 500,000 acre-feet of reservoir space was vacant.

178. Shaw argues that from the start of the irrigation season (March 1) until April 14, approximately six weeks, junior water right holders without storage below Lucky Peak could not divert the water released from the reservoir system because it had been counted toward the paper fill of Lucky Peak Reservoir, which has a water right bearing the latest priority date of the Boise River on-stream reservoirs. Shaw argues that contents-based accounting could free up this water for diversion by existing and future junior priority water right holders. Tr. 1487-1488, 1542-1543 (Shaw).

179. When the flows in the Boise River are higher than the demand, the Boise River watermasters have not regulated diversions, although natural flow distributions and storage uses are accounted year-round. If junior water right holders divert water when the junior water rights are not in priority, the water diverted registers as storage used, even if the water right holder does not have a storage account. As a result, the junior water rights are allowed to divert water during the six weeks when Shaw states they would be deprived of water.

180. Although registered storage use carries forward in the water right accounting program, at the date of allocation, all storage used while the BOR is vacating space is **always** cancelled. The reason for this automatic cancelation is that, had the water not been diverted, it would have flowed out of the Boise River Drainage and probably on to the ocean. The diversions by junior water right holders did not affect the operations of the on-stream Boise River reservoirs for flood control because the Corps and the BOR are solely interested in vacating space to a level dictated by the water control manual and flood control rule curve, regardless of how the water released is used. As a result, the junior water rights holders receive water during the time the accounting program deemed them to be out of priority. Furthermore,

the end result after storage cancelling is that the junior water right holders diverted water as if their water rights were in priority during the storage releases from the on-stream reservoirs for flood control.

Diversion by All Water Users During Storage Refill

181. Shaw testified that historical records establish that contents-based accounting would allow the on-stream reservoirs to physically fill pursuant to their water right priorities and diversions by junior water right holders would not be curtailed.

182. The Director must assume that the reservoir spaceholders are concerned about circumstances when there is not enough water to satisfy both junior priority water rights and refill the reservoir space vacated for flood control. If contents-based accounting were implemented under these circumstances, the BOR could shut off junior water rights to fill the reservoir space.

183. Storage water is often released from the on-stream reservoirs to vacate reservoir space for flood control during the late winter and early spring when water demands are lower. The space vacated for flood control is filled after the reservoir space is vacated, often during May and June when water demands are higher. This is true for both irrigation and municipal water rights. The result of Shaw's proposal for content-based accounting would be to: (1) initially register the diversion to the water right holders' natural flow water rights (even though storage cancelling accomplishes the same purpose) (a) during on-stream reservoir flood control releases, and (b) during a period of low water demand; and (2) curtail junior water rights during periods of high demand to refill the on-stream reservoir space vacated for flood control.

184. Contents-based accounting was considered and rejected for reasons previously discussed when the existing water rights accounting and storage allocation programs were implemented in Water District 1 in 1978 and Water District 63 in 1986. The same considerations that weighed against contents-based accounting then continue to weigh against its adoption at this time. Contents based accounting is incompatible with year-round accounting and would essentially preclude day-to-day accounting and administration of water rights in Water District 63 until after flood control operations had ended and the reservoir system had reached its maximum contents. Contents based-accounting would create the real possibility of curtailment of junior water rights in the future, and strengthen the ability of the space holders to refill the reservoirs after flood control releases at the expense of the junior water right holders. The present method of accounting has been in place for 30 years. The junior water right holders who have diverted under the priorities of their licensed and decreed water rights prior to and during the flood control "refill" period since implementation of the existing accounting system should have the assurance of a continuation of deliveries of water as delivered historically.

Economic Impacts

185. Several witnesses testified about the importance of storage water for irrigation of agricultural crops in the Treasure Valley, and the economic benefits derived from growing crops to maturation with a secure water supply. The Director agrees with these witnesses.

186. In assessing the economics of the present method of accounting, the following facts are immutable:

- During a storage season of drought, all water flowing in-priority to a Boise River reservoir is captured in the Boise River reservoirs, and there are no flood control operations.
- During a storage season of drought, there is insufficient inflow to physically fill the Boise River reservoirs, and the water supply for the space holders is limited.
- During a storage season of drought, the spaceholders' allocations are reduced because of a limited water supply, not because of flood control operations.
- During a storage season of plentiful snowpack and high predicted runoff, there has always been sufficient water in the reservoirs to satisfy the irrigation needs of the spaceholders.
- Since 1985, there has only been one year (1989) in which flood control operations resulted in a reduction in storage spaceholder allocations, and consistent with the Water Control Manual and the spaceholders' contracts, that reduction applied only to Lucky Peak spaceholders. Arrowrock and Anderson Ranch spaceholders have never had their storage allocations reduced as a result of flood control operations.
- Spaceholders in the storage reservoirs have never suffered a water shortage as a result the existing water rights accounting and storage allocations program.

187. In conclusion, any risk of insufficient water supply and resulting reduction of crop production or crop failure is the result of insufficient water supply during drought years and is not the result of a deficiency in total storage physically held in the Boise River on-stream reservoirs after flood control releases. In years of flood control releases, the reservoir spaceholders have had enough storage water to irrigate their crops.

Instream Flows

188. Water right no. 63-3618 authorizes storage of 152,300 acre-feet of water in Lucky Peak Reservoir to sustain instream flows in the Boise River. During the irrigation season, storage water from Lucky Peak Reservoir is not released to maintain Boise River instream flows because releases to the Boise River to satisfy irrigation demands far exceed the instream flow targets. During the nonirrigation season, water stored in Lucky Peak Reservoir must be released for instream flows. If not, the storage reservoir water rights authorize physical retention of all or

most of the inflow to the reservoirs without regard to flows in the Boise River below Lucky Peak Reservoir.

189. The Idaho Department of Fish and Game ("Fish & Game") manages the instream flow storage in Lucky Peak Reservoir. The target instream flow for the nonirrigation season is 240 cfs. Sometimes in the nonirrigation season following a year with a drought storage season, Fish & Game may reduce the releases below 240 cfs to ensure sufficient storage carryover to satisfy the instream flows for a year or two if a second low water year results in less water allotted to the instream flow storage.

190. Maintaining a flow in the Boise River of approximately 240 cfs: (1) protects the fishery in and riparian values of the Boise River, and (2) ensures adherence by the City of Boise to NPDES permit requirements for Boise River flows following discharge of treated sewage effluent from the Boise City sewer treatment plants into the Boise River.

191. In a year of flood control releases, when the water allocated to the spaceholders is less than the storage authorized, the 60,000 acre-feet guaranteed to the space holders to indemnify them from a reduction in their storage allocations is taken from the 152,300 acre-feet dedicated to instream flow maintenance. This could result in a shortfall in the total storage allocated to instream flow.

192. Nonetheless, the record is void of any evidence establishing that there has ever been a year when the failure to fill the reservoirs after a flood control release has depleted the water allocated to the instream flow so that the instream flow cannot be maintained.

CONCLUSIONS OF LAW

The Director's Authority

1. Chapter 6 of Title 42 of the Idaho Code addresses the "Distribution of Water Among Appropriators." Idaho Code §§ 42-601- 42-620. Section 42-602 states that the Director has "direction and control" over the distribution of water from natural sources within a water district, that distribution shall be accomplished by watermasters as "supervised by the director," and the distribution shall be "in accordance with the prior appropriation doctrine."

2. This statute "gives the Director a 'clear legal duty' to distribute water" and "broad powers to direct and control distribution of water from all natural water sources within water districts." *Basin-Wide Issue 17*, 157 Idaho at 393, 336 P.3d at 800 (citation omitted). "[T]he Director cannot distribute water however he pleases at any time in any way; he must follow the law." *Id.* "[T]he details of the performance of the duty," however, "are left to the director's discretion." *Id.* (citation omitted). "Therefore, from the statute's plain language, as long as the

Director distributes water in accordance with prior appropriation, he meets his clear legal duty. Details are left to the Director." *Id.*

3. The Idaho Supreme Court has historically "recognized the Director's discretion to direct and control the administration of water in accordance with the prior appropriation doctrine," and "more recently" the Court "further articulated the Director's discretion: 'Somewhere between the absolute right to use a decreed water right and an obligation not to waste it and to protect the public's interest in this valuable commodity, lies an area for the exercise of discretion by the Director.'" *Id.* (quoting *Am. Falls Reservoir Dist. No. 2 v. Idaho Dep't of Water Res.*, 143 Idaho 862, 880, 154 P.3d 433, 451 (2007)). "Thus, the Director's clear duty to act means that the Director uses his information and discretion to provide each user the water it is decreed. And implicit in providing each user its decreed water would be determining when the decree is filled or satisfied." *Id.* at 393-94, 336 P.3d at 800-01.

