

AGENDA  
IRVINE RANCH WATER DISTRICT  
WATER RESOURCES POLICY AND COMMUNICATIONS  
COMMITTEE MEETING  
WEDNESDAY, NOVEMBER 6, 2024

This meeting will be held in-person at the District’s headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Webex: <https://irwd.webex.com/irwd/j.php?MTID=m970e0cd663dc1b67c9e5f8d0234def88>

Meeting Number (Access Code): 2498 538 3205

Meeting Password: 7FwUMxi8ah3

As courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the Webex lobby when the Committee enters closed session. Participants who remain in the “lobby” will automatically be returned to the open session of the Committee once the closed session has concluded.

Participants who join the meeting while the Committee is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

CALL TO ORDER 1:30 p.m.

ATTENDANCE Committee Chair: Steve LaMar \_\_\_\_\_  
Member: Karen McLaughlin \_\_\_\_\_

ALSO PRESENT

Paul Cook	_____	Paul Weghorst	_____
Neveen Adly	_____	Kevin Burton	_____
Wendy Chambers	_____	Fiona Sanchez	_____
Christine Compton	_____	Jim Colston	_____
John Fabris	_____	Amy McNulty	_____
Louis Bronstein	_____		_____

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the “chat” feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing [comments@irwd.com](mailto:comments@irwd.com) before 8:00 a.m. on Wednesday, November 6, 2024.

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## COMMUNICATIONS

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1. Notes: Weghorst
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted; and determine which items may be approved without discussion.

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## ACTION

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4. REVIEW OF 2024 ADVOCACY ACTIVITIES AND 2025 LEGISLATIVE AND REGULATORY ISSUES PLANNING – COMPTON

Recommendation: That the Board provide input on the proposed 2025 regional, state, and federal legislative issues of interest to IRWD, and receive and file the proposed “Initial 2025 Legislative and Regulatory Resource Allocation Plan” and the “Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2025.”

5. CONSULTANT SELECTION FOR CLIMATE ADAPTATION AND ENERGY MANAGEMENT PLAN – HUANG / SANCHEZ / WEGHORST

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with Rincon Consulting, Inc. in the amount of \$449,315 for the preparation of the District’s Climate Adaptation and Energy Management Plan; and authorize an increase to the Fiscal Year 2024-25 Capital Budget for Project 11800 in the amount of \$576,747.

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## OTHER BUSINESS

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6. Directors’ Comments
7. Adjourn

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Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District’s office, 15600 Sand Canyon Avenue, Irvine, California (“District Office”). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

November 6, 2024  
Prepared and  
submitted by: C. Compton  
Approved by: Paul A. Cook *P.A.C.*

## WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

### REVIEW OF 2024 ADVOCACY ACTIVITIES AND 2025 LEGISLATIVE AND REGULATORY ISSUES PLANNING

#### SUMMARY:

This report provides a review of IRWD’s 2024 legislative and regulatory priorities and advocacy activities. It also provides an overview of expected 2025 legislative and regulatory issues in Washington, D.C., Sacramento, and regionally. Also described are proposals that the District’s associations and stakeholders are sponsoring. The report proposes an initial 2025 staff resource allocation plan for legislative and regulatory issues of importance to IRWD in the coming year. Staff recommends that the Board provide input on the proposed 2025 regional, state, and federal legislative issues of interest to IRWD, and receive and file the proposed “Initial 2025 Legislative and Regulatory Resource Allocation Plan” and the “Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2025.”

#### BACKGROUND:

##### 2024 IRWD Priorities and Activities:

In November 2023, the Board reviewed an overview of expected 2024 legislative issues in Washington, D.C., and Sacramento, including proposals that the District’s statewide associations were considering for introduction. At that time and after providing input, the Board received and filed the initial 2024 Legislative and Regulatory Resource Allocation Plan and the Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2024. The document helped guide the District’s governmental relations efforts this past year.

The 2024 priorities included actively engaging in the discussions related to the implementation of the “Making Water Conservation a California Way of Life” legislation, development of a dam safety program at the state level, seeking recognition of the importance of emergency water supplies, and engagement on a number of regulatory proposals. Over the past year, staff and IRWD’s state legislative and regulatory advocates worked on each of these issues and other issues of importance to the District, including legislation related to water rates, low-income rate assistance, and proposals on climate resilience bonds.

The 2024 priorities at the federal level included federal funding for the Kern Fan Groundwater Storage Project, seeking creation of a federal dam safety program, seeking funding for the Irvine Lake Improvement Project, and seeking additional funding for the Syphon Reservoir Improvement Project. Staff engaged on regulatory and legislative measures related to the Lead and Copper Rule and PFAS contamination.

Expected 2025 Federal Legislative and Regulatory Issues:

While it is expected that in 2025 Congress and federal agencies will work on many issues of interest to the water and wastewater communities, during the first part of 2025 Washington, D.C. will be focused on the start of the 119<sup>th</sup> Congress and the transition to the next administration. Despite the impact a transition between administrations has on the policies and priorities of federal agencies and congressional work, staff and the District's federal advocates will continue to seek progress on the key issues of interest to IRWD.

Staff, joined by the District's federal advocates, will discuss the expected 2025 political environment and federal issues with the Committee. Among the federal issues staff will discuss with the Committee are:

- The possibility of a water package during Congress's lame-duck session;
- Seeking reauthorization for the Bureau of Reclamation's Small Storage Grant Program; and
- Continued advocacy for the creation of a federal dam safety program, which focuses on funding infrastructure rehabilitation and improvement projects.

Expected 2025 Statewide Legislative and Regulatory Issues:

As is typical at the beginning of each legislative year, staff expect that the California Legislature and State regulatory agencies will take up many issues of interest to the water and wastewater communities in 2025. Staff, joined by the District's state advocates, will discuss the expected 2025 political environment and state issues with the Committee. Among the state issues staff will discuss with the Committee are:

- Low Income Water Rate Assistance and possible water tax proposals;
- Permit streamlining;
- Next steps on [SB 366 \(Caballero, D-Salinas\) – The California Water Plan Long-Term Supply Targets' veto](#);
- [SB 1157 Indoor Water Use Work Groups and Study](#);
- The State Water Resources Control Board's (State Board) consideration and adoption of new maximum contaminate levels; and
- Other State Board and other State agency regulations.

Expected 2025 Association Proposals:

IRWD's association and industry partners are in the process of completing their 2025 legislative planning. A summary of those planning efforts is provided below:

*ACWA:*

ACWA will hold its 2025 legislative planning meeting on December 5, 2024. At the time of the writing of this report no specific proposals or topics have been released for consideration at the meeting. Staff will provide an update on any new information.

*Bioenergy Association of California (BAC):*

BAC will hold its annual planning meeting on November 20, 2024. At the time of the writing of this report no specific proposals or topics have been released for consideration at the meeting. Staff will provide an update on any new information.

*California Association of Sanitation Agencies (CASA):*

CASA will hold its annual planning meeting on December 6, 2024. At the time of the writing of this report no specific proposals or topics have been released for consideration at the meeting. Staff will provide an update on any new information.

*California Municipal Utilities Association (CMUA):*

CMUA will hold its 2025 legislative and regulatory planning meeting on November 14, 2024. At the time of the writing of this report no specific proposals or topics have been released for consideration at the meeting. Staff will provide an update on any new information.

*California Special Districts Association (CSDA):*

CSDA held its 2025 legislative and regulatory planning meeting on October 24, 2024. CSDA will again sponsor a concurrent resolution recognizing Special Districts Week and will be sponsoring legislation to remove the sunset date from the emergency teleconferencing provisions within the Brown Act. Staff will provide updates to the Committee and the Board, as appropriate, as these proposals move forward.

*WateReuse California:*

The WateReuse Association of California will hold its 2025 legislative and regulatory planning meeting on November 15, 2024. At the time of the writing of this report no specific proposals or topics have been released for consideration at the meeting. Staff will provide an update on any new information.

Possible 2025 IRWD Sponsored Legislation:

Staff will discuss with the Committee three potential concepts for IRWD-sponsored legislation in 2025, which staff is still exploring. The concepts include:

- Legislation related to emergency water supplies, as a follow-up to SB 1218 (Newman);
- Legislation that would enable the use of recycled water in decorative lakes and other decorative water features; and
- Legislation related to a change in meter size, when requested by a customer.

Staff is completing due diligence related to each of these proposals, reaching out to interested parties and continuing to refine the concepts. Staff will update the Committee on those efforts and would recommend that the District sponsor no more than two legislative proposals in 2025.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board provide input on the proposed 2025 regional, state, and federal legislative issues of interest to IRWD, and receive and file the proposed “Initial 2025 Legislative and Regulatory Resource Allocation Plan” and the “Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2025.”

LIST OF EXHIBITS:

Exhibit “A” – Proposed Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2025

Exhibit “B” – Proposed IRWD’s Initial 2025 Legislative and Regulatory Resource Allocation Plan

## Exhibit “A”

### LEGISLATIVE / REGULATORY ISSUES AND ACTIVITIES OF HIGH CONCERN TO IRWD IN 2025

As a state and federal leader in water resources public policy and governance, IRWD works to promote policy initiatives that allow the District, along with other water agencies in California, to enhance the quality and reliability of water supplies and other services throughout the state. While IRWD will engage in a number of legislative and regulatory issues of interest to the District, the following are specific issues and activities of high concern to IRWD in 2025:

#### 2025 Federal Issues and Activities of High Concern:

- 1) Seek federal funding for the South Valley Conveyance and Storage Project;
- 2) Seek the creation of a federal dam safety program to provide federal funding to improve dam safety and modernization at reservoirs important to water supply;
- 3) Seek the reauthorization of, and redefining of eligible groundwater storage projects under, the Bureau of Reclamation’s Small Storage Grant Project;
- 4) Seek federal funding for the Santiago Creek Dam (Irvine Lake) Improvements Project;  
and
- 5) Continue to engage with the Bureau of Reclamation and congressional staff on additional funding for the Syphon Reservoir Improvement Project.

#### 2025 State Issues and Activities of High Concern:

- 1) Protect IRWD’s various revenue sources, and method of setting rates and other charges, in order to ensure that the District can continue to provide high quality services to its customers at low rates. Specifically, retain the District’s ability to use its water budget-based rate structure and ability to invest its replacement fund;
- 2) Continue to engage in discussion regarding the creation of a statewide Low-Income Water and Wastewater Rate Assistance Program;
- 3) Consistent with the Board’s adopted policy on a statewide public goods charge, oppose a statewide tax on water for Low Income Rate Assistance or to fund resiliency efforts that are sent to the State;
- 4) Seek recognition of the importance of emergency water supplies in water resiliency, pre-emergency designation of such supplies, and protection of their use during droughts or other water shortages;
- 5) Promote the expanded use of recycled water, and its acceptance as a resource, by advocating for the removal of hindrances to recycled water projects, storage, and use;

Legislative / Regulatory Issues and Activities of High Concern to IRWD in 2025, continued

- 6) Advocate for accelerated/continued state investment in dam safety and the modernization of dams important to water supplies;
- 7) Engage with the Department of Water Resources (DWR) on the studies and work group they are undertaking related to SB 1157 (Hertzberg) and the indoor water use standards set in that bill;
- 8) Work to develop State incentives for property owners to make their property available for groundwater recharge during “wet years” to enable California to capture water, which would otherwise be lost, for storage and beneficial use during drier years; and
- 9) Engage with the State Water Resources Control Board on the update of its climate change resolution.

