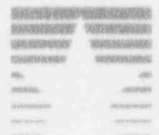

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TU ELECTRIC

April 29, 1994

William J. Cahill, Jr.
Group Vice President

U. S. Nuclear Regulatory Commission
Attn: Document Control Room
Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
ENVIRONMENTAL PROTECTION PLAN
ANNUAL ENVIRONMENTAL OPERATING REPORT FOR 1993

Gentlemen:

Pursuant to Section 5.4.1 of the Environmental Protection Plan (Appendix B to CPSES Unit 1 and Unit 2 Facility Operating License Nos. NPF-87 and NPF-89, respectively), TU Electric hereby submits the CPSES 1993 Annual Environmental Operating Report in the attachment to this letter.

If you have any questions, please contact Richard S. Berk at (214) 812-8952

Sincerely,

William J. Cahill, Jr.

William J. Cahill, Jr.

By: Roger D. Walker
R. D. Walker
Regulatory Affairs Manager

RSB/
Attachment

c - Mr. L. J. Callan, Region IV (clo)
Resident Inspectors, CPSES (2 clo)
Mr. T. A. Bergman, NRR (clo)

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R PDR

400 N. Olive Street L.B. 81 Dallas, Texas 75201

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COMANCHE PEAK STEAM ELECTRIC STATION

UNITS 1 & 2

ANNUAL ENVIRONMENTAL OPERATING REPORT

(NONRADIOLOGICAL)

FACILITY OPERATING LICENSE NOS. NPF-87 & 89

I. INTRODUCTION

This report describes implementation of the Environmental Protection Plan (EPP) for the calendar year 1993 as required by Appendix B to Facility Operating License NPF-87 & 89 for Units 1 & 2.

During 1993, Comanche Peak Steam Electric Station (CPSES) made significant environmental protection achievements and was successful in complying with all environmental monitoring commitments. Some of the more noteworthy achievements included: (1) there were no wastewater discharge permit violations, (2) there were no air permit violations, (3) completed closure of last remaining on-site active Class II landfill, (4) completed Landfills 1, 2, 4, & 5 closure in accordance with Texas Natural Resource Conservation Commission (TNRCC) approved closure plans, (5) completed and implemented the CPSES Stormwater Pollution Prevention Plan (SWPPP) to minimize pollution of stormwater runoff, (6) completed the development of the CPSES Source Reduction/Waste Minimization Plan (SR/WM) that will be implemented in 1994 for reducing hazardous waste generation, (7) completed construction and initiated operation of all components of the new Wastewater Management System (WMS) for processing Low Volume Wastewater, (8) completed closure of the Construction Flush Water Settling Pond (Outfall 401), (9) initiated a demonstration project under Section 316(b) of the Clean Water Act to assess the impact of the circulating water intake structure on aquatic biota with two unit operation.

In addition to the above, significant progress was made in 1993 toward improving CPSES' Mixed Waste Program. CPSES has taken measures to become a storer of Mixed Waste by applying for applicable Resource Conservation & Recovery Act (RCRA) Permits. Also, the CPSES Chemical Overview Group (COG) was formed during 1993. This group's charter is to evaluate and control the use of all chemicals/consumables on-site. Environmental is an integral component of this group and the COG will be instrumental in minimizing the generation of Mixed Waste, as well as nonradioactive hazardous waste.

II. SCOPE

Section 5.4.1 of the EPP requires that CPSES submit to the NRC an Annual Environmental Operating Report that shall address the following environmental protection activities:

A. Summaries and analyses of the results of the

environmental protection activities required by Section 4.2 of the EPP, including a comparison with related preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of plant operation on the environment. If harmful effects or evidence of trends toward irreversible damage to the environment are observed, a detailed analysis of the data and a proposed course of mitigating action is required. Section 4.2 of the EPP pertains to results from:

1. Groundwater levels and station water use monitoring.

2. Water treatment facility outages impact assessment and reporting.

B. The report shall also include:

1. A list of EPP noncompliance and the corrective actions taken to remedy them.

2. A list of all changes in station design and operation, tests, and experiments made in accordance with Subsection 3.1 of the EPP which involved a potentially significant unreviewed environmental question.

