WaterSMART
Drought Response Program:
Drought Resiliency Projects for FY 2018
FOA : BOR-DO-18-F008

Modjeska Park: Urban Model for Storm Water Detention and Infiltration Anaheim, California

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1. TECHNICAL PROPOSAL

1A. Executive Summary:

Date: February 13, 2018
Applicant Name: Anaheim Department of Public Works
City, County, State: Anaheim (92805), Orange County, California
Project Name: Modjeska Park: Urban Model for Storm Water Detention and Infiltration
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The Modjeska Park: Urban Model for Storm Water Detention and Infiltration Project (Project) is the first pilot project in a Citywide program (Program) to capture and infiltrate storm water as one approach to drought resiliency. This Project and the overall Program will increase the reliability of water supplies, improve water management, and provide benefits for fish, wildlife, and the environment to mitigate impacts caused by drought. The Modjeska Park Project will serve as an innovative pilot project for drought resiliency in a densely populated, urban community. It will be replicated through the City's Program (as well as potentially in other urban communities), as we strive to improve regional water self-reliance and security in order to adapt to the effects of climate change on the region's water supply. The Project plans to utilize the footprint of an existing 37,000 square foot city-owned parking lot to install underground premanufactured storage modules, which will be able to capture and infiltrate a minimum of 150 acre feet per year (AFY) of dry weather urban runoff and first flush storm water into the City's groundwater. Over the 50-year useful life of the project (typical for concrete and plastic based material used for underground modules), the retention/infiltration system will capture, retain, treat (through a natural filtration system), and recharge over 9,100 AF of water. This storm water is flowing through a completely built-out community, and it would otherwise flow untreated to the Bolsa Chica Channel and eventually to the Pacific Ocean. More significantly, the project will kick-start the Citywide Drought Resiliency Program, which aims to: 1) identify and inventory all potential detention/retention sites within the City, 2) study, compare, and select sites for implementation, 3) conduct preliminary engineering on potential sites; 4) create grant-ready documents for implementation, and 5) ultimately secure financing and construct projects that on a preliminary evaluation have an anticipated capacity to capture and infiltrate up to *1,800 AFY of water,* enough to meet the annual water supply water needs for approximately 3,600 households.

This project specifically aims to increase the reliability of the water supplies through infrastructure improvements (see Section C.3.1.1. Task A of the WaterSMART Funding Opportunity Announcement No. BOR-DO-18-F008) by storing storm water that would otherwise be lost to the Pacific Ocean in underground infiltration chambers, and then allowing that stored water to recharge groundwater supplies.

Estimated Timeline: This project will proceed immediately upon notification of grant funding. Final design, engineering, environmental, and construction of the project can be completed within 24 months. The City will monitor and evaluate project outcomes for the final six months of the grant period.

Located on Federal Facility: The project is not located on a federal facility, but the project will help reduce our draw of water from the California Bay-Delta and Colorado River (BOR facilities).

1B. Background Data:

Location: The Project is located in the county of Orange in Anaheim, California. The project latitude is 33° 48' 53.64" North, and the project longitude is 117° 57' 8.44" West. Anaheim (pop. 358,000) is the 10th largest City in the State and is home to world-class tourist destinations. Our Disneyland Theme Parks attract 16.2 million visitors annually, and Anaheim is listed as one of the top five "America's Most-Visited Cities" according to a 2010 Forbes survey (most recent data available). Anaheim and Orange County combined welcome 42.7 million visitors annually, rivaling Miami (38.1 million), Las Vegas (36.3 million), Chicago (45.6 million), and New York (47 million). Map 1 illustrates the location of Anaheim within the state of California and Orange County. Centrally located in Southern California, Orange County is bordered by Los Angeles County to the north, San Diego County to the south and San Bernardino and Riverside Counties to the east. Map 2 illustrates the location of the project site in a densely urban area in Anaheim, California. The insert shows the 22-acre park and parking lot where the system will be constructed. Map 3 shows the location of future sites where the City is considering implementing detention and infiltration projects, using the Modjeska Park Project as the model as part of its Citywide Drought Resiliency Program. The properties include city-owned parks, golf courses, vacant lots, and facilities, totaling approximately 1,500 acres.

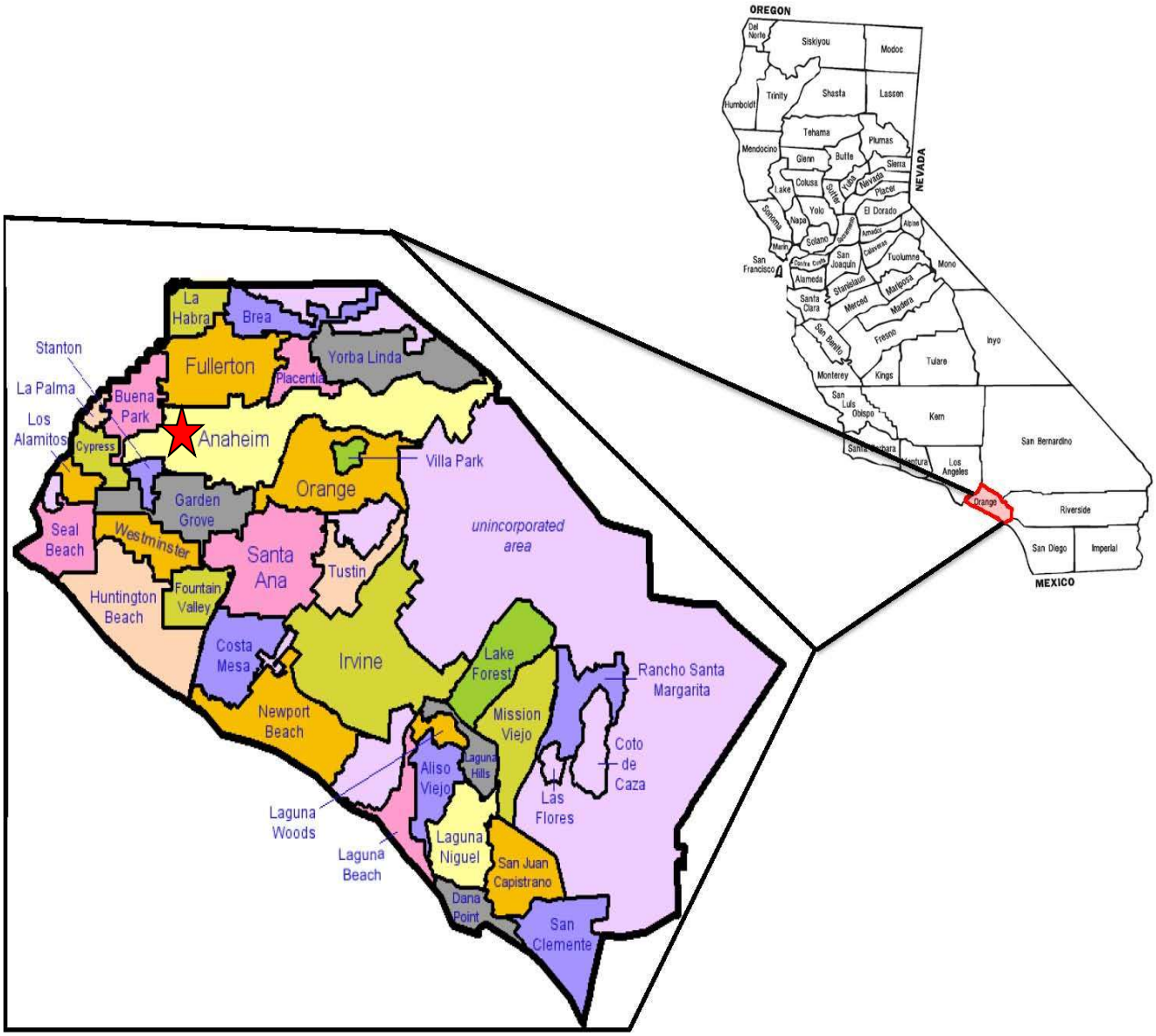
Source of Water Supply: In 2017, Anaheim Public Utilities (APU) managed a water supply of 56,400 AFY. Approximately 77% of the City's water supply is obtained from 26 active wells which draw from a local aquifer. Another 23% of the water supply comes from the Metropolitan Water District (MWD), which imports water from the California Bay-Delta and the Colorado River Project (BOR facilities). Groundwater, pumped by APU's own wells, is our most reliable and inexpensive source of water. This project directly contributes to our long-term resiliency and need for a reliable groundwater source.

