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9 CITY OF LOS ANGELES ACTING BY AND THROUGH ITS DEPARTMENT OF WATER
AND POWER OF THE CITY OF LOS ANGELES

10 **SUPERIOR COURT OF CALIFORNIA**
11 **COUNTY OF INYO**

12 CITY OF LOS ANGELES; DEPARTMENT
13 OF WATER AND POWER OF THE CITY
OF LOS ANGELES,

14 Plaintiffs,

15 vs.

16 BOARD OF SUPERVISORS OF THE
17 COUNTY OF INYO; THE COUNTY OF
18 INYO; JOHN K. SMITH, COUNTY
ADMINISTRATIVE OFFICER; INYO
19 COUNTY WATER COMMISSION; AND
DOES 1 THROUGH 50,

20 Defendants.

Case No. 12908

RESPONSE BRIEF

**ISSUE SUBMITTED TO DISPUTE
RESOLUTION PURSUANT TO
STIPULATION AND ORDER FOR
JUDGMENT**

21
22 **TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD HEREIN:**

23
24 **PLAINTIFFS, CITY OF LOS ANGELES ACTING BY AND THROUGH ITS**
25 **DEPARTMENT OF WATER AND POWER**, hereby submits its Response Brief to Inyo
26 County's Opening Brief, pursuant to Stipulation and Order for Judgment as follows:

1 attempts to bootstrap its faulty assumption into an evaluation of LADWP's actions as a
2 member of the Technical Group. Before this panel may evaluate the substance of the
3 ICWD Report, it must first find that the ICWD Report itself was the product of Technical
4 Group activity, based on a Technical Group evaluation of Blackrock 94, and that LADWP's
5 repeated objection to the County's evaluation was, in fact, provided in LADWP's capacity
6 as a Technical Group member, while performing a Technical Group analysis. As noted,
7 however, the County has provided no evidence for this panel to make such a finding and
8 LADWP's Opening Brief exhaustively details the specific requirements of the Technical
9 Group and provides uncontroverted evidence that the County acted unilaterally, in clear
10 contravention of the Water Agreement, in generating the ICWD Report. Moreover, LADWP
11 has never asserted that any response made to the ICWD Report should be considered
12 Technical Group activity. To the contrary, any and all responses from LADWP, to the
13 County, related to the ICWD Report were solely submitted by LADWP as an independent
14 agency, not pursuant to its status as a Technical group member. Consequently, this panel
15 is without jurisdiction to analyze the substance of the ICWD Report and may not accept its
16 conclusions because they are not the product of Technical group activity under the Water
17 Agreement.

18 Despite the ICWD Report's procedural flaws, this panel must also reject the ICWD
19 Report because it is not scientifically supportable and it does not conform to the vegetation
20 monitoring and analysis procedures in the Water Agreement and Green Book. In the end,
21 whether this panel elects to evaluate the ICWD Report in light of the procedural rules found
22 in the Water Agreement, or it elects to evaluate the substance of the ICWD Report, it must
23 find that no measurable, significant change has occurred at Blackrock 94 that is attributable
24 to LADWP's groundwater pumping under the Water Agreement.

25 **II. LADWP Fully Participated in the Technical Group Process on all Matters**
26 **Concerning Blackrock 94.**

1 The County's argument relating to its assertion that the ICWD Report constitutes
2 Technical Group action under the Water Agreement has two primary components: First, the
3 County argues that the mere passage of time, two years, between the date of the ICWD
4 Report and the County's initiation of the current dispute somehow establishes that LADWP
5 has prevented the Technical Group from resolving issues related to Blackrock 94.¹
6 Second, the County appears to argue that LADWP authorized the County to independently
7 evaluate Blackrock 94 and produce the ICWD Report, therefore constituting Technical
8 Group action in a manner sufficient to create a disputable issue. Setting aside LADWP's
9 contention that it had no obligation to address the ICWD Report because it was the
10 unilateral work product of the County, both arguments fail.

11 **A. LADWP did not Prevent the Technical Group from Considering Alleged**
12 **Vegetation Impacts at Blackrock 94.**

13 The County's Opening Brief ("COB") argues that "[d]ue to the actions of LADWP,
14 neither the Technical Group nor the Standing Committee has been able to address the
15 conditions in Blackrock 94 and the need for the development of a mitigation plan in an
16 expeditious fashion." COB, p. 26. The County further argues that "LADWP has not
17 addressed the substantive issues raised by the County, while at the same time using the
18 lack of progress as a reason why the core issues cannot be addressed at any level.
19 LADWP's tactics have deprived the County of the remedies in the LTWA for achieving the
20 vegetation management goals and for mitigation of ongoing damage to the environment in
21 the County." Id. Neither of the County's assertions has merit.

22 **1. LADWP did not Interfere with either the Technical Group or the**
23 **Standing Committee's Ability to Address Blackrock 94.**

24 ¹ Interestingly, and more fully discussed below, the County alleges that impacts to
25 vegetation at Blackrock 94 occurred before 1991 and have "persisted in time." Despite
26 alleging impacts that occurred over 20 years ago, the County's primary procedural
27 argument is that his process has taken too long.

1 The County has provided no evidence that establishes that LADWP has interfered
2 with either the Technical Group or the Standing Committee's right or ability to address
3 Blackrock 94. To the contrary, LADWP has repeatedly insisted that the Technical Group
4 engage in a comprehensive evaluation of Blackrock 94. Instead, the County has insisted
5 that the ICWD Report stands on its own, constitutes Technical Group action and must be
6 the basis of any Technical Group decision related to Blackrock 94. The County's position is
7 entirely contrary to the provisions of both the Water Agreement and the Green Book.

8 LADWP's Opening Brief Section 6.B.1-6 establishes the procedures and protocols
9 for Technical Group activity relating to analyzing alleged impacts to vegetation under the
10 Water Agreement. Without repeating that entire explanation, at its core, the Water
11 Agreement mandates that "all monitoring, analysis and interpretation of results shall be
12 done by the Technical Group." This provision is not qualified and contains no exceptions.
13 The County can point to no provision of the Water Agreement or the Green Book that
14 authorizes either the County or LADWP to circumvent the clear language of those
15 documents in a manner that enables either agency to prepare a vegetation monitoring
16 analysis and thereafter attempt to shoehorn the objecting agency into accepting its results.
17 To the contrary, if such action were authorized it would undermine the cooperative intent of
18 the Water Agreement and run afoul of its contractual purpose. Specifically, if the County's
19 argument succeeds, it will create a circumstance in which the Technical Group will be
20 reduced voting on competing, individually created reports, without ever engaging in any
21 joint monitoring or analysis as is mandatory under the Water Agreement. No longer will the
22 Technical Group engage in any substantive evaluation of environmental conditions in the
23 Owens Valley, instead, each Technical Group member will simply pursue its own course of
24 monitoring, data collection and monitoring and it will be left to future arbitration panels to
25 act as the Technical Group. Plainly, that was not the intent of the Water Agreement.

1 Rather than point to any section of the Water Agreement or Green Book to support
2 its contention that LADWP has interfered with the Technical Group's ability to address
3 Blackrock 94, the County instead relies on the mere passage of time as evidence that
4 LADWP has prevented "expeditious" action by the Technical Group. According to the
5 County, LADWP has prevented expeditious Technical group activity because "[i]t has been
6 over five years since the [County] first raised [its] concerns regarding parcel Blackrock 94,
7 and over 2 years since the County presented its comprehensive report to the Technical
8 Group." COB, p. 26. Unfortunately for the County's assertion, there are no timelines
9 established in the Water Agreement. Moreover, even though the Technical Group must act
10 in an expeditious manner, any evaluation of Technical Group efficiency may only begin
11 when the Technical Group has actually begun work on a particular issue. In this case, the
12 Technical Group has yet to initiate a joint evaluation of Blackrock 94, so any argument that
13 LADWP has interfered with Technical Group process has no merit.

14 More troubling, rather than confront the clear intent of the Water Agreement, that
15 LADWP and the County jointly perform all data collection, monitoring and analysis, within
16 the confines of the Technical Group, the County instead skips those relevant sections of
17 the Water Agreement and Green Book and turns its attention to the factors that the
18 Technical Group uses in a measurability analysis. Although the County is correct that a
19 "determination of measurability will be made if any of the relevant factors considered
20 indicate even a small documentable change in vegetation cover or composition has
21 occurred", that determination must be made by the Technical Group, not unilaterally by the
22 County, as it did in the ICWD Report. The County is not permitted to cherry-pick those
23 sections of the Water Agreement and Green Book that support its unilateral analysis and
24 resulting conclusions. The Water Agreement and Green Book exist as a comprehensive
25 framework for vegetation management, and neither party is empowered to circumvent the
26

1 explicit processes set forth in that contract in order to hijack the cooperative process in
2 support of its own independently generated conclusions.

