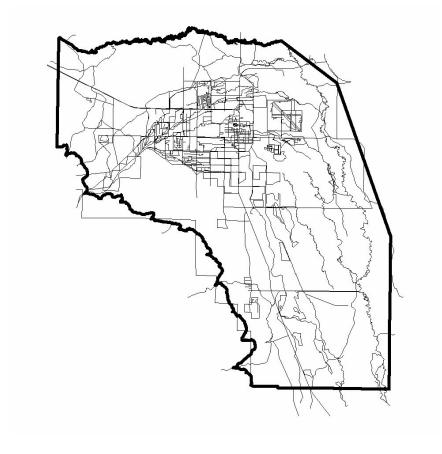
APPENDIX A – THE BISHOP CONE AUDIT FOR 2003-2004

(Provided by ICWD)

ICWD INTERNAL TECHNICAL GROUP REVIEW DRAFT

THE BISHOP CONE AUDIT FOR THE 2003-2004 RUNOFF YEAR



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Inyo County Water Department Report 2004-1 June 16, 2004

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INTRODUCTION

The Bishop Cone audit is an annual accounting of Los Angeles Department of Water and Power's (LADWP) groundwater extraction and water usage on Los Angeles-owned lands on the Bishop Cone. Section VII.A of the Inyo County/Los Angeles long-term groundwater management agreement provides that, "Before the Department may increase groundwater pumping above present levels, or construct any new wells on the [Bishop] Cone, the Technical Group must agree on a method for determining the exact amount of water annually used on Los Angeles-owned lands on the Cone. The agreed upon method shall be based on a jointly conducted audit of such water uses." (See Appendix A of this report for Section VII.A of the Inyo County/Los Angeles long-term groundwater management agreement).

At its October 17, 1995 meeting, the Technical Group agreed to recommend to the Inyo County/Los Angeles Standing Committee the description of a Bishop Cone audit procedure to be incorporated into the Green Book. That audit procedure is attached (See Appendix A of this report for section IV.D of the Green Book). The Green Book is the technical appendix to the long-term agreement. The Inyo County/Los Angeles Standing Committee adopted the procedure on November 7, 1996 as section IV.D of the Green Book.

WATER USES ON LADWP-OWNED LAND ON THE BISHOP CONE

Section IV.D.1.a. of the Green Book states, "For the purposes of the Bishop Cone audit, water usage on Los Angeles-owned land on the Bishop Cone is defined as the quantity of water supplied to such land, including conveyance losses, less any return flow to the aqueduct system" (See Appendix A). Table 1, below, is a compilation of water usage in acre-feet (AF) on LADWP-owned land on the Bishop Cone for the runoff years of 2002-2003 and 2003-2004.

TABLE 1. WATER USES ON LOS ANGELES-OWNED LAND ON THE BISHOP CONE.

LADWP	RUNOFF YEAR*	RUNOFF YEAR*
ACCOUNT NUMBER	2002-2003 (AF)	2003-2004 (AF)
BA354B or BA362B	746.00	718.00
BA302A	52.00	66.00
BA302B	944.72	803.48
BA311	3,016.45	2,661.07
BA313	837.23	563.77
BA324A	1,755.06	1,460.64
BA324C	NO DATA	NO DATA
BA387A	763.00	730.00
BARECF	781.63	376.85
BA339	230.67	232.54
BA342	0.00	NO DATA
BA362C	NO DATA	NO DATA

LADWP	RUNOFF YEAR*	RUNOFF YEAR*
ACCOUNT NUMBER	2002-2003 (AF)	2003-2004 (AF)
BA362D	26.12	27.97
BA304	205.00	85.00
BA324B	88.67	29.03
BA387B	NO DATA	NO DATA
BA397 (SAME AS BA387B-NEW LEASE HOLDER)	3,957.86	2,757.09
BA361A	910.92	1,602.14
BA361B	2,167.26	1,001.66
BA354A or 362A	1,122.00	908.00
BARECA	391.00	520.00
BARECC	86.00	103.00
BARECD	2,785.00	2,744.00
BA338	2,296.53	2,430.37
BAOPRA	0.00	0.00
BAOPRB	0.00	0.00
BAGWRA	NO DATA	NO DATA
RV361	78.54	56.02
RV361B	NO DATA	NO DATA
RVRECA	665.00	708.00
LARECB	NO DATA	NO DATA
LAE&MH	586.00	433.00
BAICR	NO DATA	NO DATA
BA1478 (SAME AS BAICR-NEW LEASE HOLDER)	343.58	510.25
BA353	232.85	94.00
BA393	111.00	76.00
*BAGOLF	0.00	0.00
*BA005A	0.00	0.00
*BA005B	0.00	0.00
*BA006A	0.00	0.00
TOTAL	25,180.09	21,697.88

^{*} A runoff year is defined as starting April 1st and ending March 31st of the following year.

