STATE OF HAWAI'I | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

STAFF SUBMITTAL

COMMISSION ON WATER RESOURCE MANAGEMENT

May 19, 2026
Honolulu, Hawai'i

Request Approval of Consultant Selection and Delegation of Authority to the Chairperson to Award, Execute, and Extend Contract for the Hawai'i Statewide Recycled Water Implementation Study for State and County Facilities

I. SUMMARY OF REQUEST

Staff requests that the Commission on Water Resource Management approve the selection of a consultant (Birchline Planning LLC) to draft the Hawai'i Statewide Recycled Water Implementation Study for State and County Facilities (Study). The Study is intended to explore strategies for expanding the use of recycled water throughout Hawai'i, specifically the use of recycled water at state and county facilities.

II. BACKGROUND

This Study is a result of Act 170[1], which seeks to expand the use of recycled (or reclaimed) water for non-potable uses in all state and county facilities by the year 2045.[2] Since 2016, implementation has been limited due to barriers such as cost, infrastructure, and coordination challenges. This study builds on prior efforts and stakeholder engagement to transition toward implementation. In 2023, the Commission on Water Resource Management (CWRM) staff requested funding from the State Legislature to make progress on Act 170 and received one million dollars in state funding to develop a statewide study focused on water reuse.[3] In an effort to gather insights and better understand the best use of this funding, CWRM staff convened four stakeholder engagement workshops between October and November 2025 with relevant county agencies and stakeholders to discuss regional recycled water priorities, specific needs, and the challenges associated with recycled water use on Kaua'i, O'ahu,

[1] https://www.capitol.hawaii.gov/sessions/session2016/bills/HB1749_CD1_.HTM
[2] Hawai'i Revised Statutes § 174C-31(g)(6)
[3] Act 164, Session Laws of Hawai'i 2023

Maui and Hawai‘i Island. Information gathered during these workshops directly informed the Statement of Work for this Study (see Exhibit 1).

The expected deliverables of this Study include:

1. A recycled water implementation roadmap, targeting locations and projects statewide with a focus on state and county facilities (as required by Act 170), where adoption is realistic and impactful, while integrating lessons learned from similar efforts. The roadmap will identify where recycled water use is most feasible (rather than mandating 100% coverage by 2045, which may not be feasible across all facilities).

2. Identification of policy, regulatory, and planning mechanisms that could expand or remove barriers to recycled water use statewide (not limited to state and county facilities), with a focus on practical implementation.

3. A phased implementation timeline, monitoring framework, and accountability mechanisms to track progress toward expanded recycled water use statewide through 2045.

4. Assessment of the recycled water opportunities for high volume uses (watershed restoration, agriculture, and firefighting), including infrastructure considerations, responsible entities, and funding pathways.

III. CONSULTANT SELECTION

A competitive sealed proposals process was determined to be the most appropriate procurement method for this Study and was approved by the Chairperson on February 27, 2026 (see Exhibit 2). A Request for Proposals (RFP) (Solicitation #CWRM-RFP-2026-01) was released on March 23, 2026, and proposals were accepted through April 22, 2026. On April 28, 2026, the RFP evaluation committee met to review and discuss the merits of five (5) proposals. The evaluation committee consisted of five (5) individuals:

Katie Roth, CWRM Hydrologic Planning Program Manager
Nicholas Ing, CWRM Planner IV
Alyssandra Rousseve, CWRM Hydrologist V
Christin Reynolds, One World One Water
Kevin Ihu, Department of Health

Birchline Planning LLC was selected as the consultant for the Study based on the evaluation criteria described in the RFP. Their proposal is attached to this submittal as Exhibit 3.

IV. PERIOD OF PERFORMANCE

This contract shall be for a period of twelve months beginning on the date specified on the Notice to Proceed. Unless terminated, the contract may be extended without re-solicitation, upon mutual agreement in writing between the State and the Contractor, prior to the expiration date, for not more than one (1) additional 12-month period.

V. ENVIRONMENTAL COMPLIANCE

Under Hawai'i Revised Statutes §343-5(a), the use of state funds triggers the need for an environmental assessment (EA). The proposed action is exempt from an EA based on Hawai'i Administrative Rule §11-200.1-15(c)(8) and the Exemption List for the Commission on Water Resource Management approved by the Environmental Council on January 5, 2021, and falls under Exemption Class 8, Part 1, No. 2, which provides for "Contracts for small purchases, professional services, competitive sealed proposals…." No exemption notice is required.

VI. AUTHORITY

The Commission has the legal authority pursuant to Hawai'i Revised Statues (HRS) §174C-5(4) to contract and cooperate with various agencies, including private persons.

VII. CONSISTENCY WITH THE HAWAI'I WATER PLAN

The Water Code, HRS §174C-2(b), requires that the Commission implement and utilize comprehensive, long-range water resources planning in its regulation and management of the State's water resources. To accomplish this mandate, the Hawai'i Water Plan (HWP)[4] is intended to serve as the long-range guide for managing water resources in Hawai'i by providing direction and general guidance for making water use decisions, including the issuance of permits as set forth in the Water Code.

The HWP currently consists of five major component plans identified as the: 1) Water Resource Protection Plan, 2) Water Quality Plan, 3) State Water Projects Plan, 4) Agricultural Water Use and Development Plan, and 5) County Water Use and Development Plans. This Study is consistent with the HWP and other plans as follows:

- Water Resource Protection Plan (WRPP)[5] - the 2019 update to the WRPP recognizes that water reuse should be viewed as a key component of sustainable water resource management. Chapter 3 of the WRPP includes an Action Plan that recommends the Commission plan for and provide guidance on the use of alternative water sources (Project 2.6).

[4] https://dlnr.hawaii.gov/cwrm/planning/hiwaterplan/
[5] https://dlnr.hawaii.gov/cwrm/planning/hiwaterplan/wrpp/

VIII. RECOMMENDATION

Staff recommend that the Commission:

1) Approve the selection of the consultant (Birchline Planning LLC) to draft the Hawai‘i Statewide Recycled Water Implementation Study for State and County Facilities (Study).

2) Authorize the Chairperson to award, execute and extend the contract for the Study, subject to approval as to form by the Department of the Attorney General.

3) Delegation of authority to the Chairperson to add no-cost amendments.

4) Find that this Study is exempt from the preparation of an environmental assessment under Hawai‘i Revised Statutes chapter 343 based on Hawai‘i Administrative Rules §11-200-8(a)(8) and the Exemption List for the Commission on Water Resource Management approved by the Environmental Council on January 5, 2021.

Ola i ka wai,

CIARA W.K. KAHAHANE
Deputy Director

EXHIBITS

1. Statement of Work for the Hawai‘i Statewide Recycled Water Implementation Study for State and County Facilities
2. Chairperson Approval for Competitive Sealed Proposals
3. Study Proposal from Birchline Planning LLC

APPROVED FOR SUBMITTAL:

RYAN K.P. KANAKA‘OLE
Acting Chairperson

STATEMENT OF WORK
FOR
CWRM-RFP-2026-01

HAWAIʻI STATEWIDE RECYCLED WATER IMPLEMENTATION STUDY FOR STATE AND COUNTY FACILITIES

It is anticipated that the proposed Statement of Work (SOW) will be incorporated as an attachment to the resultant award instrument. The SOW, without restrictive markings, is your company's affirmation that the SOW is non-proprietary.

Introduction

The State of Hawaiʻi, Commission on Water Resource Management (CWRM) is seeking qualified consulting firms to provide planning services under the project titled "Hawaiʻi Statewide Water Reuse Implementation Study for State and County Facilities" (Study). The contract is valued at approximately one million dollars and is intended to explore strategies for expanding the use of recycled water throughout Hawaiʻi, specifically the use of recycled water at state and county facilities.

Background

The ongoing climate crisis is exacerbating statewide drought conditions and the threat of future water shortages. This may have impacts on the State's freshwater resources and the availability of both groundwater and stream flows. As a result, CWRM encourages the use of alternative water sources, including recycled, reclaimed and reused water and seeks to evaluate the potential use of recycled water for non-potable and potable water demands to help offset potable use and limit the impacts of wastewater disposal into the environment.

The impetus for this Study is a result of Act 170[4] (Session Laws of Hawaiʻi 2016), which seeks to expand the use of recycled (or reclaimed) water for non-potable uses in all state and county facilities by the year 2045.[5] Since 2016, implementation has been limited due to barriers such as cost, infrastructure, and coordination challenges. This study builds on prior efforts and stakeholder engagement to transition toward implementation. In 2023, CWRM requested funding from the State Legislature to make progress on Act 170 and received one million dollars in state funding to develop a statewide study focused on water reuse.[6] In an effort to gather insights and better understand the best use of this funding, CWRM convened four (4) stakeholder engagement workshops between October and November 2025 with relevant county agencies and stakeholders to discuss regional recycled water priorities, specific needs, and the challenges associated with recycled water use on Kauaʻi, Oʻahu, Maui and Hawaiʻi Island (see Appendix A). Information gathered during these workshops directly informed the Scope of Work for this Study.

Exhibit 1

[4] https://www.capitol.hawaii.gov/sessions/session2016/bills/HB1749_CD1_.HTM
[5] Hawaiʻi Revised Statutes § 174C-31(g)(6)
[6] Act 164, Session Laws of Hawaiʻi 2023

Statement of Work

Task 1: Realistic implementation of Act 170

Overall Objective:

Develop a recycled water implementation roadmap, targeting locations and projects statewide with a focus on state and county facilities (as required by Act 170), where adoption is realistic and impactful, while integrating lessons learned from similar efforts. The roadmap should identify where recycled water use is most feasible (rather than mandating 100% coverage by 2045, which may not be feasible across all facilities). The roadmap will include the following specific sub-tasks:

Task 1A. Definitions

Objective:

Develop clear, consistent operational definitions for key terms to support practical, coordinated planning and implementation across state and county agencies. Identify reasonable interpretations where statutory language is ambiguous, based on feasibility, cost, and implementation. These definitions are intended solely for planning and implementation purposes and will not supersede statutory or regulatory requirements.

- Develop recommended operational definitions of key terms in Act 170
    - What qualifies as “facilities”
    - What it means to “utilize” recycled water
- Define “recycled water” for purposes of implementation in each “facility”, including but not limited to:
    - Greywater
    - Stormwater detention basin used for irrigation and/or groundwater recharge
    - Rainwater catchment systems
    - Municipal water reuse, and other non-potable water reuse applications
- Develop a working definition of “feasibility by facility type,” including considerations such as:
    - Availability of reusable water supply
    - Existing or potential partnerships and efforts/initiatives, especially cesspool conversions and other non-potable uses
- Develop a working definition(s) of “updates” as it pertains to facility upgrades or modifications required to integrate recycled water under Act 170.

Methods:

Work with CWRM and key stakeholders through meetings, workshops, correspondence, and document review.

Deliverables:

A set of clearly documented operational definitions to promote use of consistent terminology and shared understanding by state and county officials, facility managers, and stakeholders.

Task 1B. Evaluate all county and state facilities for recycled water feasibility

Objective:

Evaluate state and county facilities statewide to identify and prioritize locations where recycled water use is most feasible and impactful, and document constraints where recycled water use is not currently viable.

- Classify and prioritize facilities by type, scale, and operations.
- Identify where recycled water is most feasible and document limiting factors where reuse is not feasible.
- Conduct a desktop analysis to match recycled water type (e.g. treated municipal wastewater, greywater, stormwater) to facility type.

Methods:

Desktop analysis informed by available data, coordination with CWRM and key stakeholders.

Deliverables:

A facility feasibility scorecard that ranks state and county facilities based on recycled water use potential and incorporates barriers to implementation as part of ranking process.

Task 1C. Stakeholder engagement and recycled water champions

Objective:

Utilize and build on the champions and key players identified during the stakeholder engagement workshops to advance implementation of recycled water use at state and county facilities statewide. Develop a process that supports continued engagement among identified stakeholders and evolve the level of involvement to continue progress on recycled water implementation.

- Identify key agencies and individuals within county and state such as county water supply, wastewater, stormwater, etc. and state Department of Health, Public Utilities Commission, Department of Agriculture and Biosecurity, Agribusiness Development Corporation, etc.
- Define specific roles for identified state and county recycled water champions.
- Develop and describe a proposed process (e.g., water recycling council) to ensure continued coordination among identified champions that will result in the implementation and advancement of water recycling projects at state and county

facilities.

Methods:

Leverage workshop outputs and coordinate with CWRM to identify, convene, and support stakeholder participation.

Deliverables:

A stakeholder-informed recycled water champions framework, including identifying champions and example collaboration pathways (e.g. recycled water champions working together on a pilot project).

Task 1D. Develop a co-funding framework for water recycling implementation

Objective:

Although the use of recycled water has benefits across multiple sectors, often one party or agency takes on the brunt of the cost for the numerous steps involved in developing, implementing and maintaining a water recycling program in their community. This was identified in the stakeholder engagement workshops as a significant challenge inhibiting progress in implementing Act 170. The goal of this sub-task is to explore more equitable solutions and develop a structure for co-funding 1) the priority water recycling projects identified as part of Task 1B and 2) water recycling projects generally (not limited to state and county facilities).

- Identify current funding sources (federal, state, county, non-profit and non-traditional).
- Identify gaps in funding for recycled water projects and evaluate the underlying causes. Develop options for more equitable cost-sharing approaches to advance implementation of recycled water use.
- Develop non-traditional co-funding frameworks for recycled water use. Feedback from the stakeholder engagement workshops identified a more equitable approach to paying for recycled water beyond traditional sewer rate payers bearing the entire burden.
    - Define co-funding
    - Determine cost savings of co-funding between agencies (e.g.: water and wastewater) through streamlining processes (e.g.: collaborating on grant applications, etc.).

Methods:

Coordinate with CWRM and key stakeholders; review of funding programs and case studies (e.g.: Orange County Water District and San Francisco Public Utilities Commission joint funding agreements).

Deliverables:

A funding strategy and co-funding framework outlining shared funding approaches across

multiple sources. Provide reference examples as appropriate.

Task 1E. Pilot project(s) flow chart to implementation

Objective:

Develop clear guidance and a flow chart for project implementation for the priority projects identified as part of Task 1B. The flow chart should detail the steps required from project initiation through implementation. The agencies/entity responsible for implementation at each stage in the flowchart should also be identified.

The flowchart should include:

- The end-user and their respective water demand needs
- Recycled water source
- Conveyance and transportation
- Regulatory and distribution agency coordination with the identified champion(s)
- Funding mechanism(s)
- Monitoring, operations, and maintenance requirements

Methods:

Desktop analysis; coordinate with CWRM and stakeholders.

Deliverables:

A pilot priority project pathway development, including a decision-making flow chart and stepwise process from project concept through implementation.

Task 2: Moving beyond Act 170 implementation

Task 2A. Policy, regulatory, and planning mechanisms

Objective:

Identify policy, regulatory, and planning mechanisms that could expand or remove barriers to recycled water use statewide (not limited to state and county facilities), with a focus on practical implementation.

- Review existing statutes, administrative rules, regulations, codes, and policies relevant to recycled water use (including CWRM, Department of Health, and county building codes), and identify any proposed or in-development changes that may affect implementation.
- Review how CWRM and other existing agencies (e.g., Department of Health) currently apply their authorities in permitting and planning processes and identify opportunities to incorporate incentives or requirements that support recycled water use.
- Identify regulatory pathways and constraints that affect implementation of recycled

water use in *existing* buildings.

Methods:

Review recycled water regulations and policies and identify key decision points and proposed pathways for expansion of recycled water use; coordinate with CWRM and other agencies.

Deliverables:

Recommended State Water Code (Hawai‘i Revised Statutes chapter 174C) and/or Administrative Rule amendments, policies or procedures for CWRM and partner agencies (e.g. State Department of Health; county building codes amendments needed to streamline recycled water use at the start of a new development).

Task 2B. Timeline, monitoring and accountability strategies

Objective:

Develop a phased implementation timeline, monitoring framework, and accountability mechanisms to track progress toward expanded recycled water use statewide through 2045.

- Timeline with recycled water benchmarks to the year 2045
- Develop backward-looking targets from the 2045 goal set by Act 170, SLH 2016, to establish interim milestones
- Develop realistic goals for percent volumetric recycled water use increases (e.g., incremental expansion of reuse by each county at regular intervals) that are tailored to each county’s specific constraints and opportunities, including local infrastructure, supply, and demand.
- Identify and describe barriers and pathways to address implementation challenges. Develop a monitoring approach, including periodic progress assessments towards expanding of recycled water use throughout the state based on percent volumetric goals by county identified above.
- Identify and describe accountability mechanisms, such as reporting, legislative updates, etc.

Methods:

Coordination with CWRM and stakeholders. Review and apply relevant case studies (e.g. Orange County Water Replenishment District and Santa Clara Valley Recycled Water Program, San Francisco Public Utilities Commission).

Deliverables:

An implementation roadmap to the year 2045, including monitoring protocols and accountability mechanisms, informed by relevant case studies.