4. The Idaho Supreme Court "has also recognized the need for the Director's specialized expertise in certain areas of water law," and noted the Director "'cannot . . . be made to predict the future with powers other than his own reason and judgment' and 'we ordinarily must vest the findings of the state engineer with the presumption of correctness.'" *Id.* at 394, 336 P.3d at 801 (citation omitted). The Court has stated "[t]he legislature intended to place upon the shoulders of the state engineer the primary responsibility for a proper distribution of the waters of the state,'" and "recognized the need for the Director's expertise." *Id.* (citations omitted). The Court further stated:

> [T]he Director's duty to administer water according to technical expertise is governed by water right decrees. The decrees give the Director a quantity he must provide to each water user in priority. In other words, the decree is a property right to a certain amount of water: a number that the Director must fill in priority to that user. However, it is within the Director's discretion to determine when that number has been met for each individual decree. In short, the Director simply counts how much water a person has used and makes sure a prior appropriator gets that water before a junior user. Which accounting method to employ is within the Director's discretion and the Idaho Administrative Procedure Act provides the procedures for challenging the chosen accounting method.

Id.

5. The Boise River Watermaster, as supervised by the Director, must account for the distribution of natural flow and stored water separately. Idaho Code §§ 42-602, 42-801; *see also Nelson v. Big Lost Irr. Dist.*, 148 Idaho 157, 159, 219 P.3d 804, 806 (2009) ("Because the Irrigation District uses the river to convey its storage water to its water users, it must permit the watermaster of the Water District to distribute the water from the river into the Irrigation

District's waterworks . . . . When the Irrigation District's storage water is in the river, it may be comingled with natural flow water."). In addition, the Legislature vested the Department with "supervision and control" of all natural waterways used to "comingle and reclaim" water previously diverted under a water right. Idaho Code § 42-105(1). Because the natural channel of the Boise River is used to convey natural flow and the water stored in and released from the on-stream reservoirs to the various spaceholders' diversion works, such use is subject to the Director's supervision and control. *Id.*

6. The distribution of water to the federal reservoirs in Water District 63 must be consistent with the decreed elements of the water rights for the reservoirs. The distribution of stored water to spaceholders must be consistent with their federal storage contracts.

The Reservoir Water Rights

7. The water rights at issue here are storage water rights for the three federally owned and operated on-stream reservoirs on the Boise River system. "Storage water is water held in a reservoir and intended to assist the holders of the water right in meeting their decreed needs." *Am. Falls Reservoir Dist. No. 2*, 143 Idaho at 878, 154 P.3d at 449. "One may acquire storage water rights and receive a vested priority date and quantity, just as with any other water right." *Id*; Idaho Code § 42-202.

8. There is a "fundamental difference" between water rights for direct diversion to use and water rights for storage in a reservoir. *American Falls Reservoir Dist. No. 2 v. IDWR,*143 Idaho 862, 880, 154 P.3d 433, 451 (2007); *Rayl v. Salmon River Canal Co.*, 66 Idaho 199, 208, 157 P.2d 76, 80 (1945). While under direct diversion water rights, the water must be put to immediate use, "the very purpose of storage is to retain and hold for subsequent use . . . hence retention is not of itself illegal and does not deprive the user of the right to continue to hold." *Rayl*, 66 Idaho at 208, 157 P.2d at 80. Stored water "need not be put to the end use immediately, but may be stored for a period of time prior to the end use . . . ." *Basin-Wide Issue 17*, 157 Idaho at 389, 336 P.3d at 796. The stored water, however, is "impressed with the public trust to apply it to a beneficial use." *Washington Cnty. Irr. Dist. v. Talboy*, 55 Idaho 382, 43 P.2d 943, 945 (1935).

9. The reservoir water rights were decreed in the SRBA in 2007, 2008, and 2009 in the name of the "United States of America Bureau of Reclamation," but "as a matter of Idaho constitutional and statutory law title to the use of the water is held by the consumers or users of the water." *United States v. Pioneer Irr. Dist.,* 144 Idaho 106, 115, 157 P.3d 600, 609 (2007); *see also Partial Decrees*, *Water Rights Nos. 63-303, 63-3613* (Arrowrock), *63-3614* (Anderson Ranch), *63-3618* (Lucky Peak). Irrigation organizations such as the Board of Control and the Ditch Companies "act on behalf of the consumers or users" to administer the use of the water for the landowners "in the quantities and/or percentages specified in the contracts between the

Bureau of Reclamation and the irrigation organizations for the benefit of the landowners entitled to receive distribution of this water from the respective irrigation organizations." *Id.*[44]

10. Each reservoir water right was decreed with a priority date and a quantity expressed in "AFY" or "acre-feet per year" but without a diversion rate. *See* Idaho Code § 42-1411(2)(c) ("the quantity of water used describing the rate of water diversion or . . . annual volume of diversion of water for use or storage in acre-feet per year as necessary for the proper administration of the water right"). While the decreed annual quantity of each reservoir right(s) is sufficient to physically fill the "Total Reservoir Capacity" identified in the right(s), the partial decrees do not provide that the reservoir water rights are in priority until the "Total Reservoir Capacity" has been physically filled with water.

11. The partial decrees for the reservoir water rights do not identify the quantity of stored water to which each storage spaceholder is entitled. The amount of stored water to which each storage spaceholder is entitled is defined, rather, by "the quantities and/or percentages specified in the contracts between the Bureau of Reclamation and the irrigation organizations." *United States v. Pioneer Irr. Dist.,* 144 Idaho 106, 115, 157 P.3d 600, 609 (2007); *see also Partial Decrees*, *Water Rights Nos. 63-303, 63-3613* (Arrowrock), *63-3614* (Anderson Ranch), *63-3618* (Lucky Peak).

12. The decreed point of diversion for each reservoir water right is the location of the dam that forms the reservoir. The partial decrees for the reservoir water rights do not identify the downstream points of diversion at which the irrigation organizations re-divert stored water released from the reservoir system into their canal systems.

13. The reservoir water rights authorize water to be stored and subsequently used for irrigation, power, municipal, industrial, and streamflow maintenance purposes.[45] The reservoir

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[44] Because "[t]here is no dispute that the BOR does not beneficially use the water for irrigation" but only "manages and operates the storage facilities," *Pioneer*, 144 Idaho at 110, 157 P.3d at 604, for irrigation purposes the reservoir water rights are water rights for "sale, rental or distribution" under Sections 1, 4, 5, and 6 of Article XV of the Idaho Constitution. *See Clear Springs Foods, Inc. v. Spackman*, 150 Idaho 790, 805-06, 252 P.3d 71, 86-87 (2011) ("The framers of our Constitution evidently meant to distinguish settlers who procure a water right under a sale, rental, or distribution, from that class of water users who procure their water right by appropriation and diversion directly from the natural stream.").

[45] Lucky Peak water right no. 63-3618 authorizes "recreation storage" but not "recreation from storage." All the other authorized purposes of use in the federal reservoir water rights include both a "storage" component and a "from storage" component. The Court in *Basin-Wide Issue 17* stated:

> The purpose of use element of a storage water right generally contains at least two authorized purposes of use. The first authorizes the storage of water for a particular purpose (i.e., "irrigation storage," or "power storage"). The second authorizes the subsequent use of that stored water for an associated purpose, which is often referred to as the "end use" (i.e., "irrigation from storage," or "power from storage"). Each purpose of use is assigned its own quantity and period of use, which may or may not differ from one another.

water rights do not authorize "flood control" as a purpose of use, although two of the reservoir water rights include "remarks" referencing flood control operations. *See* Idaho Code § 42-1411(2)(j) ("The Director shall determine the following elements . . . . such remarks and other matters as are necessary for definition of the right, for clarification of any element of a right, or for administration of the right by the director"); *id.* § 42-1412(6) ("The decree shall contain or incorporate a statement of each element of a water right as stated in . . . section 42-1411").