Figure 1, below, is a bar graph comparing water use in LADWP account numbers on the Bishop Cone for runoff years 2002-2003 and 2003-2004. In general, there was a decrease in water use, on most accounts from runoff years 2002-2003 to 2003-2004 as well as an overall total decrease in water use of 3,482.21 acrefeet. Four of the new accounts first reported in 2002-2003 have no reported uses (See Table 1, BAGOLF, BA005A, BA005B and BA006A). Additional measuring

^{*} Accounts were first listed in the 2002-2003 runoff year. The accounts (BAGOLF, BAOO5A, BA005B and BA006A) are active water use accounts, but in the past have been denied by Inyo for lack of measuring devices. Devices are currently being installed. NO DATA –The Account was not active, no data was reported. 0.00-The account was active, no use was reported, data was 0.00 acre-feet.

devices are currently being installed to measure water use associated with these four new accounts. A field inspection will be conducted on these four new accounts when measurement device construction is complete to determine if any reported use should be credited in the Bishop Cone Audit.

FIGURE 1: LADWP BISHOP CONE WATER USE COMPARISON FOR RUNOFF YEARS 2002-2003 AND 2003-2004

TOTAL LADWP GROUNDWATER EXTRACTION ON LADWP-OWNED LAND ON THE BISHOP CONE FOR RUNOFF YEARS 2002-2003 AND 2003-2004

■ RUNOFF YEAR 2002-2003 (AF) ■ RUNOFF YEAR 2003-2004

Section IV.D.1.d of the Green Book states, "Total groundwater extraction by LADWP will be compared with corrected water usage on the Bishop Cone for the runoff year. Total groundwater extraction is defined as the sum of all groundwater pumped by LADWP plus the amount of artesian water that flowed out of LADWP uncapped wells on the Bishop Cone during the runoff year."

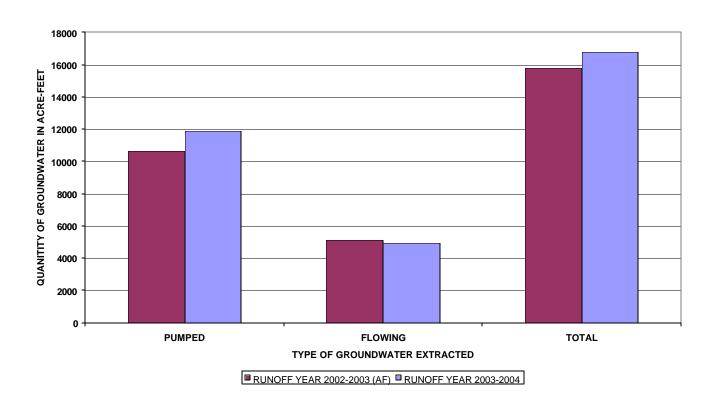
Total groundwater LADWP extraction and groundwater extraction classified as flowing and pumped groundwater in acre-feet, on the Bishop Cone for the runoff years of 2002-2003 and 2003-2004, are shown in Table 2, below.

TABLE 2. TYPE OF GROUNDWATER EXTRACTION ON LADWP LANDS ON THE BISHOP CONE

TYPE OF GROUNDWATER	RUNOFF YEAR 2002-2003 (AF)	RUNOFF YEAR 2003-2004 (AF)
PUMPED	10,644.00	11,884.00
FLOWING	5,135.00	4,919.00
TOTAL	15,779.00	16,803.00

Total groundwater extraction and groundwater extraction classified as flowing and pumped groundwater in acre-feet on LADWP-owned land on the Bishop Cone are shown in a bar chart in Figure 2, below.

FIGURE 2: TYPE OF LADWP GROUNDWATER AND TOTAL GROUNDWATER EXTRACTION ON THE BISHOP CONE FOR RUNOFF YEARS 2002-2003 AND 2003-2004



COMPLIANCE WITH THE INYO COUNTY/LOS ANGELES LONG-TERM GROUNDWATER MANAGEMENT AGREEMENT

The Inyo County/Los Angeles long-term groundwater management agreement provides that, during any runoff year, total groundwater extraction by LADWP on the Bishop Cone shall not exceed water usage on Los Angeles-owned land on

the Cone. Table 3, below, shows that LADWP was within compliance with the above provision.

TABLE 3. LADWP USES IN COMPARISON TO LADWP GROUNDWATER EXTRACTION ON THE BISHOP CONE.

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	RUNOFF YEAR 2002-2003(AF)	RUNOFF YEAR 2003-2004(AF)
TOTAL USES	25,180.09	21,697.88
TOTAL GROUNDWATER EXTRACTION	15,779.00	16,803.00

APPENDIX A

Section VII.A of the Inyo County/Los Angeles Long-Term Groundwater Management Agreement

Section IV.D of the Green Book

APPENDIX B

Data on Uses and Total Groundwater Extracted on the Bishop Cone Supplied by LADWP