

# 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:** [Stormwater]

**CAP LIAISON:** Alejandra Gavaldon

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

Rebates Program (RIHE-5.3-SA1), Green Infrastructure (RIHE-5.3-SA3), Waterways Restoration (RIHE-5.3-SA5), Stormwater Harvesting (RIHE-5.3-SA6)

**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?

## **REBATES PROGRAM**

**FY23:** In FY23 the Stormwater Department allocated \$360,000 towards the Outdoor Water Conservation Rebates Program (Rebates Program), which includes funding for the rebates themselves and funding for PUD staff to administer the program. Stormwater Department allocated an additional \$120,000 towards expanded education and outreach activities and development of enhancements to improve program accessibility. Stormwater Department also funds 2 FTE (one associate and one senior planner) to support the program. These same personnel also work on other critical stormwater work in addition to working on the rebates program.

**FY24:** In FY24 the Stormwater Department expects to allocate a similar amount of funding towards the Rebates Program. This includes funding PUD's portion of the program and also 2 FTE within the Stormwater Department (one associate and one senior planner). These same personnel also work on other critical stormwater work in addition to working on the rebates program.

**Grants:** The City has applied for and been awarded \$500,000 in IRWM grant funding to support the Rebates program, expanded education and outreach activities and development and implementation of program enhancements aimed at improving program accessibility. The City expects this funding to be available beginning in FY24. The City will be required to provide \$400,000 in matching funds.

## **GREEN INFRASTRUCTURE**

**FY23:** In FY23, the Stormwater Department received fifteen (15) Full Time positions to support planning and design of Stormwater Capital Improvement Program (CIP). These positions include engineers, planners, budget analysts and GIS analysts. Additionally, the department received \$2 million for ongoing CIP cost and a one-time budget of \$5.2 million to fund watershed level Integrated Drainage Engineering Analysis.

***These same personnel work on the Waterways Restoration and Stormwater Harvesting actions below, and the budget stated above supports the entire Stormwater CIP Program. Therefore the personnel and non-personnel budget reflect the total budget across the 3 CAP Actions (Green Infrastructure, Waterways Restoration and Harvesting).***

**Additional Resources Needed:** The CIP needs additional staffing and funding to meet the demand of the growth of the CIP Program due to the Water Infrastructure Innovation Act Loan. Additionally, funding and personnel are needed to meet stormwater regulatory requirements, improve water quality and advance equity goals in underserved communities.

**FY24:** For FY24, the Stormwater Department requested fifteen (15) additional full time positions, \$1.5 million on-going funding and a one-time \$2.0 million to support the implementation of the CIP Program.

**Funding and Financing Sources, and matching fund requirements:** Implementation of Green Infrastructure CIP projects are funded by a variety of funding sources, including: Water Infrastructure Finance and Innovation Act (WIFIA) loan, Infrastructure Fund, Development Impact Fee, TransNet Funds, Clean Water State Revolving Fund (CWSRF), Grants, and Commercial Paper.

It is estimated that Green Infrastructure project would cost \$12 million in FY24, which will be funded from the WIFIA Loan. The total cost for these projects, from planning to construction completion, is approximately \$74 million over the next several years. These projects will be funded from different funding sources including the WIFIA loan, TransNet, CWSRF, Grants, and/or Commercial Paper.

### **WATERWAYS RESTORATION**

**For FY23 budget allocation, additional resources needed and FY24 budget request:  
Please reference information provided under Green Infrastructure**

It is estimated that seven (7) waterways restoration projects will need \$4.8 million in FY24, which will be funded from the WIFIA Loan. The total cost for these projects, from planning to construction completion, is approximately \$155 million over the next several years. These projects will be funded from different funding sources including the WIFIA loan, TransNet, CWSRF, Grants, and/or Commercial Paper.

### **STORMWATER HARVESTING**

**For FY23 budget allocation, additional resources needed and FY24 budget request:  
Please reference information provided under Green Infrastructure**

It is estimated that Stormwater Harvesting program will need \$4.6 million in FY24, which will be funded from the WIFIA Loan. The total cost for these projects, from planning to construction completion, is approximately \$37 million over the next several years. These projects will be funded from different funding sources including the WIFIA loan, TransNet, CWSRF, Grants, and/or Commercial Paper.

## **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?

### **REBATES PROGRAM**

In FY24 the Stormwater Department plans to implement expanded education and outreach activities through ThinkBlue as well as enhanced program administrative offerings intended to increase program accessibility and participation. Education and outreach activities will include partnering with rainwater harvesting experts and community-based organizations to offer workshops and education materials aimed at raising awareness of the rebates program and growing community knowledge related to installation and maintenance of rainwater harvesting strategies. The Stormwater Department will coordinate with the Public Utilities 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.