2025 Regional Issues and Activities of High Concern:

- 1) Actively participate in discussions with the South Coast Air Quality Management District regarding proposed amendments to rules and regulations that would impact IRWD.



**DRAFT**  
**IRWD’s Initial 2025 Legislative and Regulatory  
Resource Allocation Plan**

The proposed initial resource allocations are aimed at balancing the importance of an issue to IRWD, the projected level of District resources available to work on the issue, and the likelihood that the issue will be raised and the District will be able to shape the policy, legislative and regulatory discussions or outcomes related to the issue in 2025. The allocation of District resources may change over the course of the year, based on continued input from the Water Resources Policy and Communications Committee and the Board of Directors. The allocation categories are intended to reflect the following expected levels of resource use:

- Very High – IRWD’s resource allocation would be significant. Staff and IRWD’s legislative advocates would dedicate a larger portion of their overall advocacy efforts to the issues designated “Very High” and would actively seek to be a key stakeholder shaping the policy, legislative or regulatory discussions related to those issues.
  
- High – IRWD’s resource allocation would be considerable. Staff and IRWD’s legislative advocates would work to create strategic opportunities to shape the policy, legislative, or regulatory discussions and outcomes related to issues designated “High.”
  
- Moderate – IRWD’s resource allocation would be modest. Staff and IRWD’s advocates would actively engage in association and industry conversations on issues designated “Moderate” but would expect to work largely through issue-specific coalitions on these issues. Staff and IRWD’s advocates would work to identify and capitalize on opportunities to shape narrow aspects of a policy, legislative, or regulatory outcome related to such issues.
  
- Low – IRWD’s resource allocation would be low. Staff and IRWD’s advocates would track policy, legislative, and regulatory discussions and outcomes related to issues designated “Low” and would continue to seek positive outcomes for the District through IRWD’s association and industry partners. Staff and IRWD’s advocates would work on such issues should resources be available. For issues that are currently not expected to be acted upon legislatively or regulatorily this next year and are given a “Low” initial allocation, staff will reevaluate the allocation when action appears likely and increase it, as appropriate.

<b>DRAFT</b> Expected 2025 Legislative and Regulatory Issues	Proposed Allocation of IRWD Resources
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<u>FEDERAL ISSUES</u>	
<b>South Valley Conveyance and Storage Project</b> – Seek federal funding for the project by engaging with the Bureau of Reclamation and Congress on the project.	<b>Very High</b>
<b>Dam Safety Program</b> – Advocate for federal investment in dam safety and the modernization of dams important to water supplies.	<b>Very High</b>
<b>Small Storage Grant Program Reauthorization</b> – Seek the reauthorization of, and redefining of eligible groundwater storage projects under, the Bureau of Reclamation’s Small Storage Grant Project.	<b>Very High</b>
<b>Irvine Lake and Santiago Creek Dam Outlet Tower and Spillway Project</b> – Seek funding for the Irvine Lake Improvement Project.	<b>High</b>
<b>Syphon Reservoir Improvement Project</b> – Continue to engage with the Bureau of Reclamation and congressional staff on additional funding for the project.	<b>High</b>
<b>Atmospheric River Research</b> – Advocate for federal programs and funding for atmospheric river research aimed at improving reservoir operations.	<b>Moderate</b>
<b>PFAS CERCLA Exemption</b> – Engage on efforts to designate PFOA and PFOS as “hazardous substances” under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and advocate for exemptions from liability for water and wastewater utilities.	<b>Moderate</b>
<b>PFAS</b> – Advocate for a science-based and cost-based approach in the development of PFAS regulations.	<b>Moderate</b>
<b>Water Resource Development Act (WRDA)</b> – Seek enactment of a WRDA bill every two years which is beneficial to IRWD and Orange County, and which includes authorizations for the water infrastructure programs and funding supported by IRWD.	<b>Moderate</b>
<b>Bureau of Reclamation’s Title XVI, Water Reclamation and Reuse Program, Reauthorization</b> – Advocate for the reauthorization of Title XVI and an increased funding authorization for the Water Reclamation and Reuse Program.	<b>Low</b>
<b>Clean Water Act Definition of “Waters of the U.S.”</b> – Advocate for changes in the definition of “Waters of the U.S.” that limits impact to IRWD and it is facilities and includes an exemption for constructed treatment wetlands.	<b>Low*</b>
<b>Delta Conveyance Implementation</b> – Advocate for a change in the operation of the Delta, consistent with the co-equal goals of ecosystem protection and water supply reliability; seek the federal actions necessary to implement a permanent solution in the Bay Delta.	<b>Low</b>

<b>DRAFT</b> Expected 2025 Legislative and Regulatory Issues	Proposed Allocation of IRWD Resources
<b>Colorado River</b> – Monitor long-term planning efforts to protect the Colorado River system.	<b>Low</b>
<b>Lead and Copper Rule</b> – Monitor implementation of the federal Lead and Copper Rule.	<b>Low</b>
<b>Tax-Exempt Municipal Bonds</b> – Maintain the current tax-exempt status of municipal bonds with the exception of restoring the tax-exempt status of local government advanced refundings. Oppose prohibitions on the use of tax-exempt bonds within WIFI or any similar program.	<b>Low</b>
<b>Tax Parity for Water Efficiency Rebates</b> – Advocate for tax parity between water and energy efficiency rebates.	<b>Low</b>
<b>Total Maximum Daily Load Limits</b> – Advocate that the Environmental Protection Agency use the best available science when setting Total Maximum Daily Load (TMDL) limitations related to Clean Water Act compliance and approve TMDLs for California based on relevant studies related to California’s environment and local conditions.	<b>Low</b>
<b>STATE ISSUES</b>	
<b>Emergency Supplies</b> – Seek recognition of the importance of emergency water supplies in water resiliency, pre-emergency designation of such supplies, and protection of their use during droughts or other water shortages.	<b>Very High</b>
<b>Low Income Water and Wastewater Rate Assistance Program</b> – Continue to engage in discussions regarding the creation of a statewide Low-Income Water and Wastewater Rate Assistance Program.	<b>Very High</b>
<b>Recycled Water</b> – Promote the expanded use of recycled water, and its acceptance as a resource, by advocating for the removal of hindrances to recycled water projects, storage, and use. Seek to: <ul style="list-style-type: none"> <li>• Remove recycled water as a waste, including addressing recycled water discharge requirements.</li> <li>• Promote a science-based, “fit for purpose” regulatory approach to recycled water.</li> <li>• Advocate for the expansion of potable water reuse in California.</li> <li>• Eliminate operational constraints on recycled water operations and use, including use of recycled water in decorative water bodies or features.</li> <li>• Seek updates to Title 17 and 22, including relief of dual-plumbed inspection/testing requirements.</li> </ul>	<b>Very High</b>
<b>Water Rates &amp; District Revenues</b> – Protect IRWD’s various revenue sources, and method of setting rates and other charges, in order to ensure that the District can continue to provide high quality services to its customers at low rates.	<b>Very High</b>

<b>DRAFT</b> Expected 2025 Legislative and Regulatory Issues	Proposed Allocation of IRWD Resources
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Specifically, preserve the District’s ability to use its water budget-based rate structure and ability to invest its replacement fund.	
<b>Water Tax</b> – Consistent with the Board’s adopted policy on a statewide public goods charge, oppose a statewide tax on water for Low Income Rate Assistance or to fund resiliency efforts that are sent to the State.	<b>Very High</b>
<b>Dam Safety Program</b> – Advocate for accelerated/continued state investment in dam safety and the modernization of dams important to water supplies.	<b>High</b>
<b>DWR</b> – Engage with DWR on policy, regulatory, and permit issues of concern to IRWD.	<b>High</b>
<b>Indoor Water Use Studies</b> – Engage with the Department of Water Resources (DWR) on the studies and work group they are undertaking related to SB 1157 (Hertzberg) and the indoor water use standards set in that bill.	<b>High</b>
<b>Groundwater Recharge Incentives</b> – Work to develop state incentives for property owners to make their property available for groundwater recharge during “wet years” to enable California to capture water, which would otherwise be lost, for storage and beneficial use during drier years.	<b>High</b>
<b>State Water Resources Control Board (State Board) Climate Change Resolution</b> – Engage with the State Board on its update of the Board’s Climate Change Resolution.	<b>High</b>
<b>Atmospheric River Research</b> – Advocate for state programs and funding for atmospheric river research aimed at improving reservoir operations.	<b>Moderate</b>
<b>Bioenergy</b> – Continue to advocate for the permissive and beneficial use of bioenergy and biosolid waste-to-energy programs and projects.	<b>Moderate</b>
<b>Biosolids</b> – Seek a broader spectrum of permissible uses of biosolids byproducts including a possible “healthy soils” designation. Engage on the State Board’s review of the General Order (WDR) for the use of biosolids on land.	<b>Moderate</b>
<b>Emergency Power Generators</b> – Advocate for public safety exemptions for California Air Resources Board proposed regulations on emergency power generation engines.	<b>Moderate</b>
<b>Climate Change Adaptation</b> – Engage in policy discussions related to climate change adaptation within the water and wastewater sectors.	<b>Moderate</b>
<b>DWR</b> – Engage with DWR on policy, regulatory, and permit issues of concern to IRWD.	<b>Moderate</b>