Task 3: Expand recycled water use for high volume uses (watershed restoration, agriculture, and firefighting)

Overall Objective:

Assess the recycled water opportunities for high volume uses (watershed restoration, agriculture, and firefighting), including infrastructure considerations, responsible entities, and funding pathways.

Task 3A. Evaluate the infrastructure needs of recycled water projects for watershed restoration, agriculture, and fire suppression

Objective:

Evaluate infrastructure needs for conveying recycled water from the treatment facility for purposes such as watershed and biocultural restoration, agriculture and fire suppression storage. This includes analysis of transmission pipelines, pumping requirements, gravity-fed opportunities, seasonal and emergency storage, and integration with existing utility and stormwater infrastructure. Determine implementing entities and potential funding mechanisms.

Watershed, conservation, agriculture, and firefighting recycled water opportunity detail breakdown and example:

- Determine key cost and feasibility variables:
    - Distance and elevation change
    - Required water quality
    - Storage needs (seasonal + emergency)
    - Dual-use infrastructure (irrigation + fire + ecological)
        - Stormwater corridors
        - Flood control channels
        - Utility easements
        - Converting seasonal irrigation mains to year-round service

Watershed restoration hypothetical examples (continent):

- San Jose / South Bay Water Recycling Program (CA) – Recycled water is used to enhance freshwater inflows into sensitive tidal marsh and wetland habitat, preventing conversion to brackish conditions and supporting endangered species.
- Shakopee Mdewakanton Sioux Community (MN) – Recycled municipal wastewater supports local wetland restoration and biodiversity, helping replenish natural habitat and reduce pressure on groundwater.
- EPA Nature-Based Solutions examples (e.g.: Palo Alto Horizontal Levees) – Highly treated recycled water supplies constructed wetlands and vegetated

buffers that can improve water quality, restore wetlands, and enhance ecosystem services.

- Orlando Wetlands (FL) – 1,640 acre constructed wetland system gets thousands of gallons per day of reclaimed water, providing habitat and recreation while acting as a functional part of local watershed hydrology.

Watershed restoration hypothetical examples (Hawai‘i):

- Wailua, Kaua‘i has two Waste Water Treatment Plants (WWTP) in need of maintenance and updates and there are several existing developments within 500 feet proximity of both WWTP.
- Department of Hawaiian Home Lands has two planned residential-agricultural developments, each in the vicinity of a different WWTP.
- Native Hawaiian non-profit is leading restoration of a cultural site (within 500 square feet) with native plantings that require non-potable water.
- Multiple lo‘i kalo fields in the vicinity of a WWTP that currently do not have access to water.
- Lahaina has many water reuse needs ranging from restoration to agricultural and fire protection.

Methods:

Survey watershed, cultural, conservation stakeholders to understand site opportunities and assess both need and feasibility; desktop analysis; coordinate with CWRM and stakeholders; review and incorporate as appropriate information from CWRM’s Update Water Reuse Survey Report (2013).[7]

Deliverables:

A prioritized assessment of high-volume recycled water opportunities for key sectors (watershed restoration, agriculture, firefighting), including infrastructure considerations, responsible entities, and funding pathways.

[7] https://files.hawaii.gov/dlnr/cwrm/planning/hwrsr2013.pdf

Appendix A - Workshop Summaries and Notes

Date	Workshop Location
October 20, 2025	**Honolulu, Oʻahu**
October 27, 2025	**Wailuku, Maui**
November 3, 2025	**Kona, Hawaiʻi Island**
November 6, 2025	**Līhuʻe, Kauaʻi**

Oʻahu Reuse Stakeholder Workshop Summary:

The workshop was held at the CWRM conference room in Honolulu, and included the following participants:

- Department of Land and Natural Resources (various divisions)
- Agribusiness Development Corporation (ADC)
- Department of Agriculture and Biosecurity (DAB)
- Public Utilities Commission (PUC)
- Department of Health (DOH)
- Honolulu Board of Water Supply (HBWS)
- City and County of Honolulu (C&C)
    - Stormwater
    - Environmental Services
    - Planning and Permitting

Oʻahu participants discussed the need to consider the end use and user first to guide the rest of the reuse project development, with a key focus being on source protection and public health. Key takeaways from the workshop include calling the project the Statewide Water Reuse Implementation Study to shift the focus towards action that will get more reuse projects piloted, and to focus on an action-oriented roadmap that is project based to realistically implement Act 170. Top industries that would be initial targets for reuse projects include airport, boat harbor washing, conservation and fire resilience, with agriculture noted as an important use with more challenges for implementation. There was discussion on going directly to potable reuse to bypass the high cost of dual piping and public health concerns and increase the use of recycled water across a broad span of uses. Workshop participants asked questions to understand how ‘facilities’ are defined and the intent of the scope of Act 170, suggesting this would be important information to include in the upcoming Study. Final thoughts from the workshop included adjusting the statewide goals around reuse to be longer term, such as 50% of Hawaiʻi water supply using recycled water by 2055 and creating a monthly/quarterly coordination meeting among potential reuse champions - DOH, CWRM, DLNR, HBWS, ADC and DAB - to identify and expedite projects.

Maui Reuse Stakeholder Workshop Summary:

The workshop was held at the County Planning Room in Wailuku and included the following participants:

- Kamehameha Schools

- The Nature Conservancy
- Department of Hawaiian Home Lands
- County of Maui
    - Wastewater Reclamation Division (WWRD)
    - Planning
    - Department of Water Supply (MDWS)
    - Department of Agriculture
    - Emergency Management
    - Office of the Mayor

Maui participants emphasized the importance of developing a broader and shared funding mechanism, infrastructure for delivery, regional partnerships and collaboration. Water and sewer are traditionally funded separately; the county is currently in the process of developing a plan to collaborate on a joint-funding mechanism to build out infrastructure for potable use. The discussion highlighted that where reuse has been successful in other places, there has been a champion that moves the project forward. There is already existing community interest in reuse from WWTP's and stormwater, especially for agriculture, fire resilience and conservation work. A pilot is currently underway to understand PFAS uptake in crops irrigated with R-1 water. There is interest in reallocating R-1 to affordable housing and agriculture zones, developing a regional asset map to better assess needs and opportunities.

Incentives should be provided when state guidelines are met, but rules must avoid becoming overly granular. Equity concerns are critical, ensuring that large landowners do not monopolize the benefits of reuse. There is a need for a comprehensive roadmap that will balance short-term projects with long-term options spanning up to 30 years, meeting multiple needs, including housing, agriculture, climate resilience, and wildfire management.

Hawai‘i Island Reuse Stakeholder Workshop Summary:

The workshop was held in Kona and included participants from:

- Department of Land and Natural Resources (various divisions)
- Department of Hawaiian Home Lands
- Department of Accounting and General Services
- Hawai‘i Rural Water Association
- County of Hawai‘i
    - Planning
    - Department of Environmental Management (DEM)

There was significant time discussing the Kealakehe Wastewater Treatment Plant, describing details of the facility operating significantly under capacity, the current upgrade to R-1 and an upcoming feasibility study that will explore reuse opportunities. However, challenges remain high due to costs, limited budgets, and restrictions on connecting areas north of Kealakehe. Kealakehe was identified as a potential hub for water reuse, with existing but incomplete reuse lines nearby, agricultural zoned lots across the street that would eventually need water. A clear opportunity exists to connect priority cesspools in the region to upcoming wastewater projects or upgrades.

To align development with reuse goals, the Department of Water Supply could align development commitments with recycled water availability, and developers may be required to provide recycled water calculations like O‘ahu’s requirements. Long-term planning emphasized the need to site plants closer to end users and evaluate the feasibility of retrofitting buildings to use R-1 water and, as well as working closer with DEM to align design priorities like generating wastewater at higher elevations to integrate water and energy systems and prioritizing small users with planning. There was interest from DLNR State Parks division to align reuse goals with cesspool conversion, and an interest in reuse as a resource for fire suppression.

Kaua‘i Reuse Stakeholder Workshop Summary:

The workshop was held at the Department of Water office in Līhu‘e, and included participants from:

- Department of Hawaiian Home Lands
- County of Kaua‘i
    - Wastewater
    - Planning
    - Department of Water Supply

The Kaua‘i discussion broke down reuse type by region; east side was people and urban-focused, west side is agriculture focused, north shore focus was in-progress community development and agriculture, and the south side has a high concentration of hotels that have their own WWTP and luxury developments. There is currently a focus on increasing fire resiliency in the County planning process - identified as a viable end use in the community’s urban centers, as well as a connection between agricultural zones for fire breaks that could be enhanced with reuse. However, there needs to be economically viable transport methods between the treatment center and target use zones. Since most county wastewater facilities need to be upgraded, a ‘reach goal’ was identified to upgrade to direct potable reuse and only treat the demand that is needed. DHHL noted they are looking into direct potable reuse for their upcoming housing projects.

A recent study in Hanalei assessed groundwater table levels and water quality to develop viable alternatives for cesspool conversion, with community supporting a sewer system due to strong concerns to avoid disturbing iwi kūpuna burials and no standardized archaeological protocol during construction. Reuse users were noted as a primary consideration as well as the environmental benefits of reuse implementation by offsetting marine disposal of effluent.

Appendix B - Historical Milestones for Water Reuse in Hawai‘i

- 2013 - CWRM Update of the Hawai‘i Water Reuse Survey and Report: Evaluates existing statewide efforts to reclaim and reuse wastewater with a summary of existing projects, regulatory frameworks, treatment standards and County-led initiatives to expand reuse.
- 2013 - CWRM Central O‘ahu Non-Potable Water Masterplan & Opportunities Report: identifies increasing demand for irrigation water and limited potable water supplies, clarifying the need to expand non-potable sources like recycled wastewater and stormwater. Outlines three key opportunities to match supply and demand through 1) regional solutions 2) stakeholder collaboration and 3) infrastructure development. Recommendations include implementing non-potable water systems for agriculture and landscaping to reduce reliance on potable groundwater and support long-term sustainability
- 2013 - HCF created the Wai Maoli: Hawai‘i Fresh Water Initiative: Highlights Reuse as a key strategy to achieving the FWI goal of “creating 100 million gallons per day in additional, reliable, freshwater capacity for Hawai‘i by 2030”. The key policies to increase Reuse include: 1) Revise Water Reuse Guidelines, 2) Revise Greywater Guidelines and 3) Increase Water Reuse for Large Landscape Areas.
- 2016 - Act 170, Session Laws of Hawai‘i enacted: Promotes the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of state and county facilities by December 31, 2045.
- 2016 - Water Security Advisory Group: Established by Act 170, the Water Security Advisory Group (WSAG) made funding recommendations that will increase Hawai‘i’s water security through conservation, recharge and reuse projects. The WSAG developed criteria to assess and prioritize projects and provide matching state funds for implementation.
- 2016 - The Reuse Guidelines were revised by DOH: Outlines the technical and regulatory requirements to construct or modify Wastewater Reclamation Facilities that produce R-1 and R-2 grade recycled water. It provides a framework for Best Management Practices required for applying recycled water, with an emphasis on public health protection while streamlining the approval process to forward water reuse projects.
- 2018 - Water Reuse Task Force Recommendations: Each county should establish Water Reuse Zones, mandate the use of recycled water and adopt regulations for onsite non-potable water reuse systems. Once project partners are determined and demonstration projects are finalized, funding may be requested for project implementation.

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DEPARTMENT OF LAND AND NATURAL RESOURCES | KA 'OIHANA KUMUWAIWAI 'ĀINA
COMMISSION ON WATER RESOURCE MANAGEMENT | KE KAHUWAI PONO
P.O. BOX 621
HONOLULU, HAWAII 96809

February 26, 2026

TO: Ryan K.P. Kanaka'ole
Acting DLNR Chairperson

FROM: Ciara W.K. Kahahane
CWRM Deputy Director

SUBJECT: Request Approval for Selection of Competitive Sealed Proposal Process and Evaluation Committee for "Statewide Recycled Water Implementation Study" as Authorized by Act 164, SLH 2023, as amended by Act 230, SLH 2024, Item D-13

BACKGROUND:

The ongoing climate crisis is exacerbating statewide drought conditions and the threat of future water shortages. This may have impacts on the State's freshwater resources and the availability of both groundwater and stream flows. As a result, the Commission on Water Resource Management (CWRM) encourages the use of alternative water sources, including recycled, reclaimed and reused water and seeks to evaluate the potential use of recycled water for non-potable and potable water demands to help offset potable use and limit the impacts of wastewater disposal into the environment.

The impetus for this Study is a result of Act 170[1] (Session Laws of Hawai'i 2016), which seeks to expand the use of recycled (or reclaimed) water for non-potable uses in all state and county facilities by the year 2045[2]. Since 2016, very little progress has been made to implement this mandate. As a result, CWRM requested funding from the State Legislature to make progress on Act 170. In 2025, CWRM received one million dollars in state funding to develop a statewide study focused on water reuse[3]. To gather insights and better understand the best use of this funding, CWRM convened four (4) stakeholder engagement workshops between October and November 2025 with relevant county agencies and stakeholders to discuss regional recycled water priorities, specific needs, and the challenges associated with recycled water use on Kaua'i, O'ahu, Maui and Hawai'i Island. Information gathered during these workshops directly informed the scope of work for this study.

DISCUSSION:

Funding, as authorized by Act 164, SLH 2023, as amended by Act 230, SLH 2024, Item D-13, will be used to hire a consultant to help write the study and be made available through a competitive request for proposals.

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[1] https://www.capitol.hawaii.gov/sessions/session2016/bills/HB1749_CD1_.HTM
[2] Hawai'i Revised Statutes § 174C-31(g)(6)
[3] Act 164, Session Laws of Hawai'i 2023

Exhibit 2

Competitive sealed bidding would not be the most advantageous to procure a consultant for this project, where award would be given to the lowest responsible and responsive bidder. While the competitiveness of price should be considered, project approach, schedule, and relevant experience are also of high importance. The proposed project approach and schedule must demonstrate a clear understanding of the scope of work and present a practical, timely, and well-sequenced methodology. Relevant experience, particularly in water recycling, water resource planning, and preparation of a technical study, should be considered as to provide a quality study for this project.

Based on the special conditions of this procurement, CWRM recommends that competitive sealed proposals be used to procure a consultant for this project. Such an approach will be the most advantageous because:

1) Award may need to be based upon a comparative evaluation as stated in the Request for Proposals of differing price, approach, schedule, experience, and other contractual factors to determine the most advantageous offering to the State.

2) Oral or written discussions may need to be conducted with offerors concerning technical and price aspects of their proposals.

Pursuant to Hawaii Administrative Rules (HAR) §3-122-45, a determination by the Head of a Purchasing Agency (HOPA) must be made for use of competitive sealed proposals when competitive sealed bidding is neither practicable nor advantageous to the State.

Additionally, pursuant to HAR §3-122-45.01, a determination must be made by the Procurement Officer (PO) that an evaluation committee, selected in writing by the PO, shall evaluate the proposals. The evaluation committee must consist of at least three government employees with sufficient qualification in the area of the construction to be procured. CWRM recommends the following individuals:

Katie Roth, CWRM Hydrologic Planning Program Manager
Nicholas Ing, CWRM Planner IV
Alyssandra Rousseve, CWRM Hydrologist V
Christin Reynolds, One World One Water
Representative, Department of Health (DOH)

REQUEST:

The Commission on Water Resource Management requests that the Chairperson approve the use of:

1) Competitive sealed proposals for solicitation of a "Statewide Recycled Water Implementation Study" as authorized by Act 164, SLH 2023, as amended by Act 230, SLH 2024, Item D-13.

2) An evaluation committee comprised of the individuals identified above to evaluate proposals in response to the Request for Proposals.

RECOMMEND:

☑ APPROVAL ☐ DISAPPROVAL

Ryan K.P. Kanaka'ole, Acting DLNR Chairperson

02/27/2026
Date

Signature:

Email: ciara.wk.kahahane@hawaii.gov

Solicitation #CWRM-RFP-2026-01

Submittal of Birchline Planning LLC

1. TABLE OF CONTENTS

No confidential, protected, or proprietary information is submitted.

Table of Contents page numbers refer to the numbers at bottom left

Exhibit 3

2.

Offer Checklist

Offeror must address ALL sections and attachments and provide the information and documentation as required in the table below.

No.	Description	Reference in RFP	Completed
1	Offer Checklist – submittal of checklist with all items checked "completed."	Offer Checklist	☒
2	Offer Form OF-1 - Completed and signed NOTE: Ensure the company name submitted in HlePRO matches the company name on OF-1.	Attachment B, Offer Form OF-1, Section 8.9 Proposal Preparation	☒
3	Table of Contents	Section 4.5 Required Format and Content	☒
4	Executive Summary, not to exceed on (1) page	Section 4.5 Required Format and Content	☒
5	Overall Experience and Capability of Company and Demonstrated Results narrative, not to exceed five (5) pages	Section 6.1 Evaluation Criteria 1	☒
6	Technical/Planning Approach narrative, not to exceed ten (10) pages	Section 6.2 Evaluation Criteria 2	☒
7	Offer Form OF-2 Price Proposal	Attachment C, Offer Form OF-2, Section 6.3 Evaluation Criteria 3	☒
	Offer Form OF-3, Client References	Attachment D, Offer Form OF-3	x
8	Wage Certificate	Attachment E, Section 8.7	x
9	Confidential, Protected or Proprietary Information Section (if applicable)	Section 8.10	n/a ☐

Julie Beth Clonds

Authorized Offeror Signature

3.