3 In this case, the Technical Group has never engaged, under the provisions and
4 protocols of the Water Agreement and Green Book, in any evaluation of Blackrock 94. The
5 only activity that has occurred, related to Blackrock 94, is the County's issuance of its
6 independently created ICWD Report, and LADWP's unilaterally created responses. Neither
7 of those actions were performed within the structure of the Technical Group, and thus there
8 is no argument that the Technical Group has failed to act in an expeditious manner, and no
9 argument that LADWP has interfered with the Technical Groups ability to evaluate
10 Blackrock 94.

11 **2. The County Failed to Engage the Technical Group in its Unilateral**
12 **Analysis of Blackrock 94.**

13 The County attempts to cloud the issue at hand by stating that "[t]he issues
14 [concerning Blackrock 94] should not be referred back to the Technical Group. A failure to
15 reach a conclusion regarding this issue can only raise serious questions about the viability
16 of the LTWA's process for ongoing avoidance and mitigation of significant impacts." COB,
17 p. 26. The County's statement does not provide any evidentiary support for its argument
18 that the Technical Group failed to act in an expeditious manner. Rather, it is a clear
19 acknowledgement that the Technical Group has not yet engaged in the evaluation of
20 Blackrock 94. In this case, it was the County's decision to circumvent the Technical Group
21 that has resulted in the delay that the County characterizes as lacking expediency. If,
22 instead of ignoring the Water Agreement and the Technical Group, the County had fully
23 engaged LADWP from the outset, as member of the Technical Group, this issue could have
24 been fully explored and evaluated. Unfortunately, the County chose to "go its own way"
25 and cannot now force its unilateral conclusions upon LADWP through dispute resolution.

1 Finally, the County attempts to provide an explanation regarding the manner in
2 which the Technical Group performs work pursuant to the Water Agreement. According to
3 the COB:

4 Since its inception, the Technical Group has customarily conducted its work
5 by one side presenting data or analysis to the Technical Group for
6 consideration by the other side. Thereafter, the two sides can either reach
7 consensus and agree on a course of action, or disagree, and either side is
8 entitled to submit the resulting disagreement to the LTWA dispute resolution
9 process (LTWA Section XXVI). Typically, when one side is concerned with a
10 particular issue, it raises the issue to the Technical Group by presenting an
11 analysis or report to the Technical Group. For example, in preparation for
12 construction of three new production wells, in 2011, LADWP prepared reports
13 analyzing the effects of the proposed wells for the purpose of complying with
14 LTWA Section VI (New Wells and Production Capacity). The County reviewed
15 the reports, provided comments, LADWP modified the reports, and the
16 Technical Group formally agreed that the LTWA requirements for
17 preconstruction evaluation of the wells had been completed. This process
18 was completed by the Technical Group in a number of weeks.

19 Absent from the County's explanation is any reference to any section of the Water
20 Agreement or Green Book that supports its argument related to vegetation monitoring and
21 analysis. The only reference to either the Water Agreement or Green Book relates to
22 dispute resolution and new well evaluation. Neither of those issues is relevant to the
23 County's argument. Moreover, the Water Agreement provisions relating to new well
24 evaluations are wholly different from the provisions relating to vegetation monitoring and
25 analysis, and provide no guidance for the current dispute.

26 As thoroughly discussed in LADWP's Opening Brief, the County has attempted to
27 thwart the clear intent and the clear language of the Water Agreement and Green Book that
28 call for joint monitoring and analysis of all alleged impacts to vegetation. Rather than
engage the Technical Group in a comprehensive analysis of conditions at Blackrock 94,
including joint collection of data, joint analysis of data, joint development of analytic
methods and joint analyses of that data using the jointly developed methods, the County
elected to forge its own path. The County, without input or participation of the Technical

1 Group, collected data, developed analytic methods to evaluate that data and produced
2 conclusions based on such analysis. The County then produced the ICWD Report,
3 independently, and is simply trying to force LADWP to accept its conclusions, all of which
4 run afoul of the Water Agreement and Green Book contractual mandates. Consequently,
5 this panel must find that LADWP did not interfere with the Technical Group's right or ability
6 to analyze alleged impacts at Blackrock 94.

7 **B. LADWP Did Not Authorize the County to Unilaterally Analyze Alleged**
8 **Impacts at Blackrock 94 on Behalf of the Technical Group.**

9 The County's second argument, although not clearly stated, appears to allege that
10 LADWP, as a Technical Group member, authorized the County to unilaterally analyze
11 Blackrock 94 on behalf of the Technical Group, and therefore the ICWD Report constitutes
12 a Technical Group analysis. The County's argument fails on two fronts. First, LADWP is
13 not empowered to authorize the County to circumvent the procedures and protocols of the
14 Water Agreement and independently analyze vegetation conditions at Blackrock 94, or
15 anywhere else. Second, LADWP never provided any authorization to the County to
16 engage in any analysis of Blackrock 94 without engaging the Technical Group in a
17 comprehensive manner under the Water Agreement.

18 **1. LADWP is Not Authorized to Permit the County to Unilaterally**
19 **Analyze Vegetation Conditions under the Water Agreement.**

20 As discussed in LADWP's Opening Brief, the Water Agreement is a contract that
21 binds the parties to act in accordance to its provisions. Chief among those provisions, as
22 they relate to vegetation monitoring and analysis, is the requirement that the Technical
23 Group, acting jointly, must determine whether a measurable, significant impact exists that is
24 attributable to LADWP's groundwater pumping. The Water Agreement provides no
25 mechanism for one Technical Group member to act unilaterally and in contravention to the
26 procedures and protocol found within the Water Agreement.

1 **2. LADWP Did Not Authorize the County to Unilaterally Analyze Alleged**
2 **Impact at Blackrock 94 on behalf of the Technical Group.**

3 The County alleges that LADWP knew that the County intended to analyze
4 vegetation conditions at Blackrock 94. The County attempts to bootstrap that alleged
5 “knowledge” into its argument that LADWP authorized the County to produce the ICWD
6 Report on behalf of the Technical Group. The facts do not support the County’s allegation.

7 According to the COB, during a Technical Group meeting on October 18, 2010:

8 Gene Coufal, LADWP Aqueduct Manager stated, “*somebody has to make the*
9 *first effort.*” Any characterization that Inyo County prepared its report
10 unilaterally is a misrepresentation of the facts related to how the Technical
11 Group customarily functions and how the Technical Group agreed to
12 approach the Blackrock 94 analysis.

13 Before conducting an analysis of whether a significant change has occurred
14 to parcel Blackrock 94, the County submitted the issue to the Technical
15 Group, obtained Technical Group concurrence that the issue should be
16 addressed through LTWA Section IV.B and Green Book Section I.C, and
17 obtained Technical Group agreement that the County would prepare an
18 analysis of the issue. Only then did the County prepare the analysis and
19 present it to the Technical Group for consideration. COB, p. 29.

20 Unfortunately, the County fails to provide a comprehensive explanation of the
21 Technical Group discussion at the October 18, 2010 meeting. While Mr. Coufal indeed
22 stated that “someone has to make a first effort”, that statement was at the end of a longer
23 discussion relating to the Technical Group development of a process that would be
24 followed during a subsequent, comprehensive evaluation of vegetation conditions at
25 Blackrock 94.

26 The October 18, 2010, Technical Group discussion began with a statement from Dr.
27 Harrington explaining that “the [ICWD], we are still working on an analysis of vegetation
28 change in the parcel. We’ve made progress cleaning up the database...it has been
 considerably more of an effort than we anticipate initially. [We are] working with access to
 get it in the data base as well as cleaning up some issue with the data themselves...” Dr.

1 Harrington then said that the ICWD was closing in on completion of the task and there was
2 discussion indicating that the County would present some vegetation data information to
3 the Technical Group, related to the cleaned up data, in November 2010.

4 Mr. Coufal responded and said "it's, [the vegetation data base review], in the
5 County's court and we will wait for the County's response back."

6 Immediately thereafter, Daniel Pritchett, a member of the community asked Dr.
7 Harrington, "I'm wondering, at the Standing Committee, [Mr. Harrington], you said that the
8 Technical Group is analyzing conditions [at Blackrock 94], is that what you are talking
9 about? In other words is this inherently the water department doing something on its own
10 or is this being done jointly."

11 Dr. Harrington responded, "like a lot of the projects that the Technical Group does,
12 one side takes the lead."

13 Mr. Pritchett then continued, asking "I'm just curious, why, I mean [the ICWD] will
14 write the report and LADWP will say 'well we don't like it and so we have to bring in a
15 consultant to write another report.' I mean is this really joint process? I just want to clarify
16 and get that on the record. In other words we aren't going to have a day where the County
17 submits its report and then LADWP says 'sorry this is your report and its biased'. [I want to
18 confirm] that this is this is really going to be something that is truly joint effort."