<b>DRAFT</b> <b>Expected 2025 Legislative and Regulatory Issues</b>	<b>Proposed Allocation of IRWD Resources</b>
<p><b>CECs and PFAS</b> – Engage with stakeholders, industry associations, and regulatory agencies on establishing better processes for identifying and regulating contaminants of emerging concern (CECs). Engage with stakeholders, industry associations, and regulatory agencies on microplastics and PFAS, and the regulatory actions proposed by state agencies including regulatory actions that would restrict land application or other uses of Class A and Class B biosolids due to PFAS.</p>	<p><b>Moderate</b></p>
<p><b>Groundwater Clean-up</b> – Support efforts to obtain State funding to clean up groundwater contamination in the Orange County Basin, and funding for basin replenishment.</p>	<p><b>Moderate</b></p>
<p><b>Groundwater Management &amp; Water Banking</b> – Engage productively in discussions of groundwater management in California to protect IRWD’s interests. Promote greater water banking opportunities to benefit IRWD banking programs.</p>	<p><b>Moderate</b></p>
<p><b>Homelessness</b> – Within the larger discussions on addressing homeless, ensure that the impacts of homeless on water and wastewater agencies is recognized, and that agencies continue to retain adequate authority to secure their facilities.</p>	<p><b>Moderate</b></p>
<p><b>Ocean Acidification and Ocean Discharges</b> – Engage productively in discussions surrounding proposals to eliminate substantially change the regulations surrounding ocean discharges to protect the District’s interests while addressing ocean acidification.</p>	<p><b>Moderate</b></p>
<p><b>Public Fleets</b> – Engage in the implementation of regulations and other policy discussion concerning the zero emission public fleet regulations and advocate for appropriate exemptions for the public fleets of water and wastewater providers that consider the constraints of certain technologies on the provision of essential public services during or after an emergency.</p>	<p><b>Moderate</b></p>
<p><b>Public Records Act</b> – Monitor proposed changes to the Public Records Act that could impact IRWD costs including new requirements for local agency websites, data production and reporting.</p>	<p><b>Moderate</b></p>
<p><b>Safe Drinking Water</b> – Engage on the implementation of the Safe and Affordable for Equity and Resilience Program (SAFER) to ensure that the program is implemented in a way to effectively move communities to sustainable access to safe drinking water</p>	<p><b>Moderate</b></p>
<p><b>State Lead and Copper Rule Changes</b> – Monitor developments and proposed revisions to State lead and copper rules, advocate for changes that effectively protect public health while limiting the annual testing burden on water agencies (e.g., seek modification to the proposed school and childcare facility testing schedule).</p>	<p><b>Moderate</b></p>

<b>DRAFT</b> <b>Expected 2025 Legislative and Regulatory Issues</b>	<b>Proposed Allocation of IRWD Resources</b>
<b>State Board</b> – Engage with the State Board on policy, regulatory, and permit issues of concern to IRWD.	<b>Moderate</b>
<b>Water Efficiency</b> – Engage with the Legislature, State Board, and Department of Water Resources (DWR) on legislation related to water efficiency and changes to the Model Water Efficient Landscape Ordinance.	<b>Moderate</b>
<b>Water Transfers and Markets</b> – Engage with the California Department of Water Resources, in coordination with IRWD’s Water Banking partners, in advocating for expedited processes to facilitate water transfers/exchanges and streamlined water marketing.	<b>Moderate</b>
<b>Water Law Modernization</b> – Monitor and engage, as appropriate, on the efforts to “modernize” California’s water law, including laws related to water rights.	<b>Moderate</b>
<b>Water Quality</b> – Engage productively in policy discussions related to changes in water quality and various discharge permits in order to protect the District’s interests.	<b>Moderate</b>
<b>Wildfire Prevention and Liability</b> – Seek to ensure that proposals related to wildfire prevention and liability proposals consider the perspective of water and wastewater providers.	<b>Moderate</b>
<b>30 Percent by 2030</b> – Engage on the implementation of 30 percent by 2030 to ensure water supplies and resources are adequately considered, and to limit impacts to existing and future water infrastructure and operations.	<b>Low</b>
<b>Delta Conveyance Implementation</b> – Advocate for a change in the operation of the Delta, consistent with the co-equal goals of ecosystem protection and water supply reliability. Seek the State actions necessary to implement a solution in the Bay Delta and oppose efforts to make implementation of a solution more difficult.	<b>Low</b>
<b>Drought Response</b> – Continue to advocate that the State’s drought response be based on a data-driven approach and consider the reliability of urban water supplier supply portfolios by using a water efficiency standards-based approach as eliminating mandatory percent reductions for those agencies whose total water demands are below the cumulative standards.	<b>Low*</b>
<b>Energy</b> – Advocate for policies that encourage energy reliability in Orange County, and energy efficiency or reductions in embedded energy in the water and wastewater sectors, including use of energy conservation funding within the water sector, and expanded availability of direct access programs, without an increase in cost to or mandates on local entities; seek incentives for energy self-reliance projects (i.e. storage, generation, efficiency).	<b>Low</b>

<b>DRAFT</b> <b>Expected 2025 Legislative and Regulatory Issues</b>	<b>Proposed Allocation of IRWD Resources</b>
<b>Operators Certifications</b> – Address inconsistent certification processes for operator certifications (treatment, distribution, and recycling). Monitor for changes in certification requirements.	<b>Low</b>
<b>Political Reform Act/FPPC Issues</b> – Monitor for changes to the Political Reform Act and FPPC regulations that could impact IRWD.	<b>Low</b>
<b>Property Tax Allocations</b> – Protect existing property tax allocations to special districts.	<b>Low</b>
<b>Proposition 218 Reforms</b> – If Proposition 218 reforms are proposed, engage in discussions surrounding the reform efforts to protect IRWD’s interests. Communicate the District’s concern over any water rate legislation which is not consistent with the California Constitution, not voluntary in nature, or that does not provide sufficient clarity or flexibility to water agencies.	<b>Low*</b>
<b>Public Agency Liability and Public Contracting</b> – Oppose efforts to impose greater liability on public agencies for work performed by its contractors. Oppose proposals that make public contracting for labor, service, or public works projects more cumbersome including reductions in contract retentions or changing the criteria agencies may consider when awarding contracts.	<b>Low</b>
<b>Plumbing Code Updates</b> – Seek clarification that Chapter 15 of the California Plumbing Code does not apply to recycled water irrigation sites. Work with the Building Standards Commission, Housing and Community Development Department, and Department of Water Resources on revisions to the California Plumbing Code during code revisions.	<b>Low*</b>
<b>Real Estate Investments</b> – Engage on regulatory or legislative proposals that may impact IRWD’s ability to maintain a high return of investment on its real estate investments.	<b>Low*</b>
<b>Unfunded Pension Liability</b> – Oppose legislation or regulations that would increase IRWD’s pension liability either by making local agencies responsible for the pension liabilities of other entities (e.g. joint powers authorities) or by failing to recognize the liability reduction benefits of Section 115 Trust and other pre-funding efforts. Seek state support for refinements in the GASB rules that limit recognition of the benefits Section 115 Trust.	<b>Low</b>
<b>Video Recording Retention Periods</b> – Advocate for greater flexibility for special districts related to the required retention period prescribed by law for video recordings.	<b>Low</b>




<b>DRAFT</b> Expected 2025 Legislative and Regulatory Issues	Proposed Allocation of IRWD Resources
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<u>REGIONAL ISSUES</u>	
<b>South Coast Air Quality Management District</b> – Actively participate in discussions with the South Coast Air Quality Management District regarding proposed amendments to rules and regulations. Advocate for reasonable changes and updates to AQMD regulations, including but not limited to achieving the Clean Air Act attainment standards in the basin, implementing reasonable and cost-effective emission reduction measures, and support locally focused and funded emission reduction projects.	<b>Very High</b>
<b>Santa Ana and San Diego Regional Water Quality Control Boards</b> – Work with the Board on issues of concern to IRWD including adjusting storm-induced overflow protections and expand the use of recycled water in decorative lakes.	<b>High</b>
<b>Recycled Water Use Site Inspection and Testing</b> – Work with Orange County Health Care Agency on completion of the Orange County Guidelines which include the frequencies and methods for conducting recycled water use site visual inspections and periodic cross-connection tests.	<b>Low</b>

\*Increase allocation of resources if warranted due to legislative or regulatory activity.



November 6, 2024  
Prepared by: R. Huang  
Submitted by: F. Sanchez / P. Weghorst  
Approved by: Paul A. Cook 

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

CONSULTANT SELECTION FOR  
CLIMATE ADAPTATION AND ENERGY MANAGEMENT PLAN

SUMMARY:

IRWD is preparing a Climate Adaptation and Energy Management Plan (CAP). A Request for Proposals (RFP) was distributed to consultants qualified to support staff efforts to develop the CAP; three proposals were received. Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with Rincon Consultants, Inc. in the amount of \$449,315 for the preparation of the District's CAP and authorize an increase to the Fiscal Year 2024-25 Capital Budget for Project 11800 in the amount of \$576,747.

BACKGROUND:

In January 2024, consultants at NV5 completed initial work for the preparation of a CAP for the District. NV5 provided greenhouse gas (GHG) inventory projections, a list of potential projects to reduce GHG emissions and energy costs, and an overview of potential project funding sources. Following NV5's work, staff developed an RFP to complete the CAP. The RFP calls for the preparation of a CAP that will describe climate change adaptation and mitigation related regulations and requirements, quantify IRWD's climate change vulnerabilities, and recommend adaptation strategies. In addition, the CAP will identify energy use optimization measures, analyze previously proposed solar projects, and examine existing energy storage opportunities. Finally, the CAP will provide forecasts of IRWD energy use and GHG emissions.

Consultant Selection Process:

In August 2024, staff distributed an RFP for the development of the District's CAP to 11 qualified firms. Proposals were received from three companies: AECOM, Hazen and Sawyer, and Rincon. After completing a thorough evaluation of the written proposals and conducting interviews with two of the firms, staff prepared the consultant selection matrix which is attached as Exhibit "A". Based on the findings in this matrix, staff recommends the selection of Rincon to complete the work. Key strengths detailed in Rincon's proposal are:

- Rincon has deep knowledge of CAP development and has authored over 90 similar plans;
- Rincon understands the unique challenges of developing CAPs for water agencies, having developed plans for Metropolitan Water District of Southern California, Las Virgenes Municipal Water District, and Inland Empire Utilities Agency;
- Rincon's proposed Principal in Charge has worked with IRWD for 15 years and has institutional knowledge about IRWD systems, facilities, and operations;
- The Rincon team brings resources with specialized expertise in energy efficiency, renewables, water and wastewater infrastructure, and climate change projections;

- Rincon’s sub-consultant Eagle Rock Analytics will provide IRWD with access to high-resolution climate data from California’s Fifth Climate Change Assessment; and
- Rincon’s scope of work and level of effort is consistent with staff expectations.

Rincon’s proposed scope of work, which is provided as Exhibit “B”, includes three optional tasks that would proceed only as authorized upon further staff consideration. These optional tasks include quantifying IRWD’s Scope 3 GHG emissions, ensuring that the CAP meets California Environmental Quality Act (CEQA) criteria, and the use of online GHG monitoring and tracking software.

FISCAL IMPACTS:

The total cost to prepare the CAP is \$576,747, including \$75,000 for staff time. This cost will be funded by Project 11800 as a water and energy study, which is included in the FY 2024-25 Capital Budget. Staff recommends a budget increase in the amount of \$576,747, as shown below:

Project No.	Current Budget	Addition <Reduction>	Total Budget
11800	\$1,500,000	\$576,747	\$2,076,747

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board authorize the General Manager to execute a Professional Services Agreement with Rincon Consulting, Inc. in the amount of \$449,315 for the preparation of the District’s Climate Adaptation and Energy Management Plan; and authorize an increase to the Fiscal Year 2024-25 Capital Budget for Project 11800 in the amount of \$576,747.

