APPENDIX A – THE BISHOP CONE AUDIT FOR 2003-2004

(Provided by ICWD)
THE BISHOP CONE AUDIT FOR THE 2003-2004 RUNOFF YEAR

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Inyo County Water Department
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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>
<thead>
<tr>
<th>ACCOUNT NUMBER</th>
<th>RUNOFF YEAR* 2002-2003 (AF)</th>
<th>RUNOFF YEAR* 2003-2004 (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA354B or BA362B</td>
<td>746.00</td>
<td>718.00</td>
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<td>BA302A</td>
<td>52.00</td>
<td>66.00</td>
</tr>
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<td>BA302B</td>
<td>944.72</td>
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<td>BA313</td>
<td>837.23</td>
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<td>BA324C</td>
<td>NO DATA</td>
<td>NO DATA</td>
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<tr>
<td>BA387A</td>
<td>763.00</td>
<td>730.00</td>
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<tr>
<td>BARECF</td>
<td>781.63</td>
<td>376.85</td>
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<td>230.67</td>
<td>232.54</td>
</tr>
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<td>BA342</td>
<td>0.00</td>
<td>NO DATA</td>
</tr>
<tr>
<td>BA362C</td>
<td>NO DATA</td>
<td>NO DATA</td>
</tr>
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<td>LADWP ACCOUNT NUMBER</td>
<td>RUNOFF YEAR*</td>
<td>RUNOFF YEAR*</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>2002-2003 (AF)</td>
<td>2003-2004 (AF)</td>
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<tr>
<td>BA362D</td>
<td>26.12</td>
<td>27.97</td>
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<td>BA304</td>
<td>205.00</td>
<td>85.00</td>
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<tr>
<td>BA324B</td>
<td>88.67</td>
<td>29.03</td>
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<tr>
<td>BA387B</td>
<td>NO DATA</td>
<td>NO DATA</td>
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<tr>
<td>BA397 (SAME AS BA387B - NEW LEASE HOLDER)</td>
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<tr>
<td>BA361A</td>
<td>910.92</td>
<td>1,602.14</td>
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<td>BA361B</td>
<td>2,167.26</td>
<td>1,001.66</td>
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<tr>
<td>BA354A or 362A</td>
<td>1,122.00</td>
<td>908.00</td>
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<td>BARECA</td>
<td>391.00</td>
<td>520.00</td>
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<td>BARECC</td>
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<td>BARECD</td>
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<td>BA338</td>
<td>2,296.53</td>
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<td>BAOPRA</td>
<td>0.00</td>
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<td>BAOPRB</td>
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<td>NO DATA</td>
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<tr>
<td>RV361</td>
<td>78.54</td>
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<td>NO DATA</td>
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<td>RVRECA</td>
<td>665.00</td>
<td>708.00</td>
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<td>LAE&amp;MH</td>
<td>586.00</td>
<td>433.00</td>
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<td>510.25</td>
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<td>BA353</td>
<td>232.85</td>
<td>94.00</td>
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<td>BA393</td>
<td>111.00</td>
<td>76.00</td>
</tr>
<tr>
<td>*BAGOLF</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>*BA005A</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>*BA005B</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>*BA006A</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>25,180.09</strong></td>
<td><strong>21,697.88</strong></td>
</tr>
</tbody>
</table>

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

* Accounts were first listed in the 2002-2003 runoff year. The accounts (BAGOLF, BA005A, 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.

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 acre-feet. Four of the new accounts first reported in 2002-2003 have no reported uses (See Table 1, BAGOLF, BA005A, BA005B and BA006A). Additional measuring
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**


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

<table>
<thead>
<tr>
<th>TYPE OF GROUNDWATER</th>
<th>RUNOFF YEAR 2002-2003 (AF)</th>
<th>RUNOFF YEAR 2003-2004 (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUMPED</td>
<td>10,644.00</td>
<td>11,884.00</td>
</tr>
<tr>
<td>FLOWING</td>
<td>5,135.00</td>
<td>4,919.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15,779.00</td>
<td>16,803.00</td>
</tr>
</tbody>
</table>

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.


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.**

<table>
<thead>
<tr>
<th></th>
<th>RUNOFF YEAR 2002-2003(AF)</th>
<th>RUNOFF YEAR 2003-2004(AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL USES</strong></td>
<td>25,180.09</td>
<td>21,697.88</td>
</tr>
<tr>
<td><strong>TOTAL GROUNDWATER</strong></td>
<td>15,779.00</td>
<td>16,803.00</td>
</tr>
<tr>
<td><strong>EXTRACTION</strong></td>
<td></td>
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</tbody>
</table>
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