14. The "quantity" element of Arrowrock water right no. 63-3613 includes a remark stating, in part, that the BOR "may temporarily store water in the surcharge capacity, which is above elevation 3216 during flood events or emergency operations."

15. The quantity element of Lucky Peak water right (no. 63-3618) includes a remark stating "Lucky Peak Reservoir has 13,950 acre feet of capacity for flood control purposes in addition to the volume of water authorized for storage under this right." The Lucky Peak water right also has a remark stating "[t]he storage rights in Lucky Peak Reservoir are subject to the flood evacuation provisions which supplement irrigation storage contracts held in Anderson Ranch and Arrowrock Reservoirs as defined by supplemental contracts with the Bureau of Reclamation." This remark reflects "the interest in Lucky Peak held by contract right holders in Anderson Ranch and Arrowrock" reservoirs. *Memorandum Decision and Order on Cross-Motions for Summary Judgment Re: Streamflow Maintenance, SRBA Subcase No. 63-3618* (Sept. 23, 2008) at 35.

16. The Lucky Peak water right expressly identifies the authorized place of storage as "Lucky Peak Reservoir." The Arrowrock and Anderson Ranch water rights do not expressly identify the authorized places of storage, but the "Total Reservoir Capacity" recited in the "quantity" elements of the water rights implies the authorized places of storage are Arrowrock Reservoir (water right nos. 63-303 and 63-3613) and Anderson Ranch Reservoir (water right no. 63-3614). The reservoir water rights do not authorize storage of water in any reservoir other than the one identified in each partial decree, and do not include any remarks or provisions authorizing coordinated operation of the individual reservoirs as a single system. The reservoir water rights do not reference the 1953 MOA, the 1956 Manual, the 1985 Water Control Manual, or the 1985 MOU.

17. The reservoir water rights do not define how the BOR allocates stored water to the irrigation organizations. *See* Idaho Code §§ 42-801 to 42-802 (Distribution of Stored Water); *see also Pioneer*, 144 Idaho at 115, 157 P.3d at 609 ("The irrigation organizations act on behalf of the consumers or users to administer the use of the water for the landowners in the quantities and/or percentages specified in the contracts between the Bureau of Reclamation and the

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Basin-Wide Issue 17, 157 Idaho at 389, 336 P.3d at 796. Recreation "use" under the Lucky Peak water right consists of activities such as boating, fishing, etc., in Lucky Peak Reservoir. In other words, recreation "use" under the Lucky Peak water right is realized by "storage" alone, obviating the need for a "from storage" or "end use" component in the purpose of use element.

irrigation organizations for the benefit of the landowners entitled to receive distribution of this water from the respective irrigation organizations.") Nor do the reservoir water rights define how the stored water is delivered to and divided among the "consumer or users of the water" by the irrigation organizations. *Pioneer,* 144 Idaho at 115, 157 P.3d at 609; *see* Idaho Code §§ 42-901 to 42-916 (Distribution of Water to Consumers).

Reservoir System Operations and Water Distribution

18. The Watermaster, as supervised by the Director, must be able to determine the natural flow supply, the water right priorities in effect, and storage entitlements in order to distribute natural flow in accordance with licensed and decreed water rights and to account for storage use. The reservoir system significantly complicates this task. As the Idaho Supreme Court and the SRBA District Court have recognized, "'[a]n on-stream reservoir alters the stream affecting the administration of all rights on the source. Accordingly, some methodology is required to implement priority administration of affected rights.'" *Basin-Wide Issue 17*, 157 Idaho at 388, 336 P.3d at 795 (quoting SRBA District Court *Order Designating Basin-Wide Issue*, 6 (Sept. 21, 2012)). Particularly in a river carrying comingled storage and natural flow, the Watermaster cannot know which headgates or diversion facilities to "shut and fasten" in "times of scarcity" without knowing which diversions have "prior rights" to the water supply. Idaho Code § 42-607. The Water District 63 water right accounting and storage allocation programs are integral to water distribution and priority water right administration in Water District 63.

19. It is undisputed that coordinated operation of the federal on-stream reservoirs for irrigation and flood control, and other purposes, balances and optimizes these often-conflicting objectives and results in more irrigation storage and better flood control than otherwise would be possible. But it is also clear the reservoirs are not operated by the Corps and BOR strictly in accordance with their decreed water rights. The reservoirs are not filled in order of priority, water diverted under one water right may be physically stored in a reservoir that is not authorized in the water right, and the reservoir system is operated for purposes not authorized in the reservoir water rights—the primary unauthorized purpose being flood control, which often requires the storage, regulation, and/or release of significant volumes of water.

20. The inconsistency between reservoir system operations and the elements of the reservoir water rights creates a dilemma for purposes of water distribution and water right administration. Water distribution and water right administration must be consistent with decreed water rights, but Boise River reservoir system operations are not consistent with decreed water rights. The Water District 63 water right accounting system resolves the dilemma by accounting for the distribution of natural flow according to decreed water rights and the allocation of stored water according to federal contracts in a manner consistent with coordinated reservoir system operations.

21. The current accounting method allows the BOR and the Corps to store water in any of the on-stream reservoirs regardless of the priority under which the water was originally diverted. This method also enforces and protects the decreed priorities and quantities of the storage water rights. The fact that the cumulative diversions, or "accruals," under the priority of a reservoir's storage water right may reach the water right's authorized annual volume before (or after) the reservoir physically fills to capacity is an inevitable result of coordinating the operation of the individual reservoirs as a single system. That is because the coordinated reservoir operations do not fill the reservoirs in order of priority.

22. Under the coordinated reservoir operations, the decreed priorities and quantities of the storage water rights would often be violated if priority administration of a storage water right was solely defined by the physical contents of its reservoir. Priority diversions would exceed the decreed annual volume when flood control evacuation or refill requirements call for the release of water from a reservoir. And, if system operations physically filled the reservoir before priority diversions reached the water right's annual volume, the storage right would go out of priority even though its decreed quantity had not been satisfied and water was available under the water right's priority.

23. Accruing to a storage water right all of the natural flow calculated to be available under the priority of the water right is also consistent with the elements of the reservoir water rights and reservoir operations. The reservoir water rights are not limited by diversion rates, they authorize diversions to storage for the entire year, and each is entitled to all natural flow available under its priority until its annual volume has been satisfied. Natural flow distributions to decreed water rights are measured by diversions, Idaho Code § 42-110, *Glen Dale Ranches, Inc. v. Shaub*, 94 Idaho 585, 588, 494 P.2d 1029, 1032 (1972), and the reservoir system is operated to physically divert and regulate all flows:

> the entire flow of the natural stream has been diverted and stored and become subject to controlled releases. The storage and releases are made possible by the massive and costly structure known as the Lucky Peak dam and reservoir. The BOR has flexibility in releasing the water when needed to accomplish such purposes. . . . [T]he BOR monitors and manages the stream flow releases from the reservoir on a day-to-day if not hour-to-hour basis.

Lucky Peak Decision, at 22.

24. Releases from the reservoir system at Lucky Peak Dam—the control point for managing overall reservoir system content—are carefully managed to satisfy various and, at times, conflicting operational objectives. The fact that the Corps or the BOR may release water

from the reservoir system for purposes other than those authorized in the water rights does not mean that the water has not been physically diverted, stored, and/or regulated.

25. When reservoir system operations require flood control releases from Lucky Peak—whether in the form of storage "evacuation" or "bypass"—stored or storable flows that were accrued to the reservoir water rights may be released at a time of the year when they are not needed for authorized beneficial uses such as irrigation. In flood control years, a significant volume of the water stored under the reservoir water rights may no longer be in the reservoir system—and the overall reservoir system contents may even be decreasing—when the reservoir water rights have "filled on paper."

26. Reservoir system flood control operations only call for the release of stored or storable water from the system, however, when additional inflows are anticipated. The releases and the system flood control space requirement are based on runoff forecasts and flood control "rule curves" developed to assure a high likelihood that the reservoir system will physically "refill" as high flows recede and the risk of flooding diminishes. Coordinated reservoir system operations seek to physically fill or "refill" the system at the end of the flood control season, and assume that the storage physically in the system at the end of the flood season is available for allocation to storage spaceholders following the conclusion of flood control operations.