LIST OF EXHIBITS:

Exhibit “A” – Consultant Selection Matrix

Exhibit “B” – Rincon Proposal for Climate Adaptation and Energy Management Plan

Exhibit “A”

CONSULTANT SERVICES EVALUATION MATRIX FOR CLIMATE ADAPTATION AND ENERGY MANAGEMENT PLAN					
Item	Description	Weights	AECOM	Hazen	Rincon
A	Technical Approach	60%	Score (1 = Best; 3 = Weakest)		
1	Understanding of Required Services and Project Details	25%	2	3	1
2	Soundness of Approach/ Methodology (Tasks 1 thru 10)	55%	2	3	1
3	Schedule	20%	2	3	1
<i>Technical Approach Weighted Score</i>			2	3	1
B	Qualifications and Experience	40%	Score (1 = Best; 3 = Weakest)		
1	Project Manager Qualifications and Exp	30%	1	3	2
2	Principal in Charge Qualifications and Exp	10%	1	3	2
3	Technical Leads Qualifications and Exp	25%	2	3	1
4	Project Team Exp w/ IRWD system, CA water utilities	5%	2	3	1
5	Project Team Exp w/ climate risk and adaptation strategies	15%	2	3	1
6	Project Team Exp w/ energy management, solar, batteries	15%	3	1	2
<i>Quals and Exp Weighted Score</i>			1.75	2.7	1.55
Combined Technical Approach and Quals and Exp Weighted Score			1.90	2.88	1.22
Forced Rankings (1 = Best; 3= Weakest)			2	3	1
C	Proposed Budget by RFP Scope of Services/Tasks		Fee by Task	Fee by Task	Fee by Task
1	Manage Project		\$ 95,241	\$ 87,574	\$ 35,984
2	Evaluate Legislative and Regulatory Framework		\$ 19,113	\$ 44,751	\$ 34,394
3	Identify Potential Climate Change Impacts and Vulnerabilities		\$ 80,937	\$ 151,211	\$ 68,686
4	Recommend Climate Adaptation Management Strategies		\$ 80,890	\$ 176,186	\$ 37,699
5	Prepare Baseline Energy Use and GHG Emission Forecasts		\$ 53,998	\$ 144,274	\$ 14,085
6	Identify and Evaluate Energy Optimization Measures		\$ 66,316	\$ 190,904	\$ 48,566
7	Identify and Evaluate Renewable Energy and Energy Storage Project Opportunities		\$ 59,040	\$ 53,330	\$ 71,696
8	Prepare Energy Use GHG Emission Forecast Under Different Scenarios		\$ 80,334	\$ 83,272	\$ 14,165
9	Prepare A Series of Next Steps		\$ 44,974	\$ 104,389	\$ -
10	Prepare CAP Drafts and Presentations		\$ 94,069	\$ 140,332	\$ 29,039
10	Optional Tasks				\$ 95,000
11	Indirect Expenses		\$ 2,000	\$ 27,500	
12	Hours*		3198	6785	2404
13	Average Rate*		\$ 211	\$ 173	\$ 187
Total Proposed Budget			\$ 676,912	\$ 1,203,723	\$ 449,315
D	Other		Yes/No	Yes/No	Yes/No
1	Joint Venture or Subs		no	yes	yes
2	Conflict of Interest		no	no	no
3	Meet Required Insurance Requirements		yes	yes	yes
4	Exceptions taken to IRWD Professional Services Agreement		no	yes	no

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# Irvine Ranch Water District

## Proposal for Climate Adaptation and Energy Management Plan

Los Angeles • September 18, 2024





# 1 Scope of Work

## Project Understanding

Irvine Ranch Water District (IRWD) is an innovator in water resource management in California, providing efficient and responsible water, wastewater, recycled water, biosolids, and urban runoff services. IRWD uses over 130 gigawatt hours of electricity and spends over \$30 million dollars on electricity each year and is reflective of the state’s largest industry consumer of energy—moving and delivering water, to operate its system of water and recycled water treatment plants, reservoirs, pump stations, and lift stations. Integrated into this system, IRWD currently has rooftop solar at its headquarters building and the Baker Water Treatment Plant; operates its Biosolids Energy Recovery Facility at the Michelson Water Recycling Plant using a methane capture system; has battery energy storage facilities at various treatment facilities to reduce peak load energy use; and participates in various Southern California Edison (SCE) programs such as demand management. Building on its existing investment in these various energy projects and additional studies, including an *Energy and GHG Master Plan*, *SCE Water-Energy Pilot Phase I Report*, and *Phase I Climate Action Plan*, IRWD is proposing to prepare a Climate Adaptation and Energy Management Plan (CAEMP). The CAEMP will provide a roadmap for IRWD to adapt to the effects of climate change, while continuing to optimize energy use and identify additional renewable energy and energy storage opportunities. The CAEMP will allow IRWD to both capture the value of existing requirements (including GHG reductions from the renewable portfolio standard and Advanced Clean Fleets) but also prepare for additional regulations that may arise as California works towards carbon neutrality by 2045.

The following scope of work reflects the tasks requested in the RFP and our experience creating climate related plans for water agencies of all sizes across the state. Rincon Consultants, Inc. (Rincon) has unmatched technical expertise in the water sector with a strong understanding of statewide climate policy, regulatory drivers, technical solutions, stakeholder concerns, as well as institutional constraints challenging water agencies. As part of our innovative approach to climate planning we have partnered with **Eagle Rock Analytics (ERA)**, who will provide access to California’s 5th Climate Assessment Data. While currently not available through Cal-Adapt, this data will create the most value for IRWD by using data that is the most accurate and current available. Using this probabilistic data, we intend to develop an adaptive management strategy for climate resilience at IRWD. In our spirit of innovation and thought leadership, we have identified additional opportunities for IRWD to consider as optional tasks, to leverage the CAEMP and maximize IRWD’s energy efficiency and management of its valuable energy resources. Rincon has also teamed with **Willdan**, one of our most trusted engineering partners. Willdan will lead the development of the energy optimization strategies through their dedicated water agency team and B3 energy analysis tool, which allows customers to quickly understand which buildings and processes have the most opportunity for energy savings. Willdan will also leverage their experience deploying solar and battery storage projects to provide both an analysis of existing projects, as well as a useful tool for future decision-making.

*“Rincon was instrumental in successfully completing a much overdue Climate Action and Adaptation Plan (CAAP) for the District. The project manager and staff were not only highly knowledgeable and well-versed as evidenced by the comprehensive and timely completion of a CAAP report, but very professional in their interactions with staff and the Board of Directors. They provided an excellent end-product at an affordable price. We highly recommend them for any agency’s CAAP needs.”*

**– Joe McDermott, P.E.,  
Director of Engineering and External Affairs  
Las Virgenes Municipal Water District**

Based on past and current work on resilience, operational modernizations, resource efficiency and the desire to complete a comprehensive CAEMP, it is clear the IRWD understands the importance of this work. While climate change presents a host of potential challenges in the form of decreased water availability, increased demand, extreme heat, and fire, we have been helping clients, build increased resilience, improve energy efficiency and increase access to funding through the implementation of comprehensive climate plans. The Rincon Team brings deep experience in greenhouse gas (GHG) and vulnerability analysis; climate action, energy, and adaptation policy, and engagement that is specific to the water sector. Rincon recently completed The Metropolitan Water District of Southern California (Metropolitan) Climate Action Plan (CAP) and Vulnerability Assessment and is in the process of implementing climate action and adaptation programs. We also recently finished climate action and adaptation plans (CAAP) for Coachella Valley Water District (CVWD), San Bernardino Valley Municipal Water District (Valley District), Inland Empire Utility Agency (IEUA) and Santa Clarita Valley Water District (SCV Water). Drawing on this experience, the Rincon Team has detailed a specific work scope necessary to provide a data driven, detailed, and implementable CAEMP that will provide a pathway for IRWD to move confidently into the future of water in California.

## **Task 1 Project Management**

The Rincon Team understands communication is fundamental to successfully accomplish this work effort according to the schedule, budget, and IRWD satisfaction. We envision our working relationship with IRWD staff as highly collaborative. Rincon will attend regular and as-needed virtual project-related meetings with IRWD during the one-year duration of this project (December 2024 to November 2025). The purpose of these calls will include the discussion of deliverables, upcoming tasks or milestones, task schedules, and next steps, as well as response to questions. We will highlight accomplishments as well as task factors that are at risk of being off course with suggested solution to realign. Project initiation will begin with a kickoff meeting to introduce the IRWD and Rincon project teams, confirm preferred communication and team roles; and review the finalized scope of work, budget, and schedule. During the kickoff call and project initiation phase, Rincon will work with IRWD to develop a vision for the project and identify goals and metrics for success. Under this task, Rincon can also prepare timelines for each task and will provide monthly written status reports along with our monthly invoices.

Additionally, once the vulnerability analysis and energy and GHG forecasts are complete, the Team will partner with IRWD to develop a suite of quantitative strategies for GHG mitigation, adaptation, resilience, and the overall structure and content of the CAEMP report.

## **Quality Assurance/Quality Control**

All deliverables will undergo a robust Quality Assurance/Quality Control (QA/QC) review process. Project Manager Kerry Nixon will be responsible for facilitating the QA/QC review process. Principal-in-Charge Jennifer Jacobus and Technical Director Ryan Gardner will review all major project deliverables, Other senior technical staff, including from our subconsultants where appropriate, will provide reviews as needed and based on the content. Our QA/QC review process covers technical content, as well as grammar and formatting, ensuring the IRWD can focus its review on the methods, analysis, and results.

### **Deliverables**

- Kickoff Meeting
- Up to 24 biweekly half-hour meetings over the 12-month project period
- One workshop for coordinating with local government entities within the IRWD service area
- Two half-day workshops with IRWD staff to aid in the development of the first and second drafts of the CAEMP

- Two presentations to the IRWD Executive Management Team and Energy Management Team to solicit feedback on the CAEMP
- Meeting or workshop agendas delivered no later than one working day before the meeting or workshop
- Draft meeting or workshop presentations delivered two working days before the meeting or workshop
- Summary notes delivered two working days after the meeting or workshop
- Monthly invoices and progress reports
- Slide deck for IRWD staff presentation to IRWD Board.

### Assumptions

- Up to four Rincon staff will attend the virtual, one-hour kickoff meeting.
- Rincon staff will attend up to 12 as-needed meetings throughout the project period.
- Invoices will include receipts, description of work, employee fee schedule rates, and percentage of project/project task(s) completed.
- IRWD will provide one set of consolidated feedback on draft presentations or workshop materials.