OFFER FORM, OF-1
OFFEROR ACKNOWLEDGEMENT AND TRANSMITTAL

HAWAI'I STATEWIDE RECYCLED WATER IMPLEMENTATION STUDY
FOR STATE AND COUNTY FACILITIES

CWRM-RFP-2026-01

Ryan K.P. Kanaka'ole
Acting Chairperson and Head of Purchasing Agency
Department of Land and Natural Resources
Commission on Water Resource Management
1151 Punchbowl Street, Room 227
Honolulu, Hawai'i 96813

Dear Acting Chairperson Kanaka'ole:

The undersigned has carefully read and understands the terms, conditions, and Special Provisions specified within this RFP, and the AG General Conditions, Form AG-008, attached hereto; and hereby submits the following offer to perform the work specified herein, all in accordance with the true intent and meaning thereof. The undersigned further understands and agrees that by submitting this offer, 1) Offeror is declaring this offer is not in violation of Chapter 84, Hawai'i Revised Statutes, concerning prohibited State contracts, and 2) Offeror is certifying that the price(s) submitted was (were) independently arrived at without collusion.

Offeror is:
☒ Sole Proprietor ☐ Partnership ☐ *Corporation ☐ Joint Venture
☐ Other _____
*State of incorporation: Vermont

Hawai'i General Excise Tax License I.D. No. GE-051-223-6032-01R

Payment address (other than street address below): same as Business Address
City, State, Zip Code: _____

Business address (street address): 46 South Main Street, Suite 3A
City, State, Zip Code: Waterbury, Vermont 05676

Respectfully submitted:

April 21, 2026 (x) JuliBeth Hinds
Date — Authorized (Original) Signature

802-324-5760 — Juli Beth Hinds, AICP, Principal
Telephone No. — Name and Title (Please Type or Print)

n/a — **BIRCHLINE PLANNING LLC**
Fax No. — ** **Exact Legal Name of Company (Offeror)**

birchlineplanningllc@gmail.com
E-mail Address

**If Offeror is a "dba" or a "division" of a corporation, furnish the exact legal name of the corporation under which the awarded contract will be executed

Project Purpose. Birchline Planning LLC, in partnership with SR Partners LLC, National Laboratory of the Rockies (NLR), Roth Ecological Design International/3Rwater (REDI), REGEN PLLC, and Focused Planning Solutions LLC, submits this proposal in response to CWRM-RFP-2026-01. The project supports Hawai‘i’s statutory mandate under Act 170: utilizing recycled water in 100% of state and county facilities by December 31, 2045. Our proposal delivers a comprehensive statewide implementation framework providing the definitions, facility evaluation, stakeholder engagement, co-funding toolkit, policy analysis, and 2045 Roadmap the State and Counties need to act.

Team. JB Hinds (Birchline Planning, Project Manager) has led four multi-stakeholder implementation planning programs of directly comparable scope. Melissa Unemori Hampe (SR Partners, Facilitation and Engagement Manager) currently facilitates Maui County’s post-wildfire recycled water recovery work and helped secure $15.6 million for the Lahaina Recycled Wastewater Facility. Dr. Scott Struck (NLR, Technical Manager) leads national water systems research through the National Alliance for Water Innovation (NAWI) and the Lahaina Energy Partnership. Amy DeBay (Focused Planning Solutions, GIS and Data Lead) brings over a decade of Hawai‘i-specific GIS experience across state and county agencies. Lauren Roth Venu (REDI/3Rwater) developed the Follow the Drop—Reuse (FTD-R) accountability platform. Paula Kehoe and Tristian Bounds (REGEN PLLC) contribute water reuse policy, financing, regulatory expertise, and international and national leadership through BILD and the Water Environment Federation (WEF) Distributed Water Infrastructure Task Force (DWITF).

Technical Approach. The team will conduct bi-weekly CWRM check-ins, a Leaders Workshop, 9–12 TWG sessions, and up to 12 vetting presentations. All virtual meetings will meet ADA accessibility standards; in-person sessions are planned for the Leaders Workshop and key TWG sessions. Work is organized in three sequential phases across 12 months, addressing all elements of RFP Section 6.2(a)–(j) and Scope of Work tasks (1.1, 1A–3A):

- **Phase 1 — Research and Stage Setting (Months 1–4):** Develop the implementation study schedule (Task 1.1); establish shared vocabulary and use case definitions (Task 1A); build the statewide facility GIS inventory (Task 1B); convene the Leaders Workshop (Month 4); begin policy and co-funding review (Tasks 1D, 2A).
- **Phase 2 — Technical Working Groups (TWGs) (Months 5–9):** Convene 3–4 Technical Working Groups (TWGs) organized by use-case category, each meeting three times (Task 1C); develop the Co-Funding Toolkit (Task 1D); produce the Decision Flowchart (Task 1E); conduct high-volume uses research in parallel (Task 3A).
- **Phase 3 — Reporting and Implementation Setup (Months 10–12):** Conduct up to 12 vetting and reporting presentations; finalize the Policy Levers Analysis (Task 2A); produce the 2045 Roadmap with county-level phasing and FTD-R monitoring dashboard (Task 2B); launch the Champions network (Task 1C).

Administrative Compliance. Birchline Planning accepts all terms of the firm-fixed-price contract. The total proposed price for the 12-month period of performance is $998,503. JB Hinds will serve as Project Manager and primary contact with CWRM. All technical work products will be reviewed by a senior staff member from a firm other than the lead author before submission; JB Hinds will provide final QA/QC sign-off. CWRM will have 10 business days to review draft deliverables (15 for the Facility Scorecard and 2045 Roadmap). This proposal is submitted electronically through HIePRO in accordance with all RFP requirements. Three client references are provided on Offer Form OF-3 (Attachment D); all references have been notified.

5. OVERALL EXPERIENCE & CAPABILITY OF COMPANY & DEMONSTRATED RESULTS

To support the Commission on Water Resource Management (CWRM), Birchline Planning LLC leads a team of committed colleagues who are *doing the work* of recycled water policy, funding, and implementation - at scale, in Hawaii, and together. Our team combines deep expertise in recycled water policy, planning, and engineering with on-the-ground experience in Hawaii's governmental, cultural, and physical landscape.

Birchline Planning LLC SR Partners LLC REGEN PLLC

National Laboratory of the Rockies (NLR)

Focused Planning Solutions LLC Roth Ecological Design International/3R Water

Company Experience

The table below lists relevant, major projects undertaken by our team firms, including many in the past three (3) years, that are directly comparable to this RFP's Statement of Work. Each project involved one or more of the following: implementation roadmap development; feasibility analysis related to recycled or non-potable water; technical working group facilitation; workshops with state and county agencies; regulatory and policy analysis; funding strategy development; and/or GIS and data management for water infrastructure planning.

Project / Description	Client	Period	Key Services	Team Lead & Partners
City & County of Honolulu Stormwater Utility — Multi-Stakeholder Advisory Process	C&C Honolulu Dept. of Facility Maintenance	2019–present	Multi-disciplinary TWG facilitation; regulatory & financial analysis; program development; implementation roadmap; reporting protocols; community meetings	JB Hinds (Lead); Amy DeBay (GIS); Lauren Roth Venu (Advisor)
Alternative Non-Potable Water Use Policy & Planning — San Diego County	San Diego Housing Authority & County of San Diego	2018–2021	Regulatory barrier analysis; alt water use strategies; implementation roadmap; workshops; disadvantaged community engagement; consultant team management	JB Hinds (Lead); Amy DeBay (GIS, data); Paula Kehoe (Expert Advisor)
Maui Economic Recovery Commission — Wai Projects	County of Maui Office of Recovery	2023–present	R-1 water for Lahaina; Wai Dashboard; Kahuwai Coalition water shortage planning; cross-sector community engagement; federal funding coordination	Melissa Unemori Hampe / SR Partners
One Water Lahaina Initiative — Community Engagement and Recycled Water Strategy	County of Maui Office of Recovery	2023–present	Community sentiment analysis; cross-sector outreach; recycled water and fire suppression strategy; stakeholder engagement design	Melissa Unemori Hampe / SR Partners
Hawaiian Islands Environmental Finance Center (HIEFC) — Implementation Team	Hawaii Fresh Water Initiative / Federal partners	2022–present	Federal funding access for water infrastructure; technical assistance to counties; $15.6M secured for Lahaina Recycled Wastewater Facility (Bureau of Reclamation); capacity-building for local utilities and nonprofits	Melissa Unemori Hampe / SR Partners

5. OVERALL EXPERIENCE & CAPABILITY OF COMPANY & DEMONSTRATED RESULTS

Project / Description	Client	Period	Key Services	Team Lead & Partners
Lahaina Energy Partnership — Water-Energy Nexus Analysis	NLR / Community partners	2023–present	Wastewater treatment plant energy characterization; hydropower and water reuse application analysis; workforce development; distributed energy-water systems modeling	Scott Struck, Elise DeGeorge, Jennifer Daw, Evan Rosenlieb
WEF Distributed Water Infrastructure Task Force — National Policy & Practice	Water Environment Federation (national)	2022–2025	Chair-level leadership of national task force; policy guidance development; best practices for distributed/decentralized water systems; regulatory frameworks; coordination with utilities, regulators, engineers	Tristian Bounds (Chair); Paula Kehoe (advisor) Scott Struck / NLR (Co-Chair, NAWI)
Stormwater Fee, Credit, and Water Billing Analysis	City of National City	2023–present	Water billing and property records analysis; impervious cover analysis; GIS; fee policy options for DOT Harbors and Airports; data management for state and county facilities	J.B. Hinds (lead) Amy DeBay (GIS, water and billing data)

The team's past completed projects includes JB Hinds's leadership of Vermont's statewide phosphorous reduction program implementation (including multi-stakeholder technical working groups (TWGs); establishing cost reimbursement formulas for ecosystem restoration; and operation and maintenance standards, 2020-2022); the Milwaukee Metropolitan Sewerage District Green Infrastructure Implementation Strategy in Milwaukee (740M gallon implementation roadmap; 29-municipality engagement, 2012-13); and the Vermont Agency of Natural Resources Statewide Climate Change Adaptation & Implementation Plan (2012-13).

Key Personnel

Our team is structured so each task has a lead with direct, relevant experience. Personnel described below will be actively engaged throughout the project; Task Leaders have 15 or more years of relevant professional experience. Full resumes are provided in the Appendix.

Juli Beth (JB) Hinds, Principal, Birchline Planning LLC — Project Manager; Lead, Tasks 1.1 (Schedule) and 2.B (Roadmap Integration). 25+ years. A planner by training, JB spent over a decade as a public official and utility manager before forming Birchline Planning in 2012. Since 2019, she has served as technical lead for the City & County of Honolulu's Stormwater-Wastewater Advisory Group (SW-WAG), managing multiple technical disciplines, consultants, agencies, and represented organizations on stormwater and wastewater finance decisions. JB has served as project manager and facilitator for four strongly comparable multi-stakeholder implementation planning projects, each involving process design, TWG facilitation, and creation of implementation roadmaps with funding and regulatory strategies.

Melissa Unemori Hampe, Partner, SR Partners LLC — Facilitation and Engagement Manager; Lead, Tasks 1.C and 1.D 20+ years. Melissa has worked for decades at the nexus of cross-sector initiatives, including as a senior Congressional staffer, national nonprofit advocate, and grants, government relations, and community engagement consultant. SR Partners is based on Maui and has worked extensively in Maui County and across the pae ʻāina. She currently facilitates aspects of the County of Maui's post-wildfire water recovery work through the Maui Economic Recovery Commission including community education and outreach, R-1 water for Lahaina, and the Wai Dashboard, and is a core member of the HIEFC implementation team.

5. OVERALL EXPERIENCE & CAPABILITY OF COMPANY & DEMONSTRATED RESULTS

Dr. Scott Struck, National Laboratory of the Rockies (NLR; formerly the National Renewable Energy Laboratory) Integrated Water Systems Group — Technical Manager; Lead, Tasks 1.A, 1.E, and 3.A. 20+ years. Scott leads NLR's water systems work, focusing on technical and economic challenges of water supply and wastewater treatment. He is a recognized leader in the National Alliance for Water Innovation (NAWI) doing current work on PFAS treatment methods and approaches, a critical component in all recycled water considerations. He is involved in the Lahaina Energy Partnership, investigating water microgrids, decentralized fit-for-purpose water treatment, and alternative energy applications. Dr. Struck is also implementing key elements of NAWI's *Technology Roadmap: Municipal Sector*, which provides transformative research on desalination and treatment technologies to lower the cost and energy needed to produce fit-for-purpose water from nontraditional sources to enhance public water supplies.

Amy DeBay, President, Focused Planning Solutions LLC — GIS and Data Manager; Task 1.B Lead. Amy has over 20 years of experience placing GIS and data management in service of community planning goals. She has especially strong knowledge of Hawaii's state and county GIS systems from a decade-plus working as project manager for the Hawaii County Planning Department General Plan Update. She has supported the Honolulu storm water utility and Stakeholder Advisory Group project for 7 years, leading the impervious cover analysis and using GIS to help the City and County forge an agreement on assessment of Hawaii Department of Transportation (HDOT) Airports and Harbors properties.

Lauren Roth Venu, Principal, Roth Ecological Design International /3Rwater — Incentives, Pilot Projects, and Tracking/Accountability; Task 2.A Lead. 20+ years in integrated water resource management, recycled water planning, onsite reuse, and policy development. REDI, founded in 2006, is one of the first Hawaii-based firms offering comprehensive water resource planning and design for new and redevelopment projects. Lauren founded 3Rwater and the Follow the Drop—Reuse (FTD-R) platform, which currently supports the C&C Honolulu stormwater program and will serve as the project's monitoring and accountability dashboard.

Paula Kehoe, Senior Water Strategy Advisor, REGEN PLLC — Definitions, Facility Evaluation, Finance, Regulatory, and Pilot Projects Advisor. 30+ years. Paula is a nationally recognized leader in integrated water resources planning, water reuse policy, and infrastructure financing. She served as an expert advisor on regulatory barriers for the San Diego non-potable reuse project and currently serves as Co-Chair of BILD (Building Infrastructure Locally for Decentralized Water Systems), an international initiative on decentralized water systems policy, financing, and implementation. Paula's experience includes extensive work designing and implementing co-funding strategies, achieving regulatory reform, and addressing equity needs through cost-sharing and program design.

Tristian Bounds, Principal, REGEN PLLC – Definitions, Facility Evaluation, Scorecard, and Pilot Projects Advisor. 15+ years. Tristian brings the team direct knowledge of decentralized water treatment and reuse from his years with Orenco Systems and his national work on water policy. Tristian's practice integrates practical engineering with systems-level thinking for water reuse and regenerative infrastructure. He was Chair of the WEF Distributed Water Infrastructure Task Force (DWITF), working with Dr. Scott Struck and Paula Kehoe. The DWITF was a landmark effort by WEF to coordinate national-level collaboration on policy and best practices for distributed water systems—frameworks now informing decentralized infrastructure policy, financing, and implementation across the U.S.

5. OVERALL EXPERIENCE & CAPABILITY OF COMPANY & DEMONSTRATED RESULTS

Elise DeGeorge and **Jennifer Daw, NLR Integrated Water Systems Group - Scorecard, Flowchart, Technical Working Group Facilitation**. Elise and Jennifer are NLR engineers with Hawaii experience, and long histories working on water-related engineering challenges each in respective engineering consulting roles before applying this knowledge in the national lab space at NLR. Their current role working with the Lahaina Energy Partnership has allowed their broadening of Maui-specific connections as the NLR team navigates the energy options being considered by the community in the wake of the fires.

Evan Rosenlieb, NLR Integrated Water Systems Group — Geospatial Analysis and High-Volume Users Support. Evan provides unique expertise on the water-energy nexus in Hawaii. He worked with the Hawaii State Energy Office in a multi-lab assessment of utility-scale pumped storage hydro (PSH) potential, evaluated floating photovoltaics on Molokai and small hydro at Wahiawa, and leads geospatial algorithm development for hydropower and water resources at NLR.

Team Experience and Collaboration

The table below documents our team's collaboration history across projects directly relevant to this study. We are a team with strong working relationships and collegiality, as well as tremendous reach in our professional networks.

