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SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF RIVERSIDE -- CENTRAL DISTRICT

Coordination Proceeding Special Title (Cal. Rules of Court, Rule 3.550) MOJAVE BASIN WATER CASES	Case No. JCCP5265 Mojave Basin Water Cases Dept. 1, Riverside Superior Court Hon. Craig G. Reimer
CITY OF BARSTOW, et al., Plaintiffs, v. CITY OF ADELANTO, et al., Defendants.	Lead Case CIV208568 Coordinated With San Bernardino Superior Court Case No. CIVSB2218461 **MOVANTS' REPLY TO WATERMASTER'S OPPOSITION TO SELECT HYDROLOGIC BASE PERIOD OF 1995-2024** *Filed Concurrently With: Declaration of Darien Key ISO Movants' Reply to Watermaster Opposition; Declaration of Anona Dutton ISO Movants' Reply to Watermaster Opposition* Date: March 18, 2026 Time: 8:30 a.m. Dept.: 1 Reservation No.: Per Court Order 2/20/2026

I. INTRODUCTION

Watermaster's Opposition confirms it is not asking the Court to select the most representative hydrologic period; rather, it is asking the Court to select a hydrologic Base Period because it will "generate lower PSY and FPA values" and thus drive "less groundwater production" and "more supplemental water," (Watermaster Opp. 2:11-13), and because it would "move the needle toward lower PSY and FPA values" and more imported supplemental water (Watermaster Opp. 3:7-8). That outcome-driven objective is not the standard for hydrologic Base Period selection under Bulletin 84 or the Judgment.

Watermaster reached its preferred "drier" outcome by misapplying Department of Water Resources ("**DWR**") forecasts and by selectively citing United States Bureau of Reclamation ("**USBR**") modeling summaries while omitting the full range of projected outcomes, including continued high-flow events. (Supplemental Declaration of Anona Dutton, March 11, 2026), ¶ 10 ("**Dutton Supp. Dec.**").

Consistent with the Court's Order of October 23, 2024, Movants will present to the Court a summary of the factual and legal contentions demonstrating the merits of Movant's Motion and evidence via PowerPoint. A copy of which is attached to the Declaration of Darien Key ("**Decl. Key**") as **Exhibit 1** and Dutton Supp. Dec. as **Exhibit 2**. (Decl. Key ¶ 3; Dutton Supp. Dec. ¶ 9; Movant's Motion, ("**MM**"), pp. 1881-1892 and pp. 1905-1922.) The PowerPoint is filed and served concurrently with this Reply, no later than five court days before the hearing as required by the Court's Order. (Decl. Key ¶ 4).

II. THE COURT SHOULD NOT SELECT A BASE PERIOD DESIGNED TO ACHIEVE MANAGEMENT OUTCOMES

Watermaster repeatedly frames the decision to force management outcomes. It states that if the goal is to bring the Basin into balance "as soon as reasonably possible," a "shorter" and "drier" period is needed "to generate lower PSY and FPA values" resulting in reduced pumping or increased purchases of supplemental water (Watermaster Opp. 2:11-13), and it reiterates that "[t]o generate lower PSY values, more rampdown, and more purchases of supplemental water," the Court must

choose a period "both 'shorter' and 'drier'" than 1931–1990 (Watermaster Opp. 2:24-25). That reverses the proper order.

The Court must first select a *representative* hydrologic Base Period; PSY is then calculated from that representative hydrology; management tools are then applied under the Judgment and Physical Solution to meet Basin objectives. Watermaster's approach improperly starts with a management goal and then works backwards to select a hydrologic Base Period engineered to yield that result.

III. THE TECHNICAL RECORD SUPPORTS 1995–2024 AS REPRESENTATIVE GOING FORWARD

Watermaster's reliance on mid-century projections does not justify selecting a drought-weighted base period today, particularly where Watermaster insists the "mid-century" prediction of 12%–13% drier conditions is "far more relevant" than the 2030 scenario and urges the Court to plan "NOW" for "significantly drier" conditions. (Watermaster Opp. 5:6-14; 4:6-8.) Movants' experts, EKI Environment & Water ("**EKI**"), explain that DWR reports four climate forecast scenarios and that the 2030 scenario yields an average annual change factor of 0.97 with a monthly value of 0.96, i.e., roughly 3–4% drier conditions. (Dutton Supp. Dec., ¶ 11; MM, p. 1899.) Change factors are applied to a representative historical time series for planning purposes to evaluate future conditions, here 1916-2011, since that is the time period DWR analyzed. (*Id.*) Watermaster itself quotes EKI's memorandum acknowledging those same values and the resulting 3–4% decrease concept. (Watermaster Opp. 5:15-19.) EKI further explains that the 2070 scenarios provide average streamflow factor changes ranging from -10% to +61% (a span from 0.90 to 1.61), demonstrating the uncertainty in long-term projections and why near-term, better-constrained estimates are more appropriate for a base period that will govern operations for roughly a decade. (Dutton Supp. Dec., ¶ 12.) Consistent with that point, EKI notes the DWR 2030 Central Tendency factors are widely used across California SGMA basins for planning. (Dutton Supp. Dec., ¶ 13.)

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Watermaster also misstates how DWR forecasts are intended to be applied. Watermaster argues EKI's conclusion is "misleading" because the datasets referenced by EKI include only 1916–2011 and therefore do not represent the future. (Watermaster Opp. 5:21-24.) EKI explains that DWR change factors are multipliers intended to be applied to a selected period of analysis, so long as the period is sufficiently long to be generally representative of average conditions; they are not confined to comparisons against a single reference period as Watermaster implies. (Dutton Supp. Dec., ¶ 14.) Against that framework, EKI identifies Watermaster's comparison of candidate base periods to the Basin's long-term hydrology as the most useful analysis and confirms that comparison shows 1995–2024 is 3% drier than the period of record and aligns with the DWR 2030 Central Tendency factors, while Watermaster's preferred 2001–2020 period is 12% drier than the period of record. (Dutton Supp. Dec., ¶ 15; Watermaster Opp. 5:1-5.) Again, the Watermaster approach is driven by management outcomes, whereas Movants' recommended hydrologic Base Period is demonstrably more representative of hydrologic conditions, both actual and projected. While projections are helpful in evaluating representativeness, they are not determinative in selecting a hydrologic Base Period and may be revisited again in the future.

IV. WATERMASTER'S OBJECTIONS TO INCLUDING 1995–2000 AND 2021–2024 ARE RESULTS-DRIVEN AND TECHNICALLY UNSUPPORTED

Watermaster's principal objection to 1995–2024 is that it includes wet years that arguably raise the calculated average. (Watermaster Opp. 6:17-24). Watermaster's desire to ignore actual wet years in the data set is not a technical basis to exclude those years in this Basin. USBR simulations show that high-flow events similar to those observed historically are likely to continue, and USBR's own presentation of results reflects a distribution in which dry and typical years trend drier, *while wet years persist and can become wetter*. (Dutton Supp. Dec., ¶ 16.) Watermaster's Opposition highlights only ensemble median summaries and does not provide the complete picture, including the range that contains *both* increases and decreases in annual flow. (Watermaster Opp. 3:21-6:4; Dutton Supp. Dec., ¶ 17.) Watermaster uses average flow at the Mojave River forks as a primary planning metric, even though "average" years are rare and the mean is driven by extremes at *both* ends of the distribution; thus, excluding wet years from the calculation artificially biases the average low and

fails to represent historical or anticipated future conditions. (Dutton Supp. Dec., ¶ 18.) That is exactly what Watermaster is attempting to do when it complains that wet years "tilt the average water supply upward" (Watermaster Opp. 6:21-23): it is asking the Court to bias the metric low to obtain lower PSY and more rampdown.

Watermaster's effort to discard 2021–2024 is similarly unsupported. Watermaster argues there is "[n]o need to keep adding additional years just for the sake of adding more years" (Watermaster Opp. 8:15-16) while also insisting the new hydrologic Base Period must be "more recent" and claiming there is "no significant difference" in cultural conditions between 2001–2020 and 2021–2024 (Watermaster Opp. 9:18-23). Watermaster *provides no technical basis* for excluding 2021–2024. Because the selected hydrologic Base Period will remain in place for a minimum of approximately a decade, including as many recent years with available data as possible is the prudent approach; whereas, selecting a new hydrologic Base Period in 2026 that unnecessarily ends in 2020 is not. (Dutton Supp. Dec., ¶ 19.)

Watermaster's reliance on model calibration endpoints is not a basis to exclude otherwise appropriate candidate periods. A groundwater flow model is not necessary to select a hydrologic base period. The point is that a model's ending in 2020 is not grounds for exclusion. (Dutton Supp. Dec., ¶ 20.)

V. CONCLUSION

Watermaster asks the Court to choose a base period because it will produce "lower PSY and FPA values" and thereby increase rampdown and supplemental water purchases. The record explains why that approach is technically and analytically unsound. DWR's 2030 Central Tendency streamflow change factor is approximately 0.97 annually (0.96 monthly), and the far wider spread of long-term scenarios underscores why near-term, better-constrained estimates are the appropriate planning touchstone for a base period that will govern approximately at least the next decade.

Watermaster's own comparative analysis shows 1995–2024 is 3% drier than the period of record and aligns with that near-term signal, while 2001–2020 is 12% drier and is an outlier. Watermaster's proposal is being advanced to depress PSY. The Court should reject outcome engineering and adopt Movants' recommendation for 1995–2024 as the most *representative*

hydrologic Base Period for the Basin among the alternatives that were presented and analyzed by Watermaster.