3. A list of nonroutine reports submitted in accordance with Subsection 5.4.2 of the EPP.

4. A summary list of National Pollutant Discharge Elimination System (NPDES) permit-related reports relative to matters identified in Subsection 2.1 of the EPP which were sent to the EPA Region VI during the report period. Subsection 2.1 of the EPP pertains to aquatic matters that are addressed by the effluent limitations, monitoring requirements and the Section 316(b) demonstration requirement (effects of intake structure on aquatic biota during operation) contained in the EPA NPDES station wastewater discharge permit.

III. RESULTS OF ACTIVITIES

A. As required by Subsection 4.2 of the EPP, the following are summaries and analyses of the results of the

environmental protection activities during 1993. Based on these activities, there were no observed environmental impacts resulting from plant operation during 1993.

1. Groundwater Pumpage

As indicated in Table 1, groundwater pumpage during 1993 averaged 28.5 gals./min. (gpm) or 15,139,100 total gallons withdrawn for the year. This withdrawal rate represents a 14% decrease from the 1992 average rate of 33.2 gpm.

Average monthly withdrawal rates fluctuated from a low of 13.0 gpm in January to a high of 39.4 gpm in July, then gradually decreased to 21.6 gpm in December.

All groundwater withdrawn during 1993 was used for potable and sanitary purposes only and no groundwater was used to supplement the station's Surface Water Treatment System. Also, there was no treated surface water used to supplement the potable water system. In fact, CPSES has physically eliminated surface water as a potable water source due to heightened regulatory restrictions on surface waters used for potable water supplies, as well as plant operational considerations.

The average annual pumpage rate of 28.5 gpm for 1993 represents 22% of the predicted operational pumpage (127 gpm) identified in Section 3.3 of the Station's Environmental Report-Operational License Stage. This rate also represents approximately 18% of the actual average withdrawal rate (158 gpm) reported in the Station's Final Environmental Statement-Operating Licensing Stage (Section 5.3.1.2) for the period 1975 to May 1979.

The combined annual rate for all recorded preoperational groundwater pumpage averaged 68.8 gpm, while the average operational pumpage for the period 1990 through 1993 was 30.5 gpm. Therefore, the average operational rates were 56% less than the groundwater pumpage during the preoperational period. Figure 1 illustrates the annual fluctuation of groundwater withdrawal over the entire preoperational and operational period.

2. Groundwater Levels

As indicated in Table 2, the groundwater level in the on-site observation well OB-3 (entrance to Plant Access Road) fluctuated during 1993 from a high level in April of 542.2 ft. MSL to a low level in September of 530.6 ft. MSL. Overall the water level in OB-3 during the reporting period (January through December) decreased 4.5 ft. (1.37m).

The groundwater level in observation well OB-4 (Squaw Creek Park) fluctuated during 1993 from a high level in April of 583.4 ft. MSL to a low level in November of 576.7 ft. MSL. Overall, the water level in OB-4 during the reporting period decreased 4.8 ft. (1.46m). As noted in Table 2, January's level reading was not used for tabulating data for OB-4. This reading was suspect due to the extreme water level increase (11.6 ft.) then decrease (10.3 ft.) it reflected from December 1992 to February 1993.

The 1993 annual average groundwater levels in wells OB-3 and OB-4 were 537.1 ft. MSL and 580.3 ft. MSL, respectively. These average levels demonstrated a decline of 5.3 ft. (1.62 m) for OB-3 and 3.8 ft. (1.16 m) for OB-4 from the respective average 1992 levels (Figure 2). However, groundwater pumpage actually decreased from an annual average of 33.2 gpm in 1992 to 28.5 gpm in 1993. Consequently, it appears the decline in annual average water levels between the two reporting periods is attributable to other factors. For instance, precipitation [1] during 1993 was 31.6 inches compared to 40.6 inches in 1992 (22% decrease). Another factor that may have influenced this decline in water levels, is the additional industrial and recreational facilities constructed in the nearby City of Glen Rose that began operation in 1992 (e.g. Squaw Valley Golf Course, Somervell County Exposition Center, expansion of Somervell County Hospital, construction of a new Nursing Home).