Team Member	Oahu Stormwater Utility	HI Fresh Water Initiative	Lahaina Energy Partnership	WEF Distributed Water	San Diego Alt Non-Potable Use	One Water Lahaina / Maui Recovery
JB Hinds	Lead			Reviewer	Lead	
Melissa Hampe		Support				Support
Amy DeBay	Data, GIS				Data, GIS	
Scott Struck			Support	Co-Chair		
Elise DeGeorge			Lead			
Jennifer Daw			Lead			
Evan Rosenlieb		Support	Lead			
Lauren Roth Venu	Tracking & Incentives	Onsite Reuse Advisor				
Tristian Bounds				Chair		
Paula Kehoe		Technical Advisor		Expert Advisor	Policy & Reg. Expert	

5. OVERALL EXPERIENCE & CAPABILITY OF COMPANY & DEMONSTRATED RESULTS

Past Performance

The team's past performance provides evidence we can and will successfully complete this project. Three client references are provided in Offer Form OF-3 (Attachment D), each representing a project similar to the services described in this RFP's Statement of Work.

Past performance highlights directly relevant to this RFP:

- **State-scale implementation planning:** JB Hinds has served as project manager for four multi-stakeholder implementation planning projects involving technical working groups, implementation roadmaps, regulatory strategy, and co-funding frameworks. Her leadership in the implementation process for Vermont's 2019 Clean Water Service Delivery Act (Act 76) directly parallels this work. Managing a team of watershed, economic, and engineering consultants, she worked with State leadership to form and then coordinate work of four technical working groups on agricultural, urban, roadway, and forest restoration processes; supported the group compiling and synthesizing cost and site-related data for funding allocations, as well as integration with the State's tracking database; coordinated production of the operation and maintenance standards for implementation of each restoration practice; and was the primary writer for the implementation summary.
- **National laboratory and industry leadership:** NLR's work through NAWI, Scott Struck's PFAS leadership, Tristian Bounds' WEF Task Force chairmanship, and Paula Kehoe's BILD co-chairmanship establish this team as national practitioners with strong Hawaii experience. We offer CWRM and recycled water leaders direct access to leading edge research on all aspects of water recycling and reuse.
- **Recycled and non-potable water implementation:** The San Diego alternative non-potable water project, for which JB Hinds was the Principal Investigator and coordinator, directly parallels this RFP's scope including regulatory barrier and funding analysis, large-scale data compilation and management led by Amy DeBay, implementation planning, and community engagement in a multi-jurisdictional context, with Paula Kehoe as regulatory expert.
- **Hawaii water infrastructure funding:** SR Partners secured $15.6 million for the Lahaina Recycled Wastewater Facility through the Bureau of Reclamation—demonstrating knowledge and experience in the exact co-funding strategy capacity this project requires.
- **Post-Maui wildfire water recovery:** SR Partners facilitates the Maui Economic Recovery Commission's recycled water and water availability planning post-2023 wildfires, including R-1 water for Lahaina—directly relevant to Task 3A fire suppression applications. NLR is deeply engaged in the Lahaina recovery process on the energy side, offering direct working knowledge of infrastructure systems that will be needed to implement both site-scale and high-volume reuse.

All Offerors have notified our references with due notice of this proposal submission. Full resumes for all Key Personnel are provided in the Appendix

6. TECHNICAL/PLANNING APPROACH

This Technical Approach addresses all ten evaluation elements in RFP Section 6.2 (a)–(j) and all Scope of Work tasks in Attachment A (Tasks 1A–3A). Cross-references appear in each section heading.

Project Ethic. "Reclaiming" water from the linear, one-way cycle of pumping, using, and disposing of Hawaii's most precious natural resource is at the heart of the State's goal: "the utilization of reclaimed water for uses other than drinking and for potable water needs in one hundred per cent of state and county facilities by December 31, 2045" (Hawaii Revised Statutes § 174C-31). Our team brings collective expertise in recycled water implementation, planning, and policy, centered on Hawaii's State and County managers: Those who will plan, permit, operate, and maintain a broad range of recycled water strategies and types. A core design principle of this proposal is that findings should identify where recycled water use is most feasible and impactful, rather than presupposing that 100% coverage at every facility is achievable by 2045. Our framework for practical decision-making is intended to support investments, set expectations, and surface new opportunities as implementation proceeds.

Three-Phase Work Program. Work is organized in three sequential, mutually reinforcing phases anchored by four core deliverables: (1) the **Facility Scorecard** (what's possible, where); (2) the **Champions Framework** (who will lead implementation); (3) the **Co-Funding Toolkit** (how projects can be resourced); and (4) the **2045 Roadmap with integrated Policy Lever Analysis** (what must change to make this work).

- **Months 1–4: Research and Stage Setting.** Establish definitions and shared vocabulary; build the facility inventory and GIS dataset; launch the Leaders Workshop (Month 4); begin policy and regulatory review; identify early co-funding opportunities and pilot candidates.
- **Months 5–9: Technical Working Groups.** Facilitate 3–4 TWGs organized by use-case category, each meeting three times; work through regulatory barriers, financing strategies, and implementation pathways; develop the Co-Funding Toolkit and draft technical memoranda. NLR leads Task 3A high-volume user research in parallel.
- **Months 10–12: Reporting and Implementation Setup.** Socialize findings with key organizations; develop the 2045 Roadmap with Policy Levers and FTD-R tracking dashboard; produce all final deliverables; launch the Champions network for post-project engagement.

Meetings and Engagement [6.2(b)]. Our engagement plan builds on CWRM's 2025 workshop foundation—synthesizing what was learned, reconnecting with past participants, and extending the conversation to agencies and sectors not yet in the room. Recognizing that many critical parties are over-extended, we propose intentional structure rather than continuous standing meetings: (1) one intensive Leaders Workshop once there is a framework to react to; (2) topic-focused TWGs staffed with the right technical expertise for each session; and (3) a vetting process that works with facility managers, but also surfaces new champions organically rather than pre-designating them. Our team will conduct a minimum of **43 formal engagements**: bi-weekly CWRM–team check-ins (24 meetings), one Leaders Workshop, 3–4 TWGs × 3 sessions each (9–12 total), and up to 12 vetting/reporting presentations. All virtual engagement will meet ADA accessibility standards; in-person half-day sessions are planned for the Leaders Workshop and key TWG sessions to maximize inter-island participation.

6. TECHNICAL/PLANNING APPROACH

Project Schedule and Deliverables Tracking [6.2(a)(j)]

The schedule reflects a 12-month period of performance. Recognizing the potential for a no-cost extension, the schedule provides for adjustment at CWRM's direction.

Phase	Months	Key Milestones / Deliverables	RFP §6.2
1: Research & Stage Setting	1–4	Facility inventory; Leaders Workshop (Month 4); Vocabulary Report (Month 5); initial policy/opportunity review; TWG scoping	(a)(b)(c)
2: Technical Working Groups	5–9	TWG sessions ×9–12; Co-Funding Toolkit (Month 8–10); Reg. Barriers Report (Month 5); draft TMs; Task 3A research	(d)(e)(f)(h)
3: Reporting & Implementation	10–12	Flowchart (Month 10); 2045 Roadmap + Policy Levers (Month 11); High-volume TMs (Month 10–11); FTD-R dashboard; Champions framework and launch	(e)(g)(h)(i)(j)

Task / Deliverable	1	2	3	4	5	6	7	8	9	10	11	12	13+
D=Draft F=Final TM=Technical Memorandum A=Agenda M=Meeting RO=Report Out													
CWRM mtg (bi-weekly)	**	**	**	**	**	**	**	**	**	**	**	**	**
Full Team mtg (monthly)	*	*	*	*	*	*	*	*	*	*	*	*	*
1.1 Project Schedule & Tracking	D	F											
1A Vocabulary (TM)			D		F								
1B.1 Facility Database			D								F		
1B.2 Scorecard			D						F				
1C.1 Engagement Plan (TM)	D	TM											
1C.2 Leaders Workshop			A	M	RO								
1C.3 TWGs (×3 each)				A	Mx3	RO/A	Mx3	RO/A	Mx3				
1C.4 Vetting presentations										Mx4	Mx4	Mx4	
1C.5 Champions Framework											D	F	
1D Co-Funding Toolkit (in Report)							D					F	
1E Decision Flowchart							D			F			
2A Policy Levers (TM, in Report)			D		TM							F	
2B.1 2045 Roadmap (Report)											D	F	
2B.2 FTD-Reuse Dashboard										D		F	
3A High-Volume Uses (TM)									D		TM		

6. TECHNICAL/PLANNING APPROACH

Task 1.1 Project Administration, Schedule Development, Deliverables Tracking, and Quality Assurance/Quality Control [6.2(c)(j)]

Effective project management for a statewide, multi-agency study requires clear governance from the outset. **J.B. Hinds will serve as project manager and primary point of contact with CWRM; Melissa Unemori Hampe will lead facilitation and engagement.** Upon contract execution, the team will work with CWRM to establish governance and operating protocols, including: (1) communication and documentation standards (i.e., file sharing, naming conventions, diacritical marks, and accessibility); (2) a decision-making framework, notably distinguishing requirements for full Commission approvals from staff-level approvals, and clarifying partner involvement; (3) structures for engaging Hawaii subject-matter experts or agency staff as needs emerge; and (4) expected firm roles, with a process for selecting consultant team leads for Technical Working Groups (TWGs) in Phase 2. For Task 1.1, Birchline Planning and SR Partners will work with CWRM to develop a comprehensive Implementation Study Schedule, anchored by a simple web-based Excel master calendar with tabs for each sub task, and a clearly labeled system of deliverables folders on a State-compliant platform (e.g., GoogleDrive, Dropbox, etc.). We recommend bi-weekly CWRM team check-ins and a monthly full team call, with agendas circulated 3 business days in advance, and notes and action items distributed within 3 business days after.

Quality Assurance and Quality Control. All technical work products will be reviewed by at least one senior staff member from a firm other than the lead author before submission to CWRM. J.B. Hinds will provide final QA/QC sign-off on all deliverables. CWRM will have a minimum of 10 business days to review draft deliverables; for major deliverables (facility scorecard, 2045 Roadmap), a minimum of 15 business days. Version control will be managed using a shared project folder accessible to CWRM staff throughout the contract period.

Task 1A. Definitions and Shared Vocabulary [6.2(b)]

Deliverable: *Draft/Final Vocabulary and Use Case Technical Memorandum (TM)*

A shared, precise vocabulary is essential for every subsequent task. In Month 1, the team will conduct a structured review of Hawaii and national literature (much of which our team members co-authored). We suggest brainstorming types using a “did it work there?” (DIWT) framing, systematically reviewing common use cases for their applicability to Hawaii. Recognizing this task will raise areas of disagreement on definitions, use cases, and recycled water “types,” we recommend two stage decision-making: first, the Leaders Workshop (Month 4) will vet draft use cases and definitions; second, CWRM staff should make final determinations where consensus is not achieved. In cases of disagreement, the reasons will be documented clearly in the Leaders Workshop report-out, including what future policy, workforce, or science developments could support reconsideration. A final TM on **Vocabulary and Use Cases** will be produced after the Leaders Workshop (Month 5), addressing five critical questions from the Scope of Work: (1) what qualifies as a “facility” under Act 170, including when cesspool conversion areas qualify; (2) what it means to “utilize” recycled water; (3) how utilization will be measured; (4) what “feasibility” means by facility type; and (5) what constitutes an “update” to an existing facility under Act 170. Working definitions will be established for four primary recycled water types: Decentralized greywater/blackwater; stormwater capture; rainwater catchment; and water reuse from Wastewater Treatment Facilities (WWTFs).

6. TECHNICAL/PLANNING APPROACH

Task 1B. Evaluate All County and State Facilities [6.2(c)]

Deliverables: *1B.1 Integrated Facility Database; 1B.2 Draft/Final Feasibility Scorecard*

The objective of Task 1B is to evaluate state and county facilities statewide, prioritize locations where recycled water use is most feasible and impactful, and document constraints where reuse is not currently viable. The primary deliverable is the **Facility Feasibility Scorecard**—the "diagnostic engine" of this process—that ranks and tiers facilities by recycled water potential and incorporates technical and non-technical barriers to implementation. It serves as the foundation for the Champions Framework, Co-Funding Toolkit, and 2045 Roadmap.

1B.1 Data Gathering and Facility Inventory

Structured desktop data collection begins in Month 2. Amy DeBay of Focused Planning Solutions will work with REDI/3Rwater and NLR staff to compile and structure the spatial dataset, drawing on team knowledge, Hawaii State Energy Office data, and NLR's infrastructure modeling and geographic analysis capability. Data will include location, building and landscape attributes (rooftop area, landscaped area, stormwater facilities), local rainfall, water consumption, and wastewater discharge capacity. The inventory scope includes State and County agencies, County golf courses, and Airports and Harbors; County capital project plans will be reviewed to identify future facilities, with outreach to Departments of Education, Transportation, and Hawaiian Home Lands. The team will also note watershed restoration, high-risk fire, and agricultural use areas—work Amy DeBay and NLR have been doing for Hawaii County and Maui County, respectively. The cesspool database will be integrated, with conversion areas mapped as future recycled water sources; NLR's statewide grid model will identify energy co-dependencies and distributed generation opportunities.

1B.2 Scorecard Methodology and Criteria

The scorecard will provide a flexible, database-style assessment of each facility, defining typologies clearly enough to identify fundable project types with clear regulatory pathways. Limiting factors—climate vulnerability, sea level rise exposure, sustainable yield constraints, partnership potential, and community goodwill—will be explicitly documented. Municipal WWTFs will constitute a specific category. Criteria will include: (1) volume of wastewater available and recycled water availability relative to demand volume; (2) treatment requirements matching recycled water class to end use; (3) proximity of source to end user; (4) cost of treatment (energy, chemicals, infrastructure); (5) regulatory and permitting complexity; (6) staffing requirements, training needs, and job classification issues; (7) infrastructure availability and capital investment; and (8) state, county, and agency-led prioritization factors.

The scorecard will produce a tiered ranking identifying near-term, high-feasibility candidates alongside longer-term opportunities requiring policy or infrastructure investment. Methodology will be vetted sequentially: first with County Environmental Departments; then with leaders at the Month 4 Workshop; followed by refinement through TWGs in Months 5–9. CWRM will approve the final scorecard methodology and ranked inventory before use in the roadmap. Our team includes practitioners with direct operational experience across recycled water system types: REDI and REGEN have operational expertise in in-building reuse, stormwater capture, and WWTF reuse; Paula Kehoe of REGEN provides regulatory and permitting expertise specific to water reuse system operation and approval in western states, including Hawaii.

Task 1C. Stakeholder Engagement and Recycled Water Champions [6.2(d)]

Deliverables: *1C.1 Overall Engagement Memo; 1C.2 Leaders Workshop materials and report-out; 1C.3 TWG materials and report-outs; 1C.4 Vetting presentations; 1C.5 Champions network framework and charge.*

Implementation at the facility level ultimately depends on people: individuals and organizations who understand the opportunity, have authority to act, and will shepherd the many practical steps between policy and reality. Our framework is designed to connect people to each other and to resources that have proved effective. Our team has a network of peer champions to draw from at jurisdictions including Orange County Water District, Los Angeles Department of Water and Power, Santa Clara Valley Water District, and California State Water Resources Control Board, plus active networks in Hawaii's NGO, agricultural, and civic sectors.

1C.1 Overall Plan & Champion Identification. SR Partners, REDI, and Birchline will work with CWRM from Month 1 to develop the engagement plan and identify the right composition for both a Leaders group and broader technical engagement pool. By end of Month 2, we will submit a proposed Overall Engagement Memo, to be treated as a flexible, evolving document, covering recommended locations, structures, and resource allocation.

1C.2 Leaders Workshop. This Month 4, in-person convening will include director-level leaders, regulators, and funders most responsible for policy and practice around recycled water. Participants will: (1) vet the draft vocabulary, facility types/use cases, and scorecard; (2) frame policy, funding, and regulatory barriers; (3) identify both near-term 'low-hanging fruit' and moonshot projects; and (4) help scope and populate the TWGs. SR Partners will lead facilitation; participants will receive structured agendas and targeted 'homework' in advance.

1C.3 Technical Working Groups (TWGs). Following the Leaders Workshop, the team will convene 3–4 TWGs organized by use-case category (potentially: WWTFs, cesspool conversions, building systems, landscape-based reuse). Each TWG will meet three times through Month 9 in half-day hybrid sessions with rotating island host. Session 1 socializes vocabulary and scorecard and sets group goals; Session 2 addresses technical, regulatory, and financing issues (PFAS, permits, cesspool/recycled water nexus, capacity constraints, etc.); Session 3 focuses on financing strategies, uptake pathways, or operator needs. Each TWG will be staffed by team members with relevant expertise; agendas and content provided 5 business days in advance; and post-meeting summaries distributed within 10 business days.