Current Water Use and Number of Water Users Served: APU provides service to 63,622 meters throughout the City. Of the 56,400 AFY of water managed by APU, residential accounts consume approximately 57%. The City's municipal irrigation (i.e., landscaping) use is rolled into the Commercial/ Industrial/ Institution (CII) water account (water used for irrigation of major crops is insignificant). The CII use accounts for over 43% of the water demand in Anaheim. The City is home to the Disneyland Resort, the Anaheim Convention Center (the largest convention center on the West Coast attracting 1.6 million visitors annually), the Los Angeles Angels of Anaheim, the Anaheim Ducks, and over 100 hotels. Because of its unique position as a global tourist destination, Anaheim is especially vulnerable to climate change. Anaheim must meet both the residential/business needs and also the water use and energy consumption needs of millions of visitors each year. As a City whose economy hinges on being a tourist destination, mandatory water conservation could have dire effects on Anaheim's economy.

Projected Water Demand: Over the next 25 years, water use is anticipated to increase by 13% to approximately 64,000 AFY, serving a population of well over 400,000 people. Much of the growth will be attributed to higher population densities, but we also attract millions of visitors due to the many entertainment venues that contribute to increased water demands. By 2020, Orange County's population is expected to increase by 300,000 to 500,000 people, Southern California's by 7 million and the State's by some 15 million. Meanwhile, despite above-average rainfall in 2016-2017 that provided a brief respite from a prolonged drought, the U.S. Drought Monitor announced on February 1 that Orange County, which has received well under 2 inches of rain this season, is again in a period of "moderate drought."[1] Nearby Los Angeles County is already identified as being in severe drought. The report from the U.S. Drought Monitor also underscored the need for local resiliency, reporting that the State's snowpack, which supplies

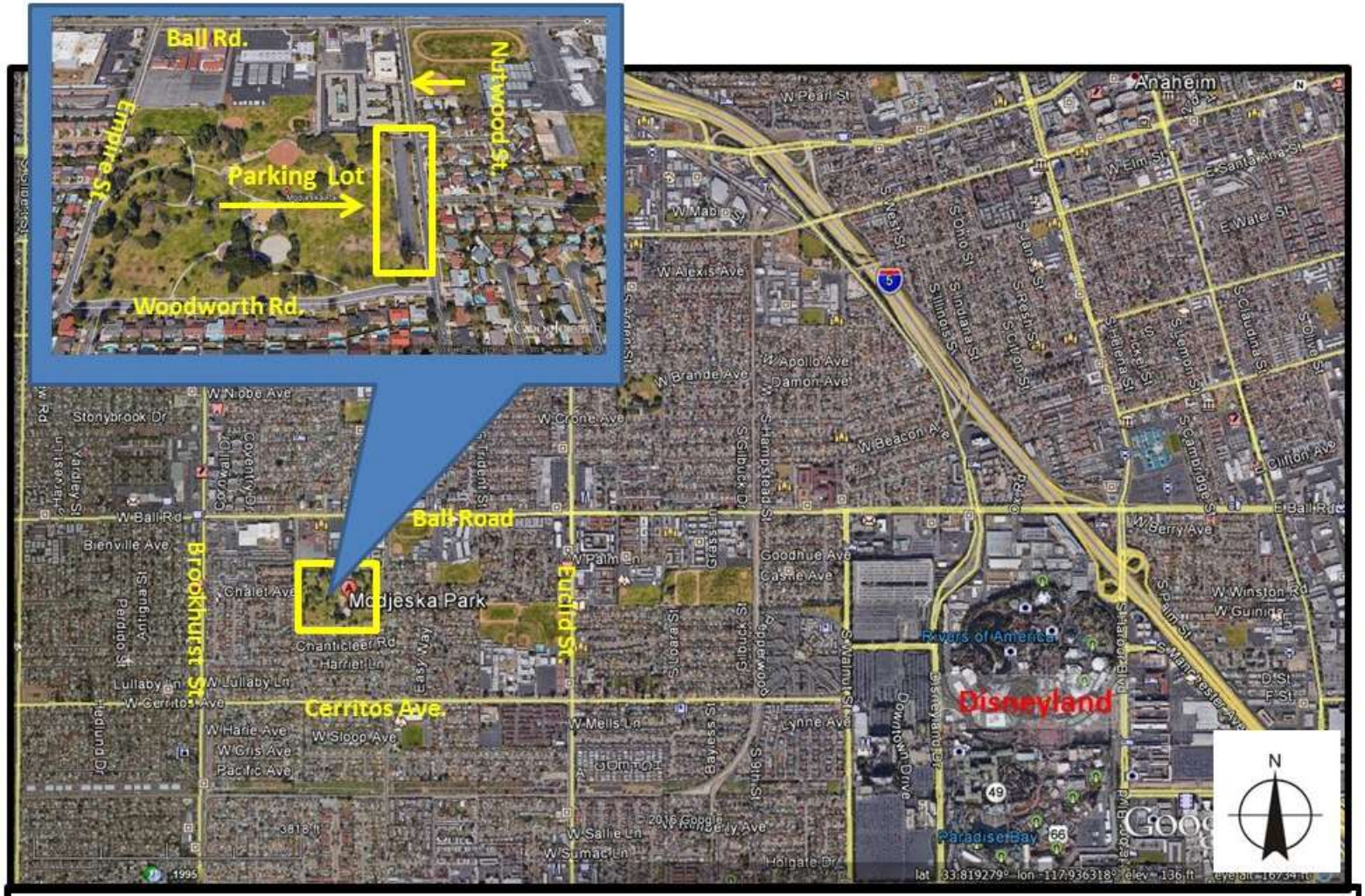
[1] Richard Heim, NOAA/NCEI, *United States Drought Monitor*, February 1, 2018.