By the end of FY24, Stormwater Department expects to raise awareness and interaction with the rebates program across the City as a whole and within Communities of Concern.

Current barriers to implementing this CAP action include lack of awareness of the program, upfront costs required for residents, overall rebate amount issued, 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.

### **GREEN INFRASTRUCTURE**

There are fifteen (15) Green Infrastructure projects that are currently in preliminary engineering or design phase:

- **Streamview Drive Green Infrastructure (B19095)** – Project will install an underground detention treatment vault and appurtenances to ensure connectivity with the City's storm water conveyance system along Streamview Dr between 54th St and 55th St to meet TMDL compliance per the Chollas Creek Watershed Master Plan.
- **Green Infrastructure Group 1024 (B15102)** – Project proposes construction of below grade biofiltration basins along T Street and Dominion Street.
- **Logan Heights LID South (B15051)** – Project proposes a combination of bioretention, biofiltration, and proprietary biofiltration (Bioclean) to treat

stormwater runoff of seven drainage areas within Logan Heights neighborhood. The proposed BMPs are generally located along Newton Ave between South 29th Street and South 33rd Street. The project is intended to capture and treat 0.5 inches of storm water runoff.

- **Serra Mesa Storm Drain & GI (B15100)** – Project improvements includes work within the ROW and Canyon area to realign and extend the existing storm drain to the well-defined low point within the Canyon area to avoid erosion. Proposed green infrastructure includes seven (7) storm drain outfalls and 13 Biofiltration Bulbouts and 1 proprietary biofiltration (Bioclean).
- **Green Infrastructure Group 1014 (B15104)** – Project proposes proprietary storm treatment facilities: Old Castle storm capture module and Filtera biofiltration. BMPs will capture and treat 0.5 inches before releasing water into the Chollas Creek. The proposed BMPs are generally located along Polk Ave between 45th Street and Menlo Ave.
- **El Cerrito & Rolando Park Storm Drain & GI (B15171)** – Project will replace several corrugated metal pipe (CMP) storm drains with reinforced concrete pipe (RCP). Inlets in the vicinity will also be replaced per current standards and sized for a 100-year storm event. The project proposes to replace several existing inlets with Type B curb inlets. In addition, the project proposes green infrastructure to treat stormwater with an underground Oldcastle PerkFilter unit on College Avenue and a proprietary biofiltration (Bioclean) on University Avenue.
- **Cherokee Point South Storm Drain & GI (B15214)** – Project proposes to replace corrugated metal pipe (CMP) storm drains with reinforced concrete pipes (RCPs) at four locations within the canyon and extending the outfalls to a well-defined low point to prevent erosion. The project also proposes installation of biofiltration basin and Filtera Planter Boxes to treat the 0.5-inch storm event. The goal of the improvements is to reduce storm water pollution and help achieve total maximum daily loads (TMDL) requirements.
- **Jamacha Lomita Green Infrastructure (B16089)** – Project will construct a biofiltration basin at the intersection of Meadowbrook Drive and Jamacha Road and at the intersection of Beacon Drive and Jamacha Road to treat storm water runoff prior to entering Chollas Creek.
- **Green Infrastructure Group 1012 (B16111)** – Project will construct three (3) proprietary biofiltration (Bioclean): one at the southeast corner of Logan Ave. and S 36th street, and two on S 37th Street between Florence St and National Ave.
- **Southcrest Green Infrastructure (B16112)** – Project will construct proprietary compact biofiltration BMPs, a 2,290 square foot biofiltration basin in an open space area, and a 52,000 cubic foot underground storm water detention vault draining to a proprietary compact biofiltration BMP. Associated work to convey storm water includes new construction of: 1,176 linear feet of 8" PVC storm drain, 227 linear feet of 12" PVC, 48 linear feet of 18" RCP, 145 linear feet of 24" RCP, 115 linear feet of

trench drains, 7 storm drain cleanouts, and 1 catch basin. The project also includes replacement of 395 linear feet of curb and gutter, 8 curb ramps, 1 curb inlet, and 33,645 square feet of street resurfacing.