19 Dr. Harrington responded saying, "I'd need to see the report first." Mr. Coufal then
20 stated, "we are in a going back and forth phase right now discussing this, once we get the
21 data and look at what's available."

22 Mr. Pritchett continued, stating, "I'm trying to clarify that this is acknowledged as a
23 joint process here, it's not going to be just one side saying here is our report and then you
24 guys throw your thumbs at it saying this is your report and not our report, that this is a joint
25 effort and that your acknowledge that." Mr. Coufal and Mr. Harrington responded by saying
26 "we are going back and forth here, and we are following a process." When pressed on the

1 question by Mr. Pritchett, neither LADWP, nor the County stated that the County was
2 producing a report on behalf of the Technical Group.

3 Subsequently, in an effort to address Mr. Pritchett's questioning, Aaron Steiwand,
4 and ICWD employee, explained, "we exchanged a bunch of letters back and forth and then
5 we said [the County] should do the analysis and [LADWP] said ok, you do the analysis and
6 tell us what you think and if there is a problem we will address it then. It was two or three
7 meetings ago that LADWP thought it had addressed the concerns or issue or whatever,
8 and we [the County] said let's do the analysis and show us [LADWP] what you think and
9 that is where we are." Mr. Pritchett then highlighted a key point, he repeated Mr.
10 Steiwand's statement saying "show us [LADWP] what YOU [the County think[s]." He
11 emphasized the County's use of the word "you", demonstrating that this preliminary data
12 analysis was not being addressed jointly by the Technical Group. Mr. Steiwand then
13 stated, "We are taking the first crack at what the vegetation data say they have not
14 reviewed anything." Mr. Pritchett then seems to indicate that he is not convinced that the
15 process being discussed meets the "joint" requirements of the Technical Group procedures
16 under the Water Agreement.

16 Mr. Coufal concluded by telling the County, "we look forward to getting your
17 analysis."

18 In the case of Blackrock 94, the Technical Group was not discussing whether the
19 County should unilaterally undertake a comprehensive evaluation and analysis of
20 vegetation conditions on behalf of the Technical Group. (See LOB, Exhibit 2). Instead, the
21 Technical Group was discussing the procedure for going forward with its joint analysis of
22 conditions. Prior to October 18, 2010, LADWP and the County had exchanged letters
23 discussing how to approach the issues at Blackrock 94, and discussing whether there was
24 enough threshold information to warrant additional Technical Group work.

1 LADWP understood that existing data needed to be “cleaned up” before the
2 Technical Group could engage any subsequent, meaningful evaluation and analysis. (Id.)
3 Thus, LADWP determined that the County could take the first step, assembly of the data,
4 and then the Technical Group could convene to review the County’s preliminary work to
5 determine if an issue actually existed that justified further Technical Group action. In this
6 context, it was a distinct possibility that the County could have assembled relevant data,
7 and after a Technical Group discussion, the parties could have determined that no further
8 action was required because there was no threshold evidence of vegetation impacts.

9 **III. Even if this Panel Accepts the ICWD Report, it Cannot Order Mitigation**

10 **Because the Alleged Impacts Occurred Before the Water Agreements Effective**
11 **Date.**

12 Even if this panel adopts the ICWD Report, which is thoroughly discussed below, it
13 cannot order any mitigation at Blackrock 94 because all impacts alleged by the County
14 occurred before signing of the Water Agreement and are not subject to its provisions.
15 Throughout the COB and the ICWD Report, the County alleges that measured impacts at
16 Blackrock 94 occurred before the Water Agreement was signed by the parties on October
17 18, 1991. Therefore, those impacts were either considered and mitigated under the 1991
18 EIR, or were impacts that are not subject to the Water Agreement.

19 **IV. The ICWD Report Fails to Establish a Measurable, Significant Impact to**
20 **Vegetation at Blackrock 94 that is Attributable to LADWP’s Groundwater**
21 **Pumping.**

22 The ICWD Report fails both procedurally and technically to support the County’s
23 position that there has been a measurable, significant impact to vegetation that is
24 attributable to LADWP’s groundwater pumping.

25 The ICWD Report, unilaterally generated by the County, does not conclude that a
26 significant impact or significant change in vegetation conditions has occurred in Blackrock

1 94. The County instead concludes that *“while the proportion of shrubs in Blackrock 94 has*
2 *not yet caused the parcel to change from Type C to Type B vegetation status, changes in*
3 *species composition **suggest a change is occurring** ...and indicate that a significant*
4 *change is occurring in Blackrock 94”*. Green Book Section I.C, page 19, clearly outlines
5 that Technical Group determination regarding *“...whether decreases and/or changes in*
6 *vegetation or other significant effects on the environment have occurred or are occurring in*
7 *a given management area”* are separate and distinct findings.

8 Moreover, the ICWD Report’s conclusions, which are based upon the County’s
9 unilateral analysis of the measurability, attributability, and significance of suspected
10 vegetation changes, state that *“these changes occurred between baseline (1986) and*
11 *1991”²*. However, the County did not produce any evidence in its ICWD Report to support
12 its theory of how changes that allegedly occurred in vegetation parcel Blackrock 94
13 between 1987 and 1990³ could conceivably result in a significant effect to vegetation to be
14 in the process of occurring or to *“suggest a change in (vegetation) Type is occurring”* over
15 twenty years later.

16 The COB also alleges that *“analysis of satellite imagery of Blackrock 94 shows that*
17 *cover decreased substantially from 1987 to 1990 and has remained depressed”* (COB, p.
18 12, ¶ 2) and *“...pumping induced declines in the water table during 1987-1990 were*
19 *coincident with drier soil conditions and decreased vegetation cover”* (COB, p. 14, ¶ 3).

20 Even if the ICWD Report were scientifically supportable, the County is alleging vegetation
21 declines at Blackrock 94 that occurred between 1987 and 1990, a period prior to the
22 signing of the Water Agreement⁴ and a period that was already evaluated, and mitigated by
23

24 _____
25 ² Inyo County often refers to the vegetation inventories conducted by LADWP between 1984 and 1987 as “baseline”.
The inventory of vegetation parcel Blackrock 94 was conducted by LADWP in 1986.

26 ³ The ICWD Report alternately alleges these changes to have occurred between 1987 and 1990 (page 56, paragraph 3).

⁴ The Water Agreement was signed on October 18, 1991.

1 the 1991 EIR⁵. (See LOB, Section VI.D). Consequently, this panel cannot find, in the
2 context of this dispute, that a measurable, significant and attributable change has occurred
3 at Blackrock 94, pursuant to the Water Agreement as alleged by the ICWD Report and the
4 COB.

5 **A. The ICWD Vegetation Monitoring Program is Biased and Technically**
6 **Flawed**

7 The County's vegetation data that forms the basis for every conclusion in the ICWD
8 Report was collected by the County using a biased and flawed monitoring program.
9 Consequently, every conclusion that is based on the County's flawed monitoring program
10 cannot be accepted in any analysis related to measurability or significance. The primary
11 flaw in the County's monitoring program, and subsequent analysis, stems from the
12 County's failure to follow monitoring procedures and protocols mandated by Green Book
13 Box I.C.1.a.ii (2) and Green Book Section II.A.2.

14 While Green Book Box I.C.1.a.ii allows for modification to vegetation monitoring
15 techniques, the Technical Group must agree to any changes in the vegetation monitoring
16 program. Here the County did not present its proposed monitoring protocol to the
17 Technical Group, and LADWP did not approve the County's vegetation monitoring
18 program. Moreover, modifying the procedure prescribed by Green Book Box I.C.1.a.ii (2) is
19 a modification of the vegetation monitoring method that the Green Book requires to "*be*
20 *used in cases of suspected vegetation changes due to groundwater pumping.*" Pursuant to
21 Water Agreement Section XXV, there must be a formal agreement between the Inyo
22 County Board of Supervisors and LADWP before either party modifies "*any provision of the*
23 *Green Book, including its provisions for monitoring sites, **the type of monitoring**, and the*
24 *interpretation of monitoring results...*" (Water Agreement Section XXV, page 52, paragraph

25 ⁵ The 1991 EIR evaluated impacts caused by LADWP's groundwater pumping between 1970 and 1990 and from 1990
26 onward.

1 3). The Inyo County Board of Supervisors and LADWP has made no such agreement.
2 Therefore, any data collected by the County, using its unilaterally developed methods, must
3 be rejected and any subsequent analysis must be dismissed by this panel

4 Here, the County's vegetation monitoring program is based upon the annual re-
5 randomization of vegetation transects. The County's "annual re-randomization method"
6 lumps temporal and spatial changes into just change making it is impossible to differentiate
7 whether detected differences are a result of an actual change in vegetation due to some
8 external influence, or simply a result of vegetation transects being placed in different
9 locations, included roads and parking lots where vegetation does not naturally exist. In
10 essence, the County's monitoring method makes it impossible to statistically verify whether
11 a detected change is due to actual change in vegetation or is created because of human
12 monitoring error.