## Task 2 Background Research

### Task 2.1 Literature Review

The Rincon Team understands that the IRWD has already taken significant steps towards preparing for climate change, increasing sustainability, and reducing GHG emissions. The review of existing documents is a critical first step in understanding the nuances of the IRWDs operations and climate planning efforts. To expand on this critical step Rincon has developed the Measure Analysis and Success Tracking (MAST) tool. Rincon has deployed the MAST tool at several water agencies to provide a streamlined approach to cataloging and scoring the effectiveness of existing climate programs to help provide a clear map of what has already been done, gauge the effectiveness of the existing policies and develop a gap analysis to identify strategic new opportunities to achieve IRWD’s vision. As we complete review of current documents, we will populate the MAST tool with the existing measures and actions that are addressing climate mitigation and adaptation at IRWD. The tool includes a scoring system with a drop-down menu for the IRWD to provide feedback on each measure based on six key variables including:

- |                            |                                      |
|----------------------------|--------------------------------------|
| • Implementation status    | • Metrics for success                |
| • Potential funding source | • Clear strategy to obtain objective |
| • Clarity of the objective | • Responsible party                  |

This process not only allows the Rincon team to gain a high level of understanding of past and current strategies employed by the District, but it also provides an opportunity to determine which strategies have been the most successful and why. The MAST tool will also serve as a foundation on which to build new measures and actions for the CAEMP. Once the MAST tool has been reviewed by the IRWD, the collective team will review the results during a workshop. The final deliverable will be a Summary Report highlighting the past and current climate resilience efforts.

### Deliverables

- Review of existing reports and data
- MAST Tool
- One workshop session with IRWD staff
- Draft and Final Summary Report



## Assumptions

- Rincon will submit a data request.
- The majority of data required for the literature review will be provided by IRWD.
- Up to three Rincon staff will attend the workshop, which will be up to two hours.

## Task 2.2 Evaluate Legislative and Regulatory Framework

As an environmental and climate consulting firm, Rincon has been monitoring, evaluating, and navigating State regulations for more than 30 years and are currently supporting agencies like Metropolitan on these efforts. We follow and regularly work with an ever-evolving set of regulations that currently or are likely to have an impact on water agencies and their energy usage and GHG emissions. In addition to the Renewable Portfolio Standard and Advanced Clean Fleet regulation, Rincon is following the development of government regulation around embodied carbon of new construction (Assembly Bill 2446) and zero NOx appliance standards (California Air Resources Board). In addition to requirements, Rincon will also identify opportunities for advanced funding or other support that IRWD might leverage to increase resilience of water supplies (stormwater capture), develop new revenue streams (low carbon fuel standard), or operational resilience (self-generation credit). Rincon will survey pending legislation and rulemaking to identify and evaluate other legislation and regulations focusing on GHG emission reduction, energy management, or climate resiliency that could potentially impact IRWD's operations. Rincon currently supports other agencies in tracking and preparing for new climate related regulations.

## Deliverables

- Summary Report of potential and existing legislation, regulation, and programs that could potentially impact IRWD operations and/or GHG emissions

## Assumptions

- Does not constitute legal advice
- Summary Report of Legislative and Regulatory Framework will be included as a technical appendix in the CAEMP

## Task 3 Identify Potential Climate Change Impacts and Vulnerabilities

Rincon will work collaboratively with our trusted teaming partner ERA as well as key IRWD staff to complete a service area-wide risk and vulnerability assessment that includes a detailed look at the impacts to the IRWDs infrastructure, operations, water supplies, and habitats, as well as impacts to water usage and management. This work will build off the literature review and MAST tool completed under Task 2.1, which will include a review of IRWD plans, studies, and programs related to climate change preparedness. The analysis will include both an assessment of today's climate risks, as well as how those risks may change over time.

To begin the process Rincon will create a matrix of IRWD facilities and infrastructure types and applicable climate hazards to be analyzed. Rincon assumes that IRWD will provide geospatial data on existing infrastructure that can be overlaid with climate data provided by ERA. The climate impacts to be included in the vulnerability assessment will include the following climate hazards at a minimum:

- Water supply changes (using results from 2024 Water Reliability Study)
- Water quality changes
- Increased wet weather flows
- Droughts
- Flooding
- Power grid instability
- Sea-level rise
- Wildfire
- Weather extremes

Rincon will begin the vulnerability analysis with a two-hour virtual working session with IRWD using Mural and will prepare an assessment matrix connecting relevant climate risks and potential impacts to facilities and operations based on the MAST tool and anecdotal evidence derived from IRWD staff. Rincon will collaborate with IRWD staff to identify potential regional impacts on the facilities and operations due to climate change if identified trends continue. This process will include a high-level review and summary of climate-related risks to existing and planned facilities and operations. Climate risks are anticipated to include the potential impacts on process design parameters, effluent water quality, and other important aspects of facility infrastructure and operations. The assessment matrix fill serves as an outline for the climate vulnerability analysis. The outline will be designed to target the analysis of the primary climate risks and will be reviewed and approved by IRWD before Rincon begins work on the in-depth climate change analysis. The assessment matrix will also serve as a basis for the identification of steps being taken or planned to address current climate impacts.

During the detailed analysis and vulnerability assessment, ERA will work collaboratively to structure climate scenarios and identify key current and future climate hazards facing the service area by drawing from California’s 5th Climate Change Assessment and key scenarios used in State planning guidance (e.g., Sustainable Groundwater Management Act). The 5th Assessment report has not yet been released by the State of California, but the Climate Data and Scenarios are currently available. ERA’s access to this data means that the CAEMP will have a significantly longer lifespan as a planning tool due to its use of the most cutting-edge data. The 5th assessment data is the most recent climate data made available by the State of California though not yet available in Cal-Adapt. This data is aligned with the next generation climate models from [Coupled Model Intercomparison Project Phase 6](#). These data have been downscaled to include higher spatial resolution for California (3 kilometer by 3 kilometer grid) and to offer higher temporal resolution and a broader spatial domain for some datasets. ERA will perform custom research tailored to IRWD infrastructure on the impacts of key climate hazards identified for IRWD operations and assets in current and future climates.

A key differentiator of the ERA data is the ability to provide probabilities to climate hazards at a very fine scale, which can be used to plan around the need and timing for capital improvement projects and other adaptation strategies. Rincon and ERA will examine changes in the intensity, frequency and duration of extreme climate events; characterize the typical patterns that lead to extreme, high-risk events with a focus on producing engineering and design relevant, probabilistic expressions of hazards to IRWD. We will create a set of key climate scenarios to be used across the plan, including aligning horizon years and operational conditions.

Once the vulnerability assessment is completed and the probability of each climate hazard occurring over time and across different climate future scenarios is understood, Rincon will hold a series of focus group meetings with various departments across IRWD. These meetings will be used to discuss the potential climate futures and hazards with facility operators, engineers, scientists, and others within IRWD. In our experience these meetings are incredibly valuable in identifying risks across an organization’s operations. By clearly presenting the potential of a particular climate hazard, staff can convey the resulting risks to their facility or operation. These risks will be included in the final report and serve as a starting point for Rincon’s broader risk analysis.

The Rincon Team will assess the level of risk to the IRWDs infrastructure, operations, and assets related to climate change (exposure), the degree to which they could be effected (sensitivity) and the

current ability of the IRWD to cope and recover from those risks (adaptive capacity) based on current conditions. Finally, Rincon will lead the development of a complete vulnerability assessment report that uses visualizations and graphics to provide data and evaluation of the IRWD's exposure, sensitivity, and adaptive capacity towards climate change both today and under a variety of future scenarios.

### **Deliverables**

- Vulnerability Assessment Report
- Two-hour virtual kickoff
- Up to eight, one-and-a-half-hour departmental risk assessment meetings

### **Assumptions**

- IRWD will provide GIS data for major infrastructure

## **Task 4 Recommend Climate Adaptation Management Strategies**

Rincon will work with IRWD staff to develop a Resilience Strategy Plan to address identified vulnerabilities, based on the risks identified in Task 3, including a roadmap to implementation of strategic recommendations and policy opportunities organized under a set of resilience goals and objectives. We will draw from best practices across California and the U.S., including successful adaptation measures implemented by other water districts like Metropolitan and Valley District, including our approach of adaptive management to climate change. An adaptive management process is one that promotes flexibility in the IRWD's responses to changes in climate projections and adjustments to measures and actions based on real-world conditions, potentially decades into the future. Because climate change has increased our uncertainty about the future, the plans and strategies we implement, have to adapt to these changes. Leveraging the climate scenarios provided by ERA, Rincon will strive to identify different strategies for IRWD across an array of possible climate outcomes and allow opportunities to recalibrate solutions based on observations. Adaptive Management Indicators will then be developed to identify which climate future we are most closely tracking and therefore, which strategies should be implemented.

Rincon will begin the strategy development process by convening a round of department working sessions (up to eight) to brainstorm and prioritize the key risks that need to be addressed and their potential solutions. Strategy recommendations may identify cross-departmental initiatives that support identified resilience goals. Rincon will also convene a cross-departmental workshop organized by cross-cutting themes to generate collaborative strategy options. Based on the MAST tool findings from Task 2.1, Rincon will also perform a plan integration exercise to place strategy recommendations in existing processes where feasible and identify whether new planning processes may add resilience value to IRWD. Using this information Rincon will develop both draft and final adaptation management strategies for review by the District.

Once the final list of strategies is identified, Rincon will develop an implementation plan which will include potential costs, benefits, implementation timelines and adaptive management indicators which will help drive the implementation and management of the plan. Additionally, Rincon will work with IRWD to develop evaluative criteria to assist IRWD in prioritizing adaptation strategies in alignment with IRWD needs and planning gaps as determined through ongoing discussion with IRWD staff, the MAST tool, and vulnerability analysis.

## Deliverables

- Initial adaptation measure list
- Evaluative criteria for prioritizing strategy implementation
- Internal adaptation measure workshop
- Up to eight departmental meetings
- Draft and Final adaptation measure list
- Draft and Final Implementation strategy

## Assumptions

- Two rounds of review with consolidated comments on all materials

## Task 5 Prepare Baseline Energy Use and GHG Emission Forecasts

Rincon understands IRWD has been completing GHG inventories since 2008. Leveraging these inventories, Rincon will develop an energy and GHG forecast and scenario planning tool through 2045. Completing a forecast is a key step in developing mitigation measures and demonstrating consistency with State targets (which may become requirements in the future). Rincon proposes to develop business-as-usual (BAU), and Adjusted forecast of emissions for IRWD's operations through 2030 and 2045.

- A BAU forecast assumes that no additional efforts or legislative actions will be made to reduce GHG emissions in the future. The BAU forecast is based on growth projected trends in water deliveries, operational changes, and known project activity over time.
- The Adjusted forecast will adjust the BAU forecast to account for state and federal legislative actions that will reduce future GHG emissions from operational activities without additional IRWD action. The Adjusted forecast will include expected changes in IRWD facilities, operations, energy sources, and state legislation including renewable portfolio standard and advanced clean fleets.

Rincon will leverage our in-house Scenario Planning and Reduction Quantification (SPARQ) tool which includes both a transparent GHG emissions forecast, as well as a reduction scenario planning function that will allow IRWD to quantify GHG emissions reductions based on various actions over time. Once the analysis for the energy and GHG forecast is complete, Rincon will summarize the methodologies and results in an Energy and GHG forecast memorandum. The memorandum will include all methodologies and calculations used in the forecast as well as the results of the analysis. A draft of the document will be provided for review before a final version is provided.

### Relevance to IRWD

Our iterative Master Planning effort coupled with our energy analysis approach with **B3 software allows our team to more accurately project energy savings and maximize cost savings** as well as reduce the performance risk.