27. The Water District 63 accounting system accommodates these assumptions and operates in a manner consistent with the priority administration of the reservoir water rights. Following "paper fill," the Water District 63 accounting system anticipates and allows for physical storage in the reservoir system of excess natural flow, i.e., flows in excess of downstream water demand that would cause flooding if not captured in the reservoirs. By tracking the additional storage as "unaccounted for storage" rather than attributing it to the storage water rights, the Water District 63 accounting system avoids violating the rights' decreed priorities and quantities. Moreover, including the "unaccounted for storage" in the annual volume calculated to be available for (or already used by) storage spaceholders on the "day of allocation" is consistent not only with coordinated reservoir system operations, but historic allocation practices as well.

The Current Method of Accounting for the Distribution of Water to the On-Stream Reservoirs Water Rights Accords with Idaho's Prior Appropriation Doctrine

28. Reduced to its most basic operation, the Department's accounting program determines that an on-stream reservoir's storage water right is "satisfied" when the quantity of natural flow diverted by the reservoir in priority equals the total quantity authorized by that reservoir's decreed storage water right. Once a storage water right is satisfied, the program determines that right is no longer in priority. Natural flow accrues toward satisfaction of the storage water rights in this manner until all of the storage rights are satisfied or a senior natural

flow right comes into priority. This methodology implements three principles of Idaho water law. First, a reservoir diverts and stores water when natural flow enters the reservoir. Second, a storage water right is satisfied when the reservoir has diverted, in priority, the total quantity of natural flow stated on the face of its partial decree.[46] Third, diversion and storage of natural flow in excess of the decreed quantity is permissible if the additional storage does not injure downstream appropriators.

29. In physical terms, all natural flow that enters an on-stream reservoir is stored in that reservoir until the dam operator releases it from storage. Idaho courts have recognized this physical reality repeatedly. *E.g.*, *United States v. State*, 135 Idaho 655, 666, 23 P.3d 117, 128 (2001) (noting that water is "stored and regulated by colossal federal projects"); *Lucky Peak Decision* at 22 ("the entire flow of the natural stream has been diverted and stored and become subject to controlled releases . . . by the massive and costly structure known as Lucky Peak dam and reservoir."); *Keller v. Magic Water Co.*, 92 Idaho 276, 284, 441 P.2d 725, 733 (1968) ("Magic Water Company diverts the entire stream of Salmon Falls Creek at the dam [even though some] water flows over the spillway back into the natural channel . . . ."); *Kunz v. Utah Power & Light Co.*, 177 Idaho 901, 914, 792 P.2d 926, 939 (1990) (Bistline, J., dissenting) (observing that a dam operator "diverted *all* such water by Stewart Dam into its regulatory system and artificial works and attempted to control and manage storage and releases, whether bypassed or not."). These cases all acknowledge that on-stream dams fundamentally alter the flow of the natural stream by diverting the entire flow into a reservoir, where it remains until the dam operator decides to release it.

30. In legal terms, all natural flow that enters the reservoir system has been "diverted." *E.g.*, *Keller*, 92 Idaho at 284–85, 441 P.2d 733–34. Diverted means "[t]o turn aside from a direction or course." Webster's II New College Dictionary 339 (3d ed. 2005), *accord* Black's Law Dictionary 511 (8th ed. 2004) (defining "diversion" as "a deviation or alteration from the natural course of things"). Plainly, "colossal federal projects" that capture and regulate the entire flow of the Boise River are, as a matter of fact and law, diverting the river. *United States v. State*, 135 Idaho at 666, 23 P.3d at 128. In addition, the Idaho Supreme Court has long held that the quantity element of a water right is measured at the point of diversion, not the place of use. *Glen Dale Ranches, Inc. v. Shaub*, 94 Idaho 585, 588, 494 P.2d 1029, 1032 (1972) (citing *Stickney v. Hanrahan*, 7 Idaho 424, 63 P. 189, 192 (1900)). Therefore, "counting" the amount of natural flow that based on sophisticated measurements is, or but for upstream storage would be, diverted at the decreed point of diversion (the dam) when the water right is in priority is consistent with Idaho law.

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[46] United Water Idaho's raises an objection to the "reset" procedure in the current water right accounting program. The reset is not at issue in this proceeding as this proceeding is limited to the question of "how water is counted or credited toward the fill of water rights for the Federal on-stream reservoirs . . . ." *Notice* at 6. The Director will not address the reset issue in this order.

31. The accounting program accepts the physical and legal reality that on-stream reservoirs divert and store natural flow, in a way that accommodates the federal government's coordinated reservoir operations. Suppose, for example, that Arrowrock's 1911 storage water right is in priority. The accounting program "counts" the natural flow physically entering Arrowrock Reservoir from the Middle Fork Boise River toward the satisfaction of the 1911 right. The program also "counts" toward satisfaction of the 1911 right natural flow that would—but for the intervening Anderson Ranch Reservoir—enter Arrowrock Reservoir via the South Fork Boise River. Coordinated federal reservoir operations can, and often do, dictate that the South Fork water is physically stored in Anderson Ranch Reservoir, regardless of the fact that Arrowrock's water right is in priority. The program nevertheless "counts" both the Middle Fork and South Fork water toward satisfaction of the Arrowrock right, because it would all be flowing into Arrowrock absent operations at Anderson Ranch. *See* Ex. 1 at 2 (defining "natural flow" as "water that would be flowing in the river system absent reservoir operations and diversions"). In this way, the program resolves a major complication arising from the coordinated operations, namely the federal practice of storing water without regard to the elements of the water rights.

32. By accruing to the reservoir water rights all natural flow available in priority at the point of diversion, the accounting program recognizes and enforces "the essential elements of priority date and quantity." *State v. Idaho Conservation League*, 131 Idaho 329, 333, 955 P.2d 1108, 1112 (1998). This methodology also creates an incentive to store water when it is most readily available and least in demand by other appropriators—i.e., prior to irrigation season. This incentive is in keeping with the longstanding "policy of the law to encourage the most efficient and least wasteful use of waters of the state." *Simpson v. Moon*, 72 Idaho 39, 47, 237 P.2d 93, 98 (1951) (citing *Reynolds Irr. Dist. v. Sproat*, 69 Idaho 315, 334, 206 P.2d 774, 786 (1948)). It is also consistent with the opportunistic role storage water rights have in Idaho water law. The purpose of storage is to capture high flows in times of plenty for later use, when the natural flow supply dwindles. *Basin-Wide Issue 17*, 157 Idaho at 389, 336 P.3d at 796; *American Falls Reservoir Dist. No. 2,*143 Idaho at 880, 154 P.3d at 451; *Rayl*, 66 Idaho at 208, 157 P.2d at 80; *Washington Cnty. Irr. Dist.,* 55 Idaho 382, 43 P.2d at 945.

33. The accounting program also prevents reservoir system operations from effectively enlarging the priorities of the reservoir water rights. Although all flows are physically diverted and/or regulated by the dams and reservoirs, the accounting system limits priority diversions to the decreed quantities of the water rights. While additional storage is allowed and may be allocated to spaceholders, provided no other water rights are injured, the accounting does not allow the additional storage operations to occur under the priorities of the reservoir water rights. *See A&B Irr. Dist. v. Aberdeen-American Falls Ground Water Dist.*, 141 Idaho 746, 753, 118 P.3d 78, 85 (2005) ("there is *per se* injury to junior water rights holders anytime an enlargement receives priority").

34. It is undisputed that the Department's longstanding policy has been to allow the on-stream reservoirs to refill the space evacuated for flood control if it can be done without injury to other appropriators. Tr. 277 (Dreher), 691 (Tuthill). Both the Idaho Supreme Court and the SRBA District Court have approved the recognition of historical practices related to the diversion and use of "excess flows" through general provisions in the SRBA insofar as the there is no resulting injury to other appropriators and the use is consistent with historical practice. *State v. Idaho Conservation League*, 131 Idaho 329, 955 P.2d 1108 (1998); *Memorandum Decision and Order on Challenge, In Re SRBA Case No. 39576, Subcase Nos. 74-15051, et al.*, (Jan. 3, 2012) (upholding general provision authorizing the use of high flow water in the Lemhi basin). These cases support the conclusion that the historical practice of the use of excess flows to fill the on-stream reservoirs in Water District 63 is appropriate where there is no resulting injury to other appropriators.