Dated: March 11, 2026

FENNEMORE LLP

By: _____

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Darien K. Key
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SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF RIVERSIDE – CENTRAL DISTRICT

Coordination Proceeding Special Title (Cal. Rules of Court, Rule 3.550) MOJAVE BASIN WATER CASES	Case No. JCCP5265 Mojave Basin Water Cases Dept. 1, Riverside Superior Court Hon. Craig G. Reimer
CITY OF BARSTOW, et al., Plaintiff, v. CITY OF ADELANTO, et al., Defendant.	Lead Case CIV208568 Coordinated With San Bernardino Superior Court Case No. CIVSB2218461 **DECLARATION OF DARIEN KEY IN SUPPORT OF MOVANTS' REPLY TO WATERMASTER OPPOSITION TO MOVANTS MOTION TO SELECT HYDROLOGIC BASE PERIOD OF 1995-2024** *Filed Concurrently With: Movants' Reply to Watermaster Opposition; Declaration of Anona Dutton ISO Movants' Reply to Watermaster Opposition* Date: March 18, 2026 Time: 8:30 a.m. Dept: 1 Reservation No.: Per Court Order 2/20/2026

I, Darien Key, hereby declare:

1. I am an attorney duly licensed to practice in the State of California, Bar No. 324353. I am a Director with Fennemore LLP and counsel of record for MITSUBISHI CEMENT CORPORATION, ROBERTSON'S READY MIX, LTD., and CALPORTLAND COMPANY ("**Movants**") and give this declaration in support of the Movants' Reply to Watermaster Opposition to Movants' Motion to Select the Hydrologic Base Period of 1995–2024 ("**Motion**").

2. I have personal knowledge of the facts stated in this Declaration and, if called as a witness, could and would competently testify thereto.

3. Consistent with the Court's Order of October 23, 2024, Movants will present to the Court a summary of the factual and legal contentions demonstrating the merits of Movant's Motion and evidence via PowerPoint. The PowerPoint is attached as **Exhibit 1**. ("**Decl. Key**").

4. The PowerPoint is filed and served concurrently with this Reply, no later than five court days before the hearing, as required by the Court's Order.

5. Movant's Motion was submitted for filing with the Court and served on Watermaster on February 24, 2026. Watermaster served Movant's Motion on all parties on February 25, 2026, consistent with Watermaster policy and procedures.

6. On the morning of March 10, 2026, counsel for Movants was notified for the first time by its filing vendor, First Legal, that Movant's Motion filing was initially rejected as of March 3, 2026. Movants immediately corrected the filing and re-filed on March 10, 2026.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 11th day of March, 2026.

Darien Key

EXHIBIT 1

Mitsubishi Cement Corporation,
Robertson's Ready Mix, Ltd. &
CalPortland Company ("Movants")

Motion to Select Hydrologic Base Period of 1995–2024

Superior Court of the State of California, County of Riverside
Mojave Basin Water Cases | March 18, 2026

FENNEMORE LLP

Procedural posture: the Court asked for a representative period, with comparative support

September 2022

The Court questioned whether a 60-year period ending in 1990 remained representative given 32 additional years of data and "climatic disruption."

2024–2025

The Court criticized inconsistent, short-term, or cherry-picked periods and directed a separate, better-supported motion on base-period selection.

January–February 2026

Watermaster's first motion was denied indefinitely for lack of comparative analysis and sufficient evidentiary support.

The present question is not whether to engineer a lower PSY. It is which of Watermaster's evaluated periods is most representative and best supported under the governing standards.

Motion 4–8; Reply 2

Governing standard for selecting a hydrologic Base Period

DWR Bulletin 84

A proper base period should include both normal and extreme wet and dry years, fall within available records, and include recent cultural conditions.

Los Angeles v. San Fernando

The desirable period includes wet and dry periods similar in magnitude and occurrence to the normal supply and sufficient measurements to relate hydrology to recent culture.

Judgment definition of PSY

PSY is the highest average annual amount that can be produced over a representative long-term sequence without long-term net reduction of storage.

Court's 2022 order

The Court asked whether 1931–1990 remains representative after decades of additional data and climatic disruption, and whether a different period should be defined.

1995–2024 satisfies every selection criterion Watermaster itself invoked

- ✓ **Both normal and extreme wet and dry years** — *Motion 10–11*
- ✓ **Within the period of available records** — *Motion 11–14*
- ✓ **Captures the most recent cultural conditions** — *Motion 14–16*
- ✓ **Aligns with PSY's representativeness mandate** — *Motion 16*
- ✓ **Addresses climatic disruption without biasing the average low** — *Motion 16–18*

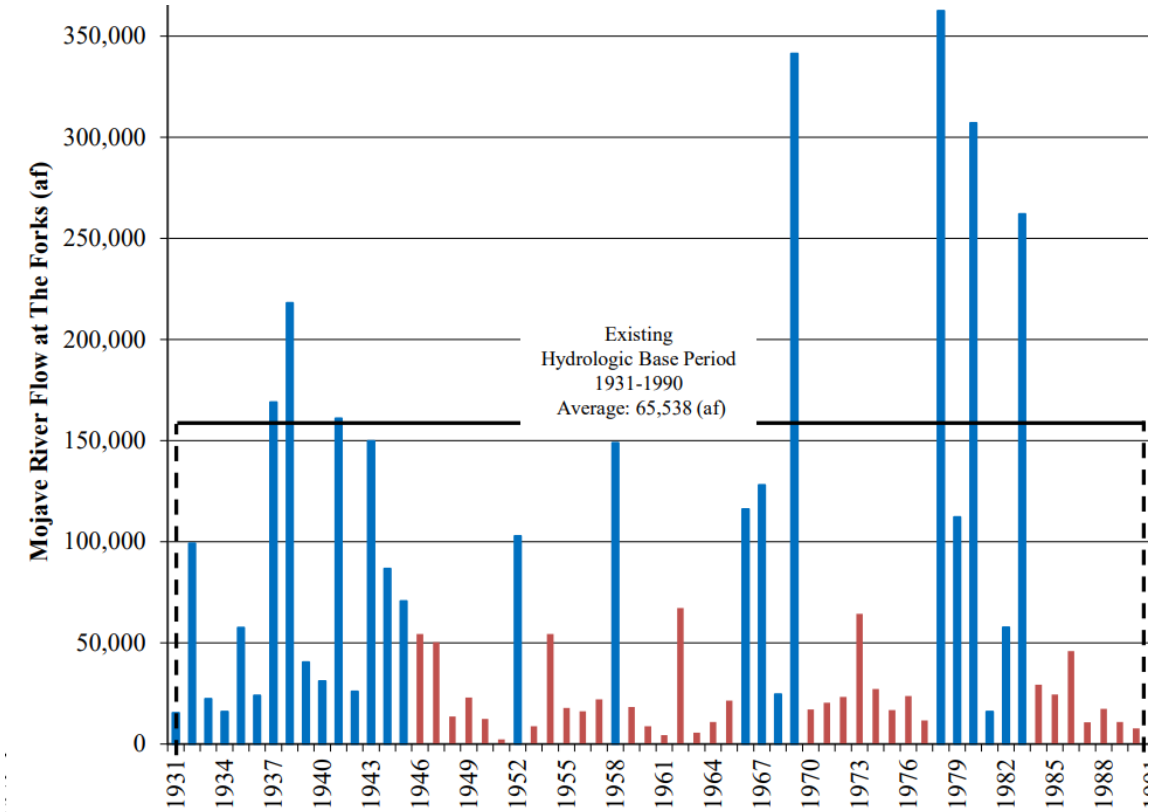
The record supports 1995–2024 as the most technically and legally supportable alternative among the periods Watermaster evaluated.

Motion 10–18

Normal and extreme wet and dry years are present in 1995–2024

Watermaster identifies wet and dry years using Mojave River flow at the Forks. On that measure, 1995–2024 includes both ends of the hydrologic spectrum:

- Extreme wet years, including 2005 and 2023
- Multi-year droughts, including 1999–2002, 2013–2018, and 2021–2022
- A more representative mix of post-1990 variability than 2001–2020 alone



Motion 10–11, 18

1995–2024 falls squarely within available records; UMBM calibration is not a legal criterion

The proposed period sits comfortably within the basin's modern reporting record, and the model-calibration endpoint does not create a rule of exclusion.

1993–94	Watermaster annual reporting begins.
1995–2024	Entire proposed period falls within reported and measured data.
2021–2024	Recent years are available; excluding them is an artificial cutoff.

? Why Watermaster's calibration point does not control

The model's calibration through 2020 may affect how PSY is run; it does not make post-2020 years legally or technically ineligible for base-period selection.

✓ Reply point

A calibrated model can be extended beyond its calibration period, and the record does not explain why that possibility could not be used here. The recent cutoff is convenience, not criterion.

The available-record requirement points toward inclusion of recent data, not exclusion of it.

Motion 11–14; Reply 4–5

Recent cultural conditions are better captured by 1995–2024 than 2001–2020

✓ 1995–2024

- Includes the four most recent years (2021–2024)
- Spans the last pre-judgment year and the full post-judgment operating period
- Captures ongoing changes in land use, groundwater pumping, and basin operations

? 2001–2020

- Omits the most recent four years
- Treats an older cutoff as "recent" without identifying a basin event that makes 2020 the right stopping point
- Excludes the very years Watermaster says should matter most: current conditions

No meaningful technical showing explains why data from 1998–2000 outweighs the value of 2021–2024, or why a new base period chosen in 2026 should stop at 2020.

Motion 14–16; Reply 4–5

PSY requires a representative period — not a lower number by design

Judgment / PSY standard

Select a representative long-term sequence and calculate the highest average annual amount that can be produced without long-term net reduction of storage.

↓ 2001–2020

Watermaster emphasizes that this period is about 6% drier than 1931–1990 and would produce lower PSY and FPA values.

↑ 1995–2024

This period is about 2% higher than 1931–1990, remains within the available record, and better reflects the full mix of post-1990 basin variability.

The question is which period is most representative under the governing standard — not which period is most effective at depressing PSY.

Motion 16; Opposition 2–3; Reply 2–3

Watermaster's opposition confirms an outcome-driven approach

Watermaster's stated premise

"If the goal is to bring the Basin Area into balance as soon as reasonably possible, a 'shorter' and 'drier' base period is needed to generate lower PSY and FPA values."