13 Additionally, the ICWD Report compares data from vegetation transects placed
14 randomly by the County in low or barren cover areas to vegetation transects run by LADWP
15 in its 1984 - 1987 vegetation inventory, which located transects "*visually by choosing lines*
16 *that appeared to cover the representative units of vegetation within the parcel*" and which
17 selected "*transect locations...toward the center of the parcels in order to avoid transitional*
18 *areas at the parcel edges*". The County's error creates unsupportable comparison because
19 the County tries to compare known low, or barren, cover areas to the 1984-87 initial
20 vegetation inventory which procedurally required avoidance of such areas. (Green Book
21 Section II.A.2.d.iv, page 38; Tillemans declaration, LOB, Exhibit 13).

22 The County's monitoring mistakes had been well known since at least 2004. In
23 2004, MWH, an environmental consulting firm issued a draft report, found in LOP, Exhibit
24 9, titled *ICWD Vegetation Monitoring, Analysis of Methods and Data* . The report found
25 serious technical and quality control concerns associated with the ICWD vegetation
26 monitoring program. Among other deficiencies regarding the ICWD vegetation monitoring

1 program that were exposed and documented by MWH in its 2004 report, MWH found: “No
2 attempt is made by ICWD to account for obvious anthropic disturbances when placing the
3 transects. These disturbances include cattle bedding areas, heavily-grazed areas, trails,
4 and mechanically-cleared areas. Including these disturbed areas in the sampling results is
5 a serious source of sampling error because it includes the variation in vegetation from
6 these factors with temporal variation”; “ICWD increase the bias in their data by selective
7 placement of the direction of transects to avoid thick stands of shrubs. This is a serious
8 source of bias in their data”; and “ICWD does not appear to have maintained sufficiently
9 high data quality standards in all aspects of the application of the technique. This has
10 resulted in larger than expected variation in the data and has made reasonable
11 repeatability of the results (a major aspect of the scientific method) difficult, if not
12 impossible” (ICWD Vegetation Monitoring, Analysis, and Methods of Data, pages ES1 -
13 ES3, LOB, Exhibit 9, Attachment 9).

14 Finally, the County’s technical and quality control deficiencies associated with its
15 vegetation monitoring program were further documented by Dr. Robert A. Pearce, of
16 EnviroCouncil consulting, who observed and criticized the County’s election to run
17 vegetation transects across bare areas, roads, disturbed areas, and parking lots (LOP,
18 Exhibit 9, Attachment 4a). The County’s decision to run vegetation transects in the above
19 noted areas results in artificially lower vegetation cover that cannot be caused by ground
20 water pumping, but result from the natural state of the land, i.e. road construction, etc.

21 Ms. Kathie and Ms. Kelly Stanly and Ms. Jean A. Swinehart, KS2 Ecological Field
22 Services LLC, further documented technical and quality control inadequacies within the
23 ICWD vegetation monitoring program including their observation that the County ran
24 vegetation transects through disturbed areas, the County changed transect locations to
25 avoid areas of heavy shrub cover, and the County failed to measure live vegetation cover
26 as required by Green Book Box I.C.1.a.ii (2) and Green Book Section II.A.2.e (LOP, Exhibit

1 9, Attachments 4b, and 4c). Again, these flawed data collection techniques lead to
2 vegetation cover values being artificially lowered. The County's error is magnified because
3 it then compared its faulty data to LADWP's initial inventory of vegetation data collected
4 pursuant to protocols that intentionally avoided barren areas.

5 **B. The ICWD Report's Analysis of Measurability is Flawed**

6 The flawed vegetation data, collected by the County, is further compromised by the
7 County's biased analysis of measurability presented in the ICWD Report. While LOB,
8 Exhibits 3 and 9, provide a thorough discussion of problems that plague the County's
9 analysis relating to measurability, a discussion addressing the most substantial errors is
10 below.

11 **1. ICWD's Statistical Analysis Exaggerated the Measurability of**
12 **Suspected Vegetation Change:**

13 The statistical analysis conducted by the County, based on flawed data, collected
14 through a flawed monitoring program, amplifies the statistical significance of the County's
15 measurability finding in manner that provides inaccurate results. Therefore the ICWD
16 Report's conclusion related to measurability must be rejected.

17 First, the County decided to reject the customary statistical methods used by the
18 Technical Group when it performs vegetation monitoring under the Water Agreement.
19 Instead, it chose to conduct its analysis using an obscure analytical method which
20 produced alleged, statistically significant changes when traditional parametric and non-
21 parametric methods could not.⁶

22
23
24 ⁶ Parametric analytical procedures were developed in the early 1930's to analyze data that
25 originated from a normally distributed population. Parametric tests are the most well-known
26 types of tests and have been widely utilized tests in ecological studies since the 1930's.
27 Non parametric tests were developed in the 1950's for use on data that deviated from the
28 assumption of normal distribution necessary in parametric analyses.

1 Second, in addition to unilaterally selecting the NPMANOVA and PERMDISP
2 analytical methods, the ICWD controlled the vegetation data in order to control the outcome
3 of their analysis and further exaggerate the statistical significance of measurable vegetation
4 change. By amplifying the statistical significance of measurable change, the County's
5 conclusions were exaggerated, which would later amplify any analysis of significance
6 significance. PERMDISP is statistical method designed to test whether group difference is
7 significantly different among groups for multivariate data. LADWP's 1986 vegetation
8 inventory of Blackrock 94 shows very small range of covers among vegetation transects
9 (very low variability) as compared to subsequent years during which cover among transects
10 are highly variable. This discrepancy within group differences among groups
11 (heterogeneous variances or significant within group difference) can lead to a significant
12 PERMANOVA result (significant group differences). A test result of PERMDISP must be
13 negative to rule out the scenario of significant within group difference when a significant
14 PERMANOVA result is obtained.

15 The County manipulated the parameters used in its statistical analysis to lower the
16 threshold of what a statistically significant change is, which in turn increased the number of
17 years shown in the County's analysis to have had a statistically significant change.
18 Moreover, instead of determining what areas in vegetation parcel Blackrock 94 may have
19 had statistically significant changes, the County averaged the data from all of the
20 vegetation transects taken in Blackrock 94. Data from the vegetation transects taken in
21 lower cover and bare areas were averaged with the data taken in higher cover areas to
22 provide the appearance that the entire parcel had experienced a statistically significant
23 change.

24 By amplifying the number of years in which a statistically significant change in
25 vegetation appeared to have occurred, as well as exaggerating the size of the alleged
26 change or decrease, the County created a larger degree of change or decrease in

1 vegetation than what would be shown using other analytical methods typically employed by
2 the Technical Group. The County then used its exaggerated measurability determination to
3 amplify the factors it considered in its determination of significance and presented in the
4 ICWD Report. These issues are fully discussed in LOP July 26 2013 Brief, Exhibit 10
5 pages 19 – 22 and 25 – 28. And LOP June 8, 2012, Letter, page 32, paragraph 5n.

6 Further compounding the County's issues, it elected not to disclose the parameters
7 or assumptions used in its chosen statistical methods to the Technical Group until April
8 2012, over two years after it began analyzing effects at Blackrock 94.

9 Next, the County unilaterally elected not to transform or standardize the data used in
10 its NPMANOVA and PERMDISP analysis, chose not to covert distances to ranks prior to
11 analysis, chose to perform unrestricted permutations thereby breaking the underlying
12 spatial structure, chose to perform a permutation test with raw vegetation data, chose to
13 use the Bray-Curtis distance measure, and chose to what species would be considered in
14 analysis. All of these decisions greatly affected the outcome of the County's statistical
15 analysis. Further discussion of these issues can be found in LOP July 26, 2013 Brief,
16 Exhibit 10, page 27, LOP July 26 2013 Brief, Exhibit 10 pages 19 – 22 and 25 – 28, LOP
17 June 8, 2012, Letter, page 32, paragraph 5, LOP September 6, 2011, Letter to ICWD, page
18 15, paragraph 5, and LOP April 9, 2012 Letter to ICWD, page 8, paragraph 1

19 A statistical analysis of the measurability of vegetation change in Blackrock 94
20 between 1986 and 2011, conducted using the County's analytical selections of the Bray-
21 Curtis distance measure and using raw data (no transformation or standardization), result
22 in fourteen years with a significant measureable difference from that measured by LADWP
23 in 1986. If however, the significance level is changed from 0.05 to 0.01 and the data *are*
24 log transformed, the number of significant years drops from fourteen to three (LOB, Exhibit
25 3, page 20). Further, if traditional parametric or non-parametric statistical methods are
26 used, the number of statistically significant years drops to zero.