- **South Mission Beach GI (B18118)** – The project’s primary objectives are reducing flood risk and inundation within the project vicinity and improving water quality within Mission Bay by treating storm water runoff. This Project includes upsizing, realignment, and replacement of the existing storm drain systems and extension of the outfalls to the Mariners Basin, as well as new storm drain systems to connect existing low points throughout South Mission Beach. The project also includes the implementation of Green Infrastructure (GI) features which include eight (8) proposed biofiltration basins in Belmont park in Mission Beach area. This is an integrated (bundled) project with Public Utilities Department (PUD) that is replacing sewer & water pipelines within South Mission Beach Area. These different assets were bundled to gain efficiencies, reduce cost, and minimize disturbance to the community.
- **Green Infrastructure Group 1027 (B15103)** – Project will install proprietary biofiltrations (Bioclean), dry well, and precast underground storage structure with associated storm drains and inlets along Pentucket Avenue to remove pollutants from storm water within the Greater North Park community.
- **Oak Park Storm Drain Replacement & GI (B16114)** – Project scope combines Green Infrastructure measures and drainage improvements within the Right of Way. Suitable GI feature will be selected during the design phase based on site conditions, i.e., soil type, existing utilities conflict, and available space. Project objective is to install GI to treat run off from three drainage basins. Additionally, the project proposes replacement of existing deteriorated drainage infrastructure.
- **Alamo, Salvation, and 68<sup>th</sup> Street Basin LID Rertofit (B14120)** – Project will construct a treatment train of permeable pavement strips followed by proprietary biofiltration (Bioclean) along University Avenue to capture and treat the volume of runoff produced by the 85<sup>th</sup> percentile storm event.

**FY24:** The following project is planned to be initiated in FY24

- Auburn Creek Trash Capture Device

Current barriers to implementing this CAP action include funding availability, potential need for real estate/property acquisition, obtaining resource agency permits, availability of mitigation land, and ensuring we have an educated and engaged community on what Green Infrastructure is, the importance and multi-benefits of these projects, and how our community members can be informed and engaged in the process.

## WATERWAYS RESTORATION

There are six (6) Waterway Restoration projects that are currently in preliminary engineering or design phase:

- **Pacific Beach Drive Improvement and Wetland Restoration (B17118)** – Project will grade a new tidal channel to connect the Noyes Street storm drain outfall to the bay and create 3ac of tidal marsh as well as transitional upland habitat.
- **Upper Auburn Creek Revitalization (S22008)** – Project will alleviate flooding of adjacent residential structures, roads, and public parks and reduce erosion by increasing creek conveyance capacity. A new biofiltration basin will be constructed to help with compliance of Chollas Creek TMDL requirements.
- **Chollas Creek Restoration at 54<sup>th</sup> Street and Euclid Avenue (S22009)** – Project will restore and enhance Chollas Creek Channel and stabilize the stream bank to reduce erosive flows. A new biofiltration basin will be constructed to the north of the channel for water quality measures.
- **Jamacha Drainage Channel Upgrade (B14078)** – Project will restore conveyance capacity of the drainage channel necessary for mitigation and maintenance of the earthen channel.
- **Los Peñasquitos Restoration Ph1 (B17033)** – Project will restore the historical salt marsh to meet TMDL goals, restore salt marsh vegetation, reduce coarse sediment and trash loading to the lagoon, and reduce flood inundation levels in business parks.
- **Maple Canyon Restoration Ph1 & Ph2 (B12040)** – Project will construct new storm drain systems upstream and downstream of the canyon to stabilize and restore the canyon floor. Biofiltration basins, detention basin, and permeable pavement will be constructed both within and outside of the public ROW to alleviate downstream flooding and increase water quality.

**FY24:** The following project is planned to be initiated in FY24:

- **Chollas Parkway and Sunshine Bernardini is planned to be initiated in FY24** – Project will widen the channels to reduce erosivity and enhance the ecosystem and biological resource value of the creeks. A new biofiltration basin will be constructed at the northeast corner of Fairmount Avenue and Las Chollas Creek for water quality measures.

Current barriers to implementing this CAP action include funding availability, potential need for real estate/property acquisition, obtaining resource agency permits, availability of mitigation land, and ensuring we have an educated and engaged community on what

waterways restoration is, the importance and multi-benefits of these projects, and how our community members can be informed and engaged in the process.

## **STORMWATER HARVESTING**

There are six (6) Stormwater Harvesting projects that are currently in preliminary engineering or design phase:

**South Mission Beach GI project** proposes nine low-flow sewer diversion systems in addition to six biofiltration basins and two bioretention basins to significantly improve water quality tributary to the receiving waters.

**Streamview Drive MUTA project** includes a two chambered underground vault system to collect stormwater runoff from an urbanized area of the City for treatment through detention and filtration. The treated stormwater is then released to the municipal separate storm sewer system (MS4).

**Carroll Canyon Creek Dry Weather Flow Diversion project** will divert 1.3 million gallons per day (mgd) of dry weather flow from Carroll Canyon Creek to the nearest sanitary sewer manhole then pump station.

**The Los Penasquitos Creek Diversion project** will divert 1.6 mgd of dry weather flow from the Los Penasquitos Creek to the nearest sanitary sewer manhole and then to the nearest pump station. The diverted flow from these projects would be treated and become a potential source of water for the Pure Water Program. The diverted flow from Carroll Canyon Creek and Los Penasquitos Creek will further benefit the restoration of the Los Penasquitos Lagoon that is currently in design for Phase 1.

