

Figure 3-6 Evaporation pan with wind anemometer installed on wooden support (courtesy of U.S. Weather Service, NOAA).

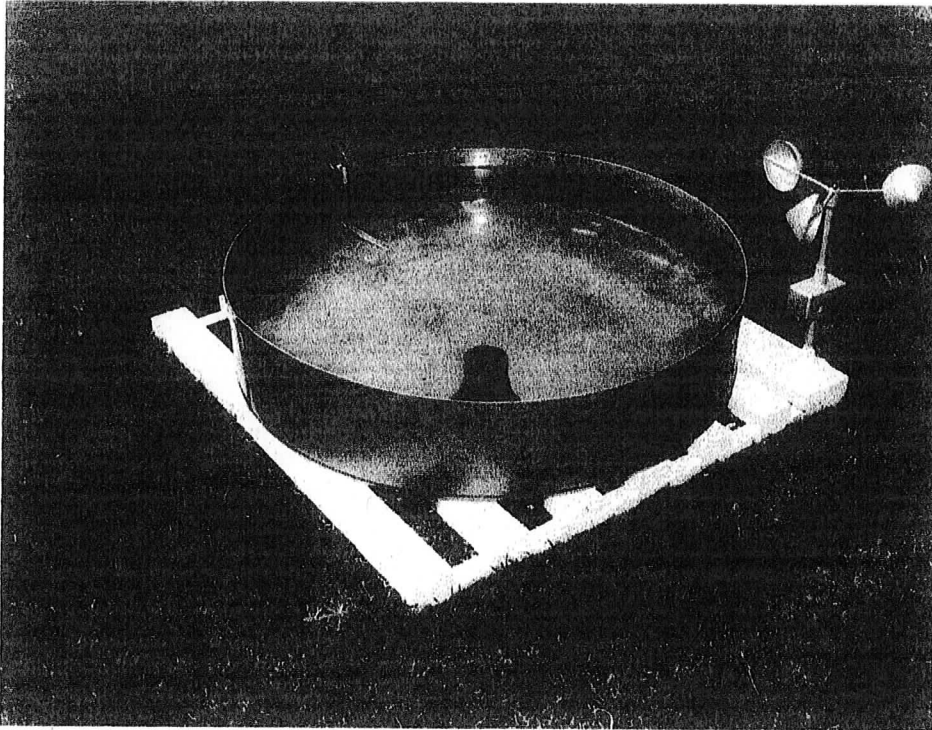


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Class A Weather Station Pan

10" high x 47.5" I.D.
(4' O.D.)

Water kept 2-3 in below top
levels measured with a hook gage

Supported on a platform of 2x4s on a 6"
earth mound

$$K_p = \frac{\text{lake evaporation}}{\text{pan evaporation}} \in (0.6-0.8)$$

[Refer to NWS NCDC for records.]

**TABLE 2.5 PAN EVAPORATION AT SELECTED LOCATIONS
(FARNSWORTH AND THOMPSON, 1982)**

Month	Folsom Dam, California	Davis Dam, Arizona	Ft. Peck Dam, Montana	Elephant Butte Dam, New Mexico	Whitney Dam, Texas	Wolf Creek Dam, Kentucky	Kerr Dam, Virginia
	(inches)						
Jan	0.90	5	—	3.28	2.95	2	—
Feb	1.62	6	—	4.85	3.88	2	—
Mar	3.46	9	—	8.53	6.05	4	—
Apr	5.38	11	—	11.75	7.02	4.68	5.27
May	8.09	14	7.49	14.45	8.46	5.47	6.22
Jun	10.13	16.68	8.68	16.17	10.65	6.35	6.81
Jul	11.46	14.43	10.67	13.64	12.39	6.57	7.20
Aug	10.18	14.62	9.86	11.63	11.38	5.88	6.12
Sep	7.66	11.8	5.88	9.72	8.33	4.58	4.87
Oct	4.96	8.93	3.56	7.70	6.24	3.24	3.37
Nov	2.03	7.45	—	4.75	4.02	2	—
Dec	0.94	5.73	—	3.21	3.12	2	—
	Annual pan evaporation						
inches	66.81	124.00	46.14	109.68	84.67	49.00	39.86
cm	170	315	117	279	215	124	101

$$\text{Pan Coefficient} = K_p = \frac{E_{T_0}}{E_{pan}} \left(\text{or } \frac{E_L}{E_p} \right)$$

(refer to Eq. 12.1.3
in Mays, 2012)

For instance, $K_p \approx 0.7$ (for shallow lakes)
NWS (of NOAA) records changes over time at
stations in the USA (i.e., National Climatic
Data Center).

SOURCE: Wurbs & James, 2002