Opposition pp. 2–3

Movants' reply

That reverses the proper order. The Court should select a representative hydrologic Base Period first; PSY is then calculated from that representative hydrology; management tools follow.

Reply pp. 2–3

The governing standards ask what is representative. They do not authorize choosing a period because it forces more rampdown or more purchases of supplemental water.

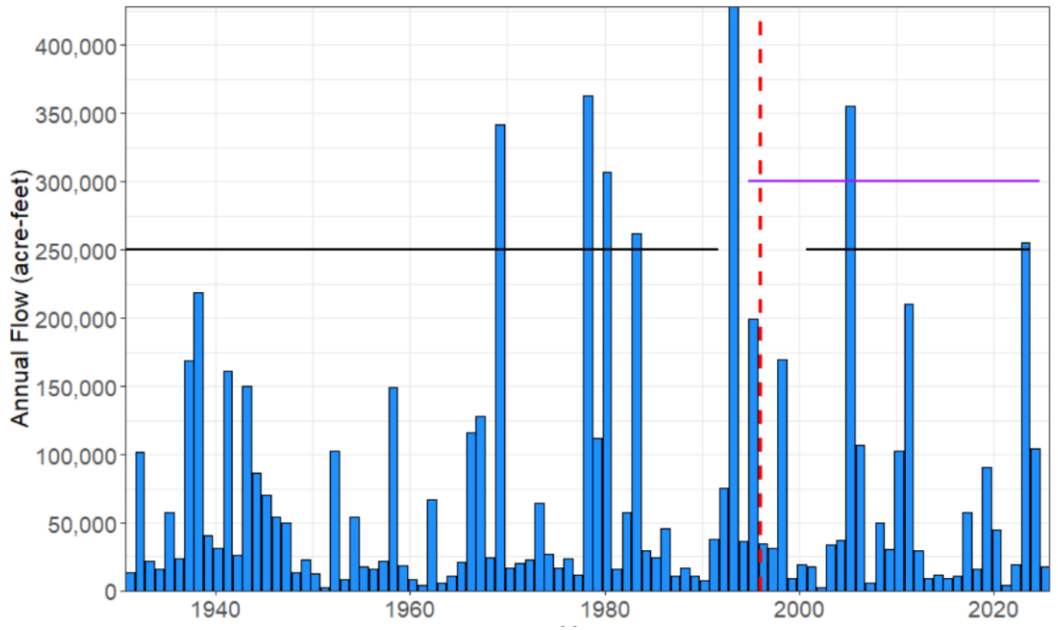
Opposition 2–3; Reply 2–3

Climate forecasts do not support selecting a drought-weighted outlier today

Watermaster relies on mid-century 12%–13% drier projections and says the Court should plan "NOW" for that result. The reply explains why that is not the right lens for selecting a base period that will guide the next decade:

- DWR's 2030 Central Tendency is the better-constrained near-term planning signal
- That average annual change factor is roughly 3–4% drier, not 12–13% drier
- Relative to the full period of record, 1995–2024 is 3% drier; 2001–2020 is 12% drier

Figure 1 – Mojave River Flow at the Forks and Potential Hydrologic Base Periods



1995–2024	Aligns closely with the 2030 Central Tendency
2001–2020	Tracks a much drier outlier advanced because it yields lower PSY

Motion 17–18; Opposition 3–6; Reply 3–4

Excluding wet years and 2021–2024 would bias the average low

Wet years are part of the signal

USBR modeling, as described in the reply, shows that high-flow events continue in the future even as dry and typical years trend drier.

The Forks average is driven by extremes at both ends

Because "average" supply in this basin is calculated across rare wet events and drought sequences, excluding wet years understates the mean and distorts representativeness.

A base period selected in 2026 should not stop at 2020 without a technical reason

The reply explains that there is no meaningful technical showing why the most recent four years should be omitted merely because more data will always continue to arrive.

The opposition's objections to 1995–2000 and 2021–2024 are best understood as attempts to trim out years that raise the representative average — not as applications of the governing standard.

Opposition 6–10; Reply 4–5

Requested order

The Court should select 1995–2024 as the hydrologic Base Period for PSY calculations and direct future PSY and FPA determinations to proceed on that basis.

Legally supportable

It is the best fit with Bulletin 84, San Fernando, the Judgment, and the Court's own directives on representativeness and climatic disruption.

Technically supportable

It captures wet and dry extremes, falls within the available record, includes the most recent cultural conditions, and avoids artificially biasing the mean low.

Best Alternative Analyzed

The record does not justify choosing a period because it is drier or because it yields lower PSY. The standard is representativeness, not outcome engineering.

1995–2024 is the most representative and best-supported period among the alternatives Watermaster evaluated.

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SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF RIVERSIDE – CENTRAL DISTRICT

Coordination Proceeding Special Title (Cal. Rules of Court, Rule 3.550) MOJAVE BASIN WATER CASES	Case No. JCCP5265 Mojave Basin Water Cases Dept. 1, Riverside Superior Court Hon. Craig G. Reimer
CITY OF BARSTOW, et al., Plaintiff, v. CITY OF ADELANTO, et al., Defendant.	Lead Case CIV208568 Coordinated With San Bernardino Superior Court Case No. CIVSB2218461 **SUPPLEMENTAL DECLARATION OF ANONA DUTTON IN SUPPORT OF MOVANTS REPLY TO WATERMASTER'S OPPOSITION TO MOVANTS MOTION FOR APPROVAL OF HYDROLOGIC BASE PERIOD OF 1995-2024**
	Date: March 18, 2026 Time: 8:30 a.m. Dept: 1 Reservation No. Per Court Order 2/20/2026

I, Anona Dutton, PG, CHg hereby declare:

1. I am the CEO at EKI Environment & Water ("**EKI**"). I have over twenty years of professional experience managing and conducting water resources projects. I have managed multi-million dollar efforts to secure reliable water supplies for water agencies and developers, including leading the technical efforts to minimize the water footprint of new and existing development, assessing groundwater and surface water supply yields, installing groundwater wells, securing water transfer options, and evaluating the feasibility of developing new water supply sources such

as recycled water, desalination water, and other non-potable sources (stormwater, rainwater, and greywater). I give this declaration on behalf of MITSUBISHI CEMENT CORPORATION, ROBERTSON'S READY MIX, LTD., and CALPORTLAND COMPANY ("**Movants**"), in reply to Watermaster's Opposition ("**Watermaster's Opposition**") to Movants Motion to Select Hydrologic Base Period of 1995–2024 ("**Motion**").

2. I am a California-licensed Professional Geologist (PG #7683) and Certified Hydrogeologist (CHg #841) with over twenty years of professional experience in groundwater and surface water resources, basin adjudications, sustainable groundwater management, numerical groundwater modeling, and litigation support.

3. I have personal knowledge of the matters stated herein and, if called as a witness, could and would competently testify to them.

4. This Declaration is based on my professional review of materials prepared and presented by the Mojave Basin Area Watermaster and Watermaster Engineer, including analyses of potential hydrologic Base Periods, as well as EKI's technical review of those materials on behalf of Movants.

5. The opinions expressed herein rely primarily on facts, data, analyses, and representations provided by the Watermaster and its consultants. Except where expressly noted, I have not independently generated or recalculated hydrologic datasets that the Watermaster relied on in proposing its hydrologic Base Period recommendation and the alternatives proposed.

6. In preparing this Declaration, I reviewed the following materials:

7. Watermaster's Opposition to Movant's Motion for Approval of 1995-2024 Hydrologic Base Period; Supporting Declaration of Robert Wagner (March 5, 2026).

8. In response to the Watermaster's Opposition to 1995-2024, my office prepared a letter with analysis regarding Basin climatic projections, a true and correct copy of which is attached as **Exhibit 1**.

9. Movants will present to the Court a summary of the factual and legal contentions demonstrating the merits of Movant's Motion and evidence via PowerPoint. Attached is a true and correct copy as **Exhibit 2**.

10. Watermaster reached its preferred "drier" outcome by mis-interpreting Department of Water Resources ("**DWR**") development and intended use case for the climate change factors and by selectively citing United States Bureau of Reclamation ("**USBR**") modeling summaries while omitting the full range of projected potential outcomes, including continued high-flow events.

11. DWR reports four climate forecast scenarios and that the 2030 Central Tendency scenario yields an average annual change factors of 0.97 with a monthly value of 0.96, i.e., roughly 3–4% drier conditions. **Exhibit 1**, p. 2, Table 1. Change factors are applied to a representative historical time series for planning purposes to evaluate future conditions.

12. The DWR 2070 scenarios provide average streamflow factors ranging from -10% to +61% (a span from 0.90 to 1.61), demonstrating the uncertainty in long-term projections and why near-term, better-constrained estimates are more appropriate for a base period that will govern operations for roughly a decade.

13. Consistent with that point, the DWR 2030 Central Tendency factors are widely used across California in basins subject to the Sustainable Groundwater Management Act (SGMA) to support planning to achieve sustainability by 2040/2042.

14. The DWR change factors are multipliers intended to be applied to a selected period of analysis, so long as the period is sufficiently long to be generally representative of average conditions; they are not confined to comparisons against a single reference period, as Watermaster implies.

15. Against that framework, Watermaster's comparison of candidate Base Periods to the Basin's long-term hydrology is the most useful analysis and confirms that comparison shows that 1995–2024 is 3% drier than the period of record (1931-2024) and aligns with the DWR 2030 2030 Central Tendency factors, while Watermaster's preferred 2001–2020 period is 12% drier than the period of record. (Watermaster Opp. 5:1-5.)

16. USBR simulations show that high-flow events similar to those observed historically are likely to continue, and USBR's own presentation of results reflects a distribution in which dry and typical years trend drier, while wet years persist and can become wetter.