1 In this case, the ICWD Report provides absolutely no details regarding the
2 parameters used in the County's statistical analysis and fails to provide the raw data used
3 by the County in the ICWD Report. Without this critical raw data and statistical parameter
4 information, the Technical Group has no ability to properly evaluate the statistical analysis
5 presented in the ICWD Report. Therefore, this panel must reject the resulting conclusions
6 as they relate to measurability because they are not founded on sound statistical practices.

7 **2. ICWD's Unilateral and Arbitrary Selection of Vegetation Parcel**
8 **Blackrock 99 and Monitoring site TS3 as Substitutes for Control**
9 **Sites is Contrary to Green Book Section I.C and Scientifically Invalid.**

10 Scientific controls are a fundamental part of the scientific method. A scientific control
11 is an experiment or observation designed to minimize the effects of variables other than the
12 single independent variable. This increases the reliability of the results, often through a
13 comparison between control measurements and the other measurements.

14 In order to evaluate changes to a given vegetation data set, it is critical that a control
15 site be located within areas which have similar vegetation, soil, and precipitation conditions.
16 It is also critical that the control site not be subject to impacts from groundwater pumping.
17 Green Book Section I.C requires the Technical Group to compare impacts at the alleged
18 area to a control site. The lists of authorized control sites is in Table 1.A on page 7 of the
19 Green Book.

20 The ICWD Report, however, ignored the mandates of the Green Book and arbitrarily
21 selected vegetation parcel Blackrock 99 as a substitute for a control site listed in the Green
22 Book. Green Book Section I.C.1.a.ii requires the Technical Group to conduct a
23 "*comparison of vegetation cover and composition at the affected area with vegetation data*
24 *from one or more control sites located in areas which have similar vegetation, soil, and*
25 *precipitation conditions.*" Blackrock 99 is not a recognized control site and is not listed in
26 Green Book Table 1.A. By circumventing the Technical Group requirement that the

1 Technical Group select a control site to be used for comparison with an area of alleged
2 vegetation change⁷ and disregarding the Green Book requirement for comparison with an
3 authorized control site, the County arbitrarily compared vegetation in vegetation parcel
4 Blackrock 94 with vegetation in vegetation parcel Blackrock 99. Consequently, its
5 comparisons have no foundational value. Vegetation parcel Blackrock 99 is simply another
6 vegetation parcel with no particularly special significance other than it having vegetation
7 species of similar type. Green Book Sections I.C.1.a and 1.C.1.b require comparisons with
8 “control sites” not vegetation parcels. The County’s unilateral substitution of vegetation
9 parcel Blackrock 99 as a control site and the comparison of vegetation parcel Blackrock 99
10 with Blackrock 94 is made even more egregious by the fact that Blackrock 99 and
11 Blackrock 94 have different soil types, Blackrock 99 has been irrigated, grazing practices
12 have been different on the two parcels, Blackrock 99 is lower on the valley floor and closer
13 to the prevailing water table, and Blackrock 99 has an unlined section of the Los Angeles
14 Aqueduct running through it (see Exhibits 9 and 10). The fundamental differences between
15 these two vegetation parcels make a meaningful comparison of vegetation changes
16 between them futile and scientifically useless.

17 The ICWD report also substitutes a comparison of permanent monitoring site TS3 as
18 a control site for comparison with permanent monitoring sites TS1 and TS2 within
19 Blackrock 94. Contrary to the claim found in the COB, that permanent monitoring site TS3
20 is located in vegetation parcel Blackrock 99, the permanent monitoring site is actually
21 located in vegetation parcel Blackrock 95, about a mile to the south of Blackrock 94,
22 adjacent to an unlined section of the Los Angeles Aqueduct, and near two artesian wells.
23 The selection of permanent monitoring site TS3 as a control site for comparison to
24 vegetation parcel Blackrock 94 suffers from the same problems as the County’s substitution

25 ⁷ Green Book Section I requires that “*unless otherwise specified, determinations, decisions, or actions called for in this*
26 *section will be made by the Technical Group*” (Green Book, page 1, paragraph 1).

1 of vegetation parcel Blackrock 99 as a control site. For example, site TS3 is located in an
2 irrigated area, is lower in elevation, is closer to the prevailing groundwater table, is adjacent
3 to an unlined section of the Los Angeles Aqueduct, has dissimilar soil types, and is located
4 near two artesian wells.

5 Selection of TS3 is even more troubling than the County's use of Blackrock 99
6 because it fails to conform with Green Book Section III and employs monitoring means
7 other than the line-point method of vegetation monitoring. Green Book Box I.C.1.a.ii (2),
8 page 22, specifically states "*vegetation transects shall also be used in cases of suspected*
9 *vegetation changes due to groundwater pumping. However, **rather than using the***
10 ***intensive sampling technique of Section III.D for calculating evapotranspiration,***
11 ***plant cover shall be measured by the line-point technique described below**" (emphasis*
12 *added).*

13 Additionally, the substitution of a permanent monitoring site as a control site is
14 scientifically invalid for reasons partially outlined by Inyo County in its ICWD Report:

15 "*Because only a single transect is completed at each site, it is not possible to infer*
16 *parcel level trends or to make a comparison with the LTWA baseline based on solely*
17 *on the monitoring site transect data. Factors such as elevation, depth to water table,*
18 *soil type change across the parcel, and a single transect is not representative of the*
19 *average or overall condition of the parcel. Additionally, observations at permanent*
20 *monitoring sites may differ from the remainder of the parcel because cattle have*
21 *been excluded from these transects since 1988 while the remainder of the parcel*
22 *has been grazed." (ICWD Report, page 7, paragraph 3).*

23 **3. The ICWD Report's Spectral Mixture Analysis (SMA) is Highly** 24 **Subjective and does not Support its Conclusion.**

25 The ICWD unilaterally chose to conduct remote sensing analysis using Landsat
26 satellite data processed using SMA. The ICWD did not outline or detail the remote sensing
27 methodology implemented, the analysis parameters chosen per analysis date, or provide
28 individual results per analysis date. Rather the ICWD Report cited a single journal article

1 (Elmore et al. 2000) as an explanation of its methodology. Unfortunately, the journal article
2 lacks the detail needed for the Technical Group to verify, recreate, and independently
3 validate the results and conclusions contained in the ICWD Report.

4 However, the County's conclusions, which were based upon its unilateral analysis of
5 satellite imagery and presented in COB, do not support the County's disputed issue that
6 "*LADWP's groundwater pumping and reductions in surface water diversions in the*
7 *Blackrock 94 area have caused a measurable and significant change in the vegetation*
8 *conditions in violation of the provisions of the LTWA.*" Rather, the County concludes that
9 vegetation in Blackrock 94 decreased in the years before the October 18, 1991 signing of
10 the Water Agreement and during a period which was evaluated under LADWP's 1991 EIR.
11 Inyo County concluded that "*analysis of satellite imagery of Blackrock 94 shows that cover*
12 *decreased substantially from 1987 to 1990 and has remained depressed*" (COB, p. 12, ¶
13 2). Therefore, the County's satellite analysis does not support Inyo County's claims.

14 **C. The ICWD Analysis of Attributability is Procedurally and Technically** 15 **Flawed**

16 **1. The County Failed to Explain Climatic Conditions that Produced** 17 **Baseline vegetation Conditions.**

18 The average annual Eastern Sierra snowpack runoff between 1978 and 1986 was
19 138 percent of normal (LADWP's July 26, 2013 Brief, Exhibit 9, page 22, paragraph 5). In
20 accordance with past practices, LADWP spread surface water runoff from Sawmill, Black
21 Canyon, and other area creeks both in and around vegetation parcel Blackrock 94 during
22 that period⁸. This protracted period of high runoff and water spreading resulted in both

23 ⁸The Water Agreement does not generally require LADWP to change its past surface water
24 management practices in order to spread water. LADWP's historical practice is to spread
25 water for operational reasons, which include spreading water during periods when
26 snowpack runoff exceeds the capacity of the Los Angeles Aqueduct. The provisions of the
27 Water Agreement allow only "*a change in surface water management practices*" to be the
28 subject matter for dispute resolution (Water Agreement Section XXVI.A.1, page 53).

1 elevated water tables in the area of Blackrock 94 as well as particularly high soil moisture
2 conditions in the parcel. This wet period provided extremely favorable conditions for
3 vegetation in vegetation parcel Blackrock 094.