1C.4 Vetting Process. Following the TWG phase, the team will present draft findings to a broader set of organizations to build understanding and buy-in before recommendations are finalized. First, we will present to County engineers and State agency facility managers. Next, we will reach out to organizations that may include the Honolulu SW-WAG, Fresh Water Initiative, One Water, WAI Convening, Hawaii Technology Forum, Hawaii Water Environment Association, building industry partners (NAIOP, USGBC), and the West Coast Health Alliance, since public health buy-in is critical to wider adoption. For efficiency, one team member will make approximately 45-minute presentations at up to 12 in-person or virtual sessions.

1C.5 Champions Network and Sustained Engagement. The vetting process will inform recommendations for the post-project Champions network. We will develop a recommended member list, meeting structure and frequency, organizational protocols, staffing needs, and group's "charge" (i.e., is it advisory vs. decision-making, its relationship to CWRM). We would propose to engage the Champions network, after it begins, in further refinement of the FTD-R dashboard displays to ensure these champions find it user-friendly and that it displays data that will help to track progress towards the 2045 Roadmap Key Performance Indicators (KPI).

Task 1D. Co-Funding Framework for Water Recycling Implementation [6.2(f)]

Deliverable: *Co-Funding Framework and Toolkit, with project-specific funding pathways organized by facility type and priority tier (e.g., current/pilot, high priority, medium, lower)*

Sustainable resourcing is as essential to recycled water implementation as any technical or regulatory factor. Led by SR Partners with support from Paula Kehoe, with support from the full team, we will develop a comprehensive co-funding framework that identifies, evaluates, and packages the funding strategies available for each project type and implementation phase—giving project sponsors a genuine approach and tools, rather than a list of sources.

Funding Landscape and Process. Co-funding work will begin in Month 1 with early coordination with developers and early-adopter champions already financing projects in Hawaii, including the Stadium District redevelopment and new buildings in Kakaako and downtown Honolulu. By Month 3, the team will engage utility stakeholders (notably the Honolulu Board of Water Supply and Department of Facility Maintenance) to integrate findings on rebates for in-building recycling, rainwater capture, and green infrastructure. SR Partners, with support from Paula Kehoe, will then develop the funding inventory and co-funding analysis in Months 5–7, informing TWG discussions by surfacing financial constraints and opportunities for each use-case category. SR Partners brings a strong track record in exactly this work: the team has helped Hawaii water utilities raise millions of dollars through Congressional Directed Spending/Community Project Funding, securing $15.6 million for the Lahaina Recycled Wastewater Facility through the U.S. Bureau of Reclamation.

Equity and Cost-Sharing. A critical equity issue surfaced in the 2025 stakeholder engagement workshops is that **sewer ratepayers have historically borne the entire cost of recycled water infrastructure, even when primary beneficiaries include agricultural users, private developers, or other non-ratepayer interests.** Our co-funding analysis will explicitly identify where funding is structurally absent—not just what exists now—and what changes would be required to close those gaps. We will assess options for more equitable cost-sharing, drawing on several models: the **City of Austin, TX** and **New York City** non-potable water programs; **Orange County Water District's** joint funding agreements with Orange County Sanitation District and other partners, allocating infrastructure costs across multiple agencies and user classes to avoid ratepayer concentration; and the **San Francisco Public Utility Commission (SFPUC)** non-potable water program, which uses developer agreements, building code requirements, and shared distribution infrastructure to spread costs and benefits across public and private parties. We will quantify cost savings available through co-funding (e.g., joint grant applications, shared infrastructure planning, coordinated State Revolving Fund (SRF) applications, etc.) to make the equity case in concrete financial terms.

Funding Source Inventory. Our approach to the funding source inventory will look both internally, at Agency and County budgets today; and externally, at the many funding sources that can be accessed to advance recycled water. The internal inventory is important. In State and local government, cost is usually framed as a limitation and barrier; however, there *is* money spent and allocated for building maintenance, facility plans, landscape maintenance, and energy that can, if identified and focused on opportunities through the Scorecard and Decision Flowchart, be invested in ways that move towards the 2045 recycled water goals. By looking with care at existing spending and budgets, we hope to promote a mindset of "You may not have all the money, but you do have the money you have" - and how that can be applied to advance even small steps towards the 2045 goals.

We recognize, at the same time, that project viability and sustainability for most larger facility types will require stacking or braiding multiple sources. Our inventory will look for specific, applicable pathways within federal loan programs (State Revolving Funds with loan forgiveness provisions); federal competitive programs (Bureau of Reclamation WaterSMART, open to western states including Hawaii, covering baseline assessments through construction; USDA Water and Environmental Programs); Congressionally Directed Spending; State funding (Green Fee revenues, Capital Improvement Program (CIP) appropriations, Grants in Aid); County CIP and rebate programs; and competitive private grants. TWGs also will discuss specific funding challenges (e.g. SRF eligibility for projects on private property, infrastructure financing where cesspool conversions generate the recycled water source, etc.).

Co-Funding Toolkit. The Toolkit, integrated into the 2045 Roadmap, will be a practical, user-friendly resource for project sponsors at the facility or county level. It will include: a scan of existing budget resources and categories that should be looked at for recycled water potential; successful public-private partnership models adaptable for Hawaii; existing co-funding barriers (administrative rules, legal restrictions, building code requirements, staff capacity, lack of match funding) with specific solutions proposed for each; specific identification of areas where rule interpretation appears more restrictive than necessary; and ready-to-use materials, templates, and guidance, formatted for likely project sponsors.

Task 1E. Pilot Project Identification and Decision Flowchart [6.2(d)(g)]

Deliverable: *Decision Flowchart (online and paper formats), coordinated with FTD-R dashboard*

The Decision Flowchart is the entry-point tool for facility managers, county planners, and project sponsors assessing whether a specific site or project type is a viable recycled water candidate, and if so, what the pathway forward looks like. We envision a standardized, replicable decision framework—rather than a static document—that agencies can apply consistently across all facility types and settings, and that alerts decision-makers to the ‘make or break’ points: value engineering on a new building; early relationship-building with a land manager; achieving specific effluent quality for a particular site. The specific decision trees will be directly tied to pilot projects identified by the team and the Hawaii-specific use cases from Task 1A, and worked through with care in the TWG process.

Pilot project identification will begin in Month 1 and continue throughout the project. Team members and partners will identify potential pilot projects—ranging from co-funded projects with private landowners, to restoration or fire suppression opportunities, to community-scale rainwater capture—maintaining a running central inventory that will seed the 2045 Roadmap. The focus will be on state and county new or redevelopment projects already in planning or early design stages so early ‘wins’ and documented progress can be incorporated into the implementation matrix, giving Champions a roadmap they can act on.

The **Decision Flowchart** will be developed from the pilot project inventory and scorecard framework, designed for practical facility-level use: clear decision nodes, plain language, and a format that works both as printed reference and digital tool. Evaluation logic will be organized around: (1) **project planning** (using the facility type in the Scorecard); (2) **feasibility screening** (Is recycled water technically viable at this site, given demand type, proximity, and treatment needs?); (3) **regulatory pathways** (What permits and Hawaii Department of Health (DOH) requirements apply? Known barriers or special conditions?); (4) **funding alignment** (Which funding sources are available for this project type, scale, and owner?); and (5) **implementation sequencing** (What needs to happen next, in what order?).

6. TECHNICAL/PLANNING APPROACH

Task 2A. Policy, Regulatory, and Planning Mechanisms [6.2(h)]

Deliverables: *Initial Policy Levers Analysis Technical Memorandum; Policy Levers Analysis in 2045 Roadmap*

Hawaii's regulatory, legislative, and programmatic landscape is both the primary constraint and the primary opportunity for accelerating recycled water implementation. REDI will lead this task, with SR Partners and Paula Kehoe as advisors, bringing national-scale water reuse policy expertise and direct experience with regulatory frameworks that have enabled (and sometimes inhibited) implementation in California and elsewhere. The team will begin reviewing policy and regulatory frameworks at the State and county levels in Month 2, covering both in-building and landscape-based reuse. A preliminary assessment will be shared with CWRM by Month 3; first findings will be presented at the Leaders Workshop (Month 4) as a structured agenda item, supplemented by confidential stakeholder interviews to surface frank candor about barriers.

In Month 3, the team will produce a TM on the **Initial Assessment of Regulatory Barriers, Levers, and Opportunities**, serving as a common reference for TWG participants. REGEN will continue to flag regulatory needs in real time, whether process-level, County ordinance, State legislation, rulemaking, or regulatory interpretation, building them into TWG agendas as they emerge. The final **Policy Levers Analysis** (Months 10–12) will address potential updates to the Hawaii Water Code (HRS Chapter 174C); DOH regulatory adjustments to streamline reuse approvals; county-level code and permitting improvements; incentive structures (rebates, rate structures, requirements in new development) by facility type; and other targeted recommendations organized by implementation priority.

Task 2B. Statewide Recycled Water 2045 Roadmap and Monitoring Framework [6.2(e)]

Deliverables: *2045 Roadmap Document with county-level phasing, monitoring framework; Accompanying FTD-R dashboard*

The 2045 Roadmap is the integrating output of this study, translating facility scorecard results, champions network insights, co-funding analysis, and policy lever recommendations into a phased, actionable plan. It will give the State and Counties a shared, measurable, and regularly updated framework for implementation, distinguishing between facilities where near-term implementation is viable, those requiring policy change or infrastructure investment, and those where long-term prospects remain uncertain.

2B.1 Scenario Development and Phasing. Using a backward-mapping approach from the 2045 statutory goal, the team will establish interim milestones at five-year intervals across three implementation horizons:

- **Near-term (0–5 years)—**pilot and high-feasibility projects; priority infrastructure investments; early regulatory clarifications.
- **Mid-term (5–15 years)—**infrastructure expansion, policy alignment, and replication at scale; county CIP integration; co-funding deployment.
- **Long-term (to 2045)—**scaled adoption; technology and regulatory integration; monitoring framework in full operation; assessment and re-evaluation of statewide goals.

2B.2 County-by-County Implementation. The roadmap will address each county—Oahu, Maui, Hawaii Island, and Kauai—with phasing specific to development densities, wastewater system scales, existing recycled water infrastructure, cesspool concentration, county CIP, and large-scale reuse opportunities. We believe a percent volumetric recycled water use goal can be established for each county, providing both a statewide trajectory and county-specific

benchmarks, informed by case studies such as Orange County Water District's indirect potable reuse program, New York City and Austin, TX non-potable water programs, the Santa Clara Valley Recycled Water Program, and SFPUC's regional reuse strategy.

2B.3 Monitoring and Accountability. Equally important to the Roadmap is a monitoring framework consolidating timelines with reporting milestones, responsibilities, and check-in points that can be handed off to CWRM and county partners. We propose to use the **Follow the Drop—Reuse (FTD-R) platform** to set up Key Performance Indicators, and to track and communicate progress in a format accessible to facility managers and decision-makers, enabling ongoing monitoring of water consumption, landscape area irrigated, rainwater captured, and other implementation metrics. Post-project, the Champions network can use FTD-R as their primary progress-tracking tool, building durable, self-sustaining accountability infrastructure.

Task 3A. Infrastructure Needs for Watershed Restoration, Agriculture, and Fire Suppression [6.2(i)]

Deliverable: *Technical Memorandum on high-volume recycled water opportunities and needs with sector-specific knowns/unknowns, desktop evaluation of up to 4 Hawaii cases with infrastructure requirements, implementing entities, regulatory issues, and funding pathways*

Reaching the 2045 goal at meaningful scale requires identifying and developing large-volume end uses that can absorb significant quantities of recycled water and serve as anchor projects for regional infrastructure investment. Watershed restoration, agriculture, and fire suppression are the three highest-potential sectors—each presenting a distinct technical, institutional, and infrastructure challenge, and each surfaced repeatedly in CWRM's 2025 stakeholder workshops as a priority.

Technical Memorandum Scope and Approach. NLR will lead development of a Technical Memorandum serving two purposes: (1) characterizing the national and scientific landscape for each sector, including current knowns and unknowns in the science and engineering relevant to Hawai‘i deployment; and (2) evaluating up to 4 Hawaii-specific opportunities at a desktop level. NLR will begin identifying relevant case studies and research in Month 1, in parallel with the facility inventory in Task 1B, so that early findings inform the GIS dataset and highlight the most promising high-volume opportunities. The national overview will draw on NLR's research portfolio and NAWI collaborations, as well as published case studies—including the San Jose/South Bay Water Recycling Program; the Shakopee Mdewakanton Sioux Community's integrated reuse program; and the City of Palo Alto's Horizontal Levees project. One of the central challenges across all three sectors is matching recycled water availability (volume, quality, timing) and conveyance to end-use demands; the TM will address this matching problem explicitly by sector.

Hawaii Desktop Case Studies. Following the Leaders Workshop (Month 4), up to 4 Hawaii-specific opportunities will be selected for desktop evaluation, consulting with CWRM and Leaders Workshop participants. We will evaluate the examples listed in Appendix A of this RFP, as well as options arising from the facility inventory and stakeholder input in Tasks 1B and 1C—potentially including the Wailua, Kauai WWTF service area; Department of Hawaiian Home Lands residential-agricultural developments near WWTFs; ecological restoration areas lacking current water access; and the overlapping restoration, agricultural, and fire suppression needs in West Maui. For each case study, the desktop evaluation will identify: Infrastructure requirements (transmission routing, pumping, storage, treatment level); implementing entities and their roles and authorities; regulatory requirements and permitting

challenges; and funding mechanisms aligned with the Task 1D Co-Funding Framework. Selected case studies may be brought into TWG sessions as structured problem-solving exercises. Findings will feed directly into the Policy Levers Analysis (Task 2A) and the 2045 Roadmap (Task 2B), illustrating where regulatory change, funding tools, or infrastructure investment are necessary conditions for high-volume deployment at scale.

Sector Priorities. *Watershed restoration*, including aquifer recharge and ecological flow restoration, represents some of the highest-value recycled water applications in Hawaii's water resource context; NLR's statewide grid model will support spatial analysis of recharge opportunity areas in coordination with The Nature Conservancy, CWRM, and the Department of Land and Natural Resources. *Agricultural irrigation substitution* offers near-term volume opportunity and a critical food security co-benefit, with particular potential in Maui where agricultural areas and cesspool conversion zones overlap with existing wastewater infrastructure. *Fire suppression* has been fundamentally reframed by the 2023 Maui wildfires; Maui County's One Water Lahaina engagement provides a natural entry point, and the team will focus on landscape-scale applications, notably strategic storage, distribution routing, and dual-use infrastructure, rather than structural firefighting.

Deliverables Tracking Summary

Task	Deliverable	Target Timing
1.1	**Implementation Study Schedule**	Draft Month 1 Final Month 2
1A	**Vocabulary & Use Cases Technical Memorandum** (Draft/Final)	Draft Month 3 Final Month 5
1B	**1B.1 Integrated Facility Database** (initial structure, population; final for CWRM); **1B.2 Facility Feasibility Scorecard** (Draft/Final)	Database Draft Month 3 Database Final Month 11 Scorecard Draft Month 3 Scorecard Final Month 9
1C	**1C.1 Engagement Memo**; **1C.2 Leaders Workshop materials & report-out**; **1C.3 TWG materials & report-outs**; **1C.4 Vetting presentation; 1C.5 Champions Network Framework & Charge**	Ongoing throughout Champions Framework Draft Month 11, Final Month 12+
1D	**Co-Funding Framework and Toolkit**	Draft Month 7–8 Final Month 12 (in report)
1E	**Decision Flowchart** (online + print formats, coordinated with FTD-R dashboard)	Draft Month 7 Final Month 10
2A	**Policy Levers Analysis and Recommendations** (Technical Memorandum, Draft language, final in report)	Draft TM Month 3 Final TM Month 5 Final Month 12 (in report)
2B	**2B.1 2045 Roadmap** with county-level phasing and monitoring framework **2B.2 FTD-R Dashboard**	Roadmap Draft Month 11 Roadmap Final Month 12 Dashboard Draft Month 10 Dashboard Final Month 12
3A	**Technical Memorandum: High-Volume Recycled Water Opportunities (TM)**	Draft Month 9 Final Month 11

7.