Map 1
Location of Anaheim within California and Orange County



Map 2

Location of the Project Site in the City of Anaheim

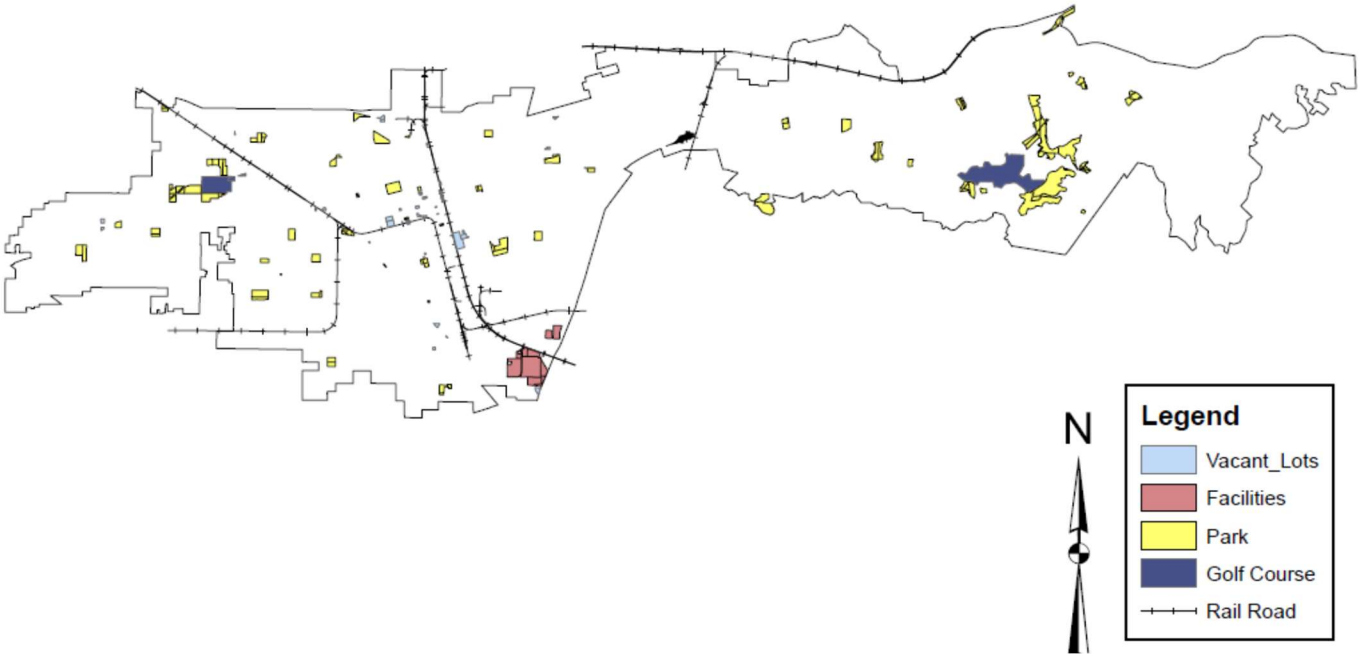


Modjeska Park Underground Storm Water Detention and Infiltration System

Project Location Map: Location of Modjeska Park Within the City of Anaheim

Map 3

Preliminary Locations of City-Owned Parcels with Potential for Replicating the Modjeska Park Urban Model for Storm Water Detention and Infiltration (Potential for 1,800 AFY of Stormwater Capture and Infiltration)



water to the California Water Project, measured only 27% of average. While last year's heavy rainfall was a break from a decade of below-average rain, the deficit in the City's groundwater will take years to overcome. Each passing year without implementation of this Project, means 182 AFY of storm water from the tributary area flowing through the project that could be recharging the groundwater is instead flowing into the Bolsa Chica Channel and eventually the Ocean (see photos 1 and 2, next page). Further, the City has calculated preliminary water infiltration estimates for the potential sites where this Project will be replicated as part of the Citywide Drought Resiliency Program (see map above), and estimates another 1,800 AFY could be infiltrated into the City's groundwater.

Instrumental to our future demand, the City participates in the Groundwater Replenishment System (GWRS) to help provide a drought-proof source of water for the region, as well as an ongoing supply source for clean water. The GWRS was expanded in 2011 with the help of federal BOR funding.

In order to ensure adequate water supplies into the future, the City is aggressively seeking ways to conserve existing water sources that are currently lost to the ocean. The reprieve from drought due to unusually wet weather in 2016-17 has already come to an end – with less than 2 inches of rain to date in 2017-18, the region is once again in a drought. The Modjeska Park Project provides a model for the City to implement at other built-out locations to help fulfill its drought resiliency goals.

Water Delivery System: APU's distribution system is comprised of 751 miles of water mains, one earthen untreated reservoir with a capacity of 920 million gallons, and 12 treated reservoirs with a capacity of nearly 29 million gallons. APU treats over 15 million gallons of water a day at its own treatment facility and maintains 17 interconnections with neighboring cities and water districts to supply water during emergency situations. The City's wells draw water from the Orange County groundwater basin, where the

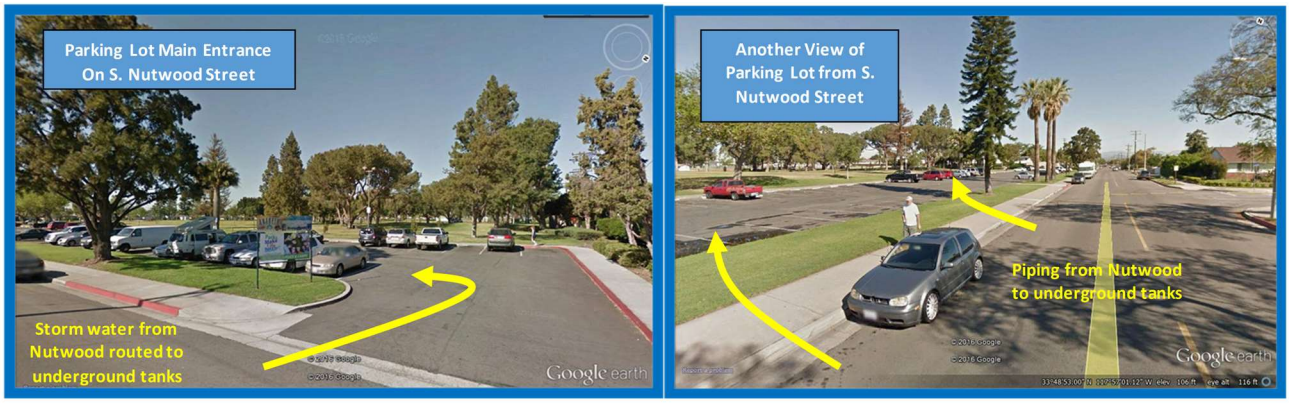
Site Photos 1 & 2: Localized flooding is a common problem at Modjeska Park. Water that does not percolate naturally into the ground is lost to the Pacific Ocean via the storm water system. Over its useful life, this proposed project will capture 9,100 AF of water and transport it to on-site underground filtration chambers, which will then be used years later as drinking water via our groundwater well system.

Orange County Water District's (OCWD's) GWRS recycled water project is located. The OCWD project takes highly treated sewage water and pipes the water to Anaheim, where it is recharged into the basin. As previously stated, approximately 23% of the City's water supply comes from imported water wholesaled by MWD. APU purchases both treated potable and untreated water from MWD. Treated water is delivered through five major feeders. MWD's method of treatment includes filtration and disinfection processes. APU maintains seven connections to the treated MWD feeders and one connection to untreated water.

1C. Project Description:

The project site (Map 2) is located in a high-density residential neighborhood, surrounded by homes, retailers, and schools. The site itself is a 37,000 square foot parking lot, adjacent to a 22-acre City park which attracts more than 4,000 monthly visitors and offers multiple community facilities including: barbecues, basketball court, children's play area, fire ring, group picnic shelter, lighted softball fields, open play area, and restrooms. Based on the City's conceptual design and preliminary design plans provided by StormTrap, the project elements may include the following (this is subject to change based on the final design):

1. Replace up to 37,000 sf of impermeable asphalt concrete (AC) with permeable pavement within the parking lot footprint to enhance percolation into the groundwater.
2. Install an underground, pre-manufactured infiltration/retention system and storm water diversions, allowing the contaminated storm water that currently flows into the Bolsa Chica Channel to instead percolate into the groundwater, removing pollutants;
3. Re-route (through pipes and cutouts) dry and wet weather runoff that collects on the adjacent Nutwood St. to the underground facility (see Site Photos 3 and 4, next page);
4. Create the new storm water detention/infiltration facility – including excavation and installation of pre-manufactured modules. The modules will be manufactured according to shop drawings approved by the Installing Contractor and Engineer. Installation will be performed in accordance with standard practices.



Site Photos 3 & 4: The project will draw storm water from the nearby street into an infiltration system installed underneath the existing parking lot. In addition, the parking lot pavement will be replaced with a permeable surface, allowing additional recharge of the City's groundwater.

The system has been designed to accommodate all dry weather runoff and first flush storm water from each rain event. We have estimated that approximately 182 AF of dry and wet weather runoff will flow to the system annually and will be infiltrated into the groundwater. There is no expectation of loss/evaporation with this system. Over 50 years (est. useful life) the system will capture and infiltrate 9,100 AF of water that would otherwise be lost to the ocean. Replication of the model at other potential City sites could result in up to an additional 1,800 AFY of storm water captured over the next 50 years.