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17. Watermaster's Opposition highlights only ensemble median summaries and does not provide the complete picture, including the range that contains both increases and decreases in annual flow.

18. Watermaster uses average flow at the Mojave River forks as a primary planning metric, even though "average" years are rare and the average, or arithmetic mean, is driven by extremes at both ends of the distribution; excluding wet years from the calculation artificially biases the average low and fails to represent historical or anticipated future conditions.

19. Watermaster provides no technical basis for excluding 2021–2024. Because the selected hydrologic Base Period will remain in place for a minimum of approximately a decade, including as many recent years with available data as possible is the prudent approach; whereas, selecting a new hydrologic Base Period in 2026 that unnecessarily ends in 2020 is not.

20. Watermaster's reliance on model calibration endpoints is not a basis to exclude otherwise appropriate candidate Base Periods, and a groundwater flow model is not necessary to select a hydrologic base period; the point is that a model's ending in 2020 is not grounds for exclusion of certain Base Periods.

21. My opinions are based on comparative evaluation of hydrologic Base Periods identified and analyzed by the Watermaster. These opinions are subject to refinement should additional data or revised analyses be provided.

22. Based on my education, experience, and review of Watermaster-provided materials, it is my professional opinion that 1995–2024 is a reasonable, technically defensible, and appropriate hydrologic Base Period.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 11th day of March, 2026, at Daly City, California.

Anona Dutton, PG, CHg

EXHIBIT 1

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10 March 2026

Derek Hoffman
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Subject: **Comments on Watermaster's Opposition to Motion for Approval of 1995-2024 Hydrologic Base Period; Supporting Declaration**
(EKI 50063.00)

Dear Mr. Hoffman:

EKI Environment & Water, Inc. (EKI) has conducted a review of the *Watermaster's Opposition to Motion for Approval of 1995-2024 Hydrologic Base Period; Supporting Declaration*[1] (Opposition). EKI has conducted this review and provided these comments to Fennemore in its role as Counsel to Mitsubishi Cement Corporation, Robertson's Ready Mix, Ltd., and CalPortland Company (collectively the "Clients") in the Mojave River Basin Area (Basin). Key comments and clarifications are provided below.

EKI limited its review and ultimate recommendation of a Hydrologic Base Period solely to the potential alternative hydrologic base periods identified by the Watermaster. Per the Watermaster, all alternative time periods met the basic criteria for a Hydrologic Base Period as described by the Watermaster in their Statement of Reasons[2], however, EKI identified several reasons why 1995-2024 is appropriate as explained in our 19 December 2025[3] and 6 February 2026 letters[4]. We appreciate that our feedback has resulted in the Watermaster conducting additional analysis and reviewing the additional key data and reference sources that we provided to them. However, we take exception to the Watermaster's limited interpretation of the information presented in those sources, as described in the Opposition.

MISREPRESENTATION OF STUDIES THAT COUD BE USED TO SUPPORT ANALYSIS OF SUITABLE HYDROLOGIC BASE PERIODS

When selecting a "drier" Hydrologic Base Period, Watermaster made no attempt to justify why its selection was appropriate to reflect potential future conditions in the Basin or to reference scientific data or studies that would have supported its recommendation[2]. EKI provided several commonly-used sources to the Watermaster, none of which had been incorporated or considered as part of their proposal. As detailed in their Opposition and summarized below, based on a narrow interpretation, the Watermaster has: (1) dismissed the work done by the California Department of Water Resources (DWR) to provide

[1] Brunick, McElhaney, & Kennedy PLC, 2026. *Watermaster's Opposition to Motion for Approval of 1995-2024 Hydrologic Base Period; Supporting Declaration*. March 5.
[2] *Watermaster Engineer's Statement of Reasons for Recommending 2001-2020 Base Period,* November 12, 2025.
[3] EKI, 2025. *Recommendation for a Hydrologic Base Period.* December 19.
[4] EKI, 2026. *Summary of Department of Water Resources Streamflow Change Factors for the Mojave Watershed.* February 6.

agencies with climate change factors in support of sustainable groundwater management, and (2) selectively referenced results from the United States Bureau of Reclamation (USBR) modeling to describe potential future conditions in the Basin.

DWR's Streamflow Change Factors

In a previous letter[5], EKI provided a high-level summary of precipitation and streamflow change factors as reported by DWR for four projected climate scenarios in the Mojave River watershed. Consistent with the approach taken in most actively managed basins across California, EKI focused on the 2030 Central Tendency scenario; however, average factors for all four scenarios shown below on **Table 1**.

Watermaster recommends using projections of 2050 and 2070 conditions for planning purposes in the Opposition[1]. However, as shown in **Table 1**, the 2070 scenarios provide average streamflow changes ranging from -10% to +61% (average streamflow change factors of 0.90 and 1.61). This broad range underscores the significant uncertainty in long-term projections of hydrology under various climate regimes, and emphasizes the importance of selecting more near-term, better-constrained estimates of anticipated hydrology. The 2030 Central Tendency scenario is therefore more representative and useful for planning purposes. Notably, in the majority of groundwater basins that are subject to the Sustainable Groundwater Management Act (SGMA), the 2030 Central Tendency is being used to support planning efforts with the goal of achieving sustainability by 2040/2042 and maintaining it through 2070/2072.

Table 1 - Summary of DWR's Streamflow Change Factors for the Mojave River Watershed

Climate Change Scenario	Average Streamflow Change Factor	
	Annual	Monthly
2030 Central Tendency	0.97	0.96
2070 Central Tendency	0.93	0.93
2070 Drier with Extreme Warming	0.90	0.93
2070 Wetter with Moderate Warming	1.61	1.41

An important clarification is that while the streamflow change factors developed by DWR use a period of reference hydrology (1916-2011) as a point of comparison for future conditions, they did so such that future conditions can be represented as multipliers, or change factors, of the reference period. However, the change factors are designed to be used for any selected period of analysis, provided the time period of analysis is long enough to be generally representative of average conditions. **The change factors are not just designed to be used to compare against the 1916-2011 time period** as the Watermaster implied. The DWR describes the use of change factors as follows: "An average monthly time series of change factors can be computed for the entire basin and each of the factors can then be applied to the corresponding historical time series to develop the projected time series at 2030 and at 2070[6]."

The most valuable analysis that the Watermaster has provided to date is the comparison of the alternative Hydrologic Base Periods identified by the Watermaster to the long-term hydrology for the Basin, as shown in the 14 January 2026 Watermaster Special Meeting to discuss the Hydrologic Base Period. In this

[5] EKI, 2026. *Summary of Department of Water Resources Streamflow Change Factors for the Mojave Watershed.* February 6.
[6] DWR, 2018. *Guidance for Climate Change Data Use During Groundwater Sustainability Plan Development.* July.

analysis, Watermaster shows that the Watermaster's proposed Hydrologic Base Period of 2001-2020 would be 12% drier than the historical average over the period of record (1931-2024). By comparison, 1995-2024, (again, an alternative Hydrologic Base Period identified by the Watermaster) is 3% drier than the period of record. Based on Watermaster's own analysis, 1995-2024 is much more closely aligned with the DWR climate change factors that are being broadly used to support actively managed basins across California to achieve sustainability (i.e., the 2030 Central Tendency).

Bureau of Reclamation Simulations

In our previous letter[4], USBR projections from their Mojave River Watershed climate change assessment[7] are referenced in response to the Watermaster's assertion that 1995-2024 is an inappropriate Hydrologic Base Period in part because of inclusion of a small number of wet years observed in the 1990s. Future simulations of runoff in the Mojave River watershed presented by USBR show that high-flow events, similar to those that have occurred in the past, are likely to continue into the future.

In their Opposition, Watermaster includes select pages from USBR's climate change assessment but does not provide a complete picture of the results of the assessment. Watermaster references several summary statistics presented by California Regional Water Quality Control Board (Board) regarding the USBR's climate modeling, including estimates of declining average runoff by 12-13% by the 2050s and by 14-20% by the 2070s. These summary statistics are based on ensemble median values which are informative but incomplete, as the underlying range of anticipated runoff is important to consider as well. As the USBR notes, *"there is significant variability between climate projections and the range of future predictions includes both increases and decreases in annual flow,"* (page ES-3 of the climate change assessment).

Regarding their modeling effort, USBR states that *"To provide a range of flow estimates, we analyzed results from 112 different GCM [Global Climate Model] climate change projections. Each projection provides monthly values of temperature and precipitation, from 1950 through 2099… To generate flow estimates, we used climate projections to force hydrologic simulations with the Variable Infiltration Capacity (VIC) model…"* (page 19-20 of the climate change assessment). USBR presents the results of these simulation suites in two ways: (1) as an ensemble median with an uncertainty envelope, or (2) as 25th, 50th, and 75th percentiles. The 25th percentile will generally represent the "drier" portion of the ensemble, while the 75th percentile generally represents the "wetter" portion of the ensemble. For example, a given parameter, such as mean streamflow, may be summarized as the ensemble median of mean streamflow plus the uncertainty envelope, representing both the center and range of the ensemble. Alternatively, mean streamflow could be summarized as relative changes in different percentiles of the distribution. EKI included USBR's plots of the ensemble median with an uncertainty envelope in its 19 December 2025 letter[3]. EKI pointed out that the uncertainty envelope for annual runoff remains largely constant over the simulation period, indicating that the potential for high and low runoff years is relatively stable, despite nominal decreases in the ensemble median (50th percentile).

Watermaster preferentially highlights the ensemble median simulated result in the Opposition, but neglects to discuss the range in projected scenarios. The USBR summarizes the range in projected scenarios in Appendix B Table B-1 of the climate change assessment, shown below.

[7] U.S. Bureau of Reclamation, 2013. *Mojave River Watershed Climate Change Assessment*. September.