## Deliverables

- Energy and GHG inventory data request, provided electronically in Word document format
- GHG inventory data evaluation memorandum, provided electronically in Word document format
- GHG forecast tool, provided electronically in Excel format
- Draft GHG analysis memorandum, provided electronically in Word document format
- Final GHG analysis memorandum, provided electronically in Word document and PDF format

## Assumptions

- Rincon will use the data provided in the GHG inventories.
- Rincon assumes methodologies within the inventories are consistent over time.
- Rincon assumes inventories will be provided with both activity data and emission factors available in Excel format.

## Task 6 Identify and Evaluate Energy Optimization Measures

Once the energy usage and GHG emissions forecast has been completed, Rincon and our teaming partner Willdan will begin identifying potential energy efficiency and decarbonization strategies which could build on the substantial effort already undertaken by the District. Leveraging the MAST Tool (which summarizes existing strategies) Rincon will develop a draft list of strategies using our experience developing CAPs for water agencies across California. Rincon will identify opportunities for both equipment and behavioral/operational changes across IRWD facilities, but with a prioritization on the largest energy users and the most common equipment types.

Willdan will work collaboratively with District engineers and operators to identify existing pain points and equipment/operations which are currently most in need of modernization. Willdan will conduct several site visits at key facilities (up to four days on-site) to better understand the opportunities. While Senate Bill 100 will drive a significant amount of GHG emissions reduction in the short term (many water agencies are able to demonstrate consistency with the State's 2030 target) wastewater facilities and other fossil fuel consuming equipment can be a significant source of emissions over the longer term. However, these areas are also large opportunities to leverage existing and upcoming incentives and other programs. For example, generating biogas at wastewater treatment facilities can generate low carbon fuel credits, which are a valuable revenue stream in addition to lowering GHG emissions. Rincon is a California Air Resources Board-accredited Low Carbon Fuel Standard-verifier and understands this program and its opportunities well. Willdan will develop a draft list of measures and actions for the District to review. The actions will be provided in along with a prioritization matrix that includes an analysis of cost effectiveness (using the District's definition if applicable) feasibility, alignment with State/federal programs, and consistency with other water agencies in the state.

To best align with the District's goals, Willdan's approach to developing preliminary recommendations includes the following steps.

Tasks	Preliminary Energy Assessments
Stakeholder Interviews	<ul style="list-style-type: none"><li>• Ask administration and stakeholders about their future capital plans and long-term goals.</li><li>• Engage with site operating personnel to identify major issues or capital improvements.</li></ul>
Utility and Maintenance Analysis	<ul style="list-style-type: none"><li>• Conduct statistical analysis of a building's energy usage in relation to its square footage, benchmarking the results from other buildings of similar size and function.</li><li>• Review maintenance costs to identify major issues, regardless of energy index.</li></ul>

Tasks	Preliminary Energy Assessments
Site Operation and Schedule	<ul style="list-style-type: none"> <li>• Complete site walk-throughs to gather additional specific information on mechanical, electrical, plumbing, lighting, building envelope, and technology systems, and operation.</li> <li>• Conduct as-built drawing and specification reviews, as needed.</li> </ul>
B3 Benchmarking	<ul style="list-style-type: none"> <li>• Use B3 Benchmarking, Willdan’s custom online tool that quickly and accurately identifies buildings with greatest potential for energy improvement – and maximum return on investment.</li> </ul>
Decision-Making Matrix	<ul style="list-style-type: none"> <li>• Evaluate each facility for: opportunities for reduced energy and maintenance expenditures, B3 Benchmarking, capital priorities, and site/infrastructure imminent need.</li> </ul>
Building Prioritization	<ul style="list-style-type: none"> <li>• Discuss matrix results and develop priorities and future project phasing, in collaboration with City of Bakersfield stakeholders.</li> </ul>

## Difference in Approach: B3 Enhancement

Willdan’s [B3](#) is a smarter energy analysis tool that allows customers to quickly understand how buildings are performing, and how they could—and should—be performing given the unique combination of size, use, and location. By efficiently prioritizing and ensuring the most benefit from the Investment Grade Audit, **B3 typically identifies that 70 percent of energy savings is in 20 percent to 30 percent of buildings.** B3 also has user-friendly tools for independent savings verification.

### Deliverables

- Draft and final list of Energy Optimization measures and actions
- Prioritization Matrix

### Assumptions

- Up to four days on-site performing site visits from up to two Willdan staff

## Task 7 Identify and Evaluate Renewable Energy and Energy Storage Project Opportunities

Rincon and Willdan understand that IRWD has entered into agreements with several owner/operators where battery energy savings are shared, as well as several existing and potential future solar power systems. As part of this task, Willdan will evaluate the current and potential future ownership and operational structures of the battery systems, as well as lifecycle purchase, operation, and disposal costs to develop a cost model for battery cost-benefit analysis. The model will allow Willdan and the District to modify different variables and identify the most ideal ownerships structures from both a cost and energy/decarbonization perspective.

Similarly, Rincon and Willdan understand that the District wants to evaluate several possible solar arrays for future installation. Rather than analyze these arrays individually and create a single report, Rincon proposes to develop an interactive excel based tool with dashboard to evaluate both current and future solar projects. The tool will include check boxes for type of mounting, size, tariff rates, battery storage pairings, and expected installation costs. In addition to the interactive tool, Willdan will create a solar guidance document that will accompany the tool and provide detail on the most cost-



effective approaches, as well as federal, State, and local utility incentive programs (as they are currently). Willdan will leverage our experience supporting the installation of some of the largest solar projects in the state to create a user friendly and long-term, decision-making tool for the District.

Willdan will draw on experience delivering over 100 megawatts (MW) of solar photovoltaic projects for public sector clients, including 1.2 MWs for the City of Dublin, 69 kilowatts for City of Ridgecrest to support electric fleet vehicles, 2.3 MWs for the Paramount Unified School District, and the 1 MW earth-mounted system for the City of Turlock. These systems were sized to maximum utility cost savings, accounting for forecasted baseline decreases from EE measures or baseline increases from future electric vehicle (EV) loads or building expansions.

### Deliverables

- Battery Storage Ownership Model and Analysis
- Solar Decision-Making Tool (Excel)
- Solar Guidance Report

### Assumptions

- The District will provide existing data on battery and solar projects.

## Task 8 Prepare Energy Use GHG Emission Forecast under Different Scenarios

The Rincon Team will begin this task by developing a set of scenarios for IRWD using our SPARQ tool. The SPARQ tool will be used to assess a range of scenarios, including:

- **Scenario 1:** Application of identified energy use optimization measures from Task 6 and renewable energy projects and energy storage projects from Task 7
- **Scenario 2:** Application of recommended climate adaptation strategies from Task 4
- **Scenario 3:** Application of the two scenarios above in a combined forecast

Though not requested by IRWD in the RFP, Rincon has worked with other water agencies to develop GHG reduction target options consistent with State GHG reduction goals, including Senate Bill 32 (reduce emissions 40 percent below 1990 levels by 2030) and Executive Order B-55-18 (achieve carbon neutrality by 2045). If IRWD is interested in developing GHG reduction target, Rincon will work with IRWD staff to assess potential targets throughout the adaptation and energy optimization measure development process. Initial targets will be discussed with IRWD to determine if any adjustments are necessary based on the reductions IRWD desires and can realistically achieve. IRWD would also have the option to use a per capita or per service person target, which would normalize GHG emissions to the number of people in the service area and account for changes in population. The per capita methodology also provides maximum benefit to IRWD for water conservation actions.

Because water districts can have variable emissions profiles between years due to changes to pumping, water demand, and water sources, Rincon has developed a carbon budget approach to target setting that would allow the District increased flexibility when demonstrating consistency with the adopted targets. This is the method Rincon developed for Metropolitan's 2020 CAP.

### Deliverables

- SPARQ tool results for up to three scenarios

## **Task 9 Prepare CAEMP Drafts and Presentations and Next Steps**

Visioning and goal-setting for the CAEMP will be conducted as part of the project management task (Task 1). The CAEMP document will summarize the findings and results of all previous tasks and present the information in a clearly organized manner and with visualizations and graphics to aide in understanding and highlighting key takeaways. As part of development of the CAEMP, Rincon will use IRWD staff input, and the findings and evaluative criteria developed in previous tasks to identify which strategies, and additional studies will constitute next steps for IRWD.

The Rincon Team proposes to develop an Adaptive Plan that will not only set goals and targets for the better understood short-term impacts of climate change, but also set milestones or triggers that would then precipitate additional actions in the future. Having an adaptive plan will allow IRWD to better address the uncertainties inherent in climate adaptation. While many adaptation and resilience plans tend to be more qualitative in nature, the Rincon Team will work directly with IRWD to establish quantitative targets that can be better implemented and tracked. Compared to GHG reduction targets the establishment of resilience visions and targets are less constrained by regulatory requirements and the Rincon Team will provide guidance on how to bring the sometimes high-level ideas around resilience into concrete and measurable goals and metrics like infrastructure operation uptime, water quality parameters, habitat biodiversity, and miles/square feet of infrastructure hardening. A summary will be developed which details the impacts of climate change specific to IRWD and will include data driven targets for both adaptation and GHG emissions to help drive a consistent understanding of the need for action around climate change.

The CAEMP development process will begin with an initial outline and include two interim drafts and a final draft report. The final draft report will be presented to the IRWD Board along with a PowerPoint presentation, developed by Rincon, for IRWD staff.

### **Deliverables**

- Outline of CAEMP, provided in Word document format
- First Draft CAEMP, provided in Word document format
- Second Draft CAEMP, provided in Word document format
- Presentation to IRWD Executive Management Team and Energy Management Committee (Task 1)
- Final Draft CAEMP, provided in Word document and PDF format
- Americans with Disabilities Act remediation of Final CAEMP in InDesign
- PowerPoint presentation for IRWD staff to present to the IRWD Board (Task 1)
- Electronic copies of spreadsheets, databases, materials, technical memorandums, and other resources used by Consultant to complete the CAEMP

### **Assumptions**

- IRWD will provide one consolidated set of requested edits, changes, and adjustments for each draft of the CAEMP, up to three rounds total.
- Feedback received during presentations and workshops will be incorporated in the CAEMP draft as part of the revision process to develop the subsequent draft.
- The Final CAEMP will be provided in PDF format with Americans with Disabilities Act remediation completed after no further revisions are required.
- Electronic copies of CAEMP supporting materials, such as technical memorandums and spreadsheets, will be provided as part of the final CAEMP deliverable.



## Optional Tasks

### Optional Task 1 Scope 3 Emissions

Rincon has worked on hundreds of GHG emissions inventories throughout the state. Based on our experience, many organizations track both Scope 1 (direct combustion) and Scope 2 (indirect emissions) in their annual GHG inventories. However, Scope 3 (other indirect emissions) like employee commute, waste, water, and business travel are not as often tracked. However, new regulations and the ability to streamline CEQA (see Optional Task 2) require this data to be tracked. As part of this task, Rincon can work with the District to round out their GHG emissions inventory to more fully capture their operational emissions and unlock new opportunities to reduce emissions over time.