This project will show marked benefits in water quality and supply. It is on track to be completed within the proposed schedule and budget. Preliminary designs and environmental inquiries have revealed no cause for delay or obstructions. The project implements cost-effective, low-impact design and green infrastructure recognized as a best management practice. Implementation is relatively simple and the results are extremely effective in preserving water otherwise lost to the storm drain system and improving water quality. In addition, the project will serve as a model for other urban, built-out sites throughout the City, and in other urban communities where opportunities for natural infiltration are limited.

1D. Performance Measures:

Measuring the success of this Project is particularly important because the City intends to use the Project as a model for future efforts implemented under its Citywide Drought Resiliency Program. Fully understanding the outcomes of the Modjeska Park Project will help the City to modify and improve the implementation of later projects, and will help justify future capital investments.

Increased Water Supply Reliability. Through this Modjeska Park Project, the City will increase the reliability of its local water supply through increased ground water recharge. Ground water recharge performance will be measured/calculated based on dry weather flow estimates multiplied by time to arrive at the total amount of volume infiltrated during dry weather. Groundwater recharge during storm events will be calculated using a gauge to indicate the level to which storm flow fills the chamber and the amount of recharge will be calculated using a local rain gauge and design information for the Storm Detention and Infiltration System. The targeted measure will be to capture and infiltrate 182 AFY of water from the surrounding watershed—180 AFY of wet weather and 2 AFY of dry weather, enough to supply water for 364 families. The City will also collect data from APU regarding the AFY of water imported prior to

implementation and in the year following implementation. These figures will be adjusted for changes in overall water usage that might occur due to other ongoing water conservation efforts.

Measurement Tools: A gauge and calculated flow rates; AF changes in water imported.

Targets: Capture and infiltration of 182 AFY of water from the surrounding watershed, 180 AFY of wet weather and 2 AFY of dry weather. Identify/investigate additional potential sites within the City under the Citywide Drought Resiliency Program for future implementation, leading to potentially 1,800 AFY of water infiltration each year.

Benefits to Water Quality and Wildlife/Habitat. This project will have a significant impact on restoring native habitat in the Bolsa Chica Channel in two ways: 1) reducing urban pollutants in the storm water (Total Maximum Daily Limits, or TMDLs) and, 2) reducing heated runoff as a pollutant. The project location and the surrounding area experience heavy flooding and the contaminated storm waters flow into the Bolsa Chica Channel. Unmanaged storm water runoff causes serious damage to natural bodies of water, particularly in urban area land use. Pollution from storm water contaminates our waters and harms/kills fish and other wildlife. As storm water passes over developed land, it picks up pollutants and transports them to the nearest storm drain and eventually into the Channel. Storm water pollution has contributed significantly to the pollution problem in the Bolsa Chica Channel.

Measurement Tools: Pollutant estimates, Peak flow rates, TMDL limits

Method: Pollutant reduction will be calculated based on the anticipated pollutant generation of the land use upstream using storm water runoff data collected from a local project on South Brookhurst Street and County dry-weather sampling data. The pollutant mass reduction will be calculated by multiplying the quantity of flow infiltrated by the anticipated pollutant generation data. The data will be converted to pounds/day. Flow rates will be measured by a gauge and calculated flow rates.

Targets: The project supports sustained, long-term water quality improvement. It will contribute to broader efforts to reduce storm water contamination and will reduce the level of ammonia flowing into Bolsa Chica Channel from urban runoff. Urban runoff is a major contributor of ammonia and samples collected for the pollutant within Bolsa Chica Channel have exceeded the TMDL limits. The City estimates 100% removal of ammonia for the design event with annual reduction of 0.13 pounds of ammonia per day. The City also estimates 100% removal of indicator bacteria from the project area for the design event for storm water with estimated concentrations of 7,000 MPN/100 mL and 128,000 MPN/100 mL of fecal coliform and total coliform, respectively.

1E. Evaluation Criteria

Evaluation Criterion A—Project Benefits

Build Long-term Resilience to Drought. Over the useful life of the project, estimated at 50 years (typical for concrete and plastic based material used for underground modules), the project will add approximately 9,100 AF of water to the City's water supply. This is water that would otherwise flow untreated to the Bolsa Chica Channel and eventually to the Pacific Ocean. It will reduce the City's reliance on imported water, thereby also increasing the water supply in other regions throughout the State.

More significantly, this Project will serve as a cornerstone of the City's developing Drought Resiliency Program, by serving as a model for capturing and infiltrating storm water in a built-environment. As shown in Map 3 above, the City has identified more than 1,500 acres of City-owned land as potential sites for the implementation of future projects modeled after the Modjeska Park project. At full implementation, the City estimates that these urban infiltration projects could detain and infiltrate more than 1,800 AFY –

enough to supply water needs of 3,600 families. Assuming a 50-year life for all projects, the overall program stands to add approximately 90,000 AF of water to the City's water supply.

Make Additional Water Supplies Available - Estimated Quantity of Additional Supply and Methodology for Calculation. The proposed project is estimated to intercept 180 AF of wet weather and 2 AF of dry weather runoff annually and use the intercepted water for recharge (182 AF total). Over the project's 50-year useful life, approximately 9,100 AF will be added to the City's water supply (182 AFY x 50 years = 9,100 AF). Currently, all 182 AF of water that this project will conserve are being lost to the ocean. The project will also contribute to the water supply in northern California, by reducing the amount of water imported into the City.

To evaluate anticipated infiltration volumes, we accessed historical rainfall data through the National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center. The data obtained were from a rain gauge located in close proximity to the site (i.e., with similar regional topography and climate).

We determined watershed size from existing City Master Plans, and runoff volumes from the watershed using the National Resource Conservation Services (NRCS) runoff curve number method. The method has been well correlated with actual experience, and its use has become dominant in the U.S. The method classifies the land use and soil type by a single parameter called the curve number, CN, and can be used for any size homogenous watershed with a known percentage of imperviousness.

The historical rain data was scrubbed to eliminate days with no precipitation and remaining daily precipitation events were analyzed to determine the amount of runoff produced from each storm event for each drainage area. These individual runoff quantities were summed for each year in the period of record to determine watershed runoff volumes from 1990 to 2015. The results show that, on average, 182 AFY of storm water and dry weather runoff is produced by the watershed and is capable of being rerouted and infiltrated into the proposed underground/retention/ detention modules at Modjeska Park. We also gathered data from the Western Regional Climate Center for two NOAA coop stations near the sites:

1. Yorba Linda: From 10/1/1912 to 1/20/2015; Average Annual Precipitation – 14.40 inches
2. Anaheim: From 8/1/1989 to 1/20/2015; Average Annual Precipitation – 14.09 inches

Wet weather calculations - 180 AF of infiltration per year, noting that the infiltration area footprint is 37,000 sf, and the volume of the infiltration chambers is 425,500 cf (11.5' x 37,000sf). The calculations assume: infiltration rate of 2.4 in/hr; 13 rain events annually generating at least 425,000 cf of runoff; and 24 hrs as typical duration of runoff (flowrate of at least 2 cfs in the mainline system). During each rain event the infiltration chamber is being filled for 24 hours. At the conclusion of this time period the chamber is full and continues to infiltrate over several days. For the first 24 hour period 4.1 AF are infiltrated (2.4 in/hr x 37,000sf x 24 hrs) which equates to 53 AF of infiltrated water (4.1 AF x 13 rain events). There is 9.8 AF of volume remaining in the infiltration system (11.5 ft x 37,000 sf) at the conclusion of the 24-hour period after the storm event starts. This equates to 127 AF of infiltrated water (9.8 AF x 13 rain events). Together this equates to 180 AFY of wet weather water infiltrated (53 AFY + 127 AFY).

Dry weather caluclations - Irvine Ranch Water District estimated dry weather runoff from residential and commercial irrigation results in 0.152 gallons of runoff per acre per minute on days without rain.