Appendix B—Summary Tables of Streamflow Projections

Table B-1: Summary of Percentage Change in Mean Streamflow as Compared to 1990s Base Period for Three Change Percentiles with the 112 GCM Climate Projections (25, 50, and 75)

Season	STN Name	2020s			2050s			2070s		
		25%	50%	75%	25%	50%	75%	25%	50%	75%
Annual	Deep Creek Near Hesperia	-20%	0%	27%	-39%	-12%	25%	-36%	-20%	17%
	West Fork Near Hesperia	-21%	3%	33%	-39%	-13%	28%	-33%	-14%	25%
	Lower Narrows Near Victorville	-20%	2%	33%	-37%	-12%	30%	-34%	-19%	18%
Dec. - Mar.	Deep Creek Near Hesperia	-23%	5%	36%	-37%	-10%	38%	-32%	-14%	24%
	West Fork Near Hesperia	-22%	4%	43%	-40%	-6%	40%	-34%	-13%	29%
	Lower Narrows Near Victorville	-23%	6%	38%	-37%	-8%	38%	-32%	-13%	26%
Apr. - Jul.	Deep Creek Near Hesperia	-39%	-12%	20%	-51%	-30%	4%	-60%	-36%	-16%
	West Fork Near Hesperia	-30%	-2%	28%	-46%	-25%	8%	-52%	-30%	-2%
	Lower Narrows Near Victorville	-35%	-7%	19%	-47%	-27%	6%	-56%	-31%	-12%

Table B-1 shows that the ensemble median of mean annual streamflow is simulated to decline by as much as 12% by the 2050s and by as much as 20% by the 2070s. Table B-1 also shows that mean annual streamflow for the ensemble "high flows" (the 75th percentile/75% column) is simulated to increase by as much as 30% by the 2050s. The USBR's analysis, as summarized in Table B-1, demonstrates that while dry and typical years are likely to exhibit relative declines in streamflow, **wet years are expected to become even wetter**.

The average (arithmetic mean) flow at the Mojave River forks has been used by the Watermaster as the primary planning metric for the Basin, although rarely does the Basin see an "average" year and as previously noted by other parties, flow at the Forks is not necessarily a relevant metric for all Subareas[8]. Most years are either wet or dry, and as such, the "average" flow at the Forks is driven by extremes on either end of the spectrum. Exclusion of wet years from this average calculation artificially biases the calculation low, and doing so does not fully represent either historical or anticipated future conditions. The USBR's modeling shows that the underlying distribution of runoff is changing, with dry and typical years becoming drier and wet years becoming wetter. As noted by other parties, a longer Hydrologic Base Period will most effectively capture this variation[9].

In their Opposition, the Watermaster points out that the 2020s so far have been drier than the 1990s, which differs from the summary statistics of USBR's simulated future conditions for the 2020s. However, we note that the 2020s are not complete (we only have data through 2025), and as described above, long-term averages used for planning purposes are driven by extreme years in the Basin. Comparison of a small number of select years to a median of an ensemble of simulated future conditions is not appropriate and does not suggest that, on average, either USBR's or DWR's projections of future conditions are any less reliable than a value that Watermaster has independently selected without a specific basis or discussion of uncertainty. As described above, there is a significant range in simulated future conditions, and the

[8] Declaration of James Blanke, *City of Barstow v. City of Adelanto*, et al., No. CIV208568 / JCCP No. 5265. Superior Court of the State of California for the County of Riverside, 4 March 2026.
[9] Declaration of Peter Leffler, *City of Barstow v. City of Adelanto*, et al., No. CIV208568 / JCCP No. 5265. Superior Court of the State of California for the County of Riverside, 4 March 2026.

range and the uncertainty of model estimates increase with time. For these reasons, EKI has recommended consideration of DWR's 2030 Central Tendency projections when making decisions that will impact planning and operations over the next decade.

DISMISSAL OF RECENT YEARS

In their Opposition, Watermaster states there is *"No need to keep adding additional years just for the sake of adding more years."* Watermaster has also repeatedly stated the new Hydrologic Base Period must be "more recent". Watermaster describes in their Opposition that *"Cultural conditions change gradually. Accordingly, there is no significant difference in the cultural conditions existing in 2001-2020, and those existing in 2021-2024."* Despite Watermaster describing a need to include "more recent" years, Watermaster has not provided a thorough justification or technical basis for excluding 2021-2024.

As described in their Renewed Motion[10], once selected, the Hydrologic Base Period will not be changed every year, but instead will be in place for a minimum of approximately a decade. As such, because the Hydrologic Base Period will remain in place for so long, including as many recent years with available data as possible at the time of Hydrologic Base Period selection makes the most sense to achieve a timeframe that reflects "recent" conditions. Selecting a new Hydrologic Base Period in 2026 that is already over a half-decade old (i.e., ends in 2020) is not prudent.

POTENTIAL USE OF A GROUNDWATER FLOW MODEL TO SUPPORT BASIN MANAGEMENT

In their Opposition, the Watermaster states that *"Extending the modeling beyond calibration can be done, but Mitsubishi does not explain why that is necessary or superior for hydrologic base period selection.[1]"* In the Statement of Reasons, Watermaster disqualifies candidate Hydrologic Base Periods on the basis of the Upper Mojave Basin Model's (UMBM's) calibration period, stating that *"The alternative base period 2002-2022 starts and ends on a dry year and is preceded by a series of dry years. However,* ***because the UMBM is calibrated through the year 2020 only, Watermaster does not consider this to be an appropriate selection****".* In the 14 January Watermaster Special Meeting, the Watermaster further stated that their proposed Hydrologic Base Period of 2001-2020 was appropriate in part because it *"fits the UMBM model calibration period (ending in 2020)."*

EKI has recommended multiple times that investment in a model that covers the entirety of the Basin would likely be the best tool to support decisions such as selecting a Hydrologic Base Period and evaluation of Basin conditions and would aid in increasing transparency and certainty for parties to the Judgment.

[10] Brunick, McElhaney, & Kennedy PLC, 2026. *Watermaster's Renewed Motion for Determination of Hydrologic Base Period for Calculation of Production Safe Yield Values; Memorandum of Points and Authorities, Supporting Declaration.* February 24.

That said, as a point of clarification, it is not EKI's position that either flow model used in the basin (UMBM or Regional Mojave Basin Model [RMBM]) is **needed** to select a hydrologic base period. Our comments simply pointed out that a model's temporal discretization is not grounds for exclusion of an otherwise appropriate hydrologic base period as the Watermaster asserted in its Statement of Reasons.

Sincerely,

EKI ENVIRONMENT & WATER, INC.

Anona Dutton, PG, CHg
Chief Executive Officer / Principal-In-Charge

EXHIBIT 2

MOTION FOR A HYDROLOGIC BASE PERIOD

18 MARCH 2026

MM001905

SUMMARY OF CONCERNS WITH THE WM PROCESS

- Watermaster has conducted very limited and selective analysis in support of its revisions to the recommended Hydrologic Base Period (HBP). Such a significant change should warrant a thorough and transparent analysis that relies on the best available data and science.
- Throughout this process, EKI has provided Watermaster with data sources and references to support a more complete evaluation.
- The proposed HBP is 12% drier than the period of record for the Basin, which is significantly drier than the California Department of Water Resources (DWR) 2030 Central Tendency Streamflow Change Factors that are being used to support groundwater management in most managed basins across the State.
- The Judgment defines Production Safe Yield (PSY) as the highest average annual amount of water that can be produced from a subarea over a sequence of years representative of long-term average natural water supply, under given cultural conditions, and without long-term groundwater depletion. The HBP should therefore be reflective of "long-term average natural water supply" in the Basin, not be skewed towards a certain and subjectively-defined outcome to generate a specific result (i.e., per the Watermaster to "*require[e] additional [Free Production Allowance] FPA rampdown and purchase of additional supplemental water*").

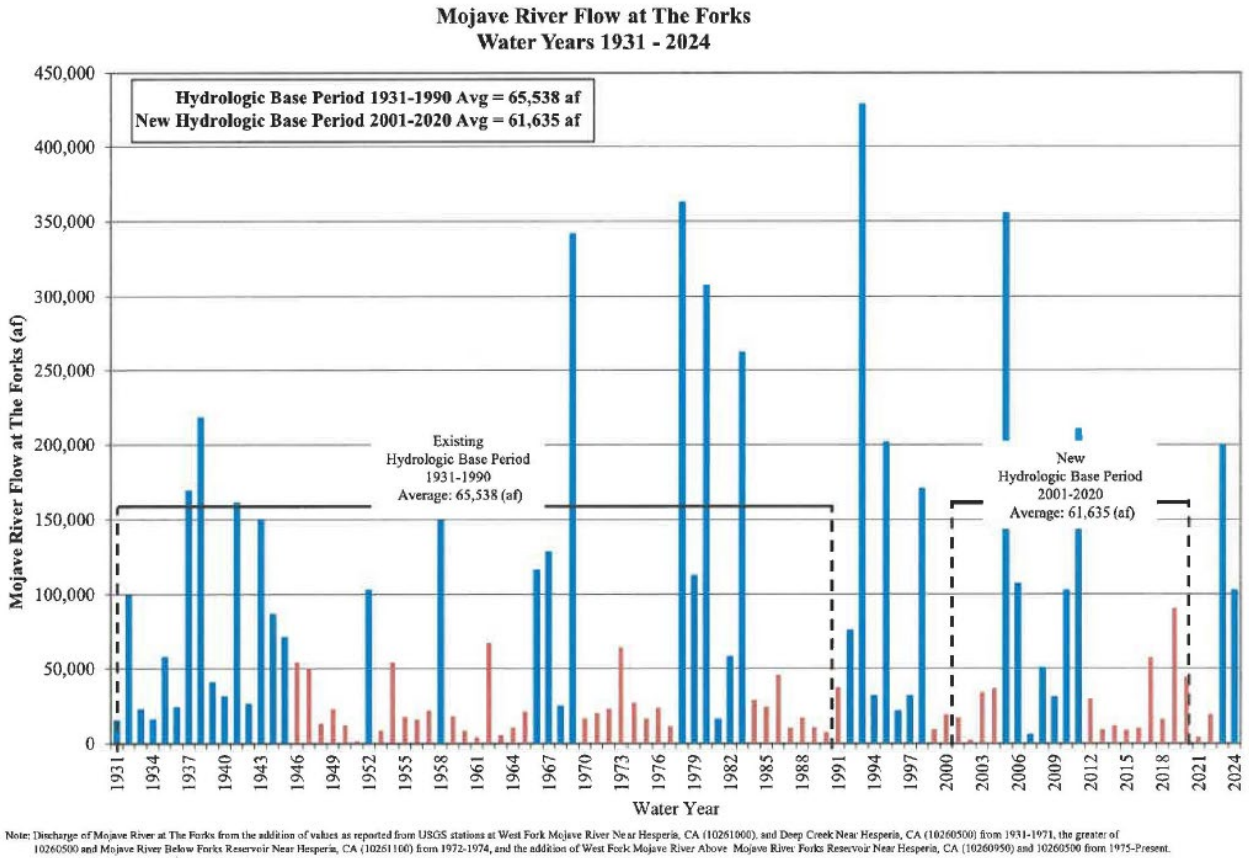
RECOMMENDATION FOR REVISED HBP

Of the HBP options presented by Watermaster, EKI identified 1995-2024 as the most appropriate HBP because it:

1. Best reflects the time period over which the physical solution set forth in the Stipulated Judgment has been adopted.
2. Contains recent years during which significant changes in cultural conditions have occurred.
3. Contains both wet and dry hydrologic extremes, or "climatic disruptions" as they are referred to in the Court's September 2022 order.
4. Best aligns with DWR's 2030 Central Tendency Streamflow Change Factors that are broadly being used across California to bring basins into balance by 2040/2042.

WM ORIGINAL MOTION – 9/3/25

- 2001-2020 was deemed appropriate by Watermaster using criteria established in Bulletin No. 84:
  - Reflective of recent cultural conditions
  - Contains normal and extreme wet and dry years
  - A series of dry years at the beginning and end of the base period
  - Relatively short and recent
  - Satisfies the requirements for a HBP as set forth in the Judgment



Note: Discharge of Mojave River at The Forks from the addition of values as reported from USGS stations at West Fork Mojave River Near Hesperia, CA (10261000), and Deep Creek Near Hesperia, CA (10260500) from 1931-1971, the greater of 10260500 and Mojave River Below Forks Reservoir Near Hesperia, CA (10261100) from 1972-1974, and the addition of West Fork Mojave River Above Mojave River Forks Reservoir Near Hesperia, CA (10260950) and 10260500 from 1975-Present.

EKI COMMENT LETTER – 9/29/25

- In response to the original Motion, EKI expressed the following concerns:
  - Watermaster did not fully demonstrate how the proposed HBP satisfies the requirements set forth in the Judgment
    - Specifically, a *"sequence of years that is representative of long-term average annual natural water supply… under given patterns of Production, applied water, return flows, and Consumptive Use"*
  - Watermaster did not describe plans to update the various components of the calculation of PSY under the new HBP (i.e., to describe the impact of revising the HBP)
    - Watermaster considered only flow at the forks of the Mojave River when evaluating the HBP without demonstrating why it was a proper surrogate for determining the HBP for all Subareas
  - Watermaster did not fully demonstrate how determination of the proposed HBP utilizes the "best available records and data"
    - Watermaster did not consider any alternative HBPs in their original Motion, or refer to any additional data or studies that described anticipated future conditions in the Basin vis a vis climate change to benchmark their proposed HBP
- EKI also provided the Watermaster references to DWR's Best Management Practice documents as potentially helpful references

WM STATEMENT OF REASONS – 11/12/25

- In response to extensive feedback from interested parties, Watermaster identified and several alternative HBPs
  - All alternative HBPs meet basic criteria necessary, as outlined by Watermaster
  - Watermaster maintained 2001-2020 as most appropriate
- Watermaster disqualified 1995-2024 because:
  - Watermaster characterized 1995-2024 as not *"dry and more recent"* (page 17)
  - Watermaster stated that *"…alternative base periods that begin in the 1990s do not meet the representation of recent cultural conditions…"* (page 18)

Alternative Hydrologic Base Periods	Mojave River at the Forks Average (a.f.)	Change relative to the 1931-1990 average (65,538 a.f.)	Criteria
1991-2022	71,344	8%	Start and end years are dry and are preceded by a series of dry years.
1995-2024	67,057	2%	Start and end years are wet and are preceded by a wet year/series of wet years.*
1998-2024	65,090	-1%	Start and end years are wet and are preceded by a wet year/series of wet years.
2001-2020	61,635	-6%	Start and end years are dry and are preceded by a series of dry years.
2002-2022	59,009	-11%	Start and end years are severe dry and are preceded by a series of severe dry years.

Notes: The PSY Update prepared by Watermaster in February of 2024 updated the hydrologic base period to be 2001-2020 for purposes of establishing PSY. This selection was based on the information that was available and reliable for Watermaster at the time of the analysis (i.e., flow data up to the year 2023).

Also, the PSY Update by Watermaster evaluated the 2001-2020 hydrologic base period also because the Upper Mojave Basin Model was calibrated through the Water Year 2020.

*The water supply at the Forks during the Water Years 1992 through 1995 was about three times the long-term average supply.

Table from page 16 of Statement of Reasons

EKI COMMENT LETTER -12/10/25

- Following the Statement of Reasons, EKI expressed further concerns and requests, specifically that:
  - Parties to the Judgment need visibility into the potential impacts to PSY in all Subareas under any new HBP
  - A clear and consistent framework should be used to determine the HBP and resultant PSY across all Subareas
  - The appropriateness of the metrics being used by the Watermaster (i.e., flow at the Forks) for establishing a HBP for all Subareas should be demonstrated
- EKI also provided the Watermaster with references to additional data sources that may be helpful in determining the HBP or evaluating the appropriate surrogacy of flow at the Forks, such as PRISM precipitation data

EKI COMMENT LETTERS -12/19/25 & 2/6/26

Following the December Watermaster Workshop, EKI identified 1995-2024 as the most appropriate hydrologic base period *among the alternatives identified by the Watermaster* because it:

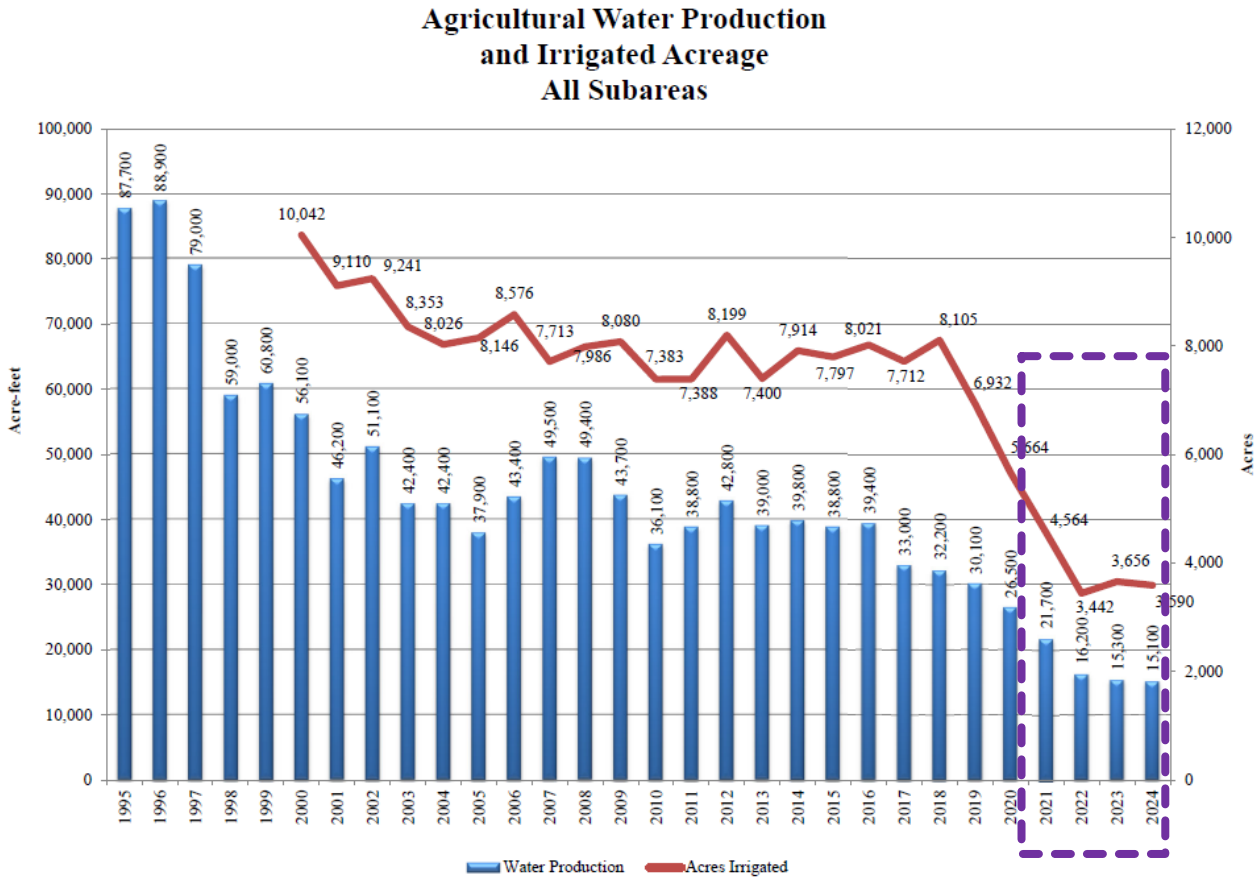
1. Best reflects the time period over which the physical solution set forth in the Stipulated Judgment has been adopted.
2. Contains recent years during which significant changes in cultural conditions have occurred.
3. Contains both wet and dry hydrologic extremes, or "climatic disruptions" as they are referred to in the Court's September 2022 order.
4. Best aligns with DWR's 2030 Climate Change Factors that are broadly being used across California to bring basins into balance by 2040/2042.