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[1] Precipitation data as recorded in official records maintained for the U. S. Weather Service by a local observer located in Glen Rose, Texas (Somervell County).

3. Surface Water Treatment System Operation
The station's Water Treatment System processed 169,632,000 total gallons (323 gpm) of surface water during 1993 for plant process use. There were no outages during 1993 that required reporting in accordance with Section 4.2.2 of the EPP.

The following is a summary list of monthly surface water usage.

MONTH	SURFACE WATER PROCESSED, GALS.
JANUARY	3,010,900
FEBRUARY	1,858,400
MARCH	23,324,020
APRIL	18,407,880
MAY	16,002,000
JUNE	13,991,500
JULY	17,976,300
AUGUST	14,529,100
SEPTEMBER	19,265,500
OCTOBER	21,398,800
NOVEMBER	1,837,400
DECEMBER	18,030,900
TOTAL	**169,632,000**

B. EPP Noncompliance and Corrective Actions-subsection 5.4.1(1)

There were no noncompliances with the requirements of the EPP during the reporting period.

C. Changes In Station Design or Operation, Tests, and Experiments Made in Accordance With Subsection 3.1 Which Involved a Potentially Significant Unreviewed Environmental Question

There were no changes in station design or operation, nor tests or experiments conducted during the reporting period that are reportable under this subsection.

D. Nonroutine Reports Submitted In Accordance With Subsection 5.4.2

There were no nonroutine reports submitted under this Subsection.

E. NPDES Permit-Related Reports Relative To Matters Identified In Subsection 2.1

Routine monthly Discharge Monitoring Reports (DMR) for all wastewater outfalls were submitted to the EPA and TNRCC for each month during 1993. The following is a summary list of correspondence submitted to the EPA relating to these DMRs.

MONTH MONITORED	LOG NUMBER/DATE
JANUARY	TXX-93115/ 02-25-93
FEBRUARY	TXX-93145/ 03-25-93
MARCH	TXX-931193/ 04-23-93*
APRIL	TXX-931193/ 05-25-93*
MAY	TXX-93253/ 06-25-93
JUNE	TXX-93275/ 07-23-93
JULY	TXX-93314/ 08-25-93
AUGUST	TXX-93329/ 09-24-93
SEPTEMBER	TXX-93371/ 10-25-93
OCTOBER	TXX-93405/ 11-24-93
NOVEMBER	TXX-93425/ 12-20-93
DECEMBER	TXX-94025/ 01-25-94

* Correspondence numbers were inadvertently duplicated.

There were no wastewater discharge permit violations in 1993. This represents a significant reduction from the six violations that occurred in 1992.

Two on-site spills occurred during 1993 that required notification to the TNRCC within 24 hours. The National Response Center was also notified of the spills. These incidents were verbally reported to the NRC.

The two notifications were made to report petroleum releases at the on-site Fuel Island. The first release (gasoline and diesel) was discovered on August 25, 1993

and contractors were hired to assess the nature and extent of this release. Remediation of all petroleum contaminated soil is on-going and is expected to be complete in May 1994. Contaminated soil is being thermally treated to less than 200 ppm total petroleum hydrocarbons. The remediation criteria being employed is in accordance with the TNRCC Risk Reduction Rules Subchapter S Clean-up Criteria No. 2 for each constituent of Benzene, Toluene, Ethylbenzene, and Xylene (BTEX). A temporary fuel dispensing facility was established pending completion of remediation activities and construction of a new permanent fuel dispensing facility.

The second reportable release occurred on November 22, 1993 at the temporary fuel dispensing facility when 37 gallons of gasoline was released from a failed pipe union. All contaminated soil associated with this release was removed and will be thermally treated.

