

Climate Action Plan Annual Workplan Template

To assist with the implementation of the Climate Action Plan (CAP), each Implementing CAP Department – as defined in AR XX – shall use this template to provide necessary information for the Mayor and City Council to make appropriate budget decisions for CAP implementation.

Throughout the workplan there are guiding prompts what information should be included. For the narrative and budget sections of the workplan, not all prompts may be applicable to the actions your department is undertaking. You only need to answer the prompts that pertain to the action you are describing.

DEPARTMENT: [Public Utilities]

CAP LIAISON: Keli Balo

CAP ACTIONS: List the CAP actions your department will work on in the upcoming fiscal year.

LEAD ACTIONS:

CECC-4.5a: Capture methane gas from wastewater treatment (Prioritization score: 48.83)

RIHE-5.3a: Develop local water supply and reduce dependence on imported water (Prioritization score: 37.37)

RIHE-5.3b: Support ongoing gallon per capita water use (GPCD) targets. (Prioritization score: 14.83)

COLLABORATING ACTIONS:

BE-1.3SA-1: Implement energy efficiency projects at City facilities to meet zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan, prioritizing projects within the City's Communities of Concern (Prioritization score: 48.83)

BE-1.3SA-2: Identify and prioritize energy projects at City facilities that increase resiliency for the surrounding communities and City operations, focusing on our Communities of Concern (Prioritization score: 53.78)

BE-1.3SA-3: Implement technologies such as renewable electricity generation, heat pumps, energy storage, and microgrids at City facilities to meet the zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan. (Prioritization score: 47.75)

BE-1.1SA-7: Develop programs to promote energy efficiency and load management technologies with an emphasis in Communities of Concern (Prioritization score: 30.90)

RIHE-5.3-SA1: Expand awareness of the City's Rainwater Harvesting Rebates and Grass Replacement Rebates programs to increase participation in the programs and facilitate accessibility to residents across the City, prioritizing those within Communities of Concern and areas that have had historically lower participation in the programs (Prioritization score: 33.40)

RIHE-5.3-SA4: Investigate opportunities to capture and reuse rain water (Prioritization score: 35.30)

CAP STRATEGIES: List the CAP Strategies in which the actions above fall under.

- Strategy 1: Decarbonization of the Built Environment
- Strategy 2: Access to Clean & Renewable Energy
- Strategy 3: Mobility & Land Use
- Strategy 4: Circular Economy & Clean Communities
- Strategy 5: Resilient Infrastructure and Healthy Ecosystems
- Strategy 6: Emerging Climate Action

BUDGET: List any budgetary needs for the upcoming fiscal year, along with funding strategy, potential external funding, current budget allocation, proposed FY budget allocation, current FTE, and proposed FTE.

- What is the department's current budget allocation for CAP implementation? Include both budget allocation and FTEs.
- What additional resources does the department need for the upcoming fiscal year? Include proposed budget allocation and additional FTEs needed.
- Are the actions granted funding? If yes, are matching funds required?

CECC-4.5a: Capture methane gas from wastewater treatment

The Public Utilities Department currently captures methane gas from wastewater treatment facilities utilizing existing staff and infrastructure at the Point Loma Wastewater Treatment Plant and Metro Biosolids Center. This methane production occurs within anaerobic digesters which have biological organisms that are consuming organic material and producing methane as a byproduct. This methane gas is then captured and utilized through existing piping infrastructure and other supporting components to power existing plant operational equipment, added to the natural gas grid, and the remaining material that is not utilized is flared off.

In order to support this ongoing effort, PUD currently has a forecasted annual budget of approximately \$1,603,142 which supports ongoing Operations & Maintenance staff, Lab staff who assist with analyzing the biological balance within the Anaerobic Digesters, and annual maintenance of the gas piping system and associated infrastructure. Since the implementation of this CAP action is performed by existing plant staff who are also responsible for operating and maintaining the entire wastewater treatment plant, their

time and the associated annual expenditures are estimated based on best available data at the time of report preparation.

In addition, \$2.9M in capital upgrades are anticipated to be expended through FY 2023 for upgrades to flares, gas pipelines, and Digester piping which support this methane capture effort. Another \$517,460 in capital project expenditures are anticipated in FY24 to support ongoing upgrades to flares and Digester piping which further supports the ongoing implementation of this CAP action.

