



HE'EIA
NATIONAL ESTUARINE
RESEARCH RESERVE

Date: October 24, 2025

To: Commission of Water Resources and Management

Re: Support for Item B-2 (October 28, 2025, Agenda)

Ke aloha nui to the Commissioners,

I am writing to offer my strong support of Item B-2 on the CWRM Agenda for October 28, 2025, relating to conducting a site visit to He'eia (Ko'olaupoko, O'ahu). The community of He'eia is broadly known – both among the citizenry of Hawai'i and within the scholarly sphere of the academy – as a leader in ahupua'a-scale restoration. From the forested areas up mauka, to the lo'i kalo along the streams and in the wetland, to the loko i'a along the coast; the community of He'eia has endeavored for decades to restore the function of the ahupua'a so that it can feed itself again. As the Director of the He'eia National Estuarine Research Reserve, I have had the good fortune of supporting these community-based efforts through a program that promotes scientific research, education, training and engagement, and stewardship.

As you all know, both lo'i kalo and loko i'a need an abundance of fresh water to be productive. When managed through biocultural restoration, freshwater fuels life in our ahupua'a and ultimately contributes to food security and community resilience. What is now clear, after more than 20 years of restoration efforts, is that there is not enough water in the stream or the springs to support these traditional and customary practices in He'eia. We, therefore, encourage this proposed site visit by the Commissioners, to see with your own eyes the amazing work that has been done – including recent progress since the Commission's 2021 decision – and the potential for further restoration if we can work together to solve the existing limitation of water.

Regarding the proposed site visit, we do request that the limited site visit include core staff members of the He'eia NERR, and leadership from our co-stewardship partner organizations (Papahana Kuaola, Kāko'o 'Ōiwi, Paepae o He'eia, Ko'olaupoko Hawaiian Civic Club, and Ko'olau Foundation), and other collaborators (e.g., hydrologists) for a total of 20 people max.

Me ka 'oia'i'o,

Kawika Winter, Ph.D.

Director, He'eia National Estuarine Research Reserve



October 27, 2025

Via Electronic Mail

Commission on Water Resource Management
Kalanimoku Building
1151 Punchbowl Street, Room 227
Honolulu, Hawai'i 96813
dlmr.cwrmm@hawaii.gov

Re: Earthjustice's Testimony in Support of Agenda Item B-2: Determination and Approval of Draft Agenda by the Commission on Water Resource Management Under Section 92-3.1, HRS, for the Commission to Conduct a Site Visit to View the Important Groundwater and Surface Water Features of the He'eia Ahupua'a, He'eia, O'ahu, Hawai'i on November 10, 2025, as a Limited Meeting, Due to the Impracticability of Public Attendance for Reasons of Danger to Health or Safety, or in the Alternative, that On-Site Inspection is Necessary for Future Water Management Purposes

Dear Chair Chang and Members of the Commission:

Earthjustice supports staff's recommendation to convene a limited meeting to conduct a site visit to view the important groundwater and surface water features of the He'eia ahupua'a. This site visit will give the Commission an opportunity to experience the ahupua'a restoration work being done by community organizations like the He'eia National Estuarine Research Reserve ("NERR"), Kako'o 'Ōiwi, Paepae o He'eia, and Papahana Kuaola (collectively, the "Community Groups"), and how demands on the groundwater and surface water of the He'eia hydrologic unit and Ko'olau region are straining the Community Groups' collective ability to continue and expand on their ahupua'a restoration work. Because most sitting Commissioners were not present during the last round of He'eia-related discussions, we offer below a summary of events leading to the present, along with our support for a site visit that includes the Community Groups' participation.

I. BACKGROUND

The He'eia hydrologic unit is located in the ahupua'a of He'eia, in the moku of Ko'olaupoko, and includes Ha'ikū valley, 'Ioleka'a valley, and the He'eia and 'Ioleka'a streams

that flow into He'eia Marsh, Paepae o He'eia, and Kāne'ohe Bay.¹ He'eia was once one of the most extensive areas for wetland kalo cultivation on O'ahu, supporting over 300 acres of lo'i kalo.² These lo'i served a critical role in the hydrology of the He'eia watershed, mitigating the effects of terrestrial runoff on downstream estuarine and inshore coral reef ecosystems.³ Many of these lo'i were lost when the area was converted to rice paddies, and due to other effects of modernization and development beginning in the early 1900s.⁴

In 1940, the suburban water utility for windward O'ahu constructed the Ha'ikū tunnel to allow for the removal of high-elevation groundwater, which drastically depleted the groundwater storage of high-elevation dike compartments that supplied base flow to He'eia stream.⁵ Base flow decreased from between 1.3 and 1.9 million gallons per day ("mgd") to between 0.64 and 1.3 mgd by the early 1990s.⁶ This reduction in base flow has led to the overgrowth of invasive vegetation and has permanently altered the hydrology and ecology of He'eia Marsh.⁷