4 Under these wet conditions vegetation flourished in area in Blackrock 94 and the
5 surrounding area. As documented by the vegetation mapping conducted by LADWP during
6 the preparation of its 1976 revised draft EIR: *Environmental Impact Report on Increased*
7 *Pumping of the Owens Valley Groundwater Basin, Volume II*, the area in and around
8 Blackrock 94 was classified as alkali scrubland (1976 revised draft EIR Figures 5-5 and 6-
9 2). Only after an extended wet period between 1978 and 1986 was the parcel reclassified
10 as alkali meadow.

11 **2. Inyo County Erroneously Focused on Blackrock Fish Hatchery**
12 **Groundwater Pumping as a cause of Groundwater Fluctuations in the**
13 **area of Blackrock 94.**

14 Groundwater pumping to supply the Blackrock Fish Hatchery began in 1972 and has
15 remained relatively constant since that time (LOB, Exhibit 9, Attachment 1, Figure 9a;
16 Exhibit 10, Figure 4B and Attachment 2; ICWD Report, page 34, Figure 10a). The ICWD
17 Report does not attempt to explain its theory of how the relatively stable groundwater
18 pumping at the Blackrock Fish Hatchery since 1972 abruptly triggered a large drawdown in
19 the water table between 1987 and 1990 as claimed on page 56 of the ICWD Report, or how
20 the groundwater table then rebounded to its current levels, which are higher than those
21 measured between 1975 and 1980 (LOB, Exhibit 10, Figures 4, 5, 6, and 7 and

22 Additionally, Water Agreement Section IV.B authorizes the Technical Group to evaluate the
23 significance of an alleged effect on vegetation or the environment after the Technical Group
24 has found "*the decrease, change, or effect is determined to be attributable to groundwater*
25 *pumping or to changes in past surface water management practices...*" (emphasis added).
26 Surface water rights are further protected under Water Agreement Section XXII (page 51).
Inyo County has neither provided any evidence or alleged that LADWP has changed its
past surface water management practices pursuant to its allegation that there has been a
significant change in vegetation conditions in vegetation parcel Blackrock 94.

1 Attachments 1, 2, 3). As demonstrated by Dr. David Martin and Mr. Motoshi Honda in LOB,
2 Exhibit 9, as well as by Dr. Saeed Jorat in Exhibit 10 of LOB, groundwater levels under
3 vegetation parcel Blackrock 94 are significantly correlated with variations in Owens Valley
4 snowpack runoff, especially runoff from Sawmill Creek which is near Blackrock 94, and are
5 not rationally correlated with Blackrock Hatchery groundwater pumping.

6 The COB alleges that “...*divergent changes in cover and composition between*
7 *Blackrock 94 and 99 are primarily the result of the **greater fluctuations in groundwater***
8 *availability at Blackrock 94”* (COB, page 13, fourth bullet). Inyo County also declares that
9 “*the majority of pumping in this wellfield from 1972 to present has been to supply the*
10 *Blackrock Fish Hatchery”* (ICWD Report, page 32, paragraph 1). The ICWD Report further
11 illustrates the point that Blackrock Hatchery pumping has remained relatively constant and
12 has been essentially the only groundwater pumping in the Thibaut-Sawmill or southern
13 Taboose-Aberdeen Wellfields since the Water Agreement was signed (ICWD Report, page
14 34, Figs 10a and b). What the County failed to explain, because it does not fit the ICWD
15 Report’s conclusions, is how the relatively stable groundwater pumping of the Blackrock
16 Fish Hatchery caused “greater fluctuations in groundwater availability at Blackrock 94” as
17 claimed by the County. Steady-state groundwater pumping cannot cause the fluctuations
18 in the groundwater table that the County claims to be the cause of vegetation change. Both
19 LADWP and Inyo County agree that the Blackrock Hatchery wells have steadily pumped
20 about 12,000 to 13,000 acre-feet per year. This constant pumping will certainly suppress
21 the water table but by a constant amount. The only way groundwater pumping could cause
22 fluctuations in the groundwater table in the area of Blackrock 94, which the County claims
23 is the cause of vegetation change at Blackrock 94, is if the amount of groundwater pumped
24 fluctuated widely (which isn’t the case with the hatchery wells). What did fluctuate year-to-
25 year was snowpack runoff. As explained in Exhibits 9 and 10 of LADWP’s July 26 Brief,

1 variations in snowpack runoff between 1991 and the present produced substantial
2 fluctuations in the groundwater table in the vicinity of vegetation parcel Blackrock 94.

3 Instead of investigating the relationship between snowpack runoff, water spreading,
4 and the water table and the soil moisture conditions that existed during the 1986 vegetation
5 inventory of Blackrock 94 and other periods, as is required pursuant to Green Book Section
6 I.C.1.b.v, the ICWD Report instead attempts to confuse the relationship between the wet
7 climatic cycle, and its effect on vegetation within the parcel, by ignoring groundwater the
8 data prior to 1986 in the hydrographs presented in Figure 12 and the Kriging data
9 presented in Figure 13 of the ICWD Report.

10 Despite the County's claims regarding how water spreading from Thibaut Creek may
11 have affected the water table in vegetation parcel Blackrock 094 (Inyo County Brief, page
12 12, paragraph 4), the County presented no analysis of Thibaut Creek or how other area
13 creeks including Division, Black Canyon, Goodale, and Oak Creeks may have affected the
14 water table in the area of Blackrock 94 or provided any spreading or creek infiltration data
15 in its report. A legitimate analysis of attributability, which should include the effect of nine
16 years with an average of 134% of normal snowpack runoff between 1978 and 1986 on the
17 water table in and around vegetation parcel Blackrock 94, instead of pursuing its unilateral
18 analysis of surface water as presented in the ICWD Report, would lead to different
19 conclusions than the ICWD Report.

20 Instead, the aggregate of the surface water analysis presented by the County in the
21 ICWD Report amounts to the evaluation of "approximate water balance" presented on page
22 32 that crudely estimates the "approximate" losses from Sawmill Creek and includes
23 groundwater pumping from two wells located in or adjacent to vegetation parcel Blackrock
24 94. (Interestingly, the ICWD-prepared water balance for the Blackrock 94 area seems to
25 have found it superfluous to include Blackrock Hatchery groundwater pumping.) The ICWD
26 Report's analysis of the effect of surface water on vegetation parcel Blackrock 94 only

1 provides a very rudimentary water balance for one Creek in the area: Sawmill Creek. The
2 ICWD Report did not look at Thibaut Creek as claimed in the COB. Moreover, it failed to
3 consider other sources of surface water in the area including Division, Black Canyon,
4 Goodale, or Oak Creeks. Moreover.

5 **3. Inyo County's Soil Moisture Data is Procedurally and Technically**
6 **Flawed.**

7 The soil water analysis presented on pages 37 - 42 of the ICWD Report is also both
8 procedurally and technically flawed. Green Book Section I.C.1.b.ii requires the Technical
9 Group to compare soil water "*at the control site(s) determined to have similar soil type*
10 *and vegetation composition and cover*" (authorized control sites are listed in Green Book
11 Table 1.A, page 7, emphasis added). Permanent monitoring sites TS1, TS2, and TS3, the
12 sites unilaterally substituted by the County for the comparison of soil water, are not control
13 sites listed in the Green Book and were not authorized by the Technical Group. Moreover,
14 the three permanent monitoring sites do not share a common soil type and permanent
15 monitoring site TS3 is in an irrigated area, lower on the valley floor (and closer to the
16 prevailing water table), adjacent to an unlined section of the Los Angeles Aqueduct, and
17 near two artesian wells, all of which affect the results of any monitoring data collected at the
18 site.

19 For reasons not explained by the County, the ICWD Report provides soil water data
20 during the dryer October and November months of 1990, 1994, 2000, and 2009. The years
21 chosen by the ICWD were all below normal runoff years with snowpack runoff in 1990 at
22 approximately 52% of normal, 1994 at approximately 66% of normal, 2000 at approximately
23 88% of normal, and 2009 at approximately 77% of normal. By selecting only the dryer fall
24 periods, during dry years, for the comparison of soil moisture between the unirrigated
25 Blackrock 94 and irrigated permanent monitoring site TS3, which is also located adjacent to
26 an unlined section of the Los Angeles Aqueduct, and is near two artesian wells, the County

1 provides the illusion of an unusual effect in vegetation parcel Blackrock 94 where none
2 actually exists.