As previously indicated, a monitoring program was initiated in 1993 to assess the impingement and entrainment impact of the circulating water intake structure on aquatic biota. This program is being implemented under the provisions of Section 316(b) of the Clean Water Act. The Final Environmental Statement Related To The Operation Of CPSES Units 1 and 2 required that this program be initiated after Unit 2 Operating License. The 316(b) study was initiated in October 1993 and the sampling program will continue for one year.

TABLE 1

SUMMARY OF GROUNDWATER PUMPAGE
For 1993

MONTH	PLANT WELL 1		PLANT WELL 2		NOSF WELL 1		NOSF WELL 2		TOTALS		NO. OF DAYS BETWEEN READINGS
	TOTAL	AVG.	TOTAL	AVG.	TOTAL	AVG.	TOTAL	AVG.	TOTAL	AVG.	
	Gals.	Gals. Per Min.	Gals.	Gals. Per Min.	Gals.	Gals. Per Min.	Gals.	Gals. Per Min.	Gals.	Gals. Per Min.	
January	493,800	9.80	30,000	0.60	60,200	1.19	68,700	1.36	652,700	12.95	35
February	477,600	11.85	0	0.00	55,300	1.37	76,300	1.89	609,200	15.11	28
March	645,800	14.47	18,000	0.40	52,700	1.18	80,1000	1.79	796,600	17.84	31
April	631,100	13.70	627,900	13.63	60,600	1.32	74,600	1.62	1,394,200	30.26	32
May	674,700	16.16	725,300	17.37	62,300	1.49	60,800	1.46	1,523,100	36.47	29
June	581,000	13.45	702,200	16.25	99,800	2.31	110,500	2.56	1,493,500	34.57	30
July	634,000	13.76	870,400	18.89	129,000	2.80	180,400	3.91	1,813,800	39.36	32
August	463,100	10.72	849,000	19.65	163,500	3.78	144,700	3.35	1,620,300	37.51	30
Sept.	160,500	3.72	1,183,000	27.38	165,300	3.83	156,500	3.62	1,665,300	38.55	30
October	825,500	18.49	356,200	7.98	97,200	2.18	117,100	2.62	1,396,000	31.27	31
November	1,108,600	24.83	0	0.00	63,100	1.41	68,700	1.54	1,240.400	27.79	31
December	835,000	19.33	0	0.00	49,100	1.14	49,900	1.16	934,000	21.62	30
TOTAL	7,530,700	14.17	5,362,000	10.09	1,058,100	1.99	1,188,300	2.24	15,139,100	28.49	369

TABLE 2

1993 SUMMARY OF GROUNDWATER

LEVELS IN OBSERVATION WELLS

MONTH	WELL OB-3 (G-3)		WELL OB-4 (G-4)	
	DEPTH (1)	MSL (2)	DEPTH (1)	MSL (2)
JANUARY	253.8	540.0	258.1 (4)	592.7(4)
FEBRUARY	253.2	540.3	268.4	582.4
MARCH	252.4	541.4	267.6	583.2
APRIL	251.6	542.2	267.4	583.4
MAY (3)	251.8	542.0	267.5	583.3
JUNE (3)	255.4	538.4	269.8	581.0
JULY (3)	257.4	536.4	270.2	580.6
AUGUST (3)	260.3	533.5	271.9	578.9
SEPTEMBER (3)	263.2	530.6	272.1	578.7
OCTOBER (3)	262.8	531.0	273.3	577.5
NOVEMBER (3)	260.1	533.7	274.1	576.7
DECEMBER (3)	258.3	535.5	273.2	577.6

ANNUAL GROUNDWATER LEVEL CHANGE FOR 1993:

Well OB-3: 253.8 ft. - 258.3 ft. = (-) 4.5 ft. = (-) 1.4 m (Decline)

Well OB-4: 268.4 ft. - 273.2 ft. = (-) 4.8 ft. = (-) 1.5 m (Decline)

NOTES:

(1) Depth to water table (ft.).

(2) Water table elevation (ft.).

(3) Levels represent average levels based on weekly readings taken when previous month pumpage exceeds 30 gpm.

(4) This data point is suspect and was not used for tabulating level change or annual average level for well OB-4. December 1992 level reading for OB-4 was 269.7 ft. (581.1 ft., MSL).