35. There is no dispute that federal reservoir operations presently, and as a matter of historical practice, aim to refill the space evacuated for flood control to the extent possible. It is also undisputed that some or all of this refilling occurs after the storage water rights have been satisfied according to the accounting program. Further, the present and former watermasters' Black Books establish that the reservoirs refilled while downstream natural flow rights, both junior and senior to the storage water rights, diverted. In fact, the Black Books and the accounting results show that, during the period where irrigation demand overlaps with reservoir refill operations, water passed Middleton unused, indicating that water supply exceeded not only irrigation demand but also demand for refill purposes. Thus, the longstanding federal practice of using excess spring runoff to refill reservoir space evacuated for flood control has occurred without injury to other appropriators. Since its implementation in 1986 at the request of Watermaster Lee Sisco, the computerized accounting program has accommodated this historical practice while enforcing the decreed quantities and priorities of the reservoir water rights.

36. There is nothing in the reservoir water rights or Idaho water law that requires the water right accounting program to "count" or accrue to the reservoir water rights in flood control years only the water that physically resides in the reservoir system on the day of allocation. To the contrary, the coordinated reservoir system operating plan has always contemplated that in flood control years, some of the water stored for irrigation purposes may be released for flood control purposes during the period from the late fall to the early summer, and the lost storage would be replaced with water captured during the flood runoff. The coordinated system of flood control operations, in short, is based on substituting flood water for previously stored irrigation water released during flood control operations.

37. Such substitutions do not violate the underlying water rights. As stated in *Bd. of Dirs. of Wilder Irr. Dist. v. Jorgensen*, the fact that:

> water has been decreed for the irrigation of lands and become appurtenant thereto does not, for that reason alone . . . prevent a substitution; and, further, that a

> decree and the appurtenancy of water to lands do not, in and of themselves, constitute a sufficient reason for denying a substitution or exchange of water.

Bd. of Dirs. of Wilder Irr. Dist., 64 Idaho 538, 548, 136 P.2d 461, 465 (1943). As stated in Justice Ailshie's concurrence:

> Conferring on the Secretary the right to substitute the waters of one stream for those of another, when that can be done without impairment of the rights of prior appropriators along these streams, is merely an administrative regulation calculated to be beneficial rather than detrimental to the proprietary rights of the water user. It can make no difference to the appropriator of water, whether he gets the water from one stream or another, or from the pooled waters of a lake or reservoir, so long as it is devliered to him at his headgate at the times and under the priorities to which his location and appropriation entitle him. This is equally true whether he be himself an original *locator, appropriator,* and *diverter of the waters*, Sec. 3, Art. XV, Const. or whether he has made *settlement and improvement, with a view to receiving water under a "sale, rental, or distribution"* (italics supplied), as contemplated by sec. 5, art. 15, of the Constitution.

Id. at 551, 136 P.2d at 467 (Ailshie, J., concurring) (italics and parenthetical in original).

38. While *Jorgensen* dealt with a BOR plan to substitute the waters of one stream for another, the reasoning is equally applicable to the reservoir system flood control operations that rely upon substituting flood water captured in the spring for stored or storable water released earlier. *Jorgensen* confirms that such a substitution is not contrary to the underlying water rights. It follows that the Water District 63 water rights accounting and storage allocations programs, which are consistent with this substitution, also do not violate the reservoir water rights. "It can make no difference" to the spaceholders, *id.*, whether the water allocated to them on the day of allocation is the same water that was "counted" or accrued to the reservoir water rights. Indeed, the "Guarantee" of the 1954 Supplemental Contracts is also a substitution: it requires the BOR to substitute water stored under the Lucky Peak water right for any Arrowrock and Anderson Ranch storage lost as a result of flood control operations. The record establishes that these substitutions have occurred for decades without detriment to the spaceholders or other appropriators, because the accrued water is released and the substituted water is stored at a time of excess supply.

39. The lack of injury highlights two key points. First, the accounting program was designed to accommodate and complement coordinated reservoir operations, has not altered reservoir operations, has not prevented federal authorities from physically filling the voids created by coordinated flood control operations, or prevented the allocation of "wet" water to the

spaceholders. And second, the BOR's contracts and storage allocation practices—particularly its "Guarantee" to the Arrowrock and Anderson Ranch spaceholders, which is also implemented through the accounting programs—have worked remarkably well.

40. Despite the lack of a cognizable injury to any party, the existence of this proceeding and the controversy that prompted it confirms that recognition of the historic practice of allocating water stored after satisfaction of the storage water rights is "necessary . . . for the efficient administration of the water rights" in Water District 63. *See* Idaho Code § 42-1412(6); *see also Idaho Conservation League*, 131 Idaho at 334-35, 955 P.2d at 1113-14 (upholding general provision authorizing the diversion and use of "excess flow" in Reynolds Creek). While a general provision is not necessary for the continuation of the historic practice, it would be best for the historic practice to be documented by the SRBA District Court. Therefore, the Director will, if given the opportunity, recommend to the SRBA District Court that a general provision be decreed for Basin 63 recognizing the longstanding practice of refilling the on-stream reservoirs when sufficient water is available to do so without injury to other appropriators.[47]

41. In sum, the Department's method of accruing natural flow toward the satisfaction of the storage water rights accords with the prior appropriation doctrine because it implements established diversion and priority principles without impairing the beneficial use of water stored in the reservoirs. It does so in a way that incentivizes storage, accommodates coordinated reservoir operations, avoids enlarging the storage water rights, and permits the longstanding practice of storing excess natural flow to continue. It also provides precisely what former Watermaster Lee Sisco sought: a sound basis for day-to-day priority administration of all water rights in Water District 63. And, importantly, the accounting program's adoption and implementation has not altered federal reservoir operations and thus has not changed the amount of water physically available to the spaceholders.

Arguments Made Against the Current Water Right Accounting Program

42. The Board of Control argues the Idaho Supreme Court's statement in *Basin-Wide Issue 17* that "the Director simply counts how much water a person has used and makes sure a prior appropriator gets that water before a junior user," 157 Idaho at 394, 336 P.3d at 801, means that accruals to the reservoir water rights must be measured by how much storage water has actually been <u>used</u> by the consumers and users of the storage rather than by diversions to storage. This argument takes the quoted statement out of context and if interpreted as the Board of Control urges, would effectively nullify the immediately preceding passage, which emphasizes the Director's discretion to determine the appropriate method of accounting for distributions to the reservoir water rights:

[47] The Director is not a party to the Snake River Basin Adjudication and thus any formal request for a general provision would have to come from a party to the SRBA.

> Here, the Director's duty to administer water according to technical expertise is governed by the water right decree. The decrees give the Director a quantity he must provide to each water user in priority. In other words, the decree is a property right to a certain amount of water: a number that the Director must fill in priority to that user. However, it is within the Director's discretion to determine when that number has been met for each individual decree.

Id.

43. The Board of Control's interpretation of *Basin-Wide Issue 17* also would preclude distributions to any water rights junior to the reservoir water rights until the full amount of "end use" authorized pursuant to the reservoir water rights had actually occurred. *See Basin-Wide Issue 17*, 157 Idaho at 394, 336 P.3d at 801 ("makes sure a prior appropriator gets that water <u>before</u> a junior user") (emphases added). Keeping the reservoir water rights in priority and/or curtailing natural flow distributions to any junior water rights unless and until the full amount of authorized "end use" has taken place is far afield from any form of administration or accounting ever practiced in Water District 63, even before 1986. Such a system would alter the historic *status quo* and be unadministrable from a practical standpoint. The watermaster must make daily distributions of the available natural flow during the seasons and cannot wait for the storage to be fully used before determining whether junior water rights are entitled to divert.

44. The Board of Control's argument that distributions to the reservoir water rights must be measured by the quantity of storage actually used by the consumers and users of the water also conflicts with the statutory requirement of measuring distributions at the point of diversion rather than the place of use. *See* Idaho Code § 42-110 ("shall be entitled to such quantity measured at the point of diversion."); *Glenn Dale Ranches, Inc.*, 94 Idaho at 588, 494 P.2d at 1032 ("waters appropriated will be measured for their sufficiency from the point of diversion, not at the place of use"). The Idaho Supreme Court long ago held that the requirement of measuring a water right distribution at the point of diversion is a corollary of the "spirit and policy of our constitution and laws, as well as . . . public policy" against "the wasting of our waters." *Stickney*, 7 Idaho at 435, 63 P. at 192. "[E]very act on the part of any individual claimant that tends to waste water is to be discouraged rather than encouraged. The necessity of measuring to each claimant, at the point of diversion from the natural stream, the waters appropriated and used by him, is apparent." *Id.* "Under the law, water of all claimants must be measured at the point where such water is diverted from the natural channel of the stream from which it is taken. This is [a] matter of necessity, demanded by public policy. It is the policy of the law to prevent the wasting of water." *Id.* at 433, 63 P. at 191. The Board of Control's argument would require the Director to read one statement in *Basin-Wide Issue 17* in isolation and conclude that it reversed multiple decisions that squarely addressed the question of whether distributions are measured at the point of diversion or the place of use.

