

Notes and Questions  
for discussion w/Steve

BOISE RIVER RESERVOIR FILL

Boise River Reservoir fill normally commences near the end of the irrigation season as irrigation diversions diminish. Storage accrues on a daily basis to each reservoir according to the priority of the water right(s) for the reservoir(s) and the natural flow supply available at the point of diversion. Natural flow is determined at the location of the dams for the main river reservoirs (Anderson Ranch, Arrowrock, and Lucky Peak), and at the Boise Project Main (New York) Canal Diversion Dam for the offstream reservoir, Lake Lowell.

*Not now done this way in  
Accrual does not occur until  
after 1 Nov unless the reserv  
accounts had not filed.*

In order of priority, the water rights for storage in Anderson Ranch, Arrowrock, Lucky Peak, and Lake Lowell reservoirs are as follows:

*Accrual under any of the rights  
is considered to occur whether  
actual diversion takes place or not  
until the volume limit is reached*

Priority	Rate (cfs)	Volume	Remarks*
December 14, 1903	1354.58	-	New York Canal (BD)
April 1, 1909	292.5	-	New York Canal (BD)
June 16, 1909	634	-	New York Canal (BD)
January 13, 1911	8000		Arrowrock (BD)
August 18, 1924	300		New York Canal (L)
June 25, 1938		15,000	Arrowrock (L)
December 9, 1940		493,161	Anderson (L)
April 12, 1963		307,000	Lucky Peak (P)

*Since L. Lowell will virtually  
always "fill" this means that  
Lucky Peak will accrue  
some water  
every year  
from Mores Cree*

\*

- BD - Bryan Decree
- L - License
- P - Permit

All of these rights are held by the Water and Power Resources Service for the United States Department of Interior.

The rights for the New York Canal which total 2581.08 cfs are irrigation rights which can also be used to store water in Lake Lowell Reservoir during the non-irrigation season. The volume of water storable per annum is limited by the physical capacity of Lake Lowell, 177,150 acre-feet.

Arrowrock Reservoir is filled according to two rights, one for 8000 cfs for a physical capacity of 275,000 acre-feet, and another for 15000 acre-feet with no limit on the diversion rate. However, because of siltation the current total physical capacity is 286,600 acre-feet, so that the latter value is limited at the time of this agreement to 11,600 acre-feet.

Anderson Ranch Reservoir is filled by a right for 493,161 acre-feet with no limit on diversion rate. This right is limited by dead storage of 28,980 acre-feet plus normally inactive storage of 40,981 acre-feet to 423,200 acre-feet active space.

Lucky Peak Reservoir is filled by a right for

*Should New York Canal be limited to minimum capacity of canal at any D/S location? D/S capacity is at most equal to 1903 right.*

*since it is measured at the canal head, should an allowance be made for canal losses? When the irrigation season begins the accrual in L. Lowell will be stopped. NY ED. will be able to make additional actual fill or even multiple fills since the diversion will be identified as irrigation water.*

307,000 acre-feet, also having no limit on diversion rate. The right is limited by normally inactive storage of 28,800 acre-feet to 278,200 acre-feet active space. At the time of this agreement, the Lucky Peak right is at permit stage and may or may not be modified upon licensing.

The above described reservoir rights are the sole diversion rights in effect during the non-irrigation season (October 15 to April 1). Prior to and subsequent to these dates 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 water law. To provide for efficiency and flexibility in reservoir operations, storage under these rights can physically occur in any of the four reservoirs without regard to the reservoir specified in the right as long as the capability of any other right to be exercised remains unaffected.

The volume stored in any one season cannot exceed the volume specified by the water right or the physical capacity of the reservoir unless all subsequent rights have been met. The volume

*Can irrigation rights be limited to April 1 to October 15 (or so) in traditional season?*

stored (including unused storage from a previous year) cannot on any given day exceed the specified or physical volume of the reservoir. Previously unused storage (carryover) which is released during the non-irrigation season for flood control or flow maintenance can be replaced in the same year within the constraints of the right(s) governing that space. The United States Water and Power Resources Service shall inform the watermaster of any such use of carryover storage.

Not <sup>new</sup> done this way in 016-1.  
On Nov 1 accounts are set to the amount of carryover.

In order to properly administer storage rights, it is the responsibility of the United States Water and Power <sup>Resources</sup> Service to inform the Boise River Watermaster of the amount of unused storage in each of the three main river reservoirs (Anderson Ranch, Arrowrock, and Lucky Peak) within thirty days of the time the Watermaster has determined the amount of stored water used. Similarly, it is the responsibility of the Boise Project Board of Control to inform the Watermaster of the unused storage of Lake Lowell Reservoir.

It is the duty of the Boise River Watermaster to determine on a daily basis the accumulation of stored water under the rights of each of the four

reservoirs and to inform the United States Water and Power Resources Service and the Boise Project Board of Control each season when the maximum fill of each reservoir is known. The Water and Power Resources Services shall in turn inform the Watermaster of each user's stored water <sup>allocation</sup> accumulation in sufficient detail for proper delivery of that water.