OFFER FORM, OF-2
PRICE PROPOSAL

HAWAI'I STATEWIDE RECYCLED WATER IMPLEMENTATION STUDY
FOR STATE AND COUNTY FACILITIES

CWRM-RFP-2026-01

Task #	Description (See Statement of Work for more details on tasks)	Price
1.1	Develop Implementation Study Schedule.	$20,704
1.A	Definitions. Work with CWRM and key stakeholders through meetings, workshops, correspondence, and document review. Develop clear, consistent operational definitions for key terms to support practical, coordinated planning and implementation across state and county agencies.	$36,955
1.B	Evaluation of state and county facilities statewide to identify and prioritize locations. Create a facility feasibility scorecard that ranks state and county facilities based on recycled water use potential and incorporates barriers to implementation as part of ranking process.	$82,198
1.C	Utilize and build on the champions and key players identified during the stakeholder engagement workshops to advance implementation of recycled water use at state and county facilities statewide. Create a stakeholder-informed recycled water champions framework, including identifying champions and example collaboration pathways (e.g. recycled water champions working together on a pilot project).	$317,974
1.D	Coordinate with CWRM and key stakeholders; review of funding programs and case studies (e.g.: Orange County Water District and San Francisco Public Utilities Commission joint funding agreements). Develop a funding strategy and co funding framework outlining shared funding approaches across multiple sources. Provide reference examples as appropriate	$84,123
1.E	Develop clear guidance and a flow chart for project implementation for the priority projects identified as part of Task 1B. Generate a pilot priority project pathway development, including a decision-making flow chart and stepwise process from project concept through implementation.	$60,723
2.A	Identify policy, regulatory, and planning levers that could expand or remove barriers to recycled water use statewide (not limited to state and county facilities). Recommended	$67,463

	State Water Code (Hawai'i Revised Statutes § 174C) and/or Administrative Rule amendments, policies or procedures for CWRM and partner agencies (e.g. State Department of Health; county building codes amendments needed to streamline recycled water use at the start of a new development).	
2.B	Develop a phased implementation timeline, monitoring framework, and accountability mechanisms to track progress toward expanded recycled water use statewide through 2045.	$159,692
3.A	Evaluate infrastructure needs for conveying recycled water from the treatment facility for purposes such as watershed and biocultural restoration, agriculture and fire suppression storage. Includes a prioritized assessment of high-volume recycled water opportunities for key sectors (watershed restoration, agriculture, firefighting), including infrastructure considerations, responsible entities, and funding pathways.	$91,391
4.1	Allowance for travel and other reimbursable costs related to workshops and meetings. Number of persons travelling **9** (2 HI, 7 Mainland) Number of airline round trips (interisland) **16 @ $250** Number of airline round trips (between U.S mainland & Hawai'i) **24 @ $750** (DEN-HNL, SAN-HNL, SFO-HNL) Number of hotel night stays **84 @ $225 + $125** per diem Number of car rental days **16 @ $180** Other reimbursable costs (explain) Rooms/logistics for **10 meetings @ $1,800 ea. $18,000; Tyler Tech. Fee $5000**	$77,280

Pricing shall include labor, materials, supplies, all applicable taxes, and any other costs incurred to provide the specified services.

The Contract for the proposed services may be extended without the necessity of re-soliciting or solicitation, subject to appropriation and availability of funds. No Contract or amendment to a Contract shall be binding the State until the Contract has been fully and properly executed by all parties thereto prior to the start date of the Contract. The contracted organization shall not provide any services until the Contract is fully and properly executed.

Offeror

Birchline Planning LLC

OFFER FORM OF-3
CLIENT REFERENCES

Client References: Offeror is required to fill out Section 1 for a minimum of three (3) references to customers who received services similar to those called out in this RFP. Offeror shall then complete Section 2 for each reference and email to referenced customer to complete Section 3.

Section 1. To be completed by the Offeror and submitted with offer.

Customer Name #1:	Honolulu Dept. of Facility Maintenance - Storm Water Quality Division
Address:	1000 Uluohia Street Ste 215, Kapolei HI 96707
Reference Name:	Randall Wakumoto, PE
Current Phone:	808-768-3343
Customer Name #2:	Hawai'i Community Foundation
Address:	827 Fort Street Mall, Honolulu HI 96813
Reference Name:	Dr. Dana Okano
Current Phone:	808-537-6333
Customer Name #3:	Lahaina Energy Partnership / Ha Sustainability
Address:	2200 Main Street/1 Main Plaza Bldg, Ste 619, Wailuku, HI 96793
Reference Name:	Alex de Roode
Current Phone:	808-268-7589
Customer Name #4:	County of Hawaii Planning Department
Address:	101 Pauahi Street, Suite 3, Hilo, HI 96720
Reference Name:	Bethany Morrison
Current Phone:	808-961-8138
Customer Name #5:	County of Kauai Public Works
Address:	4444 Rice Street I Suite 275 Līhu'e, HI 96766
Reference Name:	Wade Lord
Current Phone:	808-241-4906

The State may contact all of the references listed to inquire about Offeror's equipment, services, performance, and degree of customer satisfaction. Full points for references will not be awarded unless Section 2 and 3 are received from referenced customers in accordance with Section 6.1.

Section 2. To be completed by the Contractor – Offeror or Sub-contractor

Contractor Name: Birchline Planning LLC	Contractor Contact/Name: Juli Beth Hinds, Principal
Project Dates: October 8 2019 - present	Contractor Contact Phone: 802-324-5760
Customer Organization: Honolulu Department of Facility Maintenance - Storm Water Quality Division	Customer Contact Name: Randall Wakumoto, PE Customer Phone: 808-768-3343
Customer Address: 1000 Uluohia Street Ste 215, Kapolei HI 96707	Customer Fax: 808-768-3381
Operating Budget of Organization: ~$50 million FY25	

Project included implementation in which of the following procurement categories (Check all that apply):

☐ Acquisition Planning ☐ Market Research ☐ Solicitation and Award
☐ Contract Management ☐ Completion & Closeout ☒ Other Services

Project included implementation of procurement categories listed above in a government and/or education organization:

☐ Yes ☒ No

Scope of Project: Multi-stakeholder process for evaluation and development of a storm water fee and coordination of the Oahu Storm Water-Wastewater Advisory Group. Coordinate among multiple consultants and departments to assess financing options and impacts, develop rates and program implementation strategies, and synthesize information for stakeholders and public.
Number of employees staffed for this project: 1 Birchline + subconsultants (Focused Planning Solutions and Hey & Associates, Inc., total 3 additional personnel)
Total One-Time Cost of Project (Actual): $407,472 (note: *excludes* $217,000 2019 feasibility study project funded by Hawaii Community Foundation)

Reason for Change in Total One-Time Cost of Project, if applicable: Click here to enter text. Multiple amendments to expand Birchline Planning's scope of services to include a Storm Water Strategic Plan, development of a credit/incentive program for rainwater capture and green infrastructure, and additional facilitation of the Storm Water-Wastewater Advisory Group. City contract followed a separate 2019 contract funded by Hawaii Community Foundation ($217,000) for a feasibility study of a storm water fee and initial formation/facilitation of the Advisory Group.

Scope of Contractor/Offeror's Involvement in this project: Technical Project Lead, coordinating among multiple City departments and subconsultants. Responsible for independent technical work, public and stakeholder presentations, communication with City and State agency leadership				
Number of employees Contractor/Offeror staffed for this project: 1 + subconsultants				
Original Value of Contractor/Offeror's Contract: $68,567		Actual Total Contract Value: $407,472		
Reason(s) for Change in Value: Amendments at Client direction to add scope and additional services.				
Estimated Start & Completion Dates:	From:	10-2019	To:	Present.
Actual Start & Completion Dates:	From:	10-2019	To:	Present
Reason(s) for Difference Between Estimated and Actual Dates: n/a				

Section 2. To be completed by the Contractor – Offeror or Sub-contractor

Contractor Name: SR Partners LLC	Contractor Contact/Name: Melissa Hampe
Project Dates: July 1, 2023, to present	Contractor Contact Phone: 202-841-3368 cell
Customer Organization: Hawaii Community Foundation, Hawaiian Islands Environmental Finance Center	Customer Contact Name: Dr. Dana Okano Customer Phone: 808-537-6333
Customer Address: 827 Fort Street Mall, Honolulu, HI 96813	Customer Fax: 808-521-6286
Operating Budget of Organization: $1.2 billion in assets (per 2025 HCF annual report)	

Project included implementation in which of the following procurement categories (Check all that apply):

☐ Acquisition Planning ☐ Market Research ☐ Solicitation and Award
☐ Contract Management ☐ Completion & Closeout ☒ Other Services

Project included implementation of procurement categories listed above in a government and/or education organization:

☐ Yes ☐ No

Scope of Project: The Hawaiian Islands Environmental Finance Center helps communities across Hawai‘i access and manage federal funding for water infrastructure and environmental projects. It provides technical assistance, financial guidance, and capacity-building support so local governments, utilities, and nonprofits can successfully plan, fund, and complete projects. The goal is to make sure federal dollars actually turn into on-the-ground improvements—clean water, resilient systems, and long-term sustainability.
Number of employees staffed for this project: 2-8 employees and subcontractors at any one time, depending on the project
Total One-Time Cost of Project (Estimated/Actual): $3.2 million over five years

Reason for Change in Total One-Time Cost of Project, if applicable: n/a

Scope of Contractor/Offeror's Involvement in this project: SR Partners has been a core member of the Hawaiian Islands Environmental Finance Center implementation team, assisting County and State agencies such as water and wastewater utilities and the Commission on Water Resource Management, as well as nonprofit partners, with external funding pursuit. This has included grants training, prospecting, writing, reviewing, editing, and related capacity building efforts				
Number of employees Contractor/Offeror staffed for this project: 2-8 employees and subcontractors at any one time, depending on the project				
Original Value of Contractor/Offeror's Contract: $170,000 over two years		Actual Total Contract Value: $425,000 over five years		
Reason(s) for Change in Value: contract extension after first two years				
Estimated Start & Completion Dates:	From:	7/1/2023	To:	6/30/2028
Actual Start & Completion Dates:	From:	7/1/2023	To:	ongoing
Reason(s) for Difference Between Estimated and Actual Dates: no difference				

Section 2. To be completed by the Contractor – Offeror or Sub-contractor

Contractor Name: National Laboratory of the Rockies (NLR)	Contractor Contact/Name: Robin Burton
Project Dates: Jan 2024 – March 2027	Contractor Contact 808-205-3993
Customer Organization: Lahaina Energy Partnership (Lāhainā Strong, Hā Sustainability + Shake Energy Collaborative)	Customer Contact Name: Alex de Roode, Ha Sustainability Customer Phone: (808) 2687589
Customer Address: 2200 Main Street, One Main Plaza Bldg, Suite 619, Wailuku, HI 96793.	Customer Fax: n/a
Operating Budget of Organization: n/a	

Project included implementation in which of the following procurement categories (Check all that apply):

☐ Acquisition Planning ☐ Market Research ☐ Solicitation and Award
☐ Contract Management ☐ Completion & Closeout ☒ Other Services

Project included implementation of procurement categories listed above in a government and/or education organization:

☐ Yes ☒ No

Scope of Project: The Lahaina Energy Partnership is supporting energy planning and rebuilding efforts in Lahaina. NLR is exploring options related to building local energy resources, rebuilding highly efficient and microgrid-ready buildings, designing and analyzing microgrids, and planning and hardening the distribution grid. Technical assistance also supports implementation planning in workforce development and job training, policy and regulatory landscape analysis, and funding and financing options. Examples of key stakeholders that the team has been meeting with includes the County of Maui, Hawaiian Electric Company (HECO), the Hawai'i State Energy Office (HSEO), and State of Hawai'i Public Utilities Commission (PUC).
Number of employees staffed for this project: 12 to 20 at different points
Total One-Time Cost of Project (Estimated/Actual): $3.5M

Reason for Change in Total One-Time Cost of Project, if applicable: n/a

Scope of Contractor/Offeror's Involvement in this project: NLR is providing technical, GIS, energy and water engineering evaluation, policy analysis, and workforce training analysis and support to the community partners, in coordination with key agencies listed above.				
Number of employees Contractor/Offeror staffed for this project: 20				
Original Value of Contractor/Offeror's Contract: $3.5 million		Actual Total Contract Value: $3.5 million		
Reason(s) for Change in Value: n/a				
Estimated Start & Completion Dates:	From:	Jan. 2024	To:	March 2027
Actual Start & Completion Dates:	From:	Jan. 2024	To:	present
Reason(s) for Difference Between Estimated and Actual Dates: n/a				

ATTACHMENT D

Section 2. To be completed by the Contractor – Offeror or Sub-contractor

Contractor Name: Roth Ecological Design Int./3Rwater	Contractor Contact/Name: Lauren Roth Venu, President
Project Dates: 06/01/2023-to present	Contractor Contact Phone: 808-781-7583
Customer Organization: County of Kauai Public Works	Customer Contact Name: Wade Lord Customer Phone: 808-241-4906
Customer Address: 4444 Rice Street I Suite 275 Līhuʻe, Kauaʻi, Hawaiʻi 96766	Customer Fax: 808-241-6604
Operating Budget of Organization: $50 million	

Project included implementation in which of the following procurement categories (Check all that apply):

☐ Acquisition Planning ☐ Market Research ☒ Solicitation and Award
☐ Contract Management ☐ Completion & Closeout ☐ Other Services

Project included implementation of procurement categories listed above in a government and/or education organization:

☒ Yes ☐ No

Scope of Project: Technical Study and Infrastructure Master Plan for the Waimea 400 Project
Number of employees staffed for this project: 1 County Staff, Bowers and Kubota, and (10) subconsultants
Total One-Time Cost of Project (Estimated/Actual): $1M/$2M

Reason for Change in Total One-Time Cost of Project, if applicable: Contract was amended to include Master Planning services

Scope of Contractor/Offeror's Involvement in this project: Water Balance, Water Management Planning, Water Modeling, and Green Infrastructure Technical Study and Planning for the Waimea 400 project that included a drainage assessment and modeling for sea level rise with 100-yr storm intensities to conceptually design a ~120 acre restored wetland for flood mitigation. In addition, a nonpotable water feasibility assessment was conducted to evaluate the potential for the use of R-1 recycled water from the Waimea WWTP for irrigating agricultural lands, irrigation for community landscapes, and reuse in toilets at the proposed new Stadium on the property				
Number of employees Contractor/Offeror staffed for this project: 2 employees plus coordination of subconsultant work by Horseley Witten (2 employees).				
Original Value of Contractor/Offeror's Contract: $ 85,726.50		Actual Total Contract Value: $196,276.50		
Reason(s) for Change in Value: Project was amended to add Concept Planning for the water systems after the Technical Study was completed				
Estimated Start & Completion Dates:	From:	6/1/2023	To:	6/30/2024
Actual Start & Completion Dates:	From:	6/8/2024	To:	6/30/2026
Reason(s) for Difference Between Estimated and Actual Dates: Amendment to include Master Planning Services				

Section 2. To be completed by the Contractor – Offeror or Sub-contractor

Contractor Name: Focused Planning Solutions LLC	Contractor Contact/Name: Amy DeBay
Project Dates: June 22, 2020 - Present	Contractor Contact Phone: 813-830-2275
Customer Organization: Planning Department of the County of Hawai'i	Customer Contact Name: Bethany Morrison Customer Phone: 808-961-8138
Customer Address: 101 Pauahi Street, Suite 3, Hilo, HI 96720	Customer Fax: Click here to enter text.
Operating Budget of Organization: Click here to enter text.	

Project included implementation in which of the following procurement categories (Check all that apply):

☐ Acquisition Planning ☐ Market Research ☐ Solicitation and Award
☐ Contract Management ☐ Completion & Closeout ☒ Other Services

Project included implementation of procurement categories listed above in a government and/or education organization:

☐ Yes ☐ No

Scope of Project: General plan scenario analysis and ongoing support for plan adoptions. GP monitoring, evaluation, and update framework. General plan formatting and website design. Climate change adaptation plan preparation, including integrating plan with Climate Adaptation Plan for a consolidated plan. GIS and mapping services for all project tasks.
Number of employees staffed for this project: one FPS employee plus multiple consulting firms subcontracted for various components, including Konveio, Birchline Planning, Clarion, and TetraTech.
Total One-Time Cost of Project (Estimated/Actual): $492,350

Reason for Change in Total One-Time Cost of Project, if applicable: Expanded scope and budget to cover costs related to additional rounds of public review, additional subconsultants, and the CCAP document work (not originally budgeted).

Scope of Contractor/Offeror's Involvement in this project: Contractor acted as PM on all project work. Contractor provided all scenarios, mapping, technical documentation, analysis metrics, online mapping tools, and GIS support.				
Number of employees Contractor/Offeror staffed for this project: 1				
Original Value of Contractor/Offeror's Contract: $313,500		Actual Total Contract Value: $429,350		
Reason(s) for Change in Value: Amendments adjusted budget as needed to incorporate additional public review periods and associated rounds of editing for documents and maps.				
Estimated Start & Completion Dates:	From:	6/22/2020	To:	6/30/2022
Actual Start & Completion Dates:	From:	6/22/2020	To:	6/30/2026
Reason(s) for Difference Between Estimated and Actual Dates: Additional rounds of public review and changes in staff/administration causing delays.				

