Evaporation Stations

Standard daily pan evaporation is measured using the four-foot diameter Class A evaporation pan. The pan water level reading is adjusted when precipitation is measure to obtain the actual evaporation. Most Class A pans are installed above ground, allowing effects such as radiation on the side walls and heat exchnges with the pan material. These effects tend to increase the evaporation totals. The amounts can then be adjusted by multiplying the totals by 0.70 or 0.80 to more closely estimate the evaporation from naturally existing surfaces such as a shallow lake, wet soil or other moist natural surfaces. Additionally, the proposed storage pond will be outfitted with Hexprotect Hextiles that will provide cover from waterfowl and will decrease evaporation by approximately 50% according to WWC Engineering estimates.

Many stations do not measure pan evaportation during winter months. A "0.00" total indicates no measuement is taken.

Colorado

MONTHLY AVERAGE PAN EVAPORATION (INCHES)

	PERIOD OF RECORD	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
GRAND JUNCTION WALKER	1900-2005	0.00	0.00	4.67	8.53	12.18	15.96	16.53	14.02	10.98	7.05	2.42	0.00	92.34
GRAND JUNCTION 6 ESE	1962-2005	0.00	0.00	0.00	6.60	9.29	11.77	12.01	10.24	7.48	4.65	2.09	0.00	64.13
Grand Junction (Average)		0.00	0.00	2.34	7.57	10.74	13.87	14.27	12.13	9.23	5.85	2.26	0.00	78.24
Pan/Lake Evaporation Factor	0.7													
Grand Junction, w/ Evaporation Factor		0.00	0.00	1.63	5.30	7.51	9.71	9.99	8.49	6.46	4.10	1.58	0.00	54.76
Floating Hextiles Evaporation Factor	0.5													
Grand Junction, w/ Floating Hextiles Factor		0.00	0.00	0.82	2.65	3.76	4.85	4.99	4.25	3.23	2.05	0.79	0.00	27.38

http://www.wrcc.dri.edu/htmlfiles/westevap.final.html

Pond 1 Evaporation Calculations	
Pond 1 Water Surface Area (Sq. Ft.)=	114,326 From site design in Microstation
Total Pond 1 Evaporation (ft^3/yr)=	260,875
Total Pond 1 Evaporation (bbl/day)=	127.29

Pond 1 Volume Calculations	
Pond 1 Volume (ac-ft)=	40.1 From site design in Microstation
Pond 1 Volume (barrels)=	311,112