FIGURE 1
SUMMARY OF GROUNDWATER PUMPAGE
1975 THROUGH 1993 (GPM)

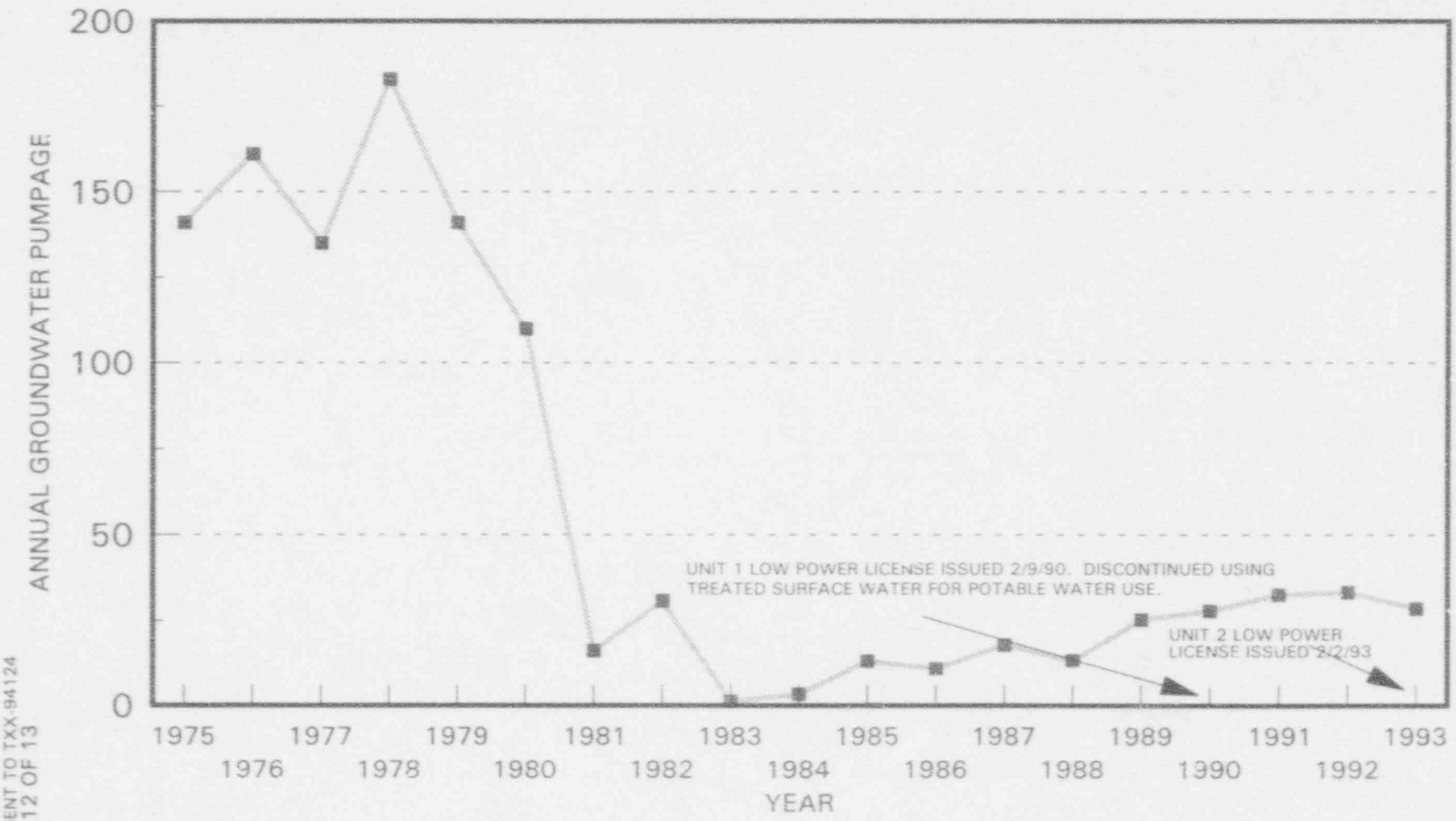