**FY24:** The following harvesting projects will be initiated in FY24:

- Tecolote Park Wet/Dry Diversion
- Rose Creek Diversion Wet/Dry Diversion
- Upper Chollas Creek Diversion– Wet Diversion

Current barriers to implementing this CAP action include funding availability, potential need for real estate/property acquisition, obtaining resource agency permits, availability of mitigation land, and ensuring we have an educated and engaged community on what stormwater harvesting is, that stormwater is a resources, the importance and multi-benefits of these projects, and how our community members can be informed and engaged in the process.



**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.**

### **REBATES PROGRAM**

- Water quality improvements and stormwater pollution prevention through urban wet and dry weather flow reductions.
- Increased local water supply and reduced dependence on imported water.
- Potential reduction in energy costs associated with transporting and purifying water that is being saved.
- Cost saving for residents through decreased use of potable water for outdoor irrigation.
- Correlation and integration with other City CAP initiatives (including composting, green spaces, urban farming, food security/resilient local food systems, recycling, etc).

### **GREEN INFRASTRUCTURE**

Green infrastructure provides many benefits to our communities and the environment. It enhances community aesthetics, increases property values, reduces emissions, improves flood resilience, water quality, and our quality of life. The City of San Diego's Stormwater Department Think Blue team invests in GI (Green Infrastructure) as an effective, multi-benefit strategy to protect us from flooding and protect our waterways from pollutants. When it rains, pollution flows untreated directly into our bays, rives and the ocean through the storm drain system. So when paired with traditional infrastructure, Green Infrastructure works as a system to manage stormwater for safe, sustainable, and thriving communities. The use of Green Infrastructure functions as a sponge that filters out pollution. It can be constructed along our streets, in our parks, and throughout our communities. Permeable surfaces such as brick pavers, rain barrels, vegetated bioswales, and climate-smart landscaping are all examples of GI that help attenuate flood flows, filter and clean urban runoff before discharging to our waterways and beaches, and restore natural processes to the urban landscape.

### **WATERWAYS RESTORATION**

Nearly all the City's rivers and streams are considered impaired under the federal Clean Water Act. The forms of these waterways can change over time as erosion, accumulation and conveyance of sediment occurs. The restoration projects will protect and improve water quality and biological conditions to produce a healthier ecosystem. When the riparian buffers are restored along stream corridors, runoff pollution from excess nutrient load is reduced, resulting in a cleaner water supply. Maintenance frequency will decrease as the habitat stabilizes to its natural native state (i.e. salt marshes). Restoring waterways

also contribute to sustainability and resiliency of stormwater infrastructure by reducing flood frequency, severity, and associated property damage.

### **STORMWATER HARVESTING**

Stormwater harvesting projects can improve water quality, reduce flooding risk and create new water supply. Depending on the extent of treatment, the harvested stormwater can be used for a variety of applications such as on-site reuse and watering, irrigation, wash water, use in water features like fountains, or conveying it to the sanitary sewer system for recycling and eventual potable use. Depending on the project and the water supply captured, it can reduce the amount of energy used to transport imported water.

**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?

### **REBATES PROGRAM**

During FY24 and beyond the Stormwater Department expects to raise awareness and interaction with the rebates program across the City as a whole and specifically within Communities of Concern. This will include coordination with Mayor’s Office of Race and Equity and community-based organizations to engage Communities of Concern through workshops and education materials aimed at raising awareness of the rebates program and growing community knowledge related to installation and maintenance of rainwater harvesting strategies. This will additionally include addressing current barriers to implementing the program such as navigating the rebate application process, reducing upfront costs required for residents, and increasing the overall rebate amount. Once the Tactical Equity Plan for the department is completed, all recommendations and actions related to foster equity will be incorporated into the program.

### **GREEN INFRASTRUCTURE, Restoration and Harvesting**

The Stormwater Department uses its Watershed Asset Management Plan (WAMP) as a planning tool that develops the projects, tasks, actions, program elements, and levels of investment needed within all City of San Diego watersheds to manage the watersheds’ assets to meet levels of service. The WAMP consists of two main asset categories – physical and programmatic assets. Physical assets are human made items that one can touch and see and provide a level of service, such as pipes, pumps, channels, inlets, and outfalls.

Programmatic assets are human-created actions and activities which provide a level of service, and include the personnel, equipment, and contracts required to operate and maintain our physical assets and meet our regulatory goals. The Stormwater Department determines funding needs and prioritizes funding request for all its assets based on business Risk Exposure (BRE) methodology, which is a triple-bottom-line approach that considers social, environment, and economic factors. The BRE score for each asset is calculated by multiplying the probability of failure by the consequence of failure. Additionally, the Climate Equity Index (CEI) is integrated into the Watershed Integrated Drainage Engineering Analysis (IDEA) for CIP long-range planning. Based on CEI, projects will receive a higher score and will be prioritized for funding.