

Via Email to [crbpost2026@usbr.gov](mailto:crbpost2026@usbr.gov)

U.S. Bureau of Reclamation  
Lower Colorado Basin Region  
Attn: BCOO-1000  
P.O. Box 61470  
Boulder City, NV 89006

Re: Comments on Draft Environmental Impact Statement for Near-Term Colorado River Operations

To Whom It May Concern:

We, the undersigned landowners and agricultural producers within the Yuma Mesa Irrigation and Drainage District (YMIDD), submit these comments on the U.S. Bureau of Reclamation's Draft Environmental Impact Statement (EIS) for Near-Term Colorado River Operations. Collectively, the undersigned collectively own over 5,600 acres within YMIDD. As water right holders and landowners directly affected by the proposed alternatives, we appreciate the opportunity to provide comments on the EIS. As explained further below, the undersigned acknowledge the Law of the River and the historic practice of following the rule of priority.

We write to highlight the need for the EIS alternatives to facilitate and include the use of forbearance agreements that both respect the rule of priority and incentivize investments in demonstratable or "firm" conservation that both water managers and irrigators alike can rely upon. We note that we have urged YMIDD to participate in voluntary conservation programs based on crop substitution—*rather than permanent fallowing*—because this approach furthers the collective needs of Colorado River users while avoiding undue impact to rural communities.

### Protecting Water Rights Priorities Without Unnecessary Economic Hardship

Recent Presidential Executive Orders have reaffirmed that ensuring reliable water supplies in the West is a matter of national priority. In Executive Order No. 14181 (Jan. 24, 2025), for example, the President directed federal agencies to take all measures to ensure adequate water resources for Western communities, emphasizing the Administration's commitment to strengthening water availability and operational reliability.<sup>1</sup>

Given the scale of agricultural water demand in the Basin, solutions to the structural deficit will almost certainly require additional conservation from the agricultural sector beyond baseline conditions. Yet the imperative for demand management at a Basin-wide scale

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<sup>1</sup> See Exec. Order No. 14181, *Emergency Measures to Provide Water Resources in California and Improve Disaster Response in Certain Areas* (Jan. 24, 2025) (directing federal agencies, including the Bureau of Reclamation, to "take all measures...to ensure adequate water resources" in Western states and to override barriers to maximizing deliveries).

does not necessitate the imposition of pro rata reductions that ignore existing water rights priorities and result in full-year fallowing, with the commensurate impacts to agricultural communities and the environment. There is instead a pathway for operating the Colorado River consistent with water right priorities and adopting measures that allow and encourage water users to strategically adapt without sacrificing their underlying rights.<sup>2</sup> We write because in modeling and setting forth alternatives in the EIS, Reclamation has the opportunity to promote and facilitate *intrastate*, market-based opportunities as part of the *interstate* solution.

### Analyzing Crop Substitution and Other Voluntary Tools in the EIS

For these reasons, crop substitution – the voluntary transition from higher water use crop(s) to lower water use alternatives – should be incorporated as part of a demand management and conservation strategy in the EIS. This analysis should include:

- Methodology for establishing baselines on program acreage from which to measure conservation
- Estimated range of consumptive use reductions at basin and state levels
- Comparative economic and community impacts relative to fallowing based and other conservation approaches
- Interactions with water rights administration and interstate accounting
- Potential environmental impacts, tradeoffs and co-benefits

Crop substitution programs are complementary to other activities that contribute to demand management, such as voluntarily taking land out of production and increasing irrigation efficiency. We encourage Reclamation to incorporate this suite of voluntary measures into the modeling of alternatives.

### Voluntary Tools Such as Crop Substitution vs. Permanent/Full-Year Fallowing

Permanent or long-term fallowing can have significant secondary economic impacts on farm labor, processing infrastructure, equipment fertilizer and supplement suppliers, and rural communities in general. This is particularly true if implemented as the dominant form of conservation in the agricultural sector. Crop substitution and market-based strategies mitigate these third-party impacts by maintaining agricultural production, employment and local economic activity. When supported by technical assistance, monitoring and measuring activities, transition funding and market development, crop substitution and similar tools can balance water conservation objectives with socioeconomic stability. The economic and environmental rationale for such tools has been well-documented over the course of decades.<sup>3</sup>

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<sup>2</sup> For a comprehensive articulation of this approach and the economic benefits, see Watson, L., Ajami, N., & Doyle, M. (2026), *Aspen National Water Strategy*, Aspen Institute, available at [https://www.aspeninstitute.org/wp-content/uploads/2026/01/AspenNationalWaterStrategy\\_web.pdf](https://www.aspeninstitute.org/wp-content/uploads/2026/01/AspenNationalWaterStrategy_web.pdf).