### Optional Task 2 Qualified GHG Reduction Strategy

One of the benefits of completing a GHG reduction strategy/energy management plan is the ability to streamline future projects under CEQA if certain criteria are met. Rincon has completed qualified GHG reduction plans for other water agencies, including Metropolitan who has used the plan to streamline the GHG emissions CEQA review for several significant projects. To do this, the plan must meet several key elements as outlined in Section 15183.5(b) of the *CEQA Guidelines*. As part of this optional task Rincon would support the District in meeting the following elements:

- (A) Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area
- (B) Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable
- (C) Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area
- (D) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level
- (E) Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels
- (F) Be adopted in a public process following environmental review

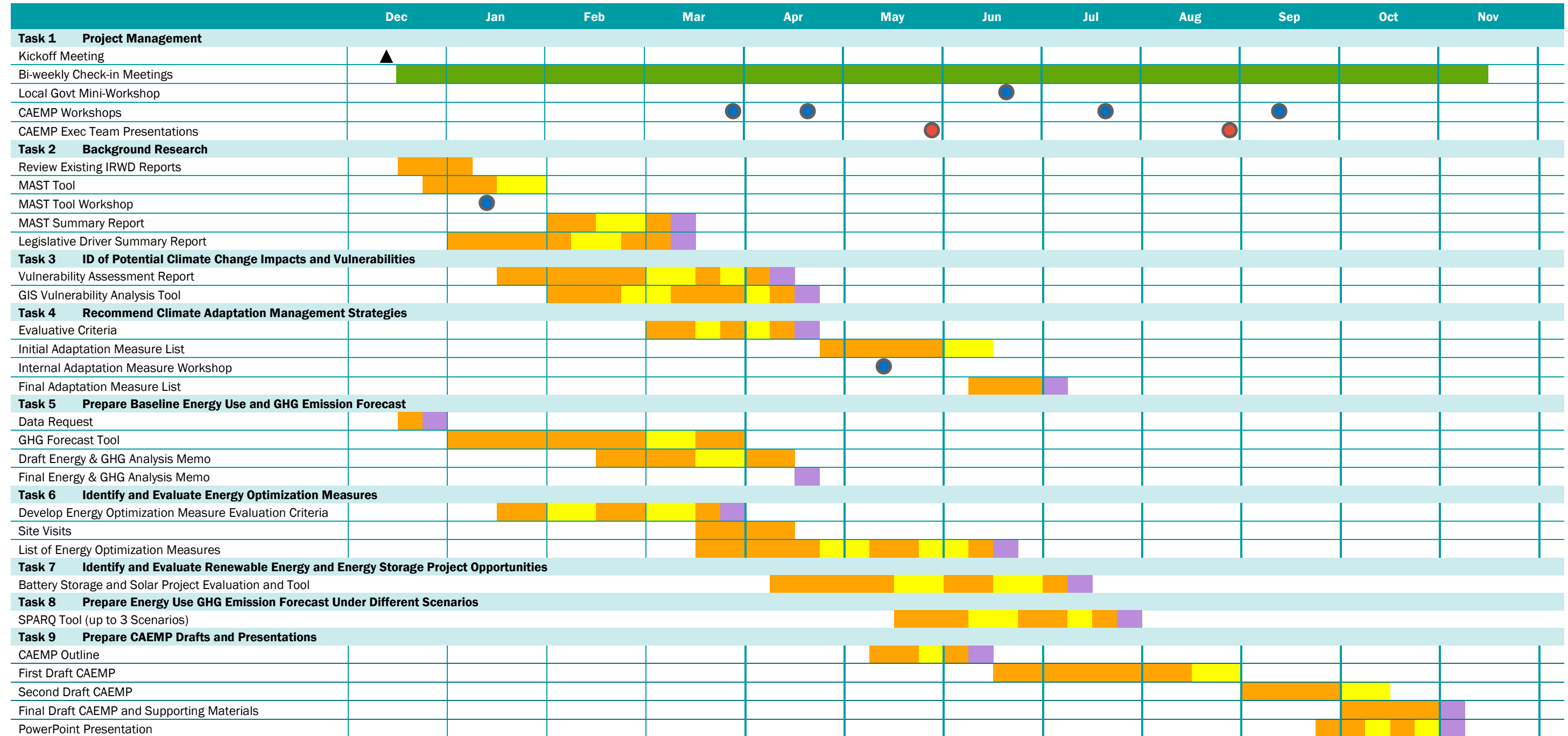
This task would include completion of a substantial evidence section outlining the GHG reduction strategies selected by the District and how they would quantifiably reduce GHG emissions over time, as well as the completion of a CEQA Initial Study and Negative Declaration environmental document. The addition of this task (along with optional task 1 if not already included) could significantly increase the value of the District's plan, potentially saving significant costs on future construction projects in consultant review and GHG mitigation.

### Optional Task 3 CAPDash

As an optional task Rincon could include our CAPDash online monitoring and tracking software. This tool (used by Metropolitan, CVWD, and SCV Water) tracks both GHG emissions and strategy implementation over time. The tool can be shared with the public through a public facing dashboard or left private for tracking by the project team only. An example of CAPDash can be found [here](#).

# 4 Schedule

The Rincon Team is prepared to begin the work program described in this proposal immediately upon authorization to proceed.



**Key**

- Work in Progress: ■
- Final Deliverable: ■
- Kickoff meeting: ▲
- IRWD Review: ■
- Biweekly Meeting: ■
- Presentation: ■
- Workshop: ●

# 5 Budget

## Cost Estimate

		Rate	Hours	Labor Budget	Direct Expenses	Total Budget
<b>Task 1 Project Management</b>			<b>127</b>	<b>\$26,283</b>	<b>\$0</b>	<b>\$26,283</b>
Senior Principal	Jennifer Jacobus	\$319	2	\$638		
Director	Ryan Gardner	\$307	18	\$5,526		
Supervisor Planner I	Erica Jensen	\$272	10	\$2,720		
Planner IV	Kerry Nixon/ Allegra Roth	\$211	65	\$13,715		
Publishing Specialist	Staff	\$120	20	\$2,400		
Administrative Assistant/Billing Specialist	Staff	\$107	12	\$1,284		
<b>Task 2 Background Research</b>			<b>99</b>	<b>\$19,010</b>	<b>\$0</b>	<b>\$19,010</b>
Senior Principal	Jennifer Jacobus	\$319	2	\$638		
Director	Ryan Gardner	\$307	8	\$2,456		
Planner IV	Kerry Nixon	\$211	16	\$3,376		
Planner II	Ella Fletcher	\$174	70	\$12,180		
Publishing Specialist	Staff	\$120	3	\$360		
Rate Escalation Allowance	Staff	\$0	0	\$0		
<b>Task 3 Identify Potential Climate Change Impacts and Vulnerabilities</b>			<b>197</b>	<b>\$38,873</b>	<b>\$58,000</b>	<b>\$96,873</b>
Senior Principal	Jennifer Jacobus	\$319	2	\$638		
Director	Ryan Gardner	\$307	15	\$4,605		
Planner IV	Kerry Nixon	\$211	70	\$14,770		
Planner II	Ella Fletcher	\$174	70	\$12,180		
GIS/CADD Specialist II	Staff	\$167	40	\$6,680		
Eagle Rock Analytics	Subconsultant				\$58,000	
<b>Task 4 Climate Adaptation Management Strategies</b>			<b>167</b>	<b>\$34,598</b>	<b>\$0</b>	<b>\$34,598</b>
Senior Principal	Jennifer Jacobus	\$319	2	\$638		
Director	Ryan Gardner	\$307	20	\$6,140		
Planner IV	Kerry Nixon/ Allegra Roth	\$211	70	\$14,770		
Planner II	Ella Fletcher	\$174	75	\$13,050		
<b>Task 5 GHG Emissions Forecast</b>			<b>70</b>	<b>\$14,085</b>	<b>\$0</b>	<b>\$14,085</b>
Senior Principal	Jennifer Jacobus	\$319	1	\$319		
Director	Ryan Gardner	\$307	4	\$1,228		
Supervisor Planner I	Erica Jensen	\$272	8	\$2,176		
Planner IV	Kerry Nixon	\$211	12	\$2,532		
Planner II	Ella Fletcher	\$174	45	\$7,830		

		Rate	Hours	Labor Budget	Direct Expenses	Total Budget
<b>Task 6 Energy Optimization Measures</b>			<b>16</b>	<b>\$3,964</b>	<b>\$44,602</b>	<b>\$48,566</b>
Senior Principal	Jennifer Jacobus	\$319	1	\$319		
Director	Ryan Gardner	\$307	5	\$1,535		
Supervisor Planner I	Erica Jensen	\$272	0	\$0		
Planner IV	Kerry Nixon	\$211	10	\$2,110		
Planner II	Ella Fletcher	\$174	0	0		
Willdan	Subconsultant				\$44,602	
<b>Task 7 Energy Storage Project Opportunities</b>			<b>16</b>	<b>\$3,952</b>	<b>\$67,744</b>	<b>\$71,696</b>
Director	Jennifer Jacobus	\$307	5	\$1,535		
Principal	Ryan Gardner	\$307	1	\$307		
Supervisor Planner I	Erica Jensen	\$272	0	\$0		
Planner IV	Kerry Nixon	\$211	10	\$2,110		
Planner II	Ella Fletcher	\$174	0	0		
Willdan	Subconsultant				\$67,744	
<b>Task 8 Prepare Energy Use GHG Emission Forecast</b>			<b>69</b>	<b>\$14,165</b>	<b>\$0</b>	<b>\$14,165</b>
Principal	Jennifer Jacobus	\$307	1	\$307		
Director	Ryan Gardner	\$307	6	\$1,842		
Supervisor Planner I	Erica Jensen	\$272	8	\$2,176		
Planner IV	Kerry Nixon	\$211	12	\$2,532		
Planner II	Ella Fletcher	\$174	42	\$7,308		
<b>Task 9 Prepare CAEMP Drafts, Presentations, and Next Steps</b>			<b>147</b>	<b>\$29,039</b>	<b>\$0</b>	<b>\$29,039</b>
Director	Jennifer Jacobus	\$307	12	\$3,684		
Principal	Ryan Gardner	\$307	5	\$1,535		
Planner IV	Kerry Nixon/ Allegra Roth	\$211	40	\$8,440		
Planner II	Ella Fletcher	\$174	50	\$8,700		
GIS/CADD Specialist II	Staff	\$167	40	\$6,680		
<b>Project Total</b>			<b>908</b>	<b>\$183,969</b>	<b>\$170,346</b>	<b>\$354,315</b>

Direct Expenses Summary		Amount
Direct Expenses Total		\$170,346
<b>Direct Expenses Subtotal</b>		
Optional Task 1	Scope 3 Emissions	\$20,000
Optional Task 2	CEQA Qualified Plan	\$60,000
Optional Task 3	CAPDash	\$15,000



## **Eagle Rock Analytics Climate Vulnerability Data Assessment Workscope Detail**

### **Task 3 Identify Potential Climate Impacts and Vulnerabilities**

Eagle Rock Analytics leads Cal-Adapt, California's official climate data and analysis portal, which provides critical statewide climate change information such as precipitation, temperature, and streamflow for water management. Eagle Rock Analytics is currently responsible for future scientific and platform development using California's 5th Climate Assessment Data. Working with the Department of Water Resources, California Energy Commission, and the Governor's Office of Planning and Research, the platform enables easy access to localized climate data, visualizations, and downloads, helping stakeholders make informed, climate-resilient decisions.