(1) 1995-2024 MOST COMPLETELY CAPTURES TIMEFRAME OF THE PHYSICAL SOLUTION

- Of the HBP alternatives identified by the Watermaster, 1995-2024 most completely captures:
  - The implementation of the physical solution to the stipulated Judgment, which began in water year 1994
  - Land use changes which began, as the Watermaster notes in their Opposition, between 1995 and 2000 and continue to this day

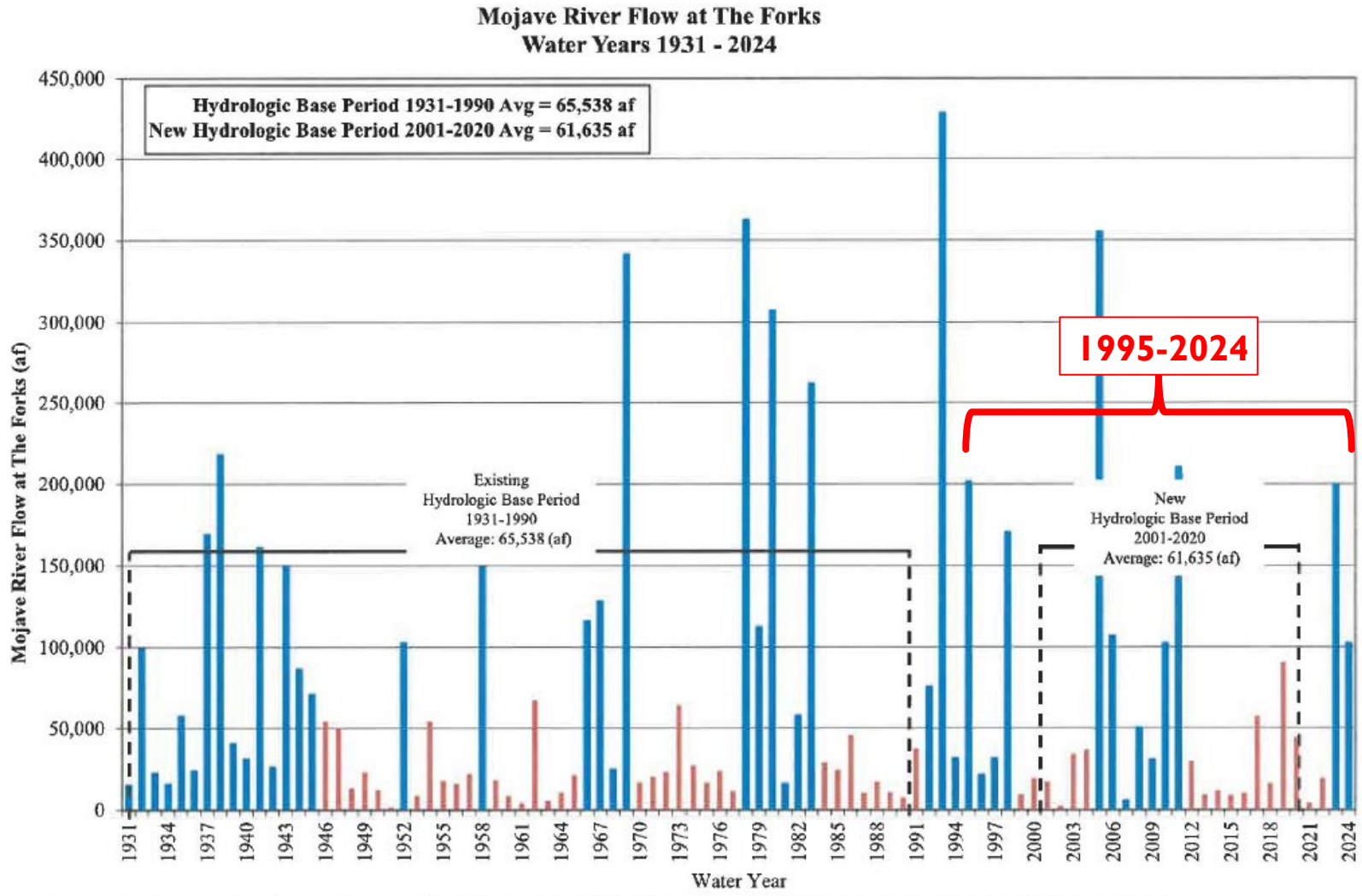
(2) 1995-2024 MOST COMPLETELY CAPTURES RECENT CULTURAL CONDITIONS

- Throughout this process, Watermaster has highlighted land use changes in the Basin since entrance of the Judgment
  - Transition from agricultural land use to urban land use throughout much of the Basin
  - Significant decreases in pumping in Oeste and Baja
- 1995-2024 most completely captures recent changes in the Basin



2021-2024 is excluded in the Watermaster's proposed period of 2001-2020.

(3) 1995-2024 CONTAINS "CLIMATIC DISRUPTIONS"



Note: Discharge of Mojave River at The Forks from the addition of values as reported from USGS stations at West Fork Mojave River Near Hesperia, CA (10261000), and Deep Creek Near Hesperia, CA (10260500) from 1931-1971, the greater of 10260500 and Mojave River Below Forks Reservoir Near Hesperia, CA (10261100) from 1972-1974, and the addition of West Fork Mojave River Above Mojave River Forks Reservoir Near Hesperia, CA (10260950) and 10260500 from 1975-Present.

- 1995-2024 includes:
  - Sustained, intense, multi-year droughts like 1999-2004 and 2012-2022, including 2 of the driest years on record
  - Wet and extreme wet years like 1995, 2005, 2011, and 2023

(4) 1995-2024 IS ALIGNED WITH THE DWR CHANGE FACTORS USED FOR BASIN MANAGEMENT

- DWR developed streamflow, precipitation, and ET change factors to be used as multipliers relative to a user-defined reference period
- 2070 projections exhibit a broad range of average change factor – 0.90 to 1.61 underscoring significant uncertainty in long-range predictions
- The 2030 Central Tendency (0.97 or 3% drier) is being widely used throughout California for groundwater planning purposes to achieve balance by 2040/2042

Scenario	Average Streamflow Change Factor	
	Annual	Monthly
2030 Central Tendency	0.97	0.96
2070 Central Tendency	0.93	0.93
2070 Drier with Extreme Warming	0.90	0.93
2070 Wetter with Moderate Warming	1.61	1.41

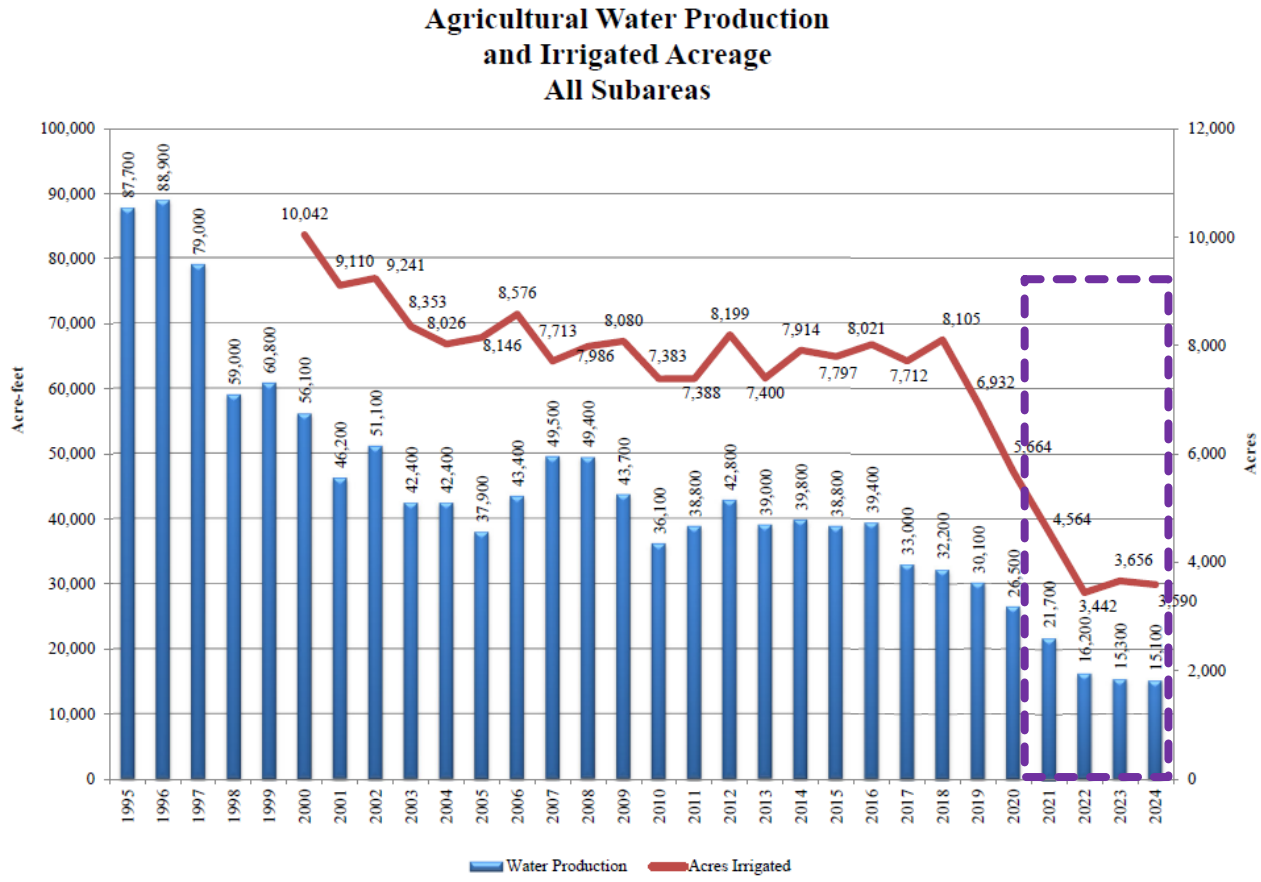
Values represent the average streamflow change factor for all model cells in the Mojave River Watershed.