Over the past decade, the Community Groups have been working tirelessly to bring back native habitat and species using traditional methods of land management. With these efforts, He'eia is slowly returning to what it once was—an abundant wetland that supports Native Hawaiian traditional practices, food production, and habitat restoration, as well as a variety of native and endangered waterbirds, estuarine fish, and wetland plants. The continued reduction of stream flow due to high-elevation groundwater pumpage, however, constricts the flow of water supporting downstream public trust uses, making it more difficult for the Community Groups to maintain and expand their ahupua'a restoration efforts.⁸

In 2020, Commission staff published its IFSAR for the He'eia hydrologic unit, providing an overview of the hydrology, instream uses, and non-instream uses within the unit.⁹ The

¹ CWRM, *Instream Flow Standard Assessment Report* ("IFSAR") at 1 (June 2020) (available at <https://files.hawaii.gov/dlnr/cwrм/ifsar/PR202002-3028-HeeiaDraft.pdf>) (last visited Oct. 22, 2025).

² Kāko'o 'Ōiwi, *History of He'eia*, <https://kakooiwi.org/history-of-he%ca%bbeia/> (last visited Oct. 22, 2025).

³ *Id.*

⁴ IFSAR, *supra* note 1, at 1.

⁵ *Id.*; see October 28, 2025 Staff Submittal at 3 (<https://files.hawaii.gov/dlnr/cwrм/submittal/2025/sb20251028B2.pdf>) (last visited Oct. 23, 2025). Board of Water Supply ("BWS") assumed operation of Ha'ikū tunnel following consolidation of all suburban water utilities in 1959. *Id.*

⁶ IFSAR, *supra* note 1, at 37.

⁷ See *id.* at 1.

⁸ See *id.* at 1.

⁹ *Id.*

IFSAR notes that the decrease in baseflows from the 1940s to 2002, along with changing stream flow characteristics, poses negative impacts to the availability of water for human use or consumption and native habitat.¹⁰ In January 2021, this Commission held an informational briefing and discussed an amended IIFS of 1.77 mgd for the He'eia hydrologic unit, based on the natural base flow under conditions at that time.¹¹ Ultimately, the Commission decided to delay the action for 90 days to explore alternatives for restoring stream flow.¹²

In June 2021, this Commission reconvened and approved an order requiring BWS to: (1) complete within two years a feasibility study and preliminary engineering design for installing a third bulkhead in the Ha'ikū tunnel at the 10-foot thick dike, and (2) reduce their withdrawal from the Ha'ikū tunnel from 1.0 to 0.3 mgd.¹³ Upon completing a feasibility study and engineering design, BWS would have three years to complete the final design and construction of the bulkhead.¹⁴ If BWS determined bulkheading to be infeasible, the Commission would "recommend an amendment to the IIFS or amend the BWS water use permit as needed."¹⁵

In 2024, BWS submitted its Haiku Tunnel Bulkhead Preliminary Engineering Study Technical Report.¹⁶ BWS's study determined that installing a fourth bulkhead would not be feasible due to concerns over tunnel conditions and safety, contamination of the tunnel that could render the water unusable, and costs ranging from 20 to 40 million dollars.¹⁷

II. THE COMMISSION SHOULD APPROVE A LIMITED MEETING AND CONDUCT A SITE VISIT TO HE'EIA

Conducting a site visit will allow the Commission to see first-hand the Community Groups' efforts to restore He'eia ahupua'a and learn about the struggles they face in doing so, particularly with respect to available surface water resources. Despite the difficulty in

¹⁰ *Id.* at 44.

¹¹ January 19, 2021, Staff Submittal at 23 (available at <https://files.hawaii.gov/dlnr/cwrn/submittal/2021/sb20210119C2.pdf>) (last visited Oct. 22, 2025).

¹² CWRM, Minutes For the Meeting of the Commission on Water Resource Management at 22 (January 19, 2021) (<https://files.hawaii.gov/dlnr/cwrn/minute/2021/mn20210119.pdf>) (last visited Oct. 22, 2025).

¹³ June 15, 2021 Staff Submittal at 21 (<https://files.hawaii.gov/dlnr/cwrn/submittal/2021/sb20210615B2.pdf>) (last visited Oct. 22, 2025).

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ Brierley Associates, *Ha'ikū Tunnel Bulkhead Preliminary Engineering Study* ("Feasibility Study") (June 24, 2024) (available at https://files.hawaii.gov/dlnr/cwrn/swhu/oahu/3028-HBWS_HaikuTunnelBulkheadPES.pdf) (last visited Oct. 22, 2025).