<sup>3</sup> See, e.g., H.S Burness and J.P. Quirk, *Water Law, Water Transfers, and Economic Efficiency: The Colorado River*, *The Journal of Law & Economics*, Vol. 23, No. 1 (Apr., 1980) (“The Colorado River illustrates that inefficient water allocation in the form of restricted transfer rights can give a false impression of water

NEPA requires Reclamation to “make predictive and scientific judgments in assessing the relevant impacts” of its proposed action,<sup>4</sup> including “reasonably foreseeable” environmental effects.<sup>5</sup> It is axiomatic that mandating a reduction in water use inconsistent with the rule of priority may cause substantial socio-economic harm within the Lower Basin and more specifically in rural communities, with commensurate impacts on the physical environment.<sup>6</sup> An alternative that includes voluntary transfers through crop-substitution and other voluntary conservation measures deserves a “hard look.”<sup>7</sup> NEPA requires federal agencies to evaluate reasonable alternatives to a proposed action and to fully disclose the economic, social, and environmental consequences of those alternatives.<sup>8</sup>

The potential socioeconomic impact of demand management in the agricultural sector can be mitigated with compensated conservation programs focused on providing farmers with a broad suite of approved conservation methods. Preferred methods should be those aimed at maintaining more acreage in production for more months of the year. Methods such as crop substitution, lower water use crop rotations, seasonal fallowing, and deficit irrigation are among the best options to reduce impacts to the agricultural sector and the Basin’s rural communities while also generating sizable water savings. Combined, this group of measures has broad applicability to farm units throughout the Basin. Given the diversity of farming conditions and operations, a broad suite of properly incentivized conservation measures is necessary to ensure broad participation and geographic dispersion of conservation programs throughout the Basin, reducing concentration of any negative impacts on certain communities.

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shortages.”); A.R. Summitt, *Marketing the Colorado River: water allocations in the American West*, *Water Hist* 3, 45–62 (2011) (“A growing water market in the west is one current way western states seek to reallocate water and address shortages caused by drought and over-consumption. . . . Most agree that some kind of mitigation of third party impacts must be part of any permanent water market and several different methods are currently used to address this issue.”); H. Singh, *Dead in the Water? Addressing the Future of Water Conservation in the Colorado River Basin*, 124 *Col. L. Rev.* 741 (2024) (“Current literature posits that water markets are the solution to address the water crisis in the American West.”); Z.M. Hirsch, H.B. Zeff, R.S. Gupta, C.R. Vernon, P.M. Reed & G.W. Characklis, *Two-Way Option Contracts That Facilitate Adaptive Water Reallocation in the Western United States*, *Earth’s Future* (2024), <https://doi.org/10.1029/2024EF004434> (modeling shows multi-year two-way option contracts can improve agricultural productivity and providing irrigators added revenue).

<sup>4</sup> *Seven County Infrastructure Coalition v. Eagle County, Colorado* (2025) 605 U.S. 168, 181.

<sup>5</sup> See 42 U.S.C. § 4332(2)(C).

<sup>6</sup> Nina Raffio, *Colorado River Water Plan Could Trigger Unprecedented Supply Cuts, Ripple Effects on Key Industries*, *USC Today* (Apr. 28, 2023), <https://today.usc.edu/colorado-river-water-plan-supply-cuts-ripple-effect-on-industries>; Shradha Sharma, *Impacts of Colorado River Water Shortages on Agriculture in Central Arizona* (ASU Water Innovation Initiative 2025), <https://azwaterinnovation.asu.edu/impacts-colorado-river-water-shortages-agriculture-central-arizona>.

<sup>7</sup> See *Robertson v. Methow Valley Citizens Council* (1989) 490 U.S. 332, 350.

<sup>8</sup> See 42 U.S.C. § 4332(2)(C).

Unlike full-year fallowing, crop substitution can generate sustained reductions in consumptive water use over multiple seasons while keeping land in production.<sup>9</sup> The piloting of crop substitution and crop selection is starting to take place and needs to be encouraged with financial incentives and supportive policy to scale up successfully.