Section 2. To be completed by the Contractor – Offeror or Sub-contractor

Contractor Name: Regen AEC PLLC	Contractor Contact/Name: Tristian Bounds, PE – Chair / Co-Chair
Project Dates: 2022-2025	Contractor Contact Phone: 541.580.2980
Customer Organization: Water Environment Federation	Customer Contact Name: Fidan Karimova Customer Phone: 703-684-2400
Customer Address: fkarimova@wef.org	Customer Fax:
Operating Budget of Organization: $32M	

Project included implementation in which of the following procurement categories (Check all that apply):

☐ Acquisition Planning ☒ Market Research ☐ Solicitation and Award
☒ Contract Management ☒ Completion & Closeout ☒ Other Services

Project included implementation of procurement categories listed above in a government and/or education organization:

☐ Yes ☒ No

Scope of Project: The purpose of WEF's Distributed Water Infrastructure Task Force (DWITF) was to serve as a forum to advance the understanding, planning, implementation, and use of distributed water infrastructure in communities. Goals included - Educating WEF members and policy makers on the role of distributed water infrastructure to foster water and wastewater resiliency within communities. - To identify the opportunities and constraints of distributed water infrastructure. - Collaborate with all water resource utilities to ensure success of distributed water infrastructure. - Promote collaboration within WEF, NBRC, WateReuse Association's Onsite and Distributed Water Recycling Systems Committee and related organizations. - Support ongoing regulatory oversight and management to protect public health. - Serve as a forum for collaboration and knowledge exchange. The final product was a 40 page technical paper published through Water Environment Publication addressing distributed infrastructure frameworks and possibilities.
Number of employees staffed for this project: 2 Regen + 30 WEF members
Total One-Time Cost of Project (Estimated/Actual): N/A Funded in-house by WEF

Reason for Change in Total One-Time Cost of Project, if applicable: N/A

Scope of Contractor/Offeror's Involvement in this project: Lead authors and Chair and Co-Chair of the Distributed Water Infrastructure Task Force.				
Number of employees Contractor/Offeror staffed for this project: 2				
Original Value of Contractor/Offeror's Contract: n/a		Actual Total Contract Value: n/a		
Reason(s) for Change in Value: N/A				
Estimated Start & Completion Dates:	From:	10/1/2022	To:	10/1/2024
Actual Start & Completion Dates:	From:	10/1/2022	To:	10/1.2025
Reason(s) for Difference Between Estimated and Actual Dates: The project was a significant lift with little guidance, which required extensive time evaluating definitions, determining appropriate outcomes, and coordinating authoring between 30 volunteers. Additionally, final editing was extensive with 30 voices being accumulated into a singular voice for the final draft of the technical paper. WEF adjusted the project schedule accordingly, extending the period by one year.				

8. WAGE CERTIFICATE

HAWAIʻI STATEWIDE RECYCLED WATER IMPLEMENTATION STUDY
FOR STATE AND COUNTY FACILITIES

CWRM-RFP-2026-01

Pursuant to Section 103-55, Hawai'i Revised Statutes (HRS), I hereby certify that if awarded the contract and it is in excess of $25,000.00 the services will be performed under the following conditions:

1. The services shall be performed by employees at wages or salaries not less than wages or salaries paid to public officers and employees doing similar work; and

2. All applicable laws of the Federal and State governments relating to worker's compensation, unemployment compensation, payment of wages, and safety will be fully complied with.

I understand that all payments required by Federal and State laws to be made by employers for the benefit of their employees are to be paid in addition to the base wages required by Section 103-55, HRS.

BY: Juli Beth Hinds
Signature of Person Authorized to Sign

Please Print

NAME: Juli Beth Hinds

TITLE: Principal

CONTRACTOR/VENDOR: Birchline Planning LLC

DATE: April 21, 2026

APPENDIX:
TEAM RESUMES

Birchline Planning LLC
Great Waters + Great Communities

JULI BETH HINDS, AICP
Principal

Birchline Planning's founding Principal, **Juli Beth Hinds, AICP**, provides public and private-sector clients with unique and effective leadership and expertise in land use planning, water resources, program development, financial management, and public communications. She founded Birchline Planning LLC in 2012 to provide flexible, cost-effective services to municipal and State agency clients. With over a decade as a municipal planning and stormwater services director and 20+ years in consulting, she has proven experience managing complex planning, finance, research, and water resource programs. A sought-after speaker, she develops and leads innovative workshops to engage and empower citizens, leaders, and professionals. JB is a passionate teacher in UC San Diego's Department of Urban Studies and Planning, where she also leads research on water resources, land use, homelessness, and climate resilience.

Education
- MCRP, City and Regional Planning, Rutgers University
- BA, Economics, Hollins College; *Phi Beta Kappa*

Teaching
- Continuing Lecturer, University of California San Diego Department of Urban Studies & Planning 2015 – Present
- National University School of Engineering, Technology & Media (Adjunct Professor), 2012-2017
- Northern Vermont University Department of Environmental Science (Adjunct Professor), 2004-2010

Professional Service
- Chair, Stormwater Symposium, Water Environment Federation (2013-2016)
- Chair, Environment Natural Resources & Energy Division, American Planning Association (2010-2013)
- Decentralized Research Advisory Committee, Water Environment Research Foundation (2004-2010)

Work Experience
- Senior Planner, Tetra Tech Inc. (San Diego, CA); 2010-2012
- Senior Planner, VHB Inc. (South Burlington, VT); 2008-2010
- Director of Planning & Zoning, City of South Burlington, VT; 2001-2008
- Executive Director, Mad River Valley Planning District, Waitsfield VT; 1997-2001
- Planner, BFJ Planning, New York NY; 1994-1997

Recognition
- Council for Advancement and Support of Education Circle of Excellence Silver Award for Public and Community Relations (with University of Wisconsin-Madison, 2018)
- Professional Planner of the Year, Vermont Planners Association (2008)
- US EPA Region 1 Environmental Excellence Award (2008)
- Vermont Governor's Award for Excellence in Pollution Prevention (2005)

Research Initiatives
- PI, **Supporting flood resilience and green infrastructure through updates of local codes and planning processes**. Cooperative with The Nature Conservancy – Wisconsin. 2025-2026.
- PI, **Auditing codes and ordinances for green infrastructure feasibility and coastal resilience.** Cooperative project with University of Minnesota and Minnesota Sea Grant. 2023-2025.
- PI, **Quantifying Fecal Pollution from People Experiencing Homelessness (Task 4, San Diego River Investigative Order).** Cooperative research initiative sponsored by Southern California Coastal Water Research Project in partnership with San Diego River Park Foundation and People Assisting the Homeless.
- **Flowpath Assessment Support Tool (FAST) Development for scenario planning**; UCSD Urban Studies & Planning with Texas A&M AgriLife Extension Service and Focused Planning Solutions LLC (2015-2023)
- Co-PI with Dr. Keith Pezzoli, **Planning for Xeriscape, Flood Prevention, and Alternative Non-Potable Water Reuse in Disadvantaged Communities;** UC San Diego Bioregional Center, San Diego Housing Commission & County of San Diego (2018-2021)
- **Innovations in Planning and Public Engagement for Community Resilience**; UC San Diego Urban Studies & Planning cooperative with the American Planning Association; 2017-2022.
- **Urban Agriculture Suitability Analysis**; UC San Diego Superfund Research Center (2015-2016)
- **"Redesigning the American Neighborhood" through Public Engagement in Water Quality Restoration;** US EPA Region 1 Grant to School of Natural Resources, University of Vermont (2002-2008)

SR PARTNERS
designing community and economic development solutions

MELISSA UNEMORI HAMPE

Partner - SR Partners LLC

CONTACT

202-841-3368

P.O. Box 2281
Wailuku, HI 96793

mhampe@srpartnersllc.com

www.srpartnersllc.com

EXECUTIVE SUMMARY

A partner with more than 30 years of experience in federal government relations, including formulating and implementing strategies, forming alliances and collaborations, and achieving results. A grants practitioner with project management, coaching, writing, reviewing, editing, and submission experience for more than 200 federal, foundation, and corporate grant projects.

CORE COMPENTENCIES

- Government Relations & Advocacy
- Federal & Foundation Grants
- Project Management
- Strategic Analysis
- Program Design & Implementation
- Communications
- Training

EDUCATION & AWARDS

Pacific Business News, Hawaii
Recognized as a top executive,
2022 - Women Who Mean Business

Cornell University, Ithaca
January 1994
Bachelor of Science

Yale School of Management,
New Haven
May 2002
Master's Business Administration

EXPERIENCE

2019 - Present

Partner, SR Partners LLC (formerly known as Skog Rasmussen LLC)

- Collaborates with clients to initiate, develop, and implement comprehensive federal government relations strategies to achieve policy and funding objectives on a wide range of issue areas such as education, workforce, housing, social programs, economic development, environment, climate change, and healthcare.
- Creates and implements comprehensive federal and foundation grants strategies and provides grant submission training and support.
- Designs and operationalizes major initiatives such as grants support programs nationally for the State Funding Readiness Project (2022-2024), Urban Sustainability Directors Network (2021-present), and American Cities Climate Challenge (2022), and statewide for the Hawaiian Islands Environmental Finance Center (2024-present), Hawai'i Alliance of Nonprofit Organizations (2021-2025), Ulupono Federal Funds Initiative (2024-present).
- Facilitates the Maui Economic Recovery Commission in the wake of the 2023 Maui fires, including implementing water projects in community education, data transparency, and other related areas.

2008 - 2019

Senior Vice President | COO | Project Manager, McAllister & Quinn

- Worked with nonprofit, education, health care, Tribal, local government and other clients to craft and implement comprehensive federal advocacy projects.
- Created international grant writing network from scratch; worked with numerous clients on grant submissions to a range of federal and foundation sources.

2007 - 2008

Federal Affairs, MENTOR: National Mentoring Partnership

- Advocated for youth mentoring funding and policy initiatives on Capitol Hill.

2002 - 2007 | 1999 - 2000

Legislative Director | Legislative Assistant, U.S. Senator Daniel Akaka (D-HI)

- Led a combined committee and personal office staff to develop, refresh, and implement the Senator's legislative agenda across all issue areas.

1997- 1999

Domestic Policy Advisor, U.S. Senate Democratic Policy Committee

- Prepared legislative policy briefs and provided vote recommendations.

1994 - 1997

Legislative and Press Staffer, U.S. Representative Patsy Mink (D-HI)

- Prepared legislative policy briefs and provided vote recommendations.

National Laboratory of the Rockies

Resume for Scott Struck, Ph.D., ENV SP., F.EWRI

Chief Engineer
Scott.Struck@nlr.gov | 303-630-5292

Dr. Struck has 24 years of water resources and energy nexus experience providing strategic and technical leadership to the National Laboratory of the Rockies (NLR) on integrated energy and water treatment systems. Scott works across the NLR directorates as lead of the Integrated Water Systems group. Scott's work focuses on addressing technical and economic challenges of water supply and wastewater treatment using combinations of passive, independent renewable energy-powered and grid connected technologies. This often includes modular and scalable systems applicable with on-site, distributed, automated, and often remotely operated infrastructure. With his NLR team, they apply physics-based and machine learning tools that evaluate the design, treatment costs, water quality output, and energy consumption of treatment system combinations. Through techno-economic evaluation scenarios these technologies can be evaluated for performance versus cost to optimize treatment system value and fit-for-purpose water production and use.

Education

- Ph.D., Water Resources Engineering and Management, Indiana University
- M.S., Water Resources Engineering and Management, Indiana University-Purdue University-Indianapolis
- M.P.A., Environmental Policy and Natural Resource Management, Indiana University
- B.S., Biology, University of Washington
- B.A., Psychology, University of Washington

Professional Experience

- Chief Engineer, National Laboratory of the Rockies (2022 – Present)
- Adjunct Professor, Dept. of Civil and Env. Engineering, Colorado School of Mines (2020 – Present)
- Principal, Geosyntec Consultants (2012 – 2022)
- Senior Scientist, Tetra Tech Inc. (2007 – 2012)
- Research Scientist/Engineer, US EPA – Office of Research and Development (2004 – 2007)
- Post-Doctoral Fellowship, US EPA – Office of Research and Development (2003 – 2004)

Relevant Projects

Department of Energy funded National Alliance for Water Innovation (8/2022 – Present). Dr. Struck provided leadership to the planning team as well as oversight on design, deployment, and assessment of innovative and promising water treatment pilot systems for fit-for-purpose water reuse.

USAID – Kingdom of Jordan (2023-2024). Dr. Struck worked with USAID and the Kingdom of Jordan to identify integrated water reuse and distributed energy alternatives that addressed water and energy scarcity challenges including consideration of water quality, agricultural and social needs, and existing energy policies.

Environmental Security Technology Certification Program (ESTCP) – Office of the Deputy Assistant Secretary of Defense (8/2025 – Present). Dr. Struck is working with a team to understand the resource potential (costs, equipment, etc.), technology landscape, techno-economic feasibility, and suitability of pumped storage hydropower as an efficient, long duration energy storage supply for military facilities.

ESTCP – Office of the Deputy Assistant Secretary of Defense (2/2026 – Present). Dr. Struck is assisting a team that is developing modular designs of DoW water treatment systems with multiple unit treatment processes, operations, and automated and remote-control capabilities to effectively treat source waters of varying quality and discharge rates to a consistent quality level to meet water quality standards for indoor or outdoor highest priority fit-for-purpose uses.

National Laboratory of the Rockies

Resume for Elise DeGeorge, P.E.

Senior Project Leader
Elise.DeGeorge@nlr.gov | 303-618-3137

Ms. DeGeorge is an experienced multidisciplinary professional bringing 13 years of experience in clean energy deployment and workforce development at NREL. Prior to her time at the National Laboratory of the Rockies, she spent 17 years at a multinational environmental engineering company leading projects in the areas of water infrastructure, decision support, risk management, stakeholder engagement and outreach, data management and communications.

Education

- MBA, Business Administration, University of California Berkeley Haas School of Business, 2003
- MS/MSc, Environmental Engineering, University of Alaska, 1996
- BS/BSc, Engineering, University of Michigan, 1993
- BS/BSc, Resource Management, University of Michigan, 1993
- Certified Professional Engineer, State of Colorado; LEED Accredited Professional
- Graduate of Energy I-Corps Sprint program, Summer 2024

Professional Experience

- Wind and Water Power Deployment Project Leader, National Renewable Energy Laboratory, Golden, Colorado (2011-Present)
- Engineer and Management Consultant, Montgomery Watson Harza (now Stantec), Denver, Colorado; Walnut Creek, California; Anchorage, Alaska (1994-2011)

Relevant Projects

- Workforce Task Co-Lead, Lahaina Energy Partnership TA Project. NLR is providing technical assistance to support energy planning and decision-making as part of the rebuilding effort, based on community priorities. Supporting crosscut assessment of workforce development and job training needs.
- Led renewable energy assessments in Alaska for pumped storage hydropower (for DOE) and for Ocean Energy Resources (for BOEM) and supported a team to assess a Renewable Portfolio Standard on the Alaska Railbelt for the State. Completed publication, videos and a story map.
- Project Manager, Asset Risk-Based Prioritization Project, City of Denver. Managed a pilot project to develop a risk-based methodology for optimizing asset maintenance and rehabilitation expenditures to maintain a pre-defined level of risk at the least cost.
- Project Engineer, San Luis Reservoir Low Point Improvement Project, Santa Clara Valley Water District, CA. Evaluated multiple alternative solutions for the district and statewide low point problem through economic and socioeconomic analysis along with development of the screening mechanism by which a preferred alternative was selected in consult with stakeholders.
- Project Engineer, Colorado Springs Utilities Strategic Plan. Conducted 40-year utility infrastructure regional planning for El Paso County with significant stakeholder involvement.
- Developer of Climate Change Preparedness and Sustainability Assessment. Developed best practice assessment focused on supporting municipalities, utilities and Cities determine their level of adaptation, risk, extreme events and economic preparedness.
- USACE's Defense Environmental Restoration Program at Formerly Used Defense Sites (DERP FUDS). Supported remedial investigations and cleanup activities at sites in Kodiak and St. Lawrence Island, Alaska. This effort included significant stakeholder involvement in native Alaskan communities.

National Laboratory of the Rockies

Resume for Evan Rosenlieb

Geospatial Data Scientist
Evan.Rosenlieb@nlr.gov

Mr. Rosenlieb is a geospatial data scientist with over 9 years of experience using performing scalable geospatial analysis on HPC systems for energy analysis at NLR. He specializes in novel algorithm development in topography and hydrography which he has used in NLR's Pumped Storage Hydropower and Floating PV portfolios. His area of work is broadly focused on energy generation technical potential estimates at large spatial extents and siting, sizing, and application of cost models in small spatial extents.