At this time, no additional FTE's are anticipated to be needed to support this CAP action, as this effort is already being supported with existing plant staff.

RIHE-5.3a: Develop local water supply and reduce dependence on imported water

Development and implementation of the Pure Water program is the primary identified strategy to address action RIHE-5.3a – Develop local water supply and reduce dependence on imported water. For the Pure Water program, PUD currently has an FY23 ongoing O&M budget allocation of \$21,616,783 to support Pure Water Management and Operations staff. This base budget includes personnel costs, contracts, supplies, etc., and is expected to grow as the Pure Water program comes online and expands into Phase 2.

In the upcoming fiscal year (FY24), Pure Water expects to incorporate the following additional FTE positions:

- (2) Assistant Chemists
- (4) Biologist 2
- (1) Biologist 3
- (2) Wastewater Pre Treatment Inspector
- (1) Senior Wastewater Plant Operator
- (1) Wastewater Plant Operator

Additionally, the Department is forecasting non-personnel expenditures of \$2,274,905 which will be used to support contracts, capital expenditures, and supplies to support the Phase 1 Program. This includes new laboratory equipment to performing testing at Pure Water Sites along with Operations supplies needed to operate expanded and new Pure Water Facilities. For the Phase 2 program, PUD is forecasting to spend \$2M in contract expenditures to support preliminary studies via a program management consultant.

In addition to the Pure Water Program, the Department is building a Dam Program to address aging dam assets and to restore water storage capacity to reduce our dependence on imported water. The City of San Diego currently owns and maintains 13 dams under the regulatory jurisdiction of the California Department of Water Resources (DWR), Division of Safety of Dams (DSOD). Nine of these are part of the City's raw drinking water reservoir

system. The City has some of the oldest dams in the state of California, they are approaching or have exceeded the end of their useful service lives (many over 100 years old). Many of these dams have exhibited deficiencies which need immediate repair to ensure safety and proper operability. Multiple City dams have been rated by the DSOD as in "poor" condition and do not meet current dam safety standards. In addition, dam conditions and DSOD restrictions affect the City's ability to operate the dams, restricting how much water can be retained, which subsequently affects our region's water supplies. Maintenance, repair, rehabilitation, and replacement of multiple dams is needed to restore functionality of the raw water system, protect public health and safety, and maintain local water supply. In the upcoming fiscal year (FY24), the Dam Program expects to add additional FTE positions and additional contractual capacity to continue technical studies and initiate multiple CIPs

RIHE-5.3b: Support ongoing gallon per capita water use (GPCD) targets.

PUD's Water Conservation team supports this CAP action by assisting the City with Water Use Efficiency (WUE) and water use reduction. This group accomplishes the actions by developing and implementing WUE programs, providing water audits, and collaborating with other City departments and water agencies. This team is structured into the following categories to support this ongoing effort.

Legislation and Long-Range Planning:

This position is responsible for reviewing state/federal/local water conservation legislative requirements and developing long term plans for ensuring implementation and compliance.

- 1 Principal Water Resource Specialist

Development and Administration:

These positions are responsible for the development, implementation, and administration of the water conservation rebate program.

- 1 Supervising Management Analyst
- 1 Associate Management Analyst
- 1 Admin Aide II

Outdoor/Indoor Water use efficiency program- These positions provide indoor and outdoor residential surveys to city customers and are also responsible for outreach and education.

- 1 Public Information Clerk
- 4 Irrigation Specialists
- 2 Field Representatives

In total, the Water Conservation team has 11 FTE positions and their personnel and non personnel expenditures (and associated funding mechanisms) can be seen below. These

costs are expected to remain fixed during the CAP workplan reporting period and not expected to grow.

Personnel \$1,012,179 Fund 700011

Non-Personnel \$631,405 Fund 700011

In recognition of the collaboration efforts between the Water Conservation team and the Stormwater Department, the Stormwater Department provides a \$425,000 annual subsidy to PUD, thereby reducing some of the costs absorbed by PUD's Water Conservation team.