EKI RESPONSE TO OPPOSITION – 3/10/26

- Dismissing recent years is not consistent with intent to revise HBP to include "recent cultural conditions"
- Watermaster has never provided a basis for what they consider to be a suitably "drier" condition
  - Throughout this process EKI provided Watermaster with data sources and modeling studies conducted by both DWR and U.S. Bureau of Reclamation (USBR) to evaluate anticipated future conditions in the Basin
    - DWR focused on four scenarios
      - 2030 Central Tendency
      - 2070 Central Tendency, Drier with Extreme Warming, and Wetter with Moderate Warming
    - USBR conducted ensemble modeling of 112 different realizations
  - Results from both DWR & USBR studies efforts point to drier average future conditions (DWR 2030 Climate Change Factors are 3% drier), but present a broad range potential climatic variability in the Basin, especially in the 2070 realizations

DISREGARD OF RECENT YEARS IS NOT CONSISTENT REFLECTING RECENT CULTURAL CONDITIONS

- In their opposition, Watermaster states there is *"No need to keep adding additional years just for the sake of adding more years"*; But Watermaster has also repeatedly stated the new hydrologic base period must be "more recent"
- Watermaster states that *"Cultural conditions change gradually. Accordingly, there is no significant difference in the cultural conditions existing in 2001-2020, and those existing in 2021-2024."* The data do not bear that out.
- At the time of selecting a new HBP, including as many recent years with available data makes the most sense to achieve a timeframe that most reflects "recent" cultural conditions



2021-2024 is excluded in the Watermaster's proposed period of 2001-2020.

WATERMASTER SHOULD CLEARLY DEFINE WHAT THEY ARE INDEXING TO DEFINE AN APPROPRIATELY "DRIER" BASE PERIOD

Alternative Hydrologic Base Periods	Mojave River at the Forks Average (a.f.)	Change relative to the 1931-1990 average (65,538 a.f.)	Change relative to the 1931-2024 average (69,176 a.f.)	Criteria
1991-2022	71,344	+8%	+3%	Start and end years are dry and are preceded by a series of dry years.
1995-2024	67,057	+2%	-3%	Start and end years are wet and are preceded by a wet year/series of wet years.*
1998-2024	65,090	-1%	-6%	Start and end years are wet and are preceded by a wet year/series of wet years.
2001-2020	61,635	-6%	-12%	Start and end years are dry and are preceded by a series of dry years.
2002-2022	59,009	-11%	-17%	Start and end years are severe dry and are preceded by a series of severe dry years.
1931-2022	67,557	+3%	-2%	Per Court's Order. Start and end years are dry and are preceding a series of severe dry years.

Per Watermaster's analysis, 1995-2024 is 3% drier than the period of record in the Basin, which is aligned with the DWR 2030 Climate Change Factors.

Table taken from Watermaster presentation at 14 January 2026 Special Watermaster meeting.

USBR'S MODELING SHOWS LARGE FUTURE CLIMATIC VARIABILITY – THE DRY WILL BE DRIER AND THE WET WILL BE WETTER

- USBR's modeling suggests that normal and dry years may become increasingly arid, while wet years may become even wetter
- Watermaster's Opposition analysis that compares a handful of years to decades-long projections is not a valid interpretation of the USBR results or a reason to dismiss the extensive modeling effort

Appendix B—Summary Tables of Streamflow Projections

Table B-1: Summary of Percentage Change in Mean Streamflow as Compared to 1990s Base Period for Three Change Percentiles with the 112 GCM Climate Projections (25, 50, and 75)

Season	STN Name	2020s			2050s			2070s		
		25%	50%	75%	25%	50%	75%	25%	50%	75%
Annual	Deep Creek Near Hesperia	-20%	0%	27%	-39%	-12%	25%	-36%	-20%	17%
	West Fork Near Hesperia	-21%	3%	33%	-39%	-13%	28%	-33%	-14%	25%
	Lower Narrows Near Victorville	-20%	2%	33%	-37%	-12%	30%	-34%	-19%	18%
Dec. - Mar.	Deep Creek Near Hesperia	-23%	5%	36%	-37%	-10%	38%	-32%	-14%	24%
	West Fork Near Hesperia	-22%	4%	43%	-40%	-6%	40%	-34%	-13%	29%
	Lower Narrows Near Victorville	-23%	6%	38%	-37%	-8%	38%	-32%	-13%	26%
Apr. - Jul.	Deep Creek Near Hesperia	-39%	-12%	20%	-51%	-30%	4%	-60%	-36%	-16%
	West Fork Near Hesperia	-30%	-2%	28%	-46%	-25%	8%	-52%	-30%	-2%
	Lower Narrows Near Victorville	-35%	-7%	19%	-47%	-27%	6%	-56%	-31%	-12%

DWR's CHANGE FACTORS ARE WIDELY USED TO SUPPORT BASIN MANAGEMENT IN CA

- DWR's 2030 Central Tendency (3% drier) is being used throughout California to support planning to achieve balance by 2040/2042
- Even DWR's 2070 Central Tendency scenario is only 7% drier, as opposed to Watermasters proposed HBP (12% drier)

Scenario	Average Streamflow Change Factor	
	Annual	Monthly
2030 Central Tendency	0.97	0.96
2070 Central Tendency	0.93	0.93
2070 Drier with Extreme Warming	0.90	0.93
2070 Wetter with Moderate Warming	1.61	1.41

Values represent the average streamflow change factor for all model cells in the Mojave River Watershed.

SUMMARY & RECOMMENDATION

Of the HBP options presented by Watermaster, EKI identified 1995-2024 as the most appropriate HBP because it:

1. Best reflects the time period over which the physical solution set forth in the Stipulated Judgment has been adopted.
2. Contains recent years during which significant changes in cultural conditions have occurred.
3. Contains both wet and dry hydrologic extremes, or "climatic disruptions" as they are referred to in the Court's September 2022 order.
4. Best aligns with DWR's 2030 Climate Change Factors that are broadly being used cross California to bring basins into balance by 2040/2042.

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SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF RIVERSIDE - CENTRAL DISTRICT

CITY OF BARSTOW, et al, Plaintiff, vs. CITY OF ADELANTO, et al,, Defendants. AND RELATED CROSS ACTIONS	Case No. CIV 208568 **PROOF OF SERVICE** Assigned for All Purposes to: Hon. Craig G. Reimer Dept: 1 **Date: March 18, 2026** **Time: 8:30 a.m.** **Dept: 1**

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF SAN BERNARDINO

Re: City of Barstow v. City of Adelanto, et al.;
Riverside Superior Court Case No.: CIV 208568

I am employed in the County of Fresno, State of California. I am over the age of 18 years and not a party to the within action; my business address is: 8080 North Palm Ave. Third Floor, Fresno, CA 93711. On March 11, 2026, I served copies of the within documents described as

MOVANTS' REPLY TO WATERMASTER'S OPPOSITION TO SELECT HYDROLOGIC BASE PERIOD OF 1995-2024

DECLARATION OF DARIEN KEY IN SUPPORT OF MOVANTS' REPLY TO WATERMASTER OPPOSITION TO MOVANTS MOTION TO SELECT HYDROLOGIC BASE PERIOD OF 1995-2024

SUPPLEMENTAL DECLARATION OF ANONA DUTTON IN SUPPORT OF MOVANTS REPLY TO WATERMASTER'S OPPOSITION TO MOVANTS MOTION FOR APPROVAL OF HYDROLOGIC BASE PERIOD OF 1995-2024

on the interested parties in this action in a sealed envelope addressed as follows:

See attached Service List

☐ **BY MAIL** - I am "readily familiar" with the firm's practice of collecting and processing correspondence for mailing. Under that practice, it would be deposited with the United States Postal Service on the same day in the ordinary course of business, with postage thereon fully prepaid at San Bernardino, California. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

☐ **BY PERSONAL SERVICE** - I caused such envelope to be delivered by hand to the offices of the addressee pursuant to C.C.P. § 1011.

☐ **BY EXPRESS MAIL/OVERNIGHT DELIVERY** - I caused such envelope to be delivered by hand to the office of the addressee via overnight delivery pursuant to C.C.P. § 1013(c), with delivery fees fully prepaid or provided for.

☐ **BY FACSIMILE** - I caused such document to be delivered to the office of the addressee via facsimile machine pursuant to C.C.P. § 1013(e). Said document was transmitted to the facsimile number of the office of the addressee from the office of Gresham Savage Nolan & Tilden, in San Bernardino, California, on the date set forth above. The facsimile machine I used complied with California Rules *of Court*, Rule 2003(3) and no error was reported by the machine. Pursuant to California *Rules of Court*, Rule 2009(i), I caused the machine to print a record of the transmittal, a copy of which is attached to this declaration.

☒ **BY ELECTRONIC/EMAIL** - Pursuant to the party's express consent to receive electronic service, I caused such document to be delivered to the office of the addressee via electronic e-mail pursuant to C.C.P. §1010.6(a)(2)(A)(ii). Said document was transmitted to the email address of that office which is listed on the attached Service List. Said document was served electronically and the transmission was reported as complete and without error.

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FEDERAL - I am employed in the office of a member of the bar of this court at whose direction the service was made.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on March 11, 2026, at Fresno, California.

KELLY RIDENOUR

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SERVICE LIST

Re: City of Barstow v. City of Adelanto, et al.;
Riverside Superior Court Case No.: CIV 208568

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