45. The Board of Control's argument that distributions to the reservoir water rights must be measured by how much storage is actually used also conflicts with the reservoir water rights. The decreed points of diversion for the reservoir water rights are the dams, and the partial decrees do not identify the points of diversion for the consumers or users of the water or the storage quantities to which they are entitled. These are defined by the storage spaceholder contracts. *Pioneer,* 144 Idaho at 110, 115, 157 P.3d at 609.

46. Irrigation use of the storage does not take place at the reservoirs; irrigation use only occurs after the stored water is released from Lucky Peak, flows down the river channel to the diversion works of the Board of Control and/or the spaceholder irrigation districts, is conveyed through their canal systems to the consumers and user of the storage, and applied to their lands. *Id.* at 110, 115, 157 P.3d at 604, 609. It is the appropriators' responsibility to make beneficial use of the water distributed to them under their water rights. *See Rayl v. Salmon River Canal Co.*, 66 Idaho 199, 209, 157 P.2d 76, 80 (1945) ("Application to a beneficial use is an individual matter not collective. Each user must apply his water to a beneficial use and is solely responsible therefor"); *Pioneer*, 144 Idaho at 110, 157 P.3d at 604 ("the appropriator must apply the water to a beneficial use"). "[T]he irrigation organizations," not the Watermaster or the Director, "act on behalf of the consumers or users to administer the use of the water for the landowners in the quantities and/or percentages defined in the contracts between the Bureau of Reclamation and the irrigation organizations." *Id.* at 115, 157 P.3d at 609; *Partial Decrees, Water Right Nos. 63-303, 63-3613, 63-3614, 63-3618.* In routinely distributing water to licensed and decreed water rights, the watermaster as supervised by the Director does not and has not followed the water past the spaceholders' headgates and down their canal systems to ensure that the consumers and users are actually using the water.

47. The related argument that distributions to the reservoir water rights should be measured by releases for the "end uses," such as releases for "irrigation from storage" purposes, is contrary to coordinated reservoir operations. As previously discussed, neither the BOR nor the accounting programs track the physical location within the reservoir system of the water diverted under each individual reservoir water right. Releases from Lucky Peak cannot be physically tracked back to the individual water rights because the reservoirs are operated as a coordinated system rather than as individual projects. Further, while spaceholders may hold contracts for storage in individual reservoirs, storage is allocated to the individual spaceholders in lump-sum accounts that cover all of their contracts. The spaceholders' use and carryover for each individual reservoir contract is not determined until the end of the season, and is simply an accounting determination, not a determination of actual use of the physical storage that actually occurred under each individual reservoir water right. Coordinated reservoir system operations, in short, preclude measuring priority distributions for each individual water right on the basis of releases for "end use."

48. Measuring priority distributions to the individual reservoir water rights on the basis of whether reservoir system releases were intended for flood control purposes would also be contrary to the partial decrees. The partial decrees do not provide for administration on the basis of flood control operations, and except for the "Guarantee" remark in the Lucky Peak water right, do not reference or incorporate any element of the 1953 MOA, the 1954 Supplemental Contracts, the 1956 Manual, the 1985 MOU, or the 1985 Water Control Manual. Conditioning priority distributions to the reservoir water rights on whether stored or storable water was released from the reservoir system for purposes that are not authorized in the partial decrees would effectively add an administrative "remark" to the decrees. *See* Ex. 2 ¶ 11 ("Distributing additional water under priority to the reservoirs to replace water released for unauthorized purposes would be, from an accounting standpoint, the same as recognizing an unquantified water right for the unauthorized uses with the same priority date as the original water right.")

49. Measuring priority distributions to the individual reservoir water rights on the basis of whether reservoir system releases were intended for flood control purposes also would be impractical or unadministrable, because the BOR often does not finalize its determination of when and how much water was released for flood control purposes until the end of the season. Further, some "flood control" releases are also intended or used for additional and/or different purposes, such as ESA flow augmentation, streamflow maintenance, or irrigation; the BOR often "feathers" flow augmentation releases into flood control releases and only determines at a later date where one ended and the other began. Even when the BOR makes an initial, in-season determination of when and/or how much water was released for "flood control," that determination is often changed or amended later. Making priority distributions contingent on such post-hoc determinations would preclude real time priority administration.

50. For the same reasons, measuring priority distributions to the individual reservoir water rights on the basis of whether reservoir system releases were intended for flood control purposes risks making natural flow distributions and priority water rights administration contingent on operations that are not authorized in the reservoir water rights and that the BOR views as "entirely independent of the water rights system." Ex. 1028 at 5. The water released in flood control operations often includes considerable volumes that were originally stored for irrigation purposes. The volume of stored or storable water released from the reservoir system in flood control operations each year is variable, and depends on snowpack, BOR and Corps runoff forecasts, flood control "rule curves," weather conditions during the flood control release and "refill" periods, and operational decisions of the BOR and the Corps. Making priority distributions to the reservoirs water rights contingent on such considerations would effectively allow federal flood control operations to dictate the distribution of water under state water rights. Further, because the volume of stored or storable water that must be released from the reservoir system for flood control purposes in any given year is variable and can even change within a year, making priority distributions contingent on flood control operations would effectively interpret the reservoir water rights as decreeing "vague and uncertain" quantities. *See Village of*

Peck v. Denison, 92 Idaho 747, 750, 450 P.2d 310, 313 (1969) ("if the decree awards an uncertain amount of water to one appropriator whose needs are vague and fluctuating, it is likely that he will waste water and yet have the power to prevent others from putting the surplus to any beneficial use."). This result would be contrary to Idaho law and even the Water Control Manual, which acknowledges that priority water right administration is a matter of state law. *See* Ex. 2005 at at 7-24 ("Surface water rights on the Boise River are administered by the Boise River Watermaster."), 9-6 ("[T]he Department of Water Resources is responsible for ensuring that Idaho water is regulated, stored, conserved, distributed, and used in an effective manner consistent with State of Idaho laws and policies.").

51. Conditioning priority distributions to the reservoir water rights on the basis of whether reservoir system releases were intended for flood control purposes would also allow the reservoir water right to remain in priority until the conclusion of flood control operations. The reservoir water rights are not limited by diversion rates and command the entire natural flow of the river when they are in priority. Thus, conditioning priority distributions on flood control releases would effectively give the BOR priority over far more water than is actually authorized for beneficial use under the reservoir water rights, simply because of the way the Corps and the BOR operate the reservoir system. This would be contrary to Idaho law. Priority extends only to the quantity of water actually applied to beneficial use, and priority will not be extended to cover larger volumes simply because of how the water right holder operates their diversion. *Van Camp v. Emery*, 13 Idaho 202, 89 P. 752, 754 (1907); *Lee v. Hanford*, 21 Idaho 327, 121 P. 558, 560 (1912).

52. Priority is intended to govern water distribution "in times of scarcity." Idaho Code § 42-607. Flood control years are not times of scarcity but rather times of excess flows. A "failure to fill" the reservoir system following flood control releases is not a result of diversions under junior water rights but rather a result of reservoir operations. Measuring priority distributions to the individual reservoir water rights on the basis of flood control releases would be contrary to these principles, and would mean that junior water right holders that have always been allowed to divert under their water rights during high flow periods would no longer be in priority during such periods, even when there is more than enough water to satisfy all water rights.