Watershed (Acres)	Estimated Flow (GPM)	Volume (Gallons/day)	Volume (AFY)
23.5	3.572	2,143	2

To estimate the potential volume of water that could be infiltrated as part of the larger program, the City calculated the physical size of the parcels in acres (based on county parcel maps) and utilized an

average annual rainfall of 14 inches per year citywide (per NOAA). These rough calculations will be refined as the City moves forward with its Citywide program based on the results of the Modjeska Park Urban Model. The table below summarizes these preliminary estimates.

Type of Parcel	Total Area (acres)	Average Rainfall (inches/year)	Volume (AFY)
1. Parks	851	14	993
2. Golf Courses	321	14	374
3. Vacant Lots	51	14	60
4. Facilities	149	14	174
5. Underground Facilities	NA	NA	4
6. Inactive Open Space from Other Agencies (e.g., railroad)	168	14	197
Total	**1,540**		**1,802**

Percentage of Total Water Supply (Increased). The 182 AFY of increased water supply represents only 0.3% of the City's total water supply. However, in a region that has been impacted by below average rainfall for the last decade, it is a significant number. The percentage was calculated by dividing the additional 182 AFY by the 56,400 AFY that represents the City's annual water supply.

In addition, the Modjeska Park Project will serve as a model and catalyst for multiple other storm water projects as part of Anaheim's developing Drought Resiliency Program. The projected annual water infiltration generated by all of the projects within that program (1,800 AFY), represents more than 3% of the total water supply (enough to supply the water demand of 3,600 households).

Significance of Benefits Associated with Additional Water Supplies. Future water resources in the Southern California region will be challenged by political and environmental limitations, continued growth, and the need to develop new water supplies. Water experts are encouraging more water reuse and more efficient use of the water currently available. Orange County's groundwater basin needs to be refilled and maintaining the groundwater basin water reserve is critical because it provides reliable supplies for the most developed portions of the county. The prolonged drought, combined with expected population growth, makes an amount of additional recharge a significant benefit.

Anaheim's water supply is a blend of groundwater from the City's own wells and water imported from Northern California and the Colorado River. As both sources of imported water continue to be strained, the City of Anaheim may be required to institute mandatory water conservation. As a City whose economy hinges on being a tourist destination, this burden could have dire effects on Anaheim's economy.

This specific increase in water supply also has a unique and substantial benefit – it represents a shift from treating storm water as a problem to treating it as a resource. The project is in a high traffic area, allowing the City to use signage to communicate this shift to area residents, while providing additional information about individual actions that can assist with drought resiliency. The project will serve as a catalyst and model for dozens of other storm water infiltration projects at similar, urban, built-out locations. The Modjeska Park Project will showcase an innovative approach for urban communities throughout the region, encouraging municipalities to recognize the opportunities storm water presents, even in a built-out environment.

Improved Management of Water Supply. While this project focuses on increasing drought resiliency by increasing water supply, it will help to ease tensions related to water supply management by reducing

dependency on outside water resources. This project will address the City of Anaheim's concerns about the impact of drought, population and tourist growth on future water supply by harvesting storm water in the affected area. Watershed management in Orange County relies upon partnerships between cities, water agencies, stakeholders, groundwater authorities and environmental groups to develop projects and prioritize efforts that balance water quality, water supply and efficiency, flood management, and natural resource protection. The Orange County Water District Groundwater Management Plan voiced strong support for the implementation of projects that harvest storm water and is actively promoting local infiltration of storm water into groundwater management. The management plan iterated that captured and recharged storm water will be a major source of the future water supply. Additionally, the *2016 Orange County Stormwater Resource Plan* (OC SWRP) stated that paramount to the implementation of an integrated watershed-based approach to address storm water and dry weather runoff pollution is a strategic prioritization of water quality issues of concern based upon the characteristics of each watershed and monitoring results garnered over time.

Despite these efforts, some signs of tension have begun to emerge. Relief from the severe drought lasted just one season (2016-17); significant shortfalls of rain in 2017-18 are already straining resources and have sent Southern California back into drought once again (with neighboring counties already facing severe drought status). Recently, the Irvine Ranch Water District filed a lawsuit against OCWD alleging that OCWD is not giving Irvine Ranch credit for its recycled water program, resulting in increased fees for ratepayers. In addition, tension continues to mount over water rights related to water from the Colorado River and the State Water Project. Increasing local self-reliance will continue to minimize the need for litigation related to imported water sources, and improve the ability of the City to deliver water to its residents during drought.

Quantity of Water Better Managed. The project will better manage up to an estimated 182 AFY of water, and 9,100 AF of water over the useful life of the project. This number reflects the total amount of water captured and infiltrated into the groundwater – water that currently is managed by funneling it to the nearest storm drain and the ocean. Methodology for these calculations was documented above.

Percentage of Total Water Supply (Managed). The water that will be better managed by this project (182 AFY) represents 0.3% of the water supply managed by the City's total water supply. The percentage was calculated by dividing the additional 182 AFY by the 56,400 AFY that represents the annual water supply managed by the City. As mentioned earlier, the project is a model for the City's emerging Drought Resiliency Program, which at full implementation represents 3% of the water the City manages (1,800 AFY).

Qualitative Description of Significance of Water Management Benefits. This project signals a major shift in the City's approach to managing storm water. Previously, storm water has been viewed as a problem to be eliminated. In a densely populated, fully-built out region of the City, the "solution" has been bigger or more storm drains that can quickly capture water and remove it from the streets by sending it to the ocean. This proposed project instead recognizes the benefits of capturing and retaining storm water, even in an urban area, by making use of City property in an innovative way. It shows collaboration between Anaheim Public Works and APU (the City's water supplier), and highlights the role multiple departments play in managing one of the City's most important resources. It will serve as a model for water management for other cities struggling to address storm water concerns in developed environments.

New Information to Water Managers. Again, this project is a shift from treating storm water as a problem and something that needs to be cleared out as quickly as possible, to a resource that needs to be captured and retained. Information and education about how the infiltration process works, and the reason the shift is critical, will be made available to water managers, maintenance staff, and the community through monitoring data, as well as through signage at the project site. The City views the Modjeska Park

Project as a model for its own future drought resiliency projects and a model for other urban communities seeking to increase water self-reliance. Monitoring and evaluation will allow the City to share real and insightful data on implementation and outcomes with other water managers throughout the region.

Salt water barriers, Wells, New water marketing tools or programs, or Metering/water measurement projects. Not applicable to this project.

Benefits to Fish, Wildlife and Environment. While this project is not a Task C project, it will have a significant impact on restoring native habitat in the Bolsa Chica Channel in two ways: 1) reducing urban pollutants in the storm water and, 2) reducing heated runoff as a pollutant. The project location and the surrounding area experience heavy flooding and the contaminated storm waters flow into the Bolsa Chica Channel. Unmanaged storm water runoff causes serious damage to natural bodies of water, particularly in urban area land use. Pollution from storm water contaminates our waters and harms or kills fish and other wildlife. As storm water passes over developed land, it picks up pollutants and transports them to the nearest storm drain and eventually into the Channel. Storm water pollution has contributed significantly to the pollution problem in the Bolsa Chica Channel.

The project will capture 182 AFY of polluted, contaminated storm water and dry weather runoff that currently goes into the Bolsa Chica Channel, which is listed as an impaired body of water on the 2010 Integrated Report (Clean Water Act 303(d) List, United States Environmental Protection Agency, 2010). Identified contaminants include: Ammonia, Indicator Bacteria, and pH. This annual pollutant loading into the Bolsa Chica Channel, a Warm Freshwater Habitat, has caused a significant impact on the survival of fish and other aquatic life. Over the 50-year useful life of the detention and infiltration system, the project will support the restoration of the native habitat of the Channel by preventing 9,100 AF of polluted water from flowing into the Channel. As a side benefit, the channel feeds into Huntington Harbor/Anaheim Bay (receiving waters). The contaminated urban runoff includes: fertilizers, pesticides, heavy metals, organic compounds, trash and debris, oil and grease, bacteria/virus, and oxygen demanding substances, among others (source: Drainage Area Management Plan, County of Orange, Cities of Orange County, and Orange County Flood Control District, 2003).

