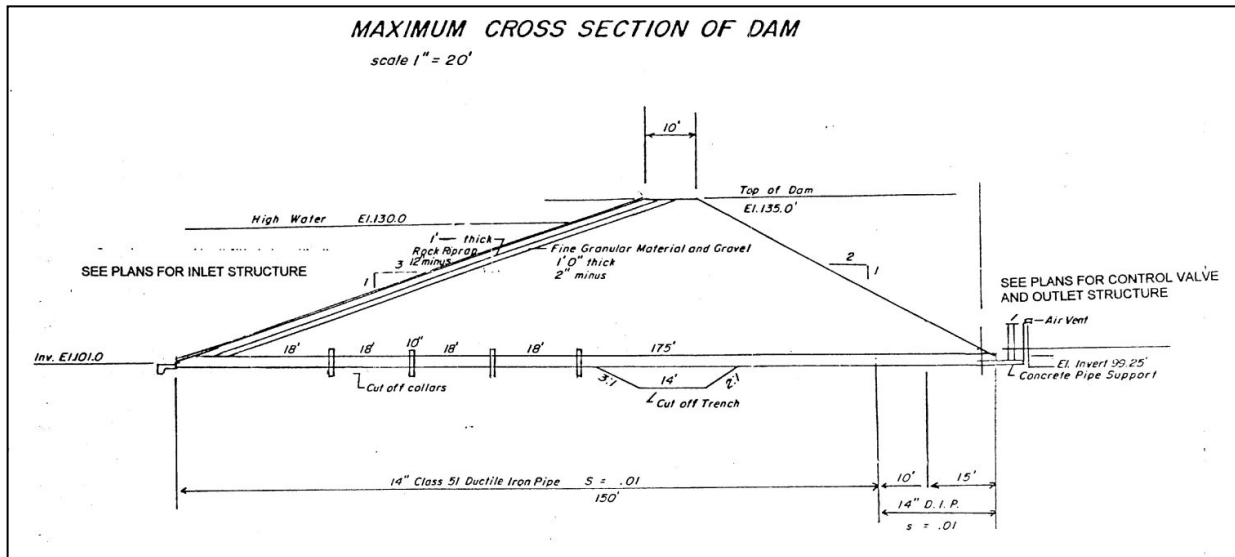

MEMORANDUM

Subject: Bear River Basin Plan
BEN RESERVOIR

Date: July 20, 2000

Location: Section 33, Township 13N, Range 118W. East Branch of LaChappelle Creek, tributary to LaChappelle Creek, tributary to Willow Creek, tributary to Sulphur Creek, tributary to Bear River.



Year of construction: 1995

Enlargement History: There was a 1997 enlargement of the supply ditch. This enlargement allowed for additional allocation of East Branch LaChappelle Creek in addition to the Van Tassel Supply Ditch from the Bear River Basin. The dam structure (and associated storage volume) was not enlarged.