53. While it is undisputed that reservoir system flood control operations are beneficial, they are not authorized purposes of use under the reservoir water rights. Measuring priority distributions to the individual reservoir water rights on the basis of flood control releases would enlarge priority administration of the water rights on the basis of a failure to put stored or storable water to the beneficial uses authorized in the reservoir water rights. Nothing in Idaho law contemplates that a failure to put water to the authorized beneficial uses justifies an enlargement of priority diversions or priority administration. *See A&B Irr. Dist. v. Aberdeen-American Falls Ground Water Dist.*, 141 Idaho 746, 753, 118 P.3d 78, 85 (2005) ("there is *per*

se injury to junior water rights holders anytime an enlargement receives priority"). Further, Idaho's prior appropriation doctrine does not permit the Director or the watermaster to effectively modify the decreed elements of the reservoir water rights by interpreting or administering the water rights to effectuate federal flood control operations that were not decreed and that are admittedly independent of the water rights system and prior appropriation.

54. The objections the Board of Control and the Ditch Companies raise to the Water District 63 water rights accounting and storage allocation programs ignore the reality that the on-stream reservoirs continuously divert and regulate the entire flow of the Boise River and its tributaries upstream of Lucky Peak Dam. In fact, the flow regulation is so extensive that the reservoirs can be totally evacuated for flood control purposes and nevertheless fill by the time flood control operations conclude. Tr. 713-715 (Mellema) (describing 1997 flood control operations). The record further establishes that coordinated flood control operations have been occurring as necessary since 1955, yet none of the water users who testified in this proceeding could recall a flood control year when they received less than a full storage allotment. One even admitted that flood control releases "put a smile on your face" because "you were in pretty good shape if they were doing that." Tr. 1107 (Anderson). These statements highlight that the accounting program has not altered federal reservoir operations, prevented federal authorities from physically filling the voids created by coordinated flood control operations, or prevented the allocation of wet water to the spaceholders.

55. These statements also highlight that the BOR's contracts and storage allocation practices have worked remarkably well. The BOR's contracts with the irrigation spaceholders in all three reservoirs recognize and address the risk that the reservoirs will not physically fill due to flood control operations. *E.g.*, Ex. 3026 (Wilder Irrigation District 1954 Supplemental Contract); Ex. 2190 (Pioneer Irrigation District Contracts). As previously noted, Arrowrock and Anderson Ranch spaceholders have been completely protected from shortfalls by the BOR's contractual Guarantee. And, although irrigation spaceholders' rights to water stored in Lucky Peak are subject to operations for flood control, the Lucky Peak spaceholders receive a large measure of protection from the BOR's practice of allocating the first 60,000 acre-feet of any shortfall to the streamflow maintenance account. The shortfall exceeded 60,000 acre-feet in 1989 only, and there is nothing in the record to suggest that the City of Boise's only apparent interest in this matter—streamflow maintenance releases—suffered from a shortfall in that or any other year. Moreover, the record demonstrates that the space the BOR has committed to streamflow maintenance is sufficient to provide the required releases when they are necessary. Tr. 537 (Cresto). In short, the Board of Control, the Ditch Companies, and the City have not established that the accounting program has injured their interests, or is likely to.[48]

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[48] As the testimony of Mary Mellema and the Water Control Manual's refill procedures demonstrate, the failure or inability to fill the reservoirs are consequences of federal reservoir operations and weather. The accounting program does not control or influence either of these factors. Further, the impact of any shortfall on a particular spaceholder depends entirely on the BOR's contractual arrangements and storage allocation decisions, not whether or when the storage water rights are satisfied.

56. These parties also argue the accounting program is illegal because it implies water is stored after the point of "paper fill" without a water right. *See* Idaho Code § 42-201(2) ("No person shall divert any water from a natural watercourse or apply water to land without having obtained a valid water right to do so, or apply it to purposes for which no valid water right exists."). The testimony established this is a long-standing practice that has not injured any other water rights and has reliably resulted in the storage spaceholders receiving full storage allocations. These objections also mischaracterize a time-of-plenty as a time-of-scarcity. It is important to recognize the reservoirs release stored water for flood control purposes only when the forecasted runoff exceeds the available capacity of the reservoir system. By definition, the need for flood control exists when there is too much water. It should therefore come as no surprise that the spring runoff in Water District 63 can, and does, refill most if not all of the evacuated space in the on-stream reservoirs.

57. The Board of Control's and the Ditch Companies' objections that the accounting systems subordinates the reservoir water rights to existing and future junior appropriators are incorrect. *See* Boise Project Br. at 54 (fearing a "risk of future users who might seek to appropriate the inflows to the reservoirs after flood control"); Ditch Cos.' Br. at 13 (claiming the lack of priority "subordinates the spaceholders' storage water rights and storage contracts to all junior water rights and future appropriations"). The Water District 63 water right accounting and storage allocation programs distribute the full quantities to the reservoir water rights on the basis of priority, and allow the BOR to allocate the excess flows captured during the "refill" phase to spaceholders as necessary to satisfy their contracts. The fact that the priorities of the reservoir water rights do not also extend to flood control operations does not diminish the priorities of the water rights, nor does it relieve the BOR of its obligation under Idaho law to ensure that the decreed amounts are available for allocation to the "consumers and users" of the storage. *Pioneer,* 144 Idaho at 115, 157 P.3d at 609; *see also Partial Decrees, Water Rights Nos. 63-303, 63-3613* (Arrowrock), *63-3614* (Anderson Ranch), *63-3618* (Lucky Peak); *Washington Cnty. Irr. Dist. v. Talboy*, 55 Idaho 382, 43 P.2d 943, 945 (1935) (stating that stored water "impressed with the public trust to apply it to a beneficial use."). There is no evidence that the BOR intends to alter its operations so that the "refill" water captured during flood control "refill" will be used for purposes other than spaceholder allocations.

58. The record also establishes that the potential for future appropriations is very limited because "refill" water consists of unreliable flood waters that are difficult to appropriate. The "refill" water has remained unappropriated ever since coordinated reservoir operations began in 1957. Further, the record establishes that most new appropriations would have little or no effect on flood control operations and "refill," which deal with very large quantities of water. The only type of new appropriation that would have any measurable impact is a new storage project, which the spaceholders testified they would likely support.

59. In any event, the fact that the reservoir water rights are not in priority until the end of flood control "refill" is simply the consequence of the BOR appropriating less water per year than the Corps and the BOR have found necessary to satisfy the conflicting goals of flood control and irrigation storage. It is also a consequence of the agreement that the spaceholders, as owners of the storage water rights, negotiated and accepted decades ago. To suddenly shift that consequence to junior appropriators or hypothetical future appropriators would be to enlarge the storage water rights to encompass the volume of water necessary for both irrigation storage and flood control release operations. Basing such a result on speculation as to nature and extent of future appropriations is particularly inappropriate.

60. In sum, the Department's method of accruing natural flow to the satisfaction of the storage water rights employs the prior appropriation doctrine because it implements established diversion and priority principles. The method of accruing natural flow to the satisfaction of the on-stream storage water rights incentivizes storage, accommodates coordinated reservoir operations, avoids enlarging the storage water rights, and permits the longstanding practice of storing excess natural flow to continue. It also provides a sound basis for day-to-day priority administration of all water rights in Water District 63, in all years, whether they be flood control years or drought years. And, importantly, the accounting program's adoption and implementation has not altered federal reservoir operations and thus has not changed the amount of water physically available to the spaceholders. The Director therefore concludes that the Board of Control's, Ditch Companies', and City's objections to the accounting program are without merit.

Alternative Methods of Accounting

61. According to the Board of Control's expert, David Shaw, changing the accounting procedure to "allow[] the storage spaceholder or the storage water right owner to call for water when they want to store it would be the simplest to implement." Tr. 1493.

62. This approach was apparently considered and rejected when the Department was first developing computerized accounting procedures for BOR reservoirs operated as coordinated systems for both irrigation and flood control purposes. This approach was not adopted "so that any particular reservoir could not, in and of themselves choose on any particular day whether they were exercising their storage right." Tr. 350 (Sutter). The existing approach was chosen "to prevent a reservoir with an older storage right from affecting the fill of reservoirs who had a junior storage right" so the senior reservoir water right could not "reduce the subsequent fill on a junior upstream or downstream reservoir." *Id.*

63. While Shaw testified that this approach would not adversely affect juniors because there is excess water in the system, Tr. 1470, this was also true when the accounting systems were being developed and implemented, but there was still a concern that allowing a

senior reservoir water right to decide when it was "calling" or "storing" and when it was not could have adverse effects on priority administration, junior water rights, and maximum beneficial use of the resource. The record establishes that those concerns remain valid.