¹⁷ *Id.* at 73-78.

predicting the availability of stream flow without an IIFS as a baseline, the Community Groups remain steadfast in their restoration efforts.

Representatives from the Community Groups request that they be permitted to participate in the entirety of the site visit, to better enhance the Commissioners' understanding of both the progress already made in He'eia and the challenges faced in carrying forward the Community Groups' important ahupua'a restoration work. The Community Groups also would like to visit the Ha'ikū tunnel and hear from BWS about its needs and any potential strategies for restoring flows to He'eia Stream. The organizations relying on the He'eia hydrologic unit as their sole source of wai, and who would seek to participate in the Commission's site visit, include:

- the He'eia NERR, which works with community partners to restore wetland habitat, facilitate research and monitoring programs, and conduct education and training programs that integrate Native Hawaiian traditional knowledge and contemporary science;¹⁸
- Kāko'o 'Ōiwi, a non-profit organization that has restored productivity to lo'i kalo and mala in He'eia, hosts educational visits, cultural workshops, and community workdays, and produces farm-fresh produce for the community with the produce grown in the lo'i and mala;¹⁹
- Paepae o He'eia, a nonprofit organization dedicated to caring for the ancient He'eia fishpond through restoration efforts that incorporate educational programs, research, and resource sharing, allowing the community to connect with values and concepts that derive from Native Hawaiian traditional fishpond management;²⁰ and
- Papahana Kuaola, a nonprofit organization based in the 'ili of Waipao in He'eia dedicated to mālama 'āina-based education and relationship building, connecting schools and community groups to the history of the area and setting goals for a sustainable future.²¹

III. CONCLUSION

Earthjustice supports staff's recommendation to hold a limited Commission meeting for the purpose of conducting a site visit to view the groundwater and surface water features of He'eia. A site visit will allow the Commission to experience first-hand the important work that the Community Groups are doing to restore He'eia ahupua'a, and to hear about the community's future needs for carrying their restoration work forward. We strongly urge the

¹⁸ See He'eia National Estuarine Research Reserve, <https://heeianerr.org/> (last visited Oct. 22, 2025).

¹⁹ See Kāko'o 'Ōiwi, <https://kakooiwi.org/> (last visited Oct. 22, 2025).

²⁰ See Paepae o He'eia, <https://paepaeoheeia.org/> (last visited Oct. 22, 2025).

²¹ See Papahana Kuaola, <https://papahanakuaola.org> (last visited Oct. 22, 2025).

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Commission to include Community Group and BWS representatives in each phase of the planned site visit. Thank you for the opportunity to provide comments on this matter.

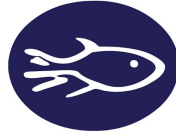
Respectfully Submitted,

/s/ Harley M. Broyles

MAHESH CLEVELAND

HARLEY M. BROYLES

EARTHJUSTICE



Paepae o He'eia

He'eia Fishpond, He'eia O'ahu

Date: October 27, 2025

To: Commission on Water Resource Management

Re: Support for Item B-2 (October 28, 2025 Agenda)

Dear Chair Chang and Members of the Commission:

Paepae o He'eia is in **strong support of Item B-2**, relating to conducting a site visit to view important water features in the He'eia Ahupua'a, He'eia, O'ahu, on the October 28, 2025 CWRM Agenda. This is a great opportunity to visit and experience the restoration work happening throughout the He'eia ahupua'a from the mauka regions of Ha'ikū valley down to the shoreline and nearshore reefs.

Specifically, we are excited for you to visit the 800-year old He'eia Fishpond located where He'eia Stream empties into Kāne'ōhe Bay creating He'eia estuary. Paepae o He'eia has stewarded He'eia fishpond since 2001 for the purpose of feeding the bodies, minds, and spirits of our community. Our restoration efforts have and continue to focus on the removal of terrestrial invasives, aquatic invasives and rebuilding fishpond infrastructure in order to create the prime aquatic environment to grow seafood. Absolutely essential to production within the fishpond is fresh water, either from stream or ground water flow, which delivers critical nutrients that nourish the primary producers, like plankton.

As stewards of the fishpond and cultivators of *i'a* (seafood) for the last 24 years, our *kilo* (observations) continually reveal that more fresh water is required to make the pond more hospitable and productive for native fishpond species, from the micro to the macro. We humbly invite you to share in our observations and visit He'eia Fishpond and all of the restoration projects in the ahupua'a to hear about the needs and aspirations for these spaces.

Again we support the recommendation to hold a Limited Commission meeting to view the water features of He'eia Ahupua'a. We request that the Commission include Community groups, BWS, He'eia NERR representatives in the planned visit. Thank you for the opportunity to provide comments on this matter.

Mahalo nui loa,

Keli'iahonui Kotubetey
Assistant Executive Director