PUD's External Affairs section supports the CAP action by working to increase public awareness. There are three (3) FTE in the External Affairs Section:

- Program Manager
- Program Coordinator
- Senior Water Resources Specialist

There are no non-personnel expenses at this time. In an effort to increase public education and awareness, they will be exploring the possibility of engaging in both earned and paid media. There is no proposed budget yet to support this effort. The External Affairs team will be adding a new FTE in FY23 to support public outreach toward achieving GPCD requirements.

BE-1.3SA-1: Implement energy efficiency projects at City facilities to meet zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan, prioritizing projects within the City's Communities of Concern

New energy efficiency projects are at the preliminary stage and not budgeted. Allocation of current FTE is to be determined, but it is anticipated PUD Engineering and Program Management Division's (EPM) 2-3 FTE would spend about 30-40% of their time once the projects are being fully developed.

BE-1.3SA-2: Identify and prioritize energy projects at City facilities that increase resiliency for the surrounding communities and City operations, focusing on our Communities of Concern

The Pump Station 2 Power Reliability and Surge Protection project provides standby power at the pump station and thus protects against surges during outages which can result in sanitary sewer overflows. The project is projected to cost \$76.1M and PUD EPM staff two (2) are anticipated to spend 15-20% of their time during design and implementation of this project.

BE-1.3SA-3: Implement technologies such as renewable electricity generation, heat pumps, energy storage, and microgrids at City facilities to meet the

zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan.

For the solar projects at Chollas Building A & B, Employee Development and Training Center Carport systems, the total project costs are \$2,976,000 and two (2) PUD EPM staff are anticipated to spend about 25% of their time during design and implementation of this CIP project.

For the solar project at Miramar Water Treatment Plant (1.2-megawatt expansion), Estimated total project costs are \$4,040,000. This is being implemented under Miramar Reservoir Pump Station upgrade project under Pure Water Phase 1. Two (2) PUD EPM staff are anticipated to spend 5-10% of their time on this project.

For the solar project at Naval Training Center Lab, it is in the preliminary stage, and projected costs are \$2,976,000. Two (2) PUD EPM staff are anticipated to spend about 10-15% of their time on this project once in design and implementation.

BE-1.1SA-7: Develop programs to promote energy efficiency and load management technologies with an emphasis in Communities of Concern

This is an ongoing effort in PUD's EPM and its FTE two (2) spend about 5% of their time on this effort.

RIHE-5.3-SA1: Expand awareness of the City's Rainwater Harvesting Rebates and Grass Replacement Rebates programs to increase participation in the programs and facilitate accessibility to residents across the City, prioritizing those within Communities of Concern and areas that have had historically lower participation in the programs

The Stormwater Department subsidizes the PUD Water Conservation section with \$425,000 annually. Under a collaborative agreement, the subsidy funds personnel for administration of the Rain Harvesting program and Rain Harvesting rebates. This subsidy accounts for approximately 26% of the total Water Conservation annual budget.

RIHE-5.3-SA4: Investigate opportunities to capture and reuse rain water

PUD is collaborating with the Stormwater Department on investigating potential opportunities for stormwater harvesting. PUD has budgeted \$290,726 to allocate towards the task as part of a cost-share between the departments. Stormwater manages the consultant and the deliverables and PUD provides review and insights.

The following PUD FTE staff spend approximately 5% of their time on this task:

- (2) Sr Engineer – Civil
- (3) Associate Engineer – Civil
- (1) Principal Water Resources Specialist

PUD also utilizes their consultant team from Stantech to provide review and advise on the deliverables provided by Stormwater and their consultant.

NARRATIVE: Summarize the department's plan for CAP implementation in the upcoming fiscal year.

- What work needs to be done to implement these CAP actions?
- What do you expect to accomplish by the end of the upcoming fiscal year?
- Are there any barriers to implementing the CAP actions identified?

CECC-4.5a: Capture methane gas from wastewater treatment

In order to continue with the implementation of this CAP action, PUD will need to continue funding existing Plant personnel and non-personnel resources needed for the management, inspection, operation and repair of this Anaerobic Digester system and supporting infrastructure.

Over the next fiscal year (FY24) PUD plans to continue with operations and as needed maintenance of the existing methane capture system and supporting infrastructure, with the goal of capturing approximately 95% of all methane being generated from wastewater treatment. At this time there are no forecasted barriers that would prevent PUD from implementing this CAP action.