Urban Runoff Pollutant Reduction. Urban runoff is a major contributor of ammonia and indicator bacteria. The Bolsa Chica Channel has exceeded the total maximum daily load (TMDL) limits. The City estimates 100% removal of ammonia for the design event with annual reduction of 0.13 pounds of ammonia per day, as well as 100% removal of indicator bacteria with estimated concentrations of 7,000 MPN/100 mL and 128,000 MPN/100 mL of fecal coliform and total coliform, respectively. The project will reduce the TMDL of contaminants entering the Bolsa Chica Channel and Coastal Plain of Orange County Groundwater Basins—one of the purposes of this project – and is therefore consistent with applicable TMDL requirements or thresholds. The City of Anaheim, like all cities nationwide, is mandated to comply with NPDES permits and WDRs issued under the federal Clean Water Act, Title IV "Permits and Licenses," Section 402 (33 USC 466 et seq.).

Heat Pollutant Reduction. This project addresses climate change vulnerability with respect to urban heat island effects in two ways: 1) Reducing heat through natural hydrology as storm water slowly percolates through the soil; and 2) reducing solar reflective heat of the existing blacktop asphalt surface.

Under section 502(6) of the Clean Water Act, heat is considered a pollutant as temperature is a very important factor in the chemical and biological processes of organisms. The proposed project is located in a highly urbanized area with rooftops, roads, parking lots, sidewalks, etc. These darker surfaces tend to have low solar reflectance, as the material has absorbed most of the solar radiation. These are major contributing components to the over-heated runoff flowing into the Bolsa Chica Channel. The project will perform a more natural cooling system, reflected by natural hydrology, whereby any heated storm water

will slowly percolate through the soil, cooling the storm water. The project will help prevent thermal pollution from negatively impacting the Bolsa Chica Channel and Pacific Ocean's fish and wildlife habitats. Storm water runoff temperatures have increased because of the increase in urban impervious surfaces. At this stage of the planning process, the pervious surface that will cover the infiltration and detention system has not been finalized but we do know the new pervious materials that will be used in the project will allow storm water penetration into the system. Systems that provide treatment by infiltration and filtration can regulate the runoff temperatures by thermal exchange with cool subsurface materials.

Type of Benefits Provided. This project will reduce the amount of untreated and polluted storm water flowing into the Bolsa Chica Channel, contaminating the water and harming/killing fish and other wildlife. Bolsa Chica Channel is listed as an impaired body of water due to the presence of Ammonia, Indicator Bacteria, and pH on the 2010 Integrated Report (Clean Water Act 303(d) List, U.S. EPA, 2010).

The City estimates 100% removal of ammonia for the design event with annual reduction of 0.13 pounds of ammonia per day and 100% removal of indicator bacteria for the design event with estimated concentrations of 7,000 MPN/100 mL and 128,000 MPN/100 mL of fecal coliform and total coliform, respectively. As previously discussed, the project will help prevent thermal pollution from negatively impacting the area's natural habitats, by creating a more natural cooling system, reflected by natural hydrology - any heated storm water will percolate through the soil,cooling the storm water.

Status of Species. The project seeks to reduce contamination of the Bolsa Chica Channel – which will positively impact the status of multiple species of aquatic and other wildlife living in or near the contaminated water. There is not a specific species that is targeted through this project.

Evaluation Criterion B—Drought Planning and Preparedness

The proposed project is aligned with two countywide plans that address drought resiliency – the *Orange County Water District Groundwater Management Plan* and the *2016 Orange County Stormwater Resource Plan.* It is also aligned with the *Santa Ana Watershed Basin Study* of 2015, conducted for BOR by the Santa Ana Watershed Project Authority, with active participation from the City of Anaheim.

Copy of Drought Plan. Relevant pages of the *Orange County Water District Groundwater Management Plan and 2016 Orange County Stormwater Resource Plan* are included in Appendix A.

How Plan Addresses Drought. While the City has several documents guiding its efforts to address drought and conserve water, more relevant to the proposed project are plans adopted at the county level, with input and buy-in from the City, that direct groundwater and storm water management and activities.[2] One of these documents is the *Orange County Water District Groundwater Management Plan*, which supports the implementation of projects that harvest and infiltrate of storm water as a major source of the future water supply. Anaheim produces approximately 77% of its water from the Orange County Groundwater Basin, which is managed by the OCWD, and supports OCWD's efforts to increase the amount of water that can be captured and recharged into the groundwater basin. Anaheim has been working with OCWD on a variety of projects and programs to maintain and improve the quantity and quality of water in the groundwater basin. These include implementing a conjunctive use program to store water in the groundwater basin during wet years for use in dry years, shifting pumping to areas which benefit management of the groundwater basin, planning for injection wells to inject recycled water into the

[2] In 2015, APU developed a *Water Use Efficiency Master Plan* to evaluate and invest in cost-effective, sustainable water conservation programs. The plan provides key measures to help the City meet the State's Water Conservation Act of 2009 (SBx7–7) mandate (20% reduction in per capita water use by 2020). The City accelerated the timeframe due to drought, partnering with customers to achieve a 20% mandated reduction by 2016, and to maintain that conservation level through 2020.

groundwater basin, use of recycled water produced by OCWD for industrial and irrigation uses, and collaboration in groundwater cleanup projects.

Additionally, the *2016 Orange County Stormwater Resource Plan* stated that paramount to the implementation of an integrated watershed-based approach to address storm water pollution is a strategic prioritization of water quality issues of concern based upon the characteristics of each watershed and monitoring results garnered over time. Watershed management in Orange County relies upon partnerships between cities, water agencies, stakeholders, groundwater authorities, and environmental groups to develop projects and prioritize efforts that balance water quality, water supply and efficiency, flood management, and natural resource protection.

The City was also a partner and participant in the study conducted by the Santa Ana Watershed Project Authority (SAWPA) for BOR, with the City providing both funding and data. The **Santa Ana Watershed Basin Study** addresses water supply and demand projections for the next 50 years and identifies potential climate change impacts to Southern California's Santa Ana River Watershed. It encompasses approximately 2,600 square miles in Orange, Riverside and San Bernardino counties and is home to more than 6 million residents and includes the City of Anaheim. The data included capacity and monthly production and energy usage of wells and pump stations as well as maximum capacity and storage volumes of the reservoirs and tanks. Information also included data related to climate change and temperature in the Santa Ana River Watershed. The Study identifies the following adaptive strategies:

- **Increase Water Supply:** Promote conjunctive management and groundwater storage; consider brackish and ocean desalination opportunities and more recycled water use, and local and regional surface storage opportunities. Identify watershed supply sources and increase storage capacity, and improve surface water operating efficiencies.
- **Improve Water Supply:** Promote conjunctive management and groundwater storage; consider brackish and ocean desalination opportunities and more recycled water use, and local and regional surface storage opportunities. Identify watershed supply sources and increase storage capacity, and improve surface water operating efficiencies.

All of these plans address climate change and its impacts on water resources and the drought.

How Project is Supported/Prioritized by Drought Plan. In addition to a discussion regarding the importance of capturing storm water, referenced in all plans and studies mentioned above, the OC SWRP also specifically identifies and prioritizes storm water and dry weather runoff projects. ***The Modjeska Park Storm Water Detention and Infiltration System was ranked a high-priority project*** with a score of 280. Priority benefits outlined in the SWRP (Pages 36-37) for Modjeska Park include: 1) Water quality benefits—Increased filtration/treatment of runoff, nonpoint source pollution control, re-established natural water drainage and treatment; 2) Storm water capture and use benefits—Conjunctive use, supply reliability, conservation; 3) Water supply and flood management—Storm water capture and use benefits.