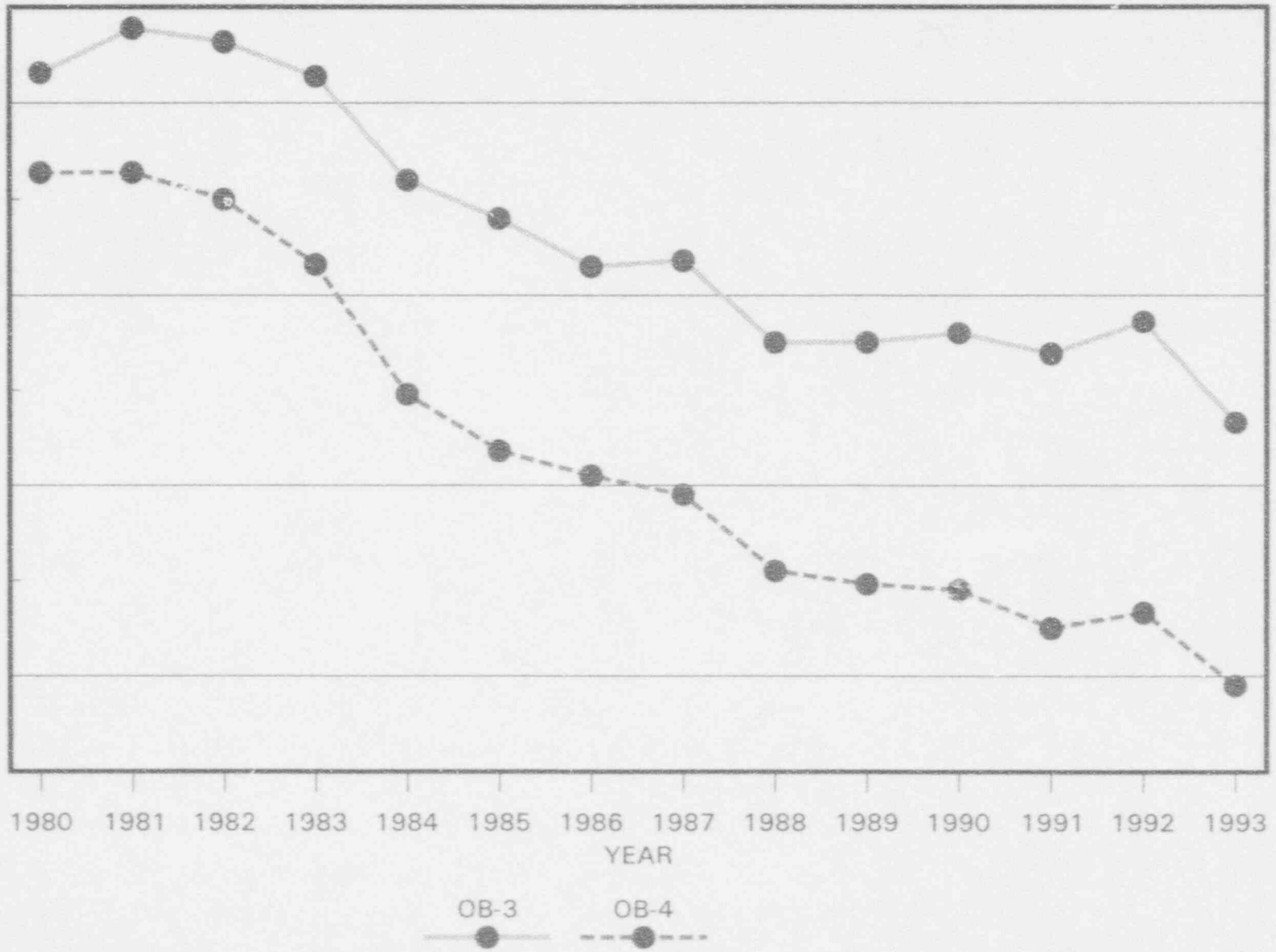
FIGURE 2
ANNUAL AVERAGE GROUNDWATER LEVEL