3 **4. The Groundwater Modeling Presented in the ICWD Report Does not**
4 **Consider all Sources of Groundwater Recharge.**

5 The County did not provide the groundwater modeling data input file with its ICWD
6 Report, so the Technical Group cannot properly assess the County's analysis. However, it
7 is known that the groundwater modeling presented in the ICWD Report is based upon the
8 USGS regional groundwater flow model for the Owens Valley, which is a coarse-grid
9 regional model⁹ and unable to represent substantial sources of groundwater recharge
10 including the recirculation-DTW relationship from the fish rearing ponds at the Blackrock
11 Hatchery. An appropriate high resolution representative model is necessary to reflect the
12 groundwater recirculation through the hatchery ponds. The ICWD Report ignores
13 recirculation from the hatchery ponds, a substantial source of local recharge, and
14 exaggerates the effect of hatchery pumping on the water table. Additional criticisms of the
15 County's modeling exercise are presented in the ICWD Report are included in Exhibits 9
16 and 10 of LADWP's July 26, 2013 Brief.

16 **5. Inyo County Ignored other Factors Unrelated to Groundwater Pumping**

17 Vegetation parcel Blackrock 94 is classified as Type C vegetation. The Water
18 Agreement provides the management goal for Type C vegetation to be: *"the goal is to*
19 *manage groundwater pumping and surface water management practices so as to avoid*
20 *causing significant decreases in live vegetation cover, and to avoid a significant amount of*
21 *vegetation comprising either Type B, C, or D classification to change to vegetation in a*
22 *classification that precedes it alphabetically (for example, Type D changing to Type C, B, or*
23

24 _____
25 ⁹ The USGS Owens Valley regional groundwater model is a finite difference model with uniform cell size of 2,000 ft by
26 2,000 ft. Such a large cell size cannot adequately represent the interactions between hatchery supply wells, ponds, and
the aquifer, all located within less than 300 ft of each other. Ideally, a variable cell size of about 50 ft to 500 ft is needed
to represent the surface-groundwater interactions at the Blackrock Hatchery.

1 A vegetation)” (Water Agreement Section IV.A, page 14). Water Agreement Section III.C
2 (page 10) sets the goal for LADWP “...to avoid certain described decreases and changes in
3 vegetation...” that would be caused by its water gathering operations. However, Water
4 Agreement Section I.D acknowledges that vegetation cover and composition change for
5 reasons other than groundwater pumping:

6 “It is recognized that vegetation composition and density varies for reasons other
7 than groundwater pumping, from period to period, depending upon weather,
8 precipitation, surface water spreading, and other factors” (Water Agreement, page
9 8).

10 The Green Book, which requires the Technical Group to make all “determinations,
11 decisions, or actions”, also requires the Technical Group to consider “the extent to which
12 other factors unrelated to the effects of groundwater pumping may have contributed to
13 vegetation change or decrease” prior to making a determination that a change in vegetation
14 is attributable to groundwater pumping or changes in surface water management practices
15 (Green Book Section I.C.1.b.v, page 24).

16 LADWP is not responsible to mitigate changes in vegetation cover or composition
17 that are caused by factors other than groundwater pumping or changes in surface water
18 management. This is made clear by Water Agreement, which provides that only “if the
19 decrease, change, or effect is determined to be attributable to groundwater pumping or to
20 changes in past surface water management practices, the Technical Group then shall
21 determine whether the decrease, change, or effect is significant” (Water Agreement Section
22 IV.B, page 19, paragraph 2). If the change is not “determined to be attributable to
23 groundwater pumping or changes in past surface water management practices”, the Water
24 Agreement does not authorize the Technical Group to consider the significance of the
25 change pursuant to Water Agreement Section IV.B or Green Book Section I.C.

26 The Technical Group has not evaluated (or even discussed) the attributability of
27 alleged vegetation changes in vegetation parcel Blackrock 94. Further, the attributability

1 analysis presented in the ICWD Report largely disregards the Green Book Section I.C.1.b.v
2 requirement for the Technical Group to evaluate the extent that other factors, unrelated to
3 the effects of groundwater pumping, may have contributed to vegetation change or
4 decrease. The Green Book cites these factors to include “drought, wet/dry climatic cycles,
5 flooding, fungal blight, range management practices, wildfire, and off-road vehicles” (Green
6 Book, page 24, paragraph 4). Despite readily available data documenting drought, wet/dry
7 climatic cycles, flooding, wildfire, and other factors, the ICWD Report skirted any
8 meaningful analysis of these factors. The County expended a 265 words in summarizing its
9 analysis of all other factors, even omitting an analysis of vegetation recovery in Blackrock
10 94 that occurred following a 1990 wildfire. The County also ignored the effects of a
11 protracted period of high snowpack runoff, between 1978 to 1986, on the groundwater
12 table, soil moisture, and vegetation that existed during the 1986 vegetation inventory.
13 Instead, the County focused on groundwater pumping. Since LADWP largely discontinued
14 pumping from other local area wells after 1991 (ICWD Report, Figures 10a and 10b), the
15 County focused on groundwater pumping for the Blackrock Hatchery.

16 **D. The County’s Analysis of Significance is both Procedurally and Technically**
17 **Flawed**

18 The Water Agreement authorized the Technical Group to consider significance only
19 after determining a decrease, change, or effect to be attributable to groundwater pumping
20 or to changes in surface water management practices:

21 *“If the decrease, change, or effect is determined to be attributable to groundwater*
22 *pumping or to changes in past surface water management practices, the Technical*
23 *Group then shall determine whether the decrease, change, or effect is significant”*
24 *(Water Agreement Section IV.B, page 19, paragraph 2).*

1 The Green Book affirms that the Technical Group¹⁰ shall only conduct an analysis of
2 significance after it had determined that there had been a measurable change that is also
3 attributable to groundwater pumping or changes in surface water management practices:

4 *“Following a determination that there has been a measurable decrease or change in*
5 *vegetation cover, and that the decrease or change was attributable to either*
6 *groundwater pumping or surface water management practices, the following*
7 *analysis shall be conducted to determine whether the measurable decrease or*
8 *change is significant”* (Green Book Section I.C.1.c, page 26, paragraph 2).

9 Since the Technical Group has not evaluated, or even discussed, the attributability
10 of vegetation change in vegetation parcel Blackrock 94, the Technical Group is not
11 authorized to conduct an analysis relating to the significance of the change in vegetation
12 parcel Blackrock 94. However, despite the County’s failure to follow the Water agreement,
13 the following observations undermine the substance of the ICWD Report relating to
14 significance of detected effect.

15 **1. Inyo County’s Analysis of Size, Location, and Use of the Allegedly**
16 **Affected Area is Flawed:**

17 Vegetation parcel Blackrock 94 is located in the Blackrock Vegetation and Wellfield
18 Management Area. The 15,615 acre Blackrock Vegetation and Wellfield Management Area
19 is delineated on a map incorporated into the Water Agreement as Exhibit A, page 2 of 14,
20 and includes vegetation parcel Blackrock 94 within a 6,763 acre boundary noted to
21 potentially experience water table declines greater than 10 feet.

22 The Water Agreement established management areas *“so as to contain all*
23 *vegetation that could be impacted as a result of groundwater pumping”* (Water Agreement

24 ¹⁰ The Water Agreement requires the Technical Group shall conduct “all monitoring, analysis and interpretation of
25 results (page 12, paragraph 1). Green Book Section I (page 1, paragraph 1) requires *“unless otherwise specified,*
26 *determinations, decisions, or actions called for in this section will be made by the Technical Group.”* The determinations
of measurability, attributability, and significance are made pursuant to Green Book Section I.C.

1 Section I.A, page 7). Water Agreement Section I.B requires the Technical Group to use the
2 Management Areas as the unit of area for vegetation and groundwater monitoring:

3 *“The vegetation and groundwater conditions within the management areas will be*
4 *carefully monitored by the Technical Group to assure that the goals and principles of*
5 *this groundwater management plan are met” (Water Agreement Section I.B, page 7).*

6 Green Book Section I.C, the Impact Determination and Mitigation procedures,
7 confirms the Water Agreement requirement that the Technical Group conduct its monitoring
8 and analysis of vegetation conditions in the context of the management area:

9 *“This section outlines a procedure for determining whether decreases and/or*
10 *changes in vegetation or other significant effects on the environment have occurred*
11 *or are occurring **in a given management area**” (Green Book Section I.C, page 19,*
12 *paragraph 3, emphasis added).*

13 In comparison, the Green Book defines vegetation parcels simply as areas of similar
14 vegetation composition:

15 *“parcel (or vegetation parcel) - This is an area of land covered by vegetation of*
16 *similar composition throughout and which is distinguishable from the surrounding*
17 *vegetation cover” (Green Book, page 125).*

18 While the Green Book requires the Technical Group to follow the *Impact*
19 *Determination and Mitigation* process to determine if impacts have occurred or are
20 occurring in a given management area, Green Book Section I.C. assigns vegetation parcels
21 with no special meaning in the determination of significance or significant effect on the
22 environment.

23 Despite the Green Book requirement for the Technical Group to evaluate an alleged
24 decrease or change to vegetation in the context of the **management area**, the County
25 unilaterally substituted the **vegetation parcel** as the unit of area it chose for its analysis for
26 determining whether decreases and/or changes in vegetation have occurred or are
27 occurring.

1 Instead of considering the size of the allegedly affected area to be approximately 2%
2 of the 15,615 acre management area, or roughly 5% of the management area's projected
3 6,763 acres within the 10 foot drawdown boundaries of the management area, the County
4 instead considered the size of the allegedly affected area to be 100% of the vegetation
5 parcel.

6 Green Book Section I.C, page 19, paragraph 3 requires the Technical Group to
7 consider impacts on the environment in the context of the given management area as to
8 where the decrease or change is alleged to occur. While 333 acres seems to be large, in
9 the context of the management area it is actually extremely small, between 2% and 5%.

10 Moreover, the County overstated the effects of using the vegetation parcel by
11 exaggerating the area affected within the parcel. The County provided no evidence in the
12 ICWD Report that 100% of Blackrock 94 was adversely affected. Instead, the ICWD Report
13 averaged vegetation cover values from within vegetation parcel Blackrock 94 to provide the
14 appearance that 100% of vegetation parcel Blackrock 94 has allegedly changed. Raw data
15 of the County transects within vegetation parcel Blackrock 94 show that vegetation in some
16 areas of vegetation parcel Blackrock 94 have remained equal to or above the 1986
17 inventory transect values in every year since 1992 and in some years by as much as 80%
18 more vegetation cover than what was measured during LADWP's initial inventory. The
19 County's use of vegetation parcels to analyze "significance" is not proper and must be
20 rejected.

21 **2. Inyo County's Analysis of Degree of Change is Flawed.**

22 The ICWD Report's analysis of the alleged degree of vegetation change in
23 vegetation parcel Blackrock 94 is based upon the County's unilateral vegetation monitoring
24 program and its unilaterally implemented analytical procedures. As previously discussed,
25 the vegetation monitoring procedures used by the ICWD are not in conformance with those
26 required to be used to determine vegetation change under Green Book Box I.C.1.a.ii (2)

1 (page 22), they exaggerate the degree of vegetation change, and they have not been
2 approved of by the Technical Group as a modification to the Green Book pursuant to Water
3 Agreement Section XXV. Therefore, any analysis in the ICWD Report relating to degree of
4 change must be rejected.

5 **3. The ICWD Report's Comparison of Species of Special Concern and is**
6 **Flawed.**

7 The ICWD Report found no trend or impact related to vegetation species of special
8 concern. According to the ICWD Report, "*data are insufficient to document any trend or*
9 *impact related to LADWP surface water or groundwater management*" (ICWD Report, page
10 58, paragraph 4). However, the County's comparison of vegetation in Blackrock 94 to
11 vegetation near monitoring well T581 is not scientifically relevant and is procedurally flawed
12 because monitoring well T581 is in an area that had received irrigation water while
13 Blackrock 94 had not; the two sites have different soil types; monitoring well T581 is
14 located in an area mapped as and known to have a considerable population of rare plant
15 species, while permanent monitoring site TS2 is not mapped to have a population of rare
16 plants; the area of monitoring well T581 is located about 400 feet from an unlined section of
17 the Los Angeles Aqueduct, and monitoring well T581 is located lower on the valley floor
18 (and closer to the prevailing water table) than vegetation parcel Blackrock 94. The Green
19 Book requires the Technical Group to compare changes in the allegedly effected area to
20 control sites. In this case, the County substituted an arbitrarily-selected area for use as a
21 control site when comparing rare plants. In addition, the County selected a site that has
22 been mapped as a place known to have rare plants for comparison with Blackrock 94. The
23 County's use of T581 cannot support the County's significance conclusions because
24 Blackrock 94 does not have any areas known to have rare plants, and therefore such a
25 benchmark is scientifically inappropriate.

1 **4. The County’s Analysis Evaluating Existing E/M Projects is**
2 **Incomplete and Flawed:**

3 Green Book Section I.C.1.c.vi requires the Technical Group to consider “*the value of*
4 *existing enhancement and mitigation projects addressing the environmental consequences*
5 *of similar impacts*” as offsetting compensation during its analysis of significance. The
6 ICWD Report glossed over this requirement. For example, the County’s analysis ignored
7 the value of the Lower Owens River Project, a multi-million dollar mitigation effort
8 implemented pursuant to 1991 EIR mitigation measure 10-14¹¹ specifically for impacts to
9 springs and vegetation caused by groundwater pumping for the Blackrock Fish Hatchery.
10 The Lower Owens River Project restored over sixty miles of a formally dry section of the
11 Owens River. The 1991 EIR unambiguously stated that the Lower Owens River Project
12 was implemented to mitigate for impacts to meadow vegetation: “*although not all springs*
13 *and associated riparian and meadow vegetation will receive on-site mitigation, the*
14 *Lower Owens River Project will provide mitigation of a compensatory nature*” (1991 EIR,
15 Mitigation Measure 10-14, emphasis added). The County’s failure to consider the Lower
16 Owens River Project is particularly troubling because the ICWD Report concluded that the
17 alleged impacts to vegetation at Blackrock 94 occurred before implementation of the Water
18 Agreement and were precisely the impacts projects like the LORP were meant to provide
19 mitigation for under the 1991 EIR.

20 Disregarding the requirement of Green Book Section I.C.1.c.vi, the County refused
21 to acknowledge the value of the Lower Owens River Project as a mitigation measure for
22 Blackrock Fish Hatchery groundwater pumping because the ICWD claimed “*the distance*
23

24 ¹¹ 1991 EIR Impact 10-14 is: “Increased groundwater pumping has reduced or eliminated flows from Fish Springs, Big
25 and Little Seely Springs, Hines Spring, Big and Little Blackrock Springs, and Reinhackle Spring. This has caused
26 significant adverse impacts to vegetation at several of these spring areas.” 1991 EIR page 10-61, paragraph 2, describes
this pumping to be “groundwater pumping from wells that supply the CDFG Blackrock Fish Hatchery, combined with
increased pumping from other wells in the area...” Blackrock Fish Hatchery is located at the site of Big Blackrock
Spring.

1 between Big Blackrock Springs (the Blackrock Fish Hatchery location) and Blackrock 94 is
2 sufficiently large – over one mile – that the alkali meadow vegetation comprising Blackrock
3 94 cannot be considered “associated” with the spring” (ICWD Report, page 64, paragraph
4 2). The County is concurrently claiming, however, that “groundwater pumping from wells
5 supplying the Blackrock Fish Hatchery and groundwater pumping by LADWP from other
6 wells in the Thibaut-Sawmill and Taboose-Aberdeen wellfields have affected the water
7 table in parcel Blackrock 94” (Inyo County July 26, 2013 Brief, page 12, paragraph 5). On
8 the one hand, the County is alleging that groundwater pumping is source of any vegetation
9 impacts to Blackrock 94, but on the other it claims “that the alkali meadow vegetation
10 comprising Blackrock 94 cannot be considered to be “associated” with (groundwater
11 pumping) at the spring”. The County can’t have it both ways, either the hydrology in and
12 around vegetation parcel Blackrock 94 is associated with the hydrology in and around the
13 Blackrock Fish Hatchery or it is not. If vegetation impacts are associated with groundwater
14 pumping, then the Technical Group must consider the previous mitigation under the 1991
15 EIR, or if such impacts are “too far” from the groundwater pumping source, in either such
16 case the County’s request for mitigation fails.

16 **V. CONCLUSION**

17 For the foregoing reasons, this panel must reject the County’s request.

20 Dated: September 3, 2013

MICHAEL N. FEUER, City Attorney
RICHARD M. BROWN, General Counsel
JULIE C. RILEY, Deputy City Attorney
DAVID EDWARDS, Deputy City Attorney

23 By 

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POWER OF THE CITY OF LOS ANGELES

PROOF OF SERVICE

I am employed in the County of Los Angeles; I am over the age of eighteen years and am not a party to the within entitled action; my business address is 111 North Hope Street, Suite 340, Los Angeles, California 90012-2694. On September 3, 2013, I served the document titled ***ISSUE SUBMITTED TO DISPUTE RESOLUTION PURSUANT TO STIPULATION AND ORDER FOR JUDGMENT***

(X) (VIA OVERNIGHT): By causing said document listed above to be Federal Expressed next business day to the persons listed below:

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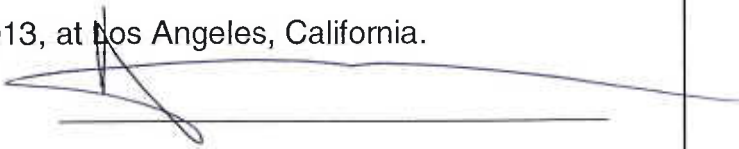
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I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business.

I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

Executed on September 3, 2013, at Los Angeles, California.



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