Evaluation Criterion C—Severity of Actual/Potential Drought Impacts Addressed by the Project

Ongoing/Potential Impacts. For nearly a decade, the southern region of the United States has experienced below average rain fall, culminating in a five-year drought that has negatively impacted the Santa Ana and Colorado Rivers. Despite a year of above average rainfall in 2016-17, Orange County is again in a moderate drought according to the U.S. Drought Monitor released on February 1, 2018. The future water picture is complicated by the fact that Orange County's population is expected to increase by more than 500,000 people by 2020. Southern California's population in general is anticipated to grow by seven million and the State's by 15 million. Each passing year, without implementation of this project, 182 AFY of polluted and contaminated storm water flow needlessly into the Bolsa Chica Channel and eventually into

the Pacific Ocean. At a time when the pressing needs of climate change and clean water are becoming more critical, this project will alleviate some of the burden of acquiring clean water in Orange County. In the coming years, capture of water at the Modjeska Park underground detention and infiltration system, and the use of the project as a model for other urban storm water capture and infiltration projects, will become more and more critical to the people of Anaheim.

Anaheim is especially vulnerable to climate change because of its unique position as a global tourist destination. More than 16 million annual visitors from around the world come to Anaheim to visit the Disneyland Resort, the Anaheim Convention Center (largest convention center on the West Coast), Angels Stadium, and the Honda Center. Already the 10th largest city in the State, Anaheim also must meet the water use and energy consumption needs of millions of visitors each year. Anaheim's water supply is a blend of groundwater from the City's own wells and water imported from Northern California and the Colorado River. As both sources of imported water continue to be strained, the City of Anaheim may be required to institute mandatory water conservation.

Anaheim is part of the Coastal Plain Orange County Groundwater Basin. Our relatively shallow groundwater reserves are more vulnerable to cycles of dryness and drought. According to the Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, "the region now uses approximately twice as much water as is available from local sources. As a result, the quantity of water imported into this region each year now equals or exceeds the amount of ground and surface water utilized" (page 1-14). This underscores the pressing need to ensure the groundwater resources are sustainable for the long-term.

Existing/Potential Drought Conditions. In 2014, 2015 and 2016, the State of California was in a drought emergency, as a result of nearly a decade of below average rainfall. Above average rainfall in 2016-17 had a significant positive impact on the drought, and the City of Anaheim emerged from "severe drought" status in early Spring 2017. However, even at that time, the U.S. Drought Monitor report noted that groundwater levels remained critically low. Orange County's relief from drought was short-lived. On February 1, 2018, the U.S. Drought Monitor announced that the County, which has received well under 2 inches of rain this season, is once again in a period of "moderate drought"[3] (see Exhibit 1). In addition, the State's snowpack, which supplies water to the California Water Project, measured only 27% of average.

Projected Increases to Projected Severity/Duration of Drought. The City of Anaheim was a partner in the study conducted by the Santa Ana Watershed Project Authority (SAWPA) for BOR. Findings included historical and projected temperature changes in the Santa Ana River Watershed (see Exhibit 2), providing projections for three future time periods. The overwhelming trend is for temperatures to continue to rise over the next 50+ years, straining already scare water supplies.

Evaluation Criterion D—Project Implementation

The City is ready to begin this project immediately upon funding from BOR. Below is a detailed Work Plan detailing all major tasks, milestones, and dates.

Work Plan and Tasks:

TASK 1. PROJECT ADMINISTRATION AND GRANT ADMINISTRATION

This task includes all actions necessary to manage the project to include ensuring adherence with the budget and schedule and also managing all grant proceeds in compliance with regulations and policies. The City will implement all necessary reporting as outlined by the final agreement.

[3] Richard Heim, NOAA/NCEI, *United States Drought Monitor*, February 1, 2018.

Exhibit 1: US Drought Monitor – Status of Drought in California

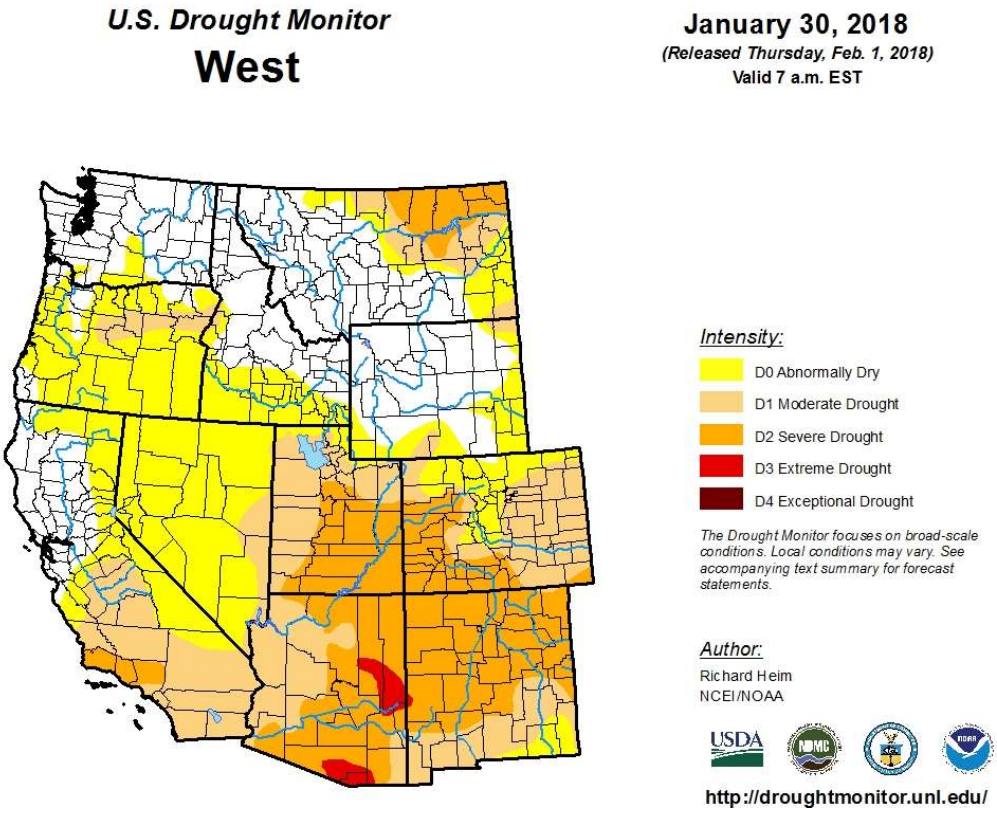


Exhibit 2: Climate and Temperature Change in the Santa Ana River Watershed

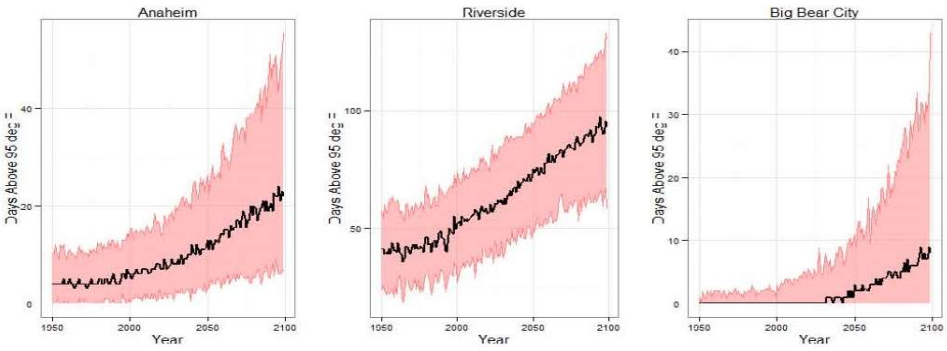


Figure 1 - Projected annual number of days above 95°F. Solid black line is the median and the red shading denotes the 5th and 95th percentile bounds

	Historical	2020	2050	2070
Anaheim	4	7	12	16
Riverside	43	58	72	82
Big Bear City	0	0	2	4

Table 1 - Median annual number of days above 95°F for one historical (1951-1999), and three future (2005-2034, 2035-2064, 2055-2084) time periods

Sub-task 1.1—Grant Kick-Off Meeting and Execution of Grant Agreement: The City will meet with BOR to review the grant agreement, discuss expectations and timelines, review procedures for consultant procurement, invoicing and reporting, the auditing checklist, and next steps. The City will document the meeting's minutes and action items. The City will process the grant agreement through the City Attorney's office and City Council and provide a fully executed copy of the grant agreement.