RIHE-5.3a: Develop local water supply and reduce dependence on imported water

In the upcoming fiscal year, Pure Water Operations will continue efforts to ensure the department is properly staffed, trained, and equipped to operate and maintain the North City Pure Water Facility, the Miramar Pipeline, and the associated De-Chlorination Facility. This includes the procurement of equipment, tools, and supplies, as well as vehicles, to support staff in these efforts, as well as the addition of up to eleven (11) positions dedicated to supporting this program. Staff will continue to monitor and participate in construction activities, as well as receive customized training on equipment and processes specific to the facility. Pure Water Operations will continue to participate in planning efforts for Phase 2, providing expertise and knowledge related to the operability of the system.

In addition, Pure Water will continue progressing on construction of Phase 1 facilities and associated pipeline this fiscal year. For Phase 2, Pure Water expects to hire a program

management consultant, begin preliminary studies, and advertise for and award a construction bid on our small-scale facility that will be built at Point Loma Wastewater Treatment Plant and will be used to demonstrate we can comply with regulatory requirements.

RIHE-5.3b: Support ongoing gallon per capita water use (GPCD) targets.

In order to implement this CAP action, PUD will continue to provide Water Use Efficiency (WUE) rebates and WUE surveys for residential and commercial customers throughout the water service area. In addition, in response to AB 1668 SB 606, PUD will be calculating the State Water Conservation Standards which are aggregated to determine the City's Water Use Objective (WUO) and will be required to be met on an annual basis. The WUO factors being aggregated are residential usage (indoor/outdoor), Commercial, Industrial, Institutional (CII) landscape irrigation, annual water loss, bonuses and approved variances.

PUD anticipates continuing to offer WUE rebates and WUE surveys to the customers of San Diego in the upcoming fiscal year. In addition, upon the approval of the WUO from State Legislature, PUD will begin quantifying water savings and performing necessary reporting which will support this action.

Currently there are no barriers associated with this CAP action, however the Water Use Objective is still being finalized by the State and will be monitored by PUD for potential impacts in the future.

Additionally, the External Affairs section will coordinate and support public outreach, education efforts, and PUD's Water Conservation Program to achieve the regulatory required GPCD requirements. By the end of the upcoming fiscal year, External Affairs will increase public awareness of drought conditions and water conservation efforts that help support achieving the regulatory required GPCD requirements. Future conservation efforts will be focused on outdoor use in an added effort to meet the State's water use objective.

BE-1.3SA-1: Implement energy efficiency projects at City facilities to meet zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan, prioritizing projects within the City's Communities of Concern

The Public Utilities Department regularly focuses on energy improvements and promotes energy efficiency. PUD's Water and Wastewater Design manuals have continually and recently been improved to reflect all new and current upgrades to existing stations. In addition, American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Level 2 audits were performed on selected facilities and feasible measures are further evaluated and/or implemented. By the end of the upcoming fiscal year (FY24) the goal is to implement low cost items which can be implemented by the Department's

Operation and Maintenance team and complete any further evaluation needed for large CIP projects.

BE-1.3SA-2: Identify and prioritize energy projects at City facilities that increase resiliency for the surrounding communities and City operations, focusing on our Communities of Concern

One of the largest energy usage plants for the City is the PUD's Pump Station 2. This facility is undergoing a comprehensive resiliency upgrade to support the local communities as the load from this facility is substantial. By the end of FY24, the expectation is to have this project completed and use renewable gas as its fuel. Other facilities are always being improved with the usage of standards for resiliency and have backup power for emergency and backup scenarios.

BE-1.3SA-3: Implement technologies such as renewable electricity generation, heat pumps, energy storage, and microgrids at City facilities to meet the zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan.

The City's Public Utilities Department is implementing renewable energy generation and improvements where possible. To date, the Department took advantage of utilizing renewable fuel such as digester gas from the sewer treatment for energy generation, which otherwise would be flared and counted against the City's greenhouse gas emission. Since early 1980's the Gas Utilization Facility (GUF) at Point Loma Wastewater Treatment Plant (PLWTP), is using digester gas as fuel for renewable energy generation. This facility is coming to the end of its life cycle and will soon be due for rebuild for the second time. A limitation for this project is availability of digester gas in the future Once Pure Water Phase 1 is completed it will divert sewer flow away from PLWTP. The Department also evaluates facilities for solar installation, and to date, four systems are in operation, including the largest City-owned 1-megawatt system at Miramar Water Treatment Plant. Several new projects are in progress, such as the Lakeside Valve Station rebuild project with solar, this new solar project supports the net zero emission goal. This facility uses very little energy and it will be equipped with solar rooftops and projected to generate enough renewable energy to help offset electrical use by the station and make the facility net zero. This is a small example on how the City continues to find improvements that provide outsized returns. By the end of upcoming fiscal year (FY24) expectation is to have three new solar projects (at Chollas Building A & B, Employee Development and Training Center Carport systems and 1.2 megawatt addition to the existing 1 megawatt at Miramar Water Treatment Plant) implemented, and to have the design for the Naval Training Center Lab carport system completed.

BE-1.1SA-7: Develop programs to promote energy efficiency and load management technologies with an emphasis in Communities of Concern

The PUD has and continues to implement energy efficiency and load management technologies and continues to be a leader in such improvements. These improvements provide a financial incentive and is the responsibility of the City to provide the lowest cost possible. A great example of this is the PUD's continual replacement of fixtures to LED or high efficiency bulbs. This provides a huge short-term and long-term financial benefit for the expansive facilities that the City owns and manages. To date, several PUD treatment plants and almost all Muni Pump Stations had lighting retrofitting completed and by the end of FY24 North City Water Reclamation is expected to be added to the list. The remaining sites will be evaluated as well. The PUD is also looking into having an Energy Dashboard at some facilities. Currently, the project is in the preliminary stage for South Bay Water Reclamation Plant. The Energy Dashboard will provide a visual energy use profile to plant operators which will help staff make informed decisions to reduce or shift load if feasible during peak times. PUD staff also works with our energy utility service provider and industry experts to have free energy tariff trainings and seminars for energy efficiency and emerging technology for City staff.

PUD has a robust energy reporting tool that can provide automated fiscal year/quarterly Energy Reports. These reports show consumption usage and total dollar amounts that staff and management are able to compare from the previous fiscal years/quarters. The tool tracks and provides graphs to visually see trends and any anomalies. This tool also assists plant staff with research on any anomalies during specified time periods. The energy reporting tool software has recently been upgraded to better assist the Department with a more efficient energy tracking tool. In previous years, the energy reports were discussed at the quarterly meetings with PUD energy team, wastewater Divisions Deputy Directors, and senior plant staff and superintendents, findings on any issues were reported to management during this meeting. The Energy Report now includes water facilities' data as well. Bringing this energy reporting tool and quarterly discussion back would be a great asset for the department to track its energy use.

RIHE-5.3-SA1: Expand awareness of the City's Rainwater Harvesting Rebates and Grass Replacement Rebates programs to increase participation in the programs and facilitate accessibility to residents across the City, prioritizing those within Communities of Concern and areas that have had historically lower participation in the programs

The PUD will coordinate with the Stormwater Department to develop and implement enhancements to program administration aimed at reducing barriers to entry and streamlining the application process. Enhancements may include the following: diversified application options, a Spanish language application and program options that will reduce the upfront participation costs to applicants.

Current barriers to implementing this CAP action include lack of awareness of the program and difficulties in navigating the rebate application process. The improvements described above are intended to directly address these barriers in order to increase access to the program and subsequently increase overall program participation.

RIHE-5.3-SA4: Investigate opportunities to capture and reuse rain water

PUD and Stormwater are continuing with feasibility studies to determine which projects and locations would be viable for stormwater harvest implementation. By the end of the upcoming fiscal year, we expect to reach conclusions on the viability studies and will engage management on the conclusions from the analysis and suggested next steps. PUD's ability to partially fund future projects will need to be determined. Should a legal analysis find that PUD may not contribute funding to the implementation of the stormwater harvesting projects, the Stormwater Department may face a financial barrier.

TIMELINE: For each action, identify status of implementation, and key milestones or estimated timeframe to complete (for this FY).

