

Conceptual Bennington Lake Storage Options

Water Release: Quantities, Timing

Assumptions:

- Early season release most desirable (March through June timeframe)
- Water can be protected downstream to recipient
- Capacity of irrigation diversion intake represents maximum potential instantaneous release rate.
- Specific rate and timing of release to be determined by fish managers, in coordination with USCOE and Ecology Watermaster.
- The total volume of water necessary to achieve instream flow objectives exceeds that potentially available from Bennington Lake storage; fish/water managers would utilize whatever quantities might be made available.
- Instream flow issues on Mill Creek could be addressed to allow for diversion to Bennington Lake for storage purposes separate from its existing flood control operations/authority.

Option 1: Gardena Farms District No. 13

Replace portion of GFID Walla Walla River diversion with reservoir storage from Bennington Lake, conveyed to GFID through Yellowhawk Creek/Walla Walla River. GFID water right authorizes diversion of up to 100 cfs in March, 93.33 cfs from April 1 to July 1.

The quantity and timing of supplemental release of water from Bennington Lake would be a function of what is determined to be most advantageous by fish managers, together with the capacity of the Yellowhawk Creek channel to convey the desired quantity of water downstream. In terms of overall volume, it is assumed the maximum available Bennington storage capacity would be desirable; the more the potentially available, the better.

Option 2: Consolidated Lowden Diversion

Water from Bennington Lake would be conveyed down Mill Creek to the Walla Walla River, and on down the river to replace diversion of water at the Consolidated Lowden ditch diversions. Below are the quantities which would be advantageous to replace. Class 30 (1892) are the last rights on the WW River to be regulated on the WW River, and at this particular diversion, if regulated are generally done so on a pro-rata basis. Water rights of Class 29 priority, and more senior, are generally not regulated at all on the mainstem WW River.

Class 30 (1892) and more senior

B/W:	March: 6.391 cfs	April 1 – July 1: 4.122 cfs
O/L:	March: 10.004 cfs	April 1 – July 1: 6.256 cfs
L#2	March: 10.738 cfs	April 1 – July 1: 7.159 cfs
GC:	<u>March: 0.400 cfs</u>	<u>April 1 – July 1: 0.266 cfs</u>
	27.533 cfs	17.803 cfs

Class 29 (1891) and more senior

B/W:	March: 0 cfs	April 1 – July 1: 0 cfs
O/L:	March: 1.585 cfs	April 1 – July 1: 0.989 cfs
L#2	March: 4.458 cfs	April 1 – July 1: 2.972 cfs
GC:	<u>March: 0.400 cfs</u>	<u>April 1 – July 1: 0.266 cfs</u>
	27.533 cfs	17.803 cfs

Option 3: Pine Creek Reservoir

Water from Bennington Lake would be piped to assist in the filling and maintenance of a Pine Creek Reservoir. Notwithstanding significant issues associated with the bi-state transfer and management of water rights, this options would allow for a secondary source for reservoir filling and provide for a more reliable supply of water to support that water storage/exchange project.

The elevations are such that water could be conveyed by gravity through a pipe to the proposed reservoir site. The timing and quantities of water required would be determined through further development and analysis of this option. It is presumed that the full volume of water available through Bennington Lake storage could be utilized for Pine Creek storage. The timing of conveyance has not been determined.

Alternative Options: 1 & 2

Either one of these options could involve direct piping to the point of diversion, vs. conveying water downstream through stream channels. Advantages of piping: ease of conveyance directly to diversion point, no administrative manpower required to shepherd water downstream. Primary disadvantage would be cost associated with piping, which would be substantial.

Summary:

It does not appear that any of these options have been developed along enough to indicate specifically what quantities of water would be ultimately be required/desired, and what the timing of the potential water deliveries would be. Generally it would appear that the quantities required for any of these options would be largely informed by the available storage; that is, the project would be able to use whatever quantities of water might be available out of Bennington Lake storage. The timing of the water release would be determined by fish/water managers, and could vary depending upon the specific option(s) implemented and streamflow conditions.