64. Shaw also proposed two related changes that would allow for so-called "contents-based accounting." First, Shaw testified the program should reduce the accrued volume in an amount equal to the volume released for purposes not authorized by the storage water right, such as flood control. Tr. 1528-1529. Second, the storage water rights should be considered satisfied when either (a) the amount of water physically stored and available for authorized beneficial uses equals the decreed quantity or (b) natural flow declines to the point that rights senior to the storage water rights have priority over the entire flow.

65. Shaw's proposal to condition priority distributions to the reservoir water rights on the basis of reservoir system flood control releases is problematic for reasons previously discussed.

66. Shaw's other contents-based accounting proposal—measuring the satisfaction or "fill" of the individual reservoir water rights based on the "physical fill" of the reservoir is unworkable because it is contrary to coordinated reservoir operations. As previously discussed, under coordinated operations, the reservoirs are not physically filled in order of priority. Measuring the satisfaction or "fill" of the individual reservoir water rights on the basis of the "physical fill" of the reservoirs would be to simply ignore water right priorities. This would be contrary to Idaho law.

67. Contents-based accounting would allow the storage water rights to remain in priority longer than they do presently. The uncontroverted evidence establishes that, from April 1 until the end of flood control operations, the Corps controls the amount of water released from the reservoirs pursuant to the Water Control Manual's Refill Requirements. During this period, the reservoirs refill at whatever rate the Corps, in consultation with the BOR, deems prudent. Under the current accounting system, the rate at which water is released from storage has no effect on satisfaction of the storage water rights because it does not change the fact that the reservoirs divert and store all natural flow available to them in priority. Contents-based accounting, as explained by the Boise Project's accounting expert, Shaw, would make accrual of the storage water rights dependent on the chosen rate of refill, thereby stretching the priority of the storage water rights beyond the point of paper fill. Tr. 1533 (Shaw).

68. Shaw also explained that contents-based accounting would allow the reservoirs to divert and store more water in priority than authorized under their partial decrees. Tr. 1519-1520 (Shaw). When asked whether this would constitute an enlargement of the storage water rights, Shaw stated it would not because the BOR could dictate when it was storing water "for beneficial use." Tr. 1500-501, 1520. This reasoning is legally flawed because as previously discussed priority may not extend to volumes in excess of that actually applied to beneficial use.

See, e.g., Van Camp v. Emery, 13 Idaho 202, 89 P. 752, 754 (1907); *Lee v. Hanford*, 21 Idaho 327, 121 P. 558, 560 (1912).

69. Shaw's proposal would give federal dam operators control over when the reservoir rights are in priority simply by declaring that the reservoirs are not storing water for beneficial use. This proposal to extend the storage water rights' priority over a longer period of time and a larger volume of water, subject only to the operational discretion of federal agencies, would enlarge the storage water rights—a "*per se* injury to junior water rights holders." *A&B Irr. Dist.*, 141 Idaho at 753, 118 P.3d at 85.

70. Moreover, by giving federal dam operators the authority to decide when their reservoir water rights are satisfied, Shaw's proposal effectively cedes the Director's authority to federal agencies. According to Shaw, this expansion of federal authority would last only until the day of allocation, when senior natural flow rights would trump the storage water rights priority. Tr. 1537-1538. But, even if that were the case, Shaw does not explain how complete albeit temporary federal control over water rights priority in Water District 63 accords with Idaho's prior appropriation doctrine. No reasonable explanation exists because "[t]here is no question that IDWR is entrusted with the responsibility to administer water resources in the state." *State v. Hagerman Water Right Owners, Inc.*, 130 Idaho 727, 734, 947 P.2d 400, 407 (1997); *see also* IDAHO CONST. art. XV § 1, Idaho Code § 42-602.

71. Instead of changing the accounting program, the Ditch Companies propose reinterpreting the program's results. They contend the interpretation should reflect that the water physically stored in the reservoirs on the day of maximum reservoir fill, and subsequently allocated to the spaceholders, is the water that accrues toward the satisfaction of the storage water rights. This interpretation, the Ditch Companies argue, would avoid "decoupl[ing] the 'irrigation storage' and 'irrigation from storage' components of the storage water rights" and thus ensure the molecules of water counted as irrigation storage are the same molecules of water delivered for irrigation from storage. Ditch Cos.' Br. at 26.

72. The Ditch Companies proposal is similar to Shaw's suggestions for "contents-based accounting" and is problematic for the same reasons as Shaw's proposals. Further, the Ditch Companies' objection is based on the theory that as a matter of law the reservoir water rights require the water right accounting program to "count" or accrue to the reservoir water rights in flood control years only the water that physically resides in the reservoir system on the day of allocation. The Ditch Companies have provided no legal support for this theory, nor any principle of Idaho law that compels the Director to ensure that each molecule of water counted toward satisfaction of a storage water right is the same molecule allocated to the spaceholders. Indeed, if such a methodology were implemented in Water District 63, it would violate, rather than accord with, Idaho's prior appropriation doctrine. Further, as previously discussed, Idaho law authorizes the BOR and the accounting and allocation systems to substitute excess water

captured in flood control "refill" operations for water previously stored under the priorities of the reservoir water rights. *Jorgensen*, 64 Idaho 538, 548, 136 P.2d 461, 465, 467 (1943). This is consistent with historic practice and the Water Control Manual while preserving priority administration of water rights in accordance with Idaho law.

73. For the reasons discussed above, the Director concludes the current water right accounting method is consistent with the prior appropriation doctrine and is the best method for efficiently accounting and distributing water and maximizing water use without waste.

ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED, the Director will continue the current method of accounting for the "fill" or "satisfaction" of the Water District 63 federal on-stream reservoirs water rights.

IT IS FURTHER ORDERED, the Director will, if given the opportunity, recommend to the SRBA District Court that a general provision be adopted in Basin 63 authorizing the historical practice of refilling the on-stream reservoirs when sufficient water is available to do so without injury to other appropriators.

IT IS FURTHER ORDERED, that Department staff work with Water District 63 water users to address other concerns raised in this contested case, such as how water rights with conditions limiting their exercise during flood control releases are documented in the water right accounting program.

DATED this 20th day of October 2015.

GARY SPACKMAN
Director

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 20th day of October 2015, I served the foregoing *Amended Final Order* to the following and by the method indicated below:

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Deborah J. Gibson
Administrative Assistant for the Director
Idaho Department of Water Resources

EXPLANATORY INFORMATION TO ACCOMPANY A FINAL ORDER

(Required by Rule of Procedure 740.02)

The accompanying order is a "**Final Order**" issued by the department pursuant to section 67-5246 or 67-5247, Idaho Code.

Section 67-5246 provides as follows:

(1) If the presiding officer is the agency head, the presiding officer shall issue a final order.

(2) If the presiding officer issued a recommended order, the agency head shall issue a final order following review of that recommended order.

(3) If the presiding officer issued a preliminary order, that order becomes a final order unless it is reviewed as required in section 67-5245, Idaho Code. If the preliminary order is reviewed, the agency head shall issue a final order.

(4) Unless otherwise provided by statute or rule, any party may file a petition for reconsideration of any order issued by the agency head within fourteen (14) days of the service date of that order. The agency head shall issue a written order disposing of the petition. The petition is deemed denied if the agency head does not dispose of it within twenty-one (21) days after the filing of the petition.

(5) Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

(a) The petition for reconsideration is disposed of; or
(b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

(6) A party may not be required to comply with a final order unless the party has been served with or has actual knowledge of the order. If the order is mailed to the last known address of a party, the service is deemed to be sufficient.

(7) A non-party shall not be required to comply with a final order unless the agency has made the order available for public inspection or the nonparty has actual knowledge of the order.

(8) The provisions of this section do not preclude an agency from taking immediate action to protect the public interest in accordance with the provisions of section 67-5247, Idaho Code.

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a final order within fourteen (14) days of the service date of this order as shown on the certificate of service. **Note: the petition must be received by the Department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See section 67-5246(4) Idaho Code.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, any party aggrieved by a final order or orders previously issued in a matter before the department may appeal the final order and all previously issued orders in the matter to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days: a) of the service date of the final order, b) the service date of an order denying petition for reconsideration, or c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration, whichever is later. See section 67-5273, Idaho Code. The filing of an appeal to district court does not in itself stay the effectiveness or enforcement of the order under appeal.