- Status: (New, In Progress)
- Key milestones and/or estimated timeframe:

CECC-4.5a: Capture methane gas from wastewater treatment

Status: In Progress

Key Milestones: The capture of methane gas from wastewater treatment facilities is an existing CAP action that is currently being implemented during plant operations. PUD plans to continue with this process during the upcoming fiscal year and will continue to operate and maintain the infrastructure, as needed, to ensure this CAP goal continues to be implemented and achieved. At the end of the FY (FY24) PUD plans to capture 95% of methane gas produced from wastewater treatment operations.

RIHE-5.3a: Develop local water supply and reduce dependence on imported water

Status: In progress

Key Milestones:

- Phase 1 Construction: Estimated to reach 95% completion by end of FY24, not including plant commissioning.
- Phase 2 Program Management Consultant hiring: Estimated to be completed by end of FY23 and preliminary studies completed by end of FY24
- Phase 2 SSF demonstration plant – small scale facility advertisement: Award by end of FY23 and enter construction during FY24

RIHE-5.3b: Support ongoing gallon per capita water use (GPCD) targets.

Status: In progress

Key Milestones:

- Continue WUE rebates and surveys
- Annual reporting as required by the state

BE-1.3SA-1: Implement energy efficiency projects at City facilities to meet zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan, prioritizing projects within the City's Communities of Concern

North City Lighting Retrofits:

Status: In progress

Key Milestones:

- Project completion by end of FY24

Replace High-Energy Demand EDR's w/ Filter Membrane at SBWRP:

Status: In progress

Key Milestones:

- Complete design phase

A number of energy efficiency projects remain in the preliminary stages and require further evaluation to identify milestones and timeframes.

BE-1.3SA-2: Identify and prioritize energy projects at City facilities that increase resiliency for the surrounding communities and City operations, focusing on our Communities of Concern

Pump Station 2 Power Reliability and Surge Protection:

Status: In progress

Key Milestone: Project completion by end of FY24

BE-1.3SA-3: Implement technologies such as renewable electricity generation, heat pumps, energy storage, and microgrids at City facilities to meet the zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan.

Employee Training & Development Center Carport Solar PV Systems Installation:

Status: In progress

Key Milestone:

- Project completion by end of FY24

Chollas Solar PV Systems Installation:

Status: In progress

Key Milestone:

- Project completion by end of FY24

MWTP Solar PV Systems Installation:

Status: In progress

Key Milestone:

- Project completion by end of FY24

EMTS-NTC Lab Solar PV Systems Installation:

Status: In progress

Key Milestone:

- Design phase completed by end of FY24

BE-1.1SA-7: Develop programs to promote energy efficiency and load management technologies with an emphasis in Communities of Concern

Status: In progress

Key Milestone: Identify free energy tariff trainings and seminars on energy efficiency and emerging technology for City staff

Development of energy dashboards are in preliminary stages and requires further evaluation.

RIHE-5.3-SA1: Expand awareness of the City's Rainwater Harvesting Rebates and Grass Replacement Rebates programs to increase participation in the programs and facilitate accessibility to residents across the City, prioritizing those within Communities of Concern and areas that have had historically lower participation in the programs

Status: In Progress

Key Milestones: Continued funding and outreach development

RIHE-5.3-SA4: Investigate opportunities to capture and reuse rain water

Status: In Progress

Key Milestones:

- Recommendations on Groundwater Recharge strategy Q4 FY23
- Revised City ordinance to Council Q1 FY24
- Recommendations on Dry Weather and Stormwater Diversion to Collection System strategy Q4 FY23

BENEFITS: Speak to any additional benefits (such as air quality improvements, cost savings, energy efficiency, etc.) derived from your proposed workplan as it relates to the implementation of the CAP.

CECC-4.5a: Capture methane gas from wastewater treatment

The implementation of this CAP action supports benefits such as improving air quality by preventing methane gas from escaping to the atmosphere, It provides a cost savings by utilizing this renewable resource (methane gas) to power existing plant operations while also supplying excess natural gas to the grid, and reduces overall GHG emissions that are produced during critical City operations of wastewater treatment.