Education

- Master's in urban and Regional Planning, University of Colorado Denver, 2016
- Graduate GIS Certificate, University of Colorado Denver, 2016
- BA, Economics with Minor in Applied Statistics, Colorado State University, 2011

Professional Experience

- Geospatial Data Scientist, National Laboratory of the Rockies; Golden, Colorado (2017-Present)
- Research Associate, University of Colorado Denver Department of Urban and Regional Planning, Colorado; Denver, Colorado (2014-2017)

Relevant Projects

- Resource Assessment Task Lead, Lahaina Energy Partnership TA Project. NLR is providing technical assistance to support energy planning and decision-making as part of the rebuilding effort, based on community priorities. Supporting assessment of electricity generation and storage capabilities from small hydropower (including treated wastewater conveyance systems) and small/distributed PV.
- Resource assessment task lead for a multi-lab project for the Hawaii State Energy Office assessing potential for utility scale grid storage using PSH in Hawaii, tailored for the smaller sizes required by Hawaii's islanded grids.
- Technical lead for a DOE Energy Technology Innovation Partnership Program (ETIPP) project for Molokai, which included evaluating the feasibility of Floating PV and PSH for the island. Worked closely with stakeholders directly from the community.
- Technical lead for ongoing ETIPP program for the Hawaii Agribusiness Development Corporation to assess the Wahiawa reservoir and damn in central Oahu for hydropower and PSH opportunities, and their ability to support agricultural processing productive uses.
- Technical lead for other technical assistance projects to support high level technical resource assessments for hydropower and PSH for the Chemehuevi Tribe, Hoonah Indian Association, and town of Oakridge, OR.
- Lead developer for NLR's geospatial PSH identification algorithms and contributor to NLR's PSH component level cost model. This project assesses utility scale PSH potential for all 50 US states and Puerto Rico, which is used for NLR's Annual Technology Baseline and Standard Scenarios models.

National Laboratory of the Rockies

Resume for Jennifer Daw, P.E., CEM, LEED AP

Senior Researcher, Group Manager
Jennifer.Daw@nlr.gov | 720-412-7921

Jennifer Daw is a water and energy professional with over 25 years of experience leading consulting engagements, managing multidisciplinary teams, and advising decision-makers. Jennifer worked in the environmental consulting industry for 10 years where she was responsible for hydraulic modeling and analysis, developing design and construction documents, and performing asset management and capital planning of water and wastewater systems. She served as resident engineer and construction inspector for $74M in drinking water pump stations, pipelines, and a water treatment plant for the East Cherry Creek Valley Water and Sanitation District. Jennifer also led asset management and organizational effectiveness work for municipal clients, including condition and criticality data collection and analysis, prioritization, workshop facilitation, strategy, and project business case development. Ms. Daw was also responsible for developing a strategic vision for water/wastewater sector sustainability.

At the National Laboratory of the Rockies, Jennifer has used her water systems expertise to analyze and inform decisions at the energy-water nexus. Her work has included projects focused on optimization of renewable energy powered desalination, energy-water-food nexus policy research and educational resources, energy efficiency in water and wastewater treatment, assessing alternative water treatment technologies to improve cooling tower efficiency, evaluating energy-water tradeoffs of energy generation and water treatment technologies, performing a feasibility assessment for a water-energy microgrid, and conducting water and energy audits of buildings to identify conservation measures.

Education and Credentials

- M.S. Civil Engineering/Sustainable Development, University of Colorado
- B.S., Environmental Engineering, Northwestern University
- Licensed Professional Engineer, Certified Energy Manager, LEED Accredited Professional

Professional Experience

- Senior Researcher and Group Manager, National Laboratory of the Rockies (2018 – Present)
- Technical Project Leader, National Laboratory of the Rockies (2010 – 2018)
- Environmental Consultant, Malcolm Pirnie/ARCADIS (2007 – 2010)
- Consulting Engineer, CDM Smith (2000 – 2007)

Relevant Projects and Publications

- Workforce Task Co-Lead, Lahaina Energy Partnership TA Project. NLR is providing technical assistance to support energy planning and decision-making as part of the rebuilding effort, based on community priorities. Supporting cross-cut assessment of workforce development and job training needs.
- Gadzanku, S., Mirletz, H., Lee, N., **Daw, J.**, Warren, A. (2021). Benefits and Critical Knowledge Gaps in Determining the Role of Floating Photovoltaics in the Energy-Water-Food Nexus. *Sustainability*, 13(8), 4317.
- **Daw, J.**, Stout, S. (2019). *Building Island Resilience through the Energy, Water, Food Nexus*. NREL.
- **Daw, J.**, Hallett, K., DeWolfe, J., & Venner, I. (2012). *Energy Efficiency Strategies for Municipal Wastewater Treatment Facilities*. NREL.
- **Daw, J.**, Gardener, L., Meyer, P. 2012. New Perspectives on Climate and Water. *AWWA Journal Vol. 104 No.2, pp.32-28.*
- Means, E., Laugier, M., **Daw, J.**, Owen, D. (2012). Impacts of Climate Change on Infrastructure Planning and Design: Past Practices and Future Needs. *AWWA Journal Vol. 102 No. 6.*

AMY DEBAY, M. Sc.

WORK EXPERIENCE

Focused Planning Solutions LLC
Owner and President
January 2018 – Present

Flowpath Assessment and Stormwater Technologies (FAST) Analysis and Workshops (Texas A&M AgriLife Extension)

- Manage development of a statewide stormwater site/neighborhood tool for use in public workshops
- Lead creation of a landcover extraction tool for fine resolution analysis
- Run pilot workshops using FAST technology to support conversations around green infrastructure

Hawai`i County General Plan Update and Post Disaster Recovery

- Scenarios for relocation and recovery following the 2018 Kilauea lava flows
- Ongoing analysis to support the General Plan update, climate adaptation, and recovery work islandwide

O'ahu Stormwater Utility Feasibility Study

- GIS analysis of impervious coverage for property-based rate study using islandwide land use and landcover

Disadvantaged Communities Grant: Community Modules for Stormwater Analysis (UCSD Partnership)

- Develop analysis tools for community-led redevelopment projects exploring stormwater
- Support community workshops with 5 participating community groups in San Diego metro area

Innovations in Planning and Public Engagement for Community Resilience, APA & FEMA, Downers Grove, IL

- FEMA-funded pilot in partnership with APA Hazards Planning Center on GIS tool for localized flood impacts

City Explained, Inc. (purchased Placeways LLC December 2016)
Colorado Office Leader/Planning Consultant
January 2017 – December 2017

Go Triangle Durham-Orange Light Rail Study, Value Capture Analysis, NC

- CommunityViz tool to test transit-oriented development around new light rail stations
- Performance measures include general building data, value capture and traffic and infrastructure costs

Placeways LLC
Co-Owner/Director of Planning Services
May 2008 – December 2016

- **Hawaii County Growth Plan Update, HI**
- **CHARM Community Health and Resources Model, Houston/Galveston, TX**
- **NJTPA Small Area Land Use Impact Tool, NJ**
- **Comprehensive Plan Update Infill Strategies Workshop, Colorado Springs, CO**
- **Communities in Motion 2040 LRTP Update, COMPASS, Treasure Valley, ID**
- **Scenario Planning for a LRTP Update, Macatawa Area COG, MI**
- **Integrated Transportation & Land Use Modeling, PPACG, Colorado Springs, CO**
- **Regional Land Use Model, SLOCOG, San Luis Obispo County, CA**
- **San Luis Obispo Community Design Model, San Luis Obispo County, CA**
- **Scenario Planning for LRTP Update, Portneuf Valley, ID**
- **USDOT Volpe Center Scenario Planning Pilot Project, Cape Cod, MA**
- **Kelowna Official Community Plan Update, Kelowna, BC**
- **Boulder East Arapahoe Corridor Study, Boulder, CO**
- **Pasadena Comprehensive Plan Update, Pasadena, CA**
- **Site and Neighborhood Stormwater Calculator, UCSD, San Diego, CA**
- **Scenario Planning and Smart Growth for Superstorm Sandy Recovery, Long Island, NY**

Engelhardt, Hammer and Associates
Land Use Planner
March 2005 – April 2008

EDUCATION

MSc, City Design and Social Science (London School of Economics, London, UK), 2004
BSAE, Architectural Engineering, Structural Specialty (Milwaukee School of Engineering, Milwaukee, WI), 2001

Lauren Carter- Roth Venu, M.Sc.
2800 Woodlawn Ave. Suite 197
Honolulu, HI 96822
+1 808-781-7583 (d)
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lauren@3r-water.com

EDUCATION

- M.Sc. University of Hawai`i at Manoa School of Earth, Science and Technology Department of Oceanography
- B.A. University of Colorado at Boulder Major: Environmental Science; Specialization: Water Resources

PROFESSIONAL DEVELOPMENT

- Hawaii Leadership Lab for Entrepreneurs, Business and Government Leaders (2025-2026)
- Google for Startups United Nations Sustainable Development Goals Program (2022-present)
- Blue Startups Cohort 12 (2020-2021)
- National Green Infrastructure Certification Program – Trainer (2018-Present)
- The Water Environmental Federation Leadership Program (2015)
- United Nations University / East- West Center's ProSPER.net Leadership Program (2013)

COMMUNITY & CIVIC INVOLVEMENT

- World Bank Youth Innovation Challenge Water Solutions for a New Climate Reality- Founding Partner (2024-2025)
- Onsite Nonpotable Reuse Stakeholder Advisory Group (2020-present)
- Board of Directors Member for *Ahahui Malama I ka Lokahi* (2014-present)
- State of Hawai`i Building Code Council, *Co-Chair Green Codes Investigative Committee,* 2013-2018
- State of Hawai`i Water Security Advisory Group (2017).
- State of Hawai`i Department of Health Water Reuse Guidelines Advisory Committee, 2013-2017
- State of Hawai`i Commission of Water Resource Management's Water Conservation Advisory Group, 2011-2013
- Water and Wastewater Committee Chair for the Honolulu City and County Sustainable Building Task Force, 2010-2011

WORK EXPERIENCE & SELECT PROJECTS

Roth Ecological Design, Int. LLC (2006-Present)

Founder and Principal, 2800 Woodlawn Ave. Suite 197, Honolulu, HI. 96822. Tel:+ 1 808-737-1512, www.rothecological.com

- **Honolulu Board of Water Supply:** Onsite Reuse Assessments for Master Planned Transit Oriented Development on Oahu.
- **Waimea 400 Master Plan:** Concept design of a 120+ acre stormwater wetland to mitigate flooding and onsite reuse evaluation for the 400-acre County of Kauai affordable housing and agricultural development project.
- **City and County of Honolulu, Neal Blaisdell Center Redevelopment:** Integrated water master planning including the design of onsite water reuse, rainwater harvesting and green stormwater infrastructure.
- **Office of Hawaiian Affairs, Kūkaniloko Water Master Plan:** Development of a Water Portfolio. Planning and concept design of green infrastructure to support stormwater capture and assessment of recycled water supplies for agricultural development.
- **Kamehameha Schools, Kapālama, Maui & Hawaii Island Campuses:** Onsite water reuse and green infrastructure assessments.
- **University of Hawaii West Oahu Campus Administration and Allied Health Building:** Onsite greywater treatment and reuse, rainwater harvesting and green stormwater infrastructure design.

3Rwater, Inc. (2019-present)

Founder and CEO, P.O. Box 11081, Honolulu, HI 96828. Tel: 1 808-781-7583, www.3r-water.com
3Rwater developed the Follow the Drop mobile app, data platform and dashboard. Although Follow the Drop is currently deployed primarily to support stormwater capture, it is envisioned to become a comprehensive water management platform that includes nonpotable reuse guidance to help engage the public and for water agencies, collect metrics, track projects and build transparency.

- **City and County of Honolulu (2020-present)**: Development and deployment of the Follow the Drop app for Oahu residents. Collect data in software, integrate third party data, model outputs, provide cloud-based data management and analytics such as volumes of stormwater captured, potable water savings and other climate impacts, and display near-real time data on a user friendly dashboard. FtD also helps to administer and track projects for the GSI Direct-Install Incentive Program.

PAULA A. KEHOE SENIOR ADVISOR REGEN AEC, PLLC | paulak@regenaec.com

QUALIFICATIONS

Accomplished water resources leader with over 35 years of experience in water and wastewater management, demonstrating a One Water / circular economy approach. Pioneered the implementation of onsite and decentralized water treatment systems in San Francisco and across North America by establishing water quality and industry standards, management programs, permitting processes, and technical and operating guidance. Skilled in developing new approaches for water use efficiency and recycling, including public health protection strategies, policies, regulations, and making the business case for deployment.

ACHIEVEMENTS

- Founder and Co-Chair – Building Infrastructure Locally for Decentralized Water Systems (BILD), advancing global adoption of decentralized water systems (Apr 2026 – Present)
- Established the National Blue Ribbon Commission for Onsite Water Systems (NBRC) to develop consistent water quality standards, policies, and regulations for onsite/decentralized water treatment systems across North America
- Authored groundbreaking legislation allowing onsite collection, treatment, and reuse of graywater, blackwater, rainwater, and stormwater within buildings and districts in San Francisco
- Led development of the OneWaterSF Program – an integrated management approach to water, wastewater, and power utility services
- Coordinated with ICC, IAPMO, and NSF to amend standards and certifications aligned with NBRC health risk-based approach for onsite/decentralized water systems
- Organized and led an international independent advisory panel assessing feasibility of single-family water reuse applications, including public health risk management for recirculating showers, recirculating clothes washers, and single-family graywater systems

EXPERIENCE

Senior Advisor – REGEN

4-2026 to Present | REGEN AEC, PLLC.

- Senior advisory role focused on the advancement and adoption of onsite and decentralized water systems, policy development, and One Water / circular economy strategy; supporting engineering teams on premise-scale water reuse, regulatory frameworks, and public-private partnerships.

Director of Water Resources – SFPUC

5-2004 to 4-2026 | City and County of San Francisco, Public Utilities Commission | San Francisco, CA

- Water resources management for a major metropolitan utility, including onsite and decentralized water treatment systems, water use efficiency, recycled water, groundwater, desalination, drought management, integrated water resources planning, legislation and regulation development, and public health risk management for innovative water reuse applications.

EDUCATION

M.Sc. Environmental Management

Master of Science, Environmental Management *University of San Francisco* *December 1993*

B.A. Geography

NATHAN TRISTIAN BOUNDS, P.E. PRINCIPAL ENGINEER

REGEN AEC, PLLC | (541) - 580 - 2980 | tristianb@regenaec.com

QUALIFICATIONS

Accomplished civil engineer with significant experience in water and wastewater collection and treatment. Background includes developing new treatment process and equipment, as well as designing state-of-the-art treatment facilities. Developed engineering work experience in a high-tech manufacturing environment. Skilled in staff supervision, collection and treatment systems design, system troubleshooting, technical evaluation, and construction oversight. Experience with customer service, technical sales, international development, and interpersonal social skills.

ACHIEVEMENTS

- Professional Engineering License (P.E.) — Oregon #74747PE (Dec 2007), Washington #47965 (Mar 2011), Utah #10094202-2202 (Sep 2016), Idaho #18483 (Jan 2019), Florida (Feb 2021), Texas #141071 (May 2021), New Mexico #28985 (Aug 2021), Arizona #78692 (May 2023)
- Chair — Distributed Water Infrastructure Task Force, Water Environment Federation U.S.A. (Aug 2022 – Oct 2025)
- Community Leadership Council Director — Water Environment Federation U.S.A. (Oct 2025 – Present)

EXPERIENCE

Principal Engineer – REGEN

1-1-2019 to Present | REGEN AEC, PLLC. | 217 S 11th St., Boise, ID 83702

- High Performance Building Design including civil engineering, wastewater collection and treatment systems design, nitrogen reduction facilities, facility planning, project cost estimating, sustainable wastewater infrastructure specifications, grey/blackwater treatment and reuse, underground vessel design, construction management, and commissioning; specializing in sustainable systems, difficult wastewater collection system analysis, and stringent permit-limit wastewater and stormwater treatment design.

Director of Innovation – Orenco Systems Inc.

1-5-2000 to Present | Orenco Systems Inc. | 814 Airway Avenue, Sutherlin, OR 97479

- Manage Process R&D and AutoCAD departments; develop new processes and equipment for wastewater/water/stormwater treatment and pressure sewer collection; provide engineering design, project management, training, and construction oversight for internal and external projects, consulting engineers, regulators, and contractors; manage distribution of Orenco products and services in the Pacific Northwest, California, Hawaii, and Canada, with project assistance in Australia, Costa Rica, Mexico, and New Zealand.

Principal Engineer – MAP

1-2-2015 to 12-31-2018 | MAP Engineering, Inc. | 1501 W 13th St., Boise, ID 83702

- Civil engineering and wastewater collection and treatment systems design, facility planning, project cost estimating, sustainable infrastructure specifications, grey/blackwater reuse, and underground vessel design; engineering design, specification, inspection, and construction oversight; specializing in difficult collection system analysis, stringent permit-limit treatment design, and sustainable systems.

Principal Engineer – Aqualogic

1-1-2012 to 1-2-2015 | Aqualogic Engineering, LLC. | 334 Winchester Creek Avenue, Winchester, OR 97495

- Wastewater collection and treatment systems design, facility planning, project cost estimating, sustainable infrastructure specifications, grey/blackwater reuse, and underground vessel design; specializing in difficult collection system analysis, stringent permit-limit treatment design, and sustainable systems using alternative materials, energy sources, and water reuse.

EDUCATION

B.Sc. Civil Engineering — Emphasis in Environmental Engineering *Boise State University* *December 1999*

Engineering — General Studies in Engineering *Umpqua Community College* *June 1996*