Eagle Rock Analytics will perform custom research using California's 5th Climate Assessment Data to identify key climate vulnerabilities of IRWD's infrastructure and operations and transform them into actionable information for multivariate/compound event analysis (i.e., daily max temperature vs. stress tests for peak summer electricity demand). The initial step of this process involves two rounds of workshop meeting between Rincon, Eagle Rock Analytics, and IRWD staff to complete a collaborative risk analysis based on known vulnerabilities or impacts to infrastructure, operations, water supplies, habitats, headwaters and water demand and anecdotal experience facing existing climate change impacts. The team will leverage this information to identify specific climate data that matches the local context that can be leveraged for actionable measure development. ERA will develop a Climate Metric Workplan which will delineate the specific climate data products that are to be generated. Once the Climate Metric Workplan is finalized and approved by IRWD, ERA will begin to extract data from new climate projections from California's Fifth Climate Change Assessment to analyze the climate metrics listed in the Climate Metric Workplan. The workplan will include up to 10 climate metrics and 4 time horizons (for example past, current and two future timepoints or amounts of warming (e.g 2030 and 2050 or 2 degrees and 2.5 degrees warmer)).

Eagle Rock Analytic will use their Analytics Engine to derive the climate metrics identified in the Climate Metric Workplan. The processed data will then be used to examine changes in the intensity, frequency and duration of extreme climate events; characterize the typical patterns that lead to extreme, high-risk events; and design relevant, probabilistic expressions of hazards for IRWD. Example climate metrics tailored to IRWD that could be evaluated include extreme precipitation/flooding, extreme heat, frequency of high fire risk days; and frequency of extreme wind events. The analysis will include both an assessment of today's climate risks as well as how those risks may change over time. The Consultant team will conduct detailed analysis of up-to-four primary climate metrics. Our team has found that additional analysis beyond the four primary metrics detracts from the most imminent and relevant risks and the primary concerns of the community. The final workbook of climate metrics and data products produced shall be finalized with IRWD staff. We will then combine these with key planning guidance such as SGMA and relevant water projection data from the IRWUMP into a set of key climate scenarios to be used across the plan including aligning horizon years and operational conditions.

#### **Assumptions**

- The ERA analysis will cover up to 5 climate hazards (two metrics per hazard)
- The ERA analysis will analyze hazards across 2 warming scenarios
- The ERA analysis will analyze climate hazards for 4 milestone years



- ERA has budgeted for receipt of one set of consolidated comments on each deliverable. Any additional revisions will be completed on a time-and-materials basis in accordance with our standard fee schedule (Section G).

### **Deliverables**

- Draft and Final Climate Metric Workplan
- Climate Data Workbook
- Two 1 hour Climate Hazard Meetings with IRWD
- Twelve 30 minute bi-weekly meetings to discuss results and work with data to identify actionable strategies



	Loaded Rate	Task 1: Bi-Weekly Planning Meetings		Task 2: Climate Metric Workplan		Task 3: Climate Data Workbook		Task 4: Client Meetings w/IRWD, ERA & Rincon	
		Effort	Cost	Effort	Cost	Effort	Cost	Effort	Cost
Principal Research Scientist	\$ 284	12	\$ 3,408	6	\$ 1,704			4	\$ 1,136
Product Owner	\$ 220		\$ -		\$ -				\$ -
Scientific Project Manager	\$ 125		\$ -		\$ -	20	\$ 2,500		\$ -
Senior Research Scientist	\$ 135		\$ -		\$ -		\$ -		\$ -
Research Scientist I	\$ 118		\$ -		\$ -		\$ -		\$ -
Research Scientist II	\$ 130	18	\$ 2,340	40	\$ 5,200	80	\$ 10,400	8	\$ 1,040
Associate Scientist	\$ 85	18	\$ 1,530	40	\$ 3,400	80	\$ 6,800	4	\$ 340
Senior Developer / Programmer	\$ 174		\$ -		\$ -		\$ -		\$ -
Developer / Programmer	\$ 144		\$ -		\$ -		\$ -		\$ -
Junior Developer / Programmer	\$ 108	18	\$ 1,944	40	\$ 4,320	80	\$ 8,640	4	\$ 432
Administrative Staff	\$ 78		\$ -		\$ -		\$ -		\$ -
<b>Subtotal</b>			\$ 9,222		\$ 14,624		\$ 28,340		\$ 2,948
								<b>ERA Total</b>	<b>\$ 55,134</b>
								<b>Rincon Markup</b>	<b>\$ 2,866.00</b>
								<b>Final Total</b>	<b>\$ 58,000.00</b>



## Willdan Energy Efficiency and Renewable/Energy Storage Analysis Workscope Detail

The majority of our effort will be focused on data gathering and analysis, with targeted site visits where required to verify the energy usage patterns. **Willdan's analysis will involve a deep preliminary dive into customer data and systems and will inform our development of recommendations for next steps.** Our team prioritized the areas indicated below based on the provided information; we would need Rincon's assistance to make sure that these issues are addressed and that the customer's needs are met.

Our estimates of hours and costs are based on the following assumptions and approach:

### Task 6 Energy Efficiency Analysis

Comprehensive review of District's energy spends portfolio-wide, including:

- Benchmarking of large usage meters (up to 50 total meters)
- Development of incremental data for selected accounts
- Load factor Analysis
- Enhanced Benchmarking with B3
- B3 provides building ranking by performance
- Use weather normalization to be able to measure energy savings from conservation measures
- One year access to B3 database and dashboard
- Up to 4 days of site visits which may include multiple facilities per day

#### Assumptions

- Willdan will complete up to 4 days of site visits
- Willdan will analyze up to 50 individual meters based on energy costs

#### Deliverables

- Draft and final prioritized list of energy efficiency projects

### Task 7 Energy Efficiency Analysis

Willdan will evaluate the current and potential future ownership and operational structures of the battery systems, as well as lifecycle purchase, operation, and disposal costs to develop a cost model for battery cost-benefit analysis. The model will allow Willdan and the District to modify different variables and identify the most ideal ownerships structures from both a cost and energy/decarbonization perspective.

- **Battery Energy Storage:** Review and analysis of contractual terms, system specifications, operational parameters, historical performance and any other relevant factors or documentation for the six existing battery energy storage systems specified in the RFP (Michelson Water Recycling Plant (2.5 MW/15Mega-Watt- Hour MWh), Baker Water Treatment Plant (1 MW/ 6 MWh), Deep Aquifer Treatment System (1 MW/ 6 MWh), Los Alisos Water Recycling Plant (1 MW/ 5.6 MWh), Potable Treatment Plant (0.5 MW/ 2 MWh), Wells/21/22 Desalter Facility (0.25 MW/ 1.1 MWh)





- **Solar PV:** Review and analysis of any feasibility studies, preliminary designs and specifications, and proposals for the four anticipated solar PV projects (Baker Water Treatment Plant (281 kW ground mount solar), Zone A North Reservoir (310 kW rooftop solar), Rattlesnake Reservoir Baseball Field (635 kW ground mount solar), MWRP (2.4 MW ground-mount/canopy solar))
- **Solar PV Screening Tool:** Development of an Excel-based tool for screening potential future solar projects, based on our experience and understanding of industry trends and standards, the current and future regulatory environment, available funding options and financing structures, utility requirements, and the specific needs and characteristics of the local community. This tool will address each of the factors requested in the RFP, including solar array capacity (minimum capacity), paired BESS (including impacts of recent changes in tariff rates), form factor, system array tariff structure, community issues, and federal, state and utility incentive programs.

### **Deliverables**

- A report outlining the energy efficiency analysis as stated above for Battery Energy Storage and Solar PV and a Solar PV screening tool.



## Willdan Budget Detail

	<u>Scott Griffith</u>	<u>Chris Gaddy</u>	<u>Bill Clifford</u>	<u>Roxanne Chavarria</u>	<u>Brandon Rock</u>	<u>Zoe Warp</u>	<u>Tedd Kelley</u>	<u>Saj Puthur</u>		
	<u>Sr. Project Director</u>	<u>Project Development</u>	<u>Water Project Mgr</u>	<u>Lead DER Engineer</u>	<u>Sr. PDE</u>	<u>Energy Engineer</u>	<u>Electrical Engineer</u>	<u>Electrical Engineer</u>	<u>Total Hours</u>	<u>Total Labor Cost</u>
<b>SUMMARY TASK</b>	<b>\$160</b>	<b>\$125</b>	<b>\$225</b>	<b>\$195</b>	<b>\$160</b>	<b>\$120</b>	<b>\$155</b>	<b>\$155</b>		
<b>Task 6 Identify and Evaluate Energy Optimization Measures</b>										
Develop energy optimization measure evaluation criteria	5.0	5.0	20.0		20.0	10.0			60.0	\$ 10,325
Apply criteria to develop a list of energy optimization opportunities that target specific IRWD facilities	5.0	5.0	60.0		60.0	30.0			160.0	\$ 28,125
<b>Subtotal</b>	<b>10.0</b>	<b>10.0</b>	<b>80.0</b>	<b>0.0</b>	<b>80.0</b>	<b>40.0</b>	<b>0.0</b>	<b>0.0</b>	<b>220.0</b>	<b>\$ 38,450</b>
<b>Task 7 Identify and Evaluate Renewable Energy and Energy Storage Project Opportunities</b>										
Provide an analysis of the options available to IRWD following the sunset of the battery savings sharing agreements	5.0			48.0			24.0	24.0	101.0	\$ 17,600
Evaluate recommended solar installations	5.0			64.0			32.0	32.0	133.0	\$ 23,200
Develop a checklist for successful solar projects in California	5.0			48.0			24.0	24.0	101.0	\$ 17,600
<b>Subtotal</b>	<b>15.0</b>	<b>0.0</b>	<b>0.0</b>	<b>160.0</b>			<b>80.0</b>	<b>80.0</b>	<b>335.0</b>	<b>\$ 58,400</b>
<b>Total</b>	<b>25.0</b>	<b>10.0</b>	<b>80.0</b>	<b>160.0</b>	<b>80.0</b>	<b>40.0</b>	<b>80.0</b>	<b>80.0</b>	<b>555.0</b>	<b>\$ 96,850</b>
									<b>Willdan Labor Cost</b>	<b>\$ 96,850</b>
									<b>Rincon Markup</b>	<b>\$15,496</b>
									<b>Total</b>	<b>\$112,346</b>