Ownership: Joseph Broadbent. Contact George Thatcher (801) 225-3991

Total Storage: 303.15 acre-feet

Active Storage: 300.29 acre-feet

Dead Storage: 2.86 acre-feet

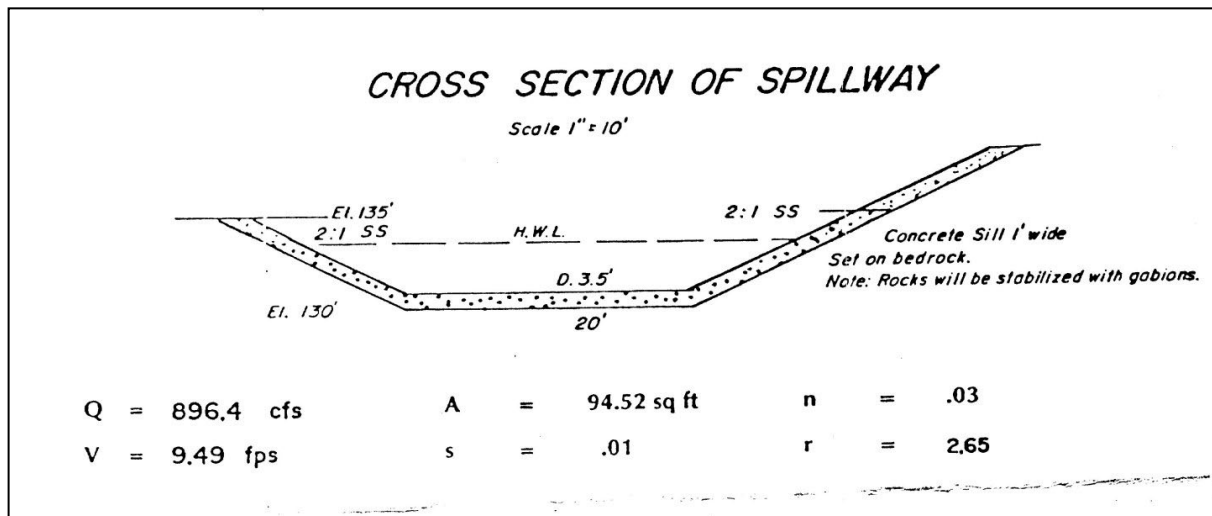
Area/Capacity Data:

Ben Reservoir Capacity Table		
Elevation	Area (acres)	Cumulative Capacity (acre-feet)
0	0	0
5	.58	1.45
10	2.70	9.65
15	7.80	35.90
20	14.40	91.40
25	20.20	177.90
30	29.90	303.15

Dam Construction Type: Earth-fill with rock face

Outlet: 14-inch ductile iron pipe. Capacity = 5.83 CFS.

Spillway: Concrete sill wasteway on bedrock; 20-foot bottom, 34-foot top, 3.5-foot depth; located on right abutment; Capacity = 896.4 FS



Water Rights: The table below represents the three permits that have been issued for the Ben Reservoir.

Ben Reservoir Permitted Storage Rights			
Permit No.	Priority	Volume (acre-feet)	Comments
10278R	4-7-1995	303.15	
7144E	4-7-1995	0	<i>For Van Tassel Supply Ditch supply.</i>
10657R	12-8-1997	0	<i>Enlargement of supply ditch – allocation of East Branch of LaChapelle Creek in addition to Ban Tassel supply.</i>
TOTALS		303.15	

Designated Use: Irrigation and Stock

Recreational Use: None

Associated Irrigation Diversions: Broadbent diversions

Associated Industrial Diversions: None

Operational Discussion: The Ben reservoir is particular interest because under Permit # 7144E, water from the Green River Basin is diverted to the Ben Reservoir in the Bear River Basin (via the Van Tassel Ditch to LaChappelle Creek). Initially, this was permitted as the sole source of supply. No appropriation was granted at that time for storage water from LaChappelle Creek in the Bear River Basin, and no allocation of storage under the Bear River Compact was allowed. In 1997, an enlargement was filed (permit # 10657E) to provide water from the East Branch of LaChappelle Creek in addition to that provided by the Van Tassel Creek Diversion.

The Green River Basin inflows from Van Tassel Creek, of course, are not regulated as part of the Bear River compact and must be accounted for separately.

In the 1999 Wyoming summary to the Bear River Commission we read; *“The Broadbent [a.k.a Van Tassel] supply ditch which brings water from the Green River basin now has a recorder with telemetry, thus allowing the State Engineer to document imports. (with a portion of the flow bypassing the gage orifice, only 24.8 acre-feet were recorded over a period from July 31st to the end of the water year, averaging a flow of only 0.2 FS over 62 days.)”*

Resources:

- 1) *Water Right Permit filings, mapping and special limitations obtained from the Wyoming State Engineers Office.*
- 2) *Jade Henderson, 1999 Wyoming Summary for the Bear River Commission Biennial Report*