Deliverables: Meeting agenda, minutes, and action items; Fully executed grant agreement

Sub-task 1.2—Project and Grant Management: The City will conduct monthly project team meetings with selected consultant(s) and contractors and internal support staff to monitor project progress, prepare for upcoming tasks, debrief on completed tasks, conduct problem-solving, and ensure the project remains on schedule and within budget. The City's project manager will develop a schedule of monthly check-in/progress meetings and arrange for a conference call line for all parties to participate. The project schedule will be used as the standing agenda item for all calls. A qualified finance/ accounting staff member will be assigned to attend all meetings and coordinate/complete all financial reporting forms, as required. This will include preparing and submitting all reimbursement requests and grant completion forms. It is estimated that the City will seek reimbursement on a quarterly basis. As required, quarterly progress reports will be submitted to BOR which will include details about the progress of project implementation. At the conclusion of the project, a draft and final project report also will be submitted to BOR detailing the activities of the project, from commencement to conclusion, and include required data and analysis from the mandatory post-construction monitoring phase. The project manager will be responsible for completing and submitting required quarterly progress reports, program completion reports, water management status reports, and post-performance reports and forms (as required). Records Retention will be 3 years after final payments are made.

Deliverables: Schedule of monthly check-in calls with contractors/State staff; Request for reimbursement forms/documents, including receipt of grant funds; Water management status reports; Quarterly progress reports; Project/Grant completion reports; Post-performance reports and forms; Audit findings, etc.; and Records retention for specified time (per grant contract).

TASK 2. PLANNING, DESIGN, ENGINEERING, AND ENVIRONMENTAL

Sub-task 2.1—Issue RFP, Procure Consultant, Kick-off Meeting: The City will prepare and issue a Request for Proposal (RFP) and select a consultant to guide the planning, design, engineering, and environmental process (PDE&E). The City envisions hiring one qualified consultant who will perform all PDE&E work as one contract to streamline activities and complete work more quickly. This consultant will also provide construction support to the Construction Manager during the construction/ implementation phase in order to achieve consistency between design and construction. City-approved procurement procedures will be followed and the City Council will approve the selection of the consultant. City staff and the Consultant will meet to review the project's goals, objectives, tasks, and timeline; the City's expectations; and all grant requirements. The Project Kick-off Meeting will outline the plan for completing all tasks. It will be led by the City, and all key staff (City and Consultant) will be required to attend.

Deliverables: RFP; List of proposals received, reviewed, and ranked; Executed agreement with design and engineering consultant; Agenda/ meeting minutes from kick-off meeting; List of tasks (schedule) necessary for successful completion of design and engineering; and Notice to Proceed.

Sub-task 2.2—Planning, Design, Engineering, and Environmental Work: The selected consultant will develop all design and engineering plans to enable the City to advertise for constructing the system which will include, at a minimum, removing the existing impermeable asphalt concrete (AC) pavement, installing an underground, pre-manufactured infiltration/retention system with larger storm water pipe that will

route storm water into the system, and replacing with permeable pavement that will allow for storm water infiltration. Final design plans will likely incorporate some or all of the following elements (may change based on consultant recommendations): modules will be manufactured according to shop drawings approved by the installing contractor and engineer; shop drawings must specify size and location of roof openings and inlet/outlet pipe openings; and installation must be in accordance with industry standards.

Deliverables: Design plan meeting agenda/minutes; Photos/aerial documentation, as necessary; Design plans at 30%, 80% and 100% final level for review and feedback; List of necessary permits; Preliminary and final cost estimates; Construction drawings; and RFP to solicit contractors.

Sub-task 2.3—National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA): The selected consultant (from sub-task 2.1) will be responsible for working with BOR to complete all environmental reviews. Activities will include addressing any possible environmental impacts and determine compliance pertaining to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). No significant impacts are expected and therefore the project is expected to result in Categorical Exemption or Finding of No Significant Impact (for NEPA) and Notice of Exemption or Negative Declaration (for CEQA). The City confirmed with Doug McPherson (BOR Southern California Area Office) that the budget and timeline for environmental work included in this application should be sufficient to conduct any necessary NEPA activities.

Deliverables: Documents that satisfy the NEPA/CEQA process; Coordination with relevant agencies (if applicable) to obtain feedback and sign-off as Responsible Agency.

Sub-task 2.4—Permits/Construction Permits: Consultant, on behalf of the City, will research and determine what permits are necessary and will acquire such environmental or construction permits on behalf of the City. Permits that are anticipated at this time include: National Pollution Discharge Elimination System permit, City of Anaheim Plan Check, Water Quality Plan, and a right-of-way access permit through the City's Department of Public Works. Construction drawings will be processed through the City's plan check process.

Deliverables: Signed permits, as required; and Successful plan check process (approval).

TASK 3. CONSTRUCTION/IMPLEMENTATION

Sub-task 3.1—Construction Documents Developed, Public Bidding Process, Procure Contractor, Kick-off Meeting: The design and engineering consultant will prepare construction documents and assist the City staff in the public bidding process to select a contractor to perform the construction and implementation of the project. City-approved procurement procedures will be followed and the City Council will approve the selection of the construction contractor. City staff and/or Construction Management consultant, serving as the Construction Manager and the successful construction contractor will meet to review the project's goals, objectives, tasks, and timeline; the City's expectations; and grant requirements. These requirements may include prevailing wage provisions, Buy America, American Iron and Steel requirements, etc. When needed, the City of Anaheim contracts with a third party to monitor labor compliance programs (LCP). The Project Kick-off Meeting will outline the plan for completing all tasks. The Meeting will be led by the Construction Manager, and all key staff will be required to attend.

Deliverables: Construction document developed and posted/advertised; List of proposals received, reviewed, and ranked; Executed agreement with successful construction contractor; Agenda/ minutes from kick-off meeting; and List of all project tasks (step by-step list required).

Sub-Task 3.2 - Staging and Mobilization, Demolition, Construction/Installation

3.2.1 Staging and Mobilization (i.e. pre-construction activities): Activities include at a minimum: establish staging area on-site; mobilize equipment; remove and haul away existing impervious AC surface

pavement; excavate property and prepare site for installation phase. The contractor will be required to adhere to all NEPA/CEQA Mitigation Monitoring Plan elements and report on findings, if any.

3.2.2 Construction: Install Re-Enforced Concrete Pipes (RCP) laterals for inlet and outlet; install underground pre-manufactured infiltration/retention system for capturing runoff; backfill/repave parking lot using pervious surfaces; and complete restriping and other needed work to restore site amenities.

Deliverables: Construction status meeting agenda/minutes; Labor/work safety posters at construction site; Notification to Grant Manager prior to construction; Photos/documentation, as needed; Proof of adherence to NEPA/CEQA Mitigation Monitoring, if required; Proof of system check/conformance to standards; Invoices with documentation of work completed; Proof of compliance with local/State/Federal laws including prevailing wage; and Certificate of Completion.

TASK 4. MONITORING AND PROJECT PERFORMANCE

The project's schedule includes sufficient time to perform post-construction monitoring, as appropriate, to determine the project's effectiveness. The City will utilize the services of an existing on-call consultant with expertise in water quality monitