12105800 HOWARD A. HANSON RESERVOIR NEAR PALMER, WA

LOCATION.--Lat 47°16'38", long 121°47'03", in NE 1/4 SE 1/4 sec.28, T.21 N., R.8 E., King County, Hydrologic Unit 17110013, near left bank on outlet gate structure, just upstream from Howard A. Hanson Dam on Green River, 1.4 mi upstream from Bear Creek, 5.1 mi southeast of Palmer, and at mile 64.5.

DRAINAGE AREA.--220 mi^2, approximately.

PERIOD OF RECORD.--December 1961 to current year.

REVISED RECORDS.--WDR WA-96-1: 1985-1995 maximum and minimum contents.

GAGE.--Water-stage recorder. Datum of gage is sea level, supplementary adjustment of 1947.

REMARKS.--Reservoir is formed by earth-fill dam; completed Mar. 31, 1962; storage began Dec. 5, 1961. Capacity, 105,463 acre-ft between elevations 1,035 ft, invert of outlet tunnel, and 1,206 ft, top of spillway gates. Retained during initial flood conditions, storage is released as soon as possible after a flood to attenuate flows downstream and to maintain reservoir capacity for possible future floods. Storage is used during summer months to augment the natural river flow.

COOPERATION.--Elevations and capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 68,811 acre-ft Feb. 10, 1996, elevation, 1,182.0 ft; minimum contents observed, 34 acre-ft Nov. 2, 1962, elevation, 1,037.6 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,800 acre-ft June 13, elevation, 1,148.7 ft; minimum contents 1,610 acre-ft Nov. 30, elevation, 1,073.6 ft.

Capacity table (elevation, in feet, and total contents, in acre-feet)
(Based on conic method by Corps of Engineers in 1984)

1,045	13	1,080	2,422	1,140	24,622
1,050	64	1,090	4,081	1,150	32,982
1,055	201	1,100	6,313	1,160	42,804
1,060	439	1,110	9,271	1,170	53,902
1,065	777	1,120	13,140	1,180	66,186
1,070	1,220	1,130	18,126	1,190	79,912

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16600	2700	1850	3190	2500	4460	22000	25100	30300	30500	25700	22200
2	18100	2670	2120	3540	2610	4600	23000	24700	30400	30400	25500	22100
3	18300	2610	2440	3060	2780	4740	23200	23600	30500	30300	25400	22000
4	18000	2530	2670	2450	3050	4840	23000	21800	30600	30100	25300	21800
5	17700	2650	2860	2200	4770	4910	22300	20300	30600	29900	25200	21700
6	17200	2890	3040	3090	3770	5010	21700	18900	30700	29600	25000	21600
7	16600	3070	3170	3270	3040	5180	21400	17900	30700	29300	24900	21400
8	15900	3240	3260	2590	2850	5530	21000	18000	30600	29000	24700	21300
9	15300	3600	3270	1960	2710	6260	20500	19000	30700	28600	24600	21100
10	14600	3890	3260	2010	3050	7050	20100	19600	31000	28300	24400	20900
11	13900	4040	3220	1900	3360	7750	20000	20100	31200	28000	24300	20800
12	13200	4120	3110	1830	3540	8330	19900	20800	31500	27700	24200	20600
13	12400	4120	2980	2000	3640	8870	19800	22000	31800	27500	24000	20400
14	11700	4080	2380	2120	3790	9720	19300	23300	31300	27200	23900	20200
15	11000	4000	1820	2130	3970	10600	18700	25300	30800	27000	23700	19600
16	10200	3890	1740	2050	4140	11600	18000	27300	30700	26700	23500	18900
17	9740	3740	1940	2070	4140	12100	17500	29000	30800	26600	23400	18200
18	9200	3570	2120	2060	4160	12500	17300	30000	30800	26600	23300	17900
19	8850	3380	1930	2040	4210	14500	17300	30400	30600	26500	23100	17600
20	8550	3190	1700	2010	4220	17000	17300	30400	30600	26500	23000	17200
21	8840	3050	1670	1940	4220	18100	17400	30200	30600	26500	22800	16900
22	9710	2900	1690	1960	4210	18600	17500	30300	30700	26500	22800	16500
23	10200	2770	1730	2030	4250	18600	17600	30800	30700	26500	22900	16200
24	9970	2800	1780	2070	4320	18300	18000	31000	30600	26500	23000	15800
25	9390	2880	1880	2080	4370	18100	18600	30900	30600	26400	23000	15400
26	8650	3120	1950	2060	4400	18600	19800	30800	30600	26300	22900	15100
27	7850	3980	1980	2060	4410	19100	21900	30700	30500	26200	22800	14800
28	6230	3750	2130	2050	4420	19400	23400	30300	30500	26100	22700	14400
29	4740	2410	2140	2010	---	19800	24300	30200	30500	26100	22600	14100
30	3300	1650	2220	2040	---	20200	24900	30200	30500	25900	22400	13700
31	2730	---	2660	2280	---	20700	---	30300	---	25800	22300	---
MEAN	11569	3243	2345	2263	3746	12098	20223	25910	30733	27584	23784	18680
MAX	18300	4120	3270	3540	4770	20700	24900	31000	31800	30500	25700	22200
MIN	2730	1650	1670	1830	2500	4460	17300	17900	30300	25800	22300	13700
(††)	1081.9	1074.7	1084.1	1080.2	1091.8	1135.5	1140.6	1147.0	1147.2	1141.4	1136.6	1120.6
(†)	2699	1733	3041	2450	4437	21471	25071	30307	30481	25682	22206	13405
(‡)	-12984	-966	+1308	-591	+1987	+17034	+3600	+5236	+174	-4799	-3476	-8801

CAL YR 2000 MEAN 13950 MAX 33100 MIN 1650 AC-FT‡ +267
WTR YR 2001 MEAN 15242 MAX 31800 MIN 1650 AC-FT‡ -2278

†† Monthend elevation, in feet, at 2400 hours.
† Monthend contents, in acre-feet.
‡ Change in Contents, in acre-feet.