Incentivizing crop substitution and similar tools, moreover, increases the adaptive capacity of the agricultural sector under increasing hydrologic variability driven by climate change<sup>10</sup> The Colorado River Basin has experienced a long-term decline in precipitation and runoff efficiency; trends that are expected to continue through the mid-century. By providing financial incentives and offsets to plant lower water use crops and crop rotations as well as crops capable of enduring deficit irrigation, the Basin is building a more sustainable system and is more equitably sharing the burden of protecting it among the major metropolitan areas and rural communities.<sup>11</sup>

Crop substitution and these alternative methods are compatible with existing voluntary, incentive-based conservation programs. Like the programs implemented under recent system conservation agreements by Reclamation, crop substitution and similar tools can deliver verified reductions in consumptive use that are equal or greater than full-year rotational fallowing without the often-cited negative socioeconomic impacts. Measuring reductions in baseline water use on agricultural land with verifiable records of historical farming is consistent with existing water rights administration and interstate accounting. Inclusion of crop substitution and similar market-based tools in the EIS would allow for programmatic analysis of how these tools can be implemented with measurement, monitoring and verification frameworks already in use by Reclamation and the Basin States.

### Conclusion

We appreciate your consideration of these comments and urge Reclamation to incorporate these recommendations into the Final EIS and the selected alternative for near-term Colorado River operations. Please see the following pages for the list of signatories to these comments.

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<sup>9</sup> See K.F. Davis, A. Seveso, M.C. Rulli & P. D’Odorico, Water Savings of Crop Redistribution in the United States, 9 Water 83 (2017), <https://doi.org/10.3390/w9020083>.

<sup>10</sup> See D. Crespo, M. Nemati, A. Dinar, Z. Frankel & N. Halberg, *Assessing the Economic Value of Water in the Colorado River Basin: A Hydroeconomic Analysis*, 52 Water Resources & Econ. 100266 (2025), <https://doi.org/10.1016/j.wre.2025.100266> (setting forth a “hydro-economic model” that accounts for hydrologic variability).

<sup>11</sup> See N. Silber-Coats, E. Elias, K. Fernald & M. Gagliardi, *Evaluating Alternative Crops as a Solution to Water Stress in the U.S. Southwest*, 312 Agric. Water Mgmt. 109439 (2025), <https://doi.org/10.1016/j.agwat.2025.109439>.

Colorado River Operations DEIS Comments  
Undersigned YMIDD Irrigators  
March 2, 2026

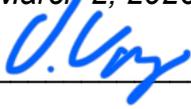
A handwritten signature in blue ink, appearing to read "R. Woodman", is written over a horizontal line.

By: Robert Woodman representing 270 acres of agricultural land in Yuma Mesa  
Irrigation & Drainage District

*Colorado River Operations DEIS Comments*

*Undersigned YMIDD Irrigators*

*March 2, 2026*



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By: Vince Vasquez, Managing Director, on behalf entities below representing 1,105 acres of agricultural land in Yuma Mesa Irrigation & Drainage District

Entities:

WPI – ACP II Farm AZ, LLC

WPI – ACP III Farm AZ, LLC

WPI II – Tuscan Farm AZ, LLC

WPI II – C1416 Farm AZ, LLC

WPI Ironwood Holdings, LLC

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March 2, 2026



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By: Rocky Curtis representing 464 acres of agricultural land in Yuma Mesa Irrigation  
& Drainage District

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Undersigned YMIDD Irrigators  
March 2, 2026



By: Michael Malano, Managing Director on behalf entities below representing 660 acres  
of agricultural land in Yuma Mesa Irrigation & Drainage District

14 ½ Street Farm, LLC  
Avenue 1E Farm, LLC  
Aracnida Farm, LLC  
Paradise Yuma Grove, LLC  
Yuma Vineyards Farm, LLC  
CCDL Farm, LLC  
Avenue 5E Farm, LLC  
Lateral Grove, LLC  
Ranchette Farm, LLC

A handwritten signature in black ink, appearing to read "Joe Perricone", written over a horizontal line.

By: Joe Perricone representing 1,860 acres of agricultural  
land in Yuma Mesa Irrigation & Drainage District

*Colorado River Operations DEIS Comments*  
*Undersigned YMIDD Irrigators*  
*March 2, 2026*



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By: Harold Edwards, President and Chief Executive Officer, Limoneira Company, on behalf of the entities below representing 1,284.2 acres of agricultural land in Yuma Mesa Irrigation & Drainage District

Entities: Associated Citrus Packers, LLC