RIHE-5.3a: Develop local water supply and reduce dependence on imported water

This action provides benefits such as developing resilient infrastructure which will further prepare the City to combat the impacts of climate change the region is expected to experience. Through the development of Pure water, the City will have a local water supply that won't be susceptible to the effects of severe drought or other natural disasters which could impact the City's water supply in the future. Additionally, this CAP action will also reduce the wastewater outfall flows at the Point Loma Wastewater Treatment Plant which would reduce impacts to and support a healthy Pacific Ocean ecosystem.

RIHE-5.3b: Support ongoing gallon per capita water use (GPCD) targets.

This CAP action provides cost savings benefits by promoting and supporting water use efficiency which could have a direct impact on water utility bills both for the water supplier and the water customer. In addition, a reduction in water demand would also reduce the energy associated with transporting water to the San Diego region and associated water treatment processes. Reduced water demand would result in less chemical use for drinking water treatment, further reducing PUD's carbon footprint. Further, reduction in demand helps PUD continue to meet water needs as the population grows and makes the City more resilient to water shortages and drought conditions.

BE-1.3SA-1: Implement energy efficiency projects at City facilities to meet zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan, prioritizing projects within the City's Communities of Concern

Cost savings and energy efficiency

BE-1.3SA-3: Implement technologies such as renewable electricity generation, heat pumps, energy storage, and microgrids at City facilities to meet the zero emissions goals for municipal buildings established in the Municipal Energy Strategy & Implementation Plan.

These renewable energy projects improve air quality, save energy costs and provide in some cases 100% self-sufficient on-site power source.

BE-1.1SA-7: Develop programs to promote energy efficiency and load management technologies with an emphasis in Communities of Concern

Cost savings and energy efficiency

RIHE-5.3-SA1: Investigate opportunities to capture and reuse rain water

Benefits include a potential reduction in energy costs associated with transporting and purifying water that is being saved. Rainwater harvesting also reduces the amount of pollution from properties that will be transported in storm flows through the storm sewer system to City outfalls.

RIHE-5.3-SA4: Investigate opportunities to capture and reuse rain water

Benefits include reduced pollutant flows to outfalls and progress towards compliance with state permits, as well as added local water supply and sufficient flows to Pure Water program.

CLIMATE EQUITY: List any work related to your department's planned CAP action(s) that is focused within Communities of Concern. Speak to how this will prioritize the needs of Communities of Concern.

- Does the department plan to focus any work within Communities of Concern?
- How is the department prioritizing Communities of Concern in its engagement and outreach?
- Are there other ways the department has incorporated equity into the planning or implementation of the actions?

CECC-4.5a: Capture methane gas from wastewater treatment

This CAP action supports climate equity as it improves air quality throughout the entire San Diego region and also reduces GHG emissions which have a direct impact on future climate change conditions the region is expected to experience.

Methane capture facilities are located at the wastewater treatment facilities which are not located in communities of concern. Upgrades of those existing systems in the future would not impact communities of concern.

RIHE-5.3a: Develop local water supply and reduce dependence on imported water

By having more control over the water supply throughout its service area, the City will also be better positioned to focus necessary resources towards communities of concern in the future. The Pure Water program could also allow the City the flexibility to provide an economic buffer for rater payers from future added costs that were previously out of the City's control (imported water costs), providing an extra layer of protection for low income water customers.

RIHE-5.3b: Support ongoing gallon per capita water use (GPCD) targets.

This CAP action supports all customers in the San Diego water service area which include communities of concern. In addition, PUD collaborates with the Stormwater Department to reach communities of concern via the ongoing Think Blue Campaign. PUD has also developed multi language fliers and applications for its customers along with staffing bilingual employees which are available to better serve the San Diego community and our communities of concern. The Stormwater Department is expanding their Residential Water Conservation Rebates Program which will target communities of concern.

RIHE-5.3-SA1: Expand awareness of the City's Rainwater Harvesting Rebates and Grass Replacement Rebates programs to increase participation in the programs and facilitate accessibility to residents across the City, prioritizing those within Communities of Concern and areas that have had historically lower participation in the programs

The SW department is expanding outreach efforts to communities of concerns through its Think Blue campaign. PUD will collaborate with SW for development and implementation of the plan.