

Appendix C: Reservoir Evaporation

Calculation of Reservoir Evaporation for the Snake/Salt River Basin Plan 2012 Update

Reservoir Name	Evaporation (inches/year)	Reservoir Surface Area (Acres)	Calculated Evaporation Depletion (AFY)	Notes
Afton Electric	40	5	16.67	
Baldwin	31	3	7.75	
Beaver Pond			0.00	Not Built 12/2012
Bergman Lake	33	37	101.75	
Cottonwood Lake	41	32	109.33	
Cottonwood	37	28.4	87.57	
Teton Meadows Ranch	37	14.5	44.71	
Flat Creek Ranch	34	46	130.33	
Four Shadows	37	5.98	18.44	
Grassy Lake	32	313	834.67	
Hardeman			0.00	Breached
Hardeman #2			0.00	Breached
Indian Lake	31	202	651.00	
Jackson Lake	32	43,530	68,080.00	
Jackson Wastewater Treatment Plant	36	160	60.00	
Leidy Lake	33	14	38.50	
Leland's	37	4.77	14.71	
McLean	37	3	9.25	
Melody Ranch Pond	37	6	18.5	
Porter	37	7	18.67	
Strawberry Creek	39	3	9.75	
Teal	40	32	106.67	
Timber Creek	37	1	3.08	
Tracy Lake	32	47	125.33	
Tucker Ranch No. 23	37	11	33.92	
Tucker Ranch No. 24	37	16	49.33	
Two Ocean	32	512	1365.33	
Uhl	32	83	221.33	
West Borrow Area Lake	37	6	18.50	
Woodward			0.00	Not Built 12/2012
Total			72,175.09	

A sample calculation is presented below. This calculation allows the evaporation rate and units to be correct.

$$40 \text{ in/yr} * 1\text{ft}/12\text{in} * (5\text{acres} * 43,560\text{ft}^2/1\text{acre}) / 43,560\text{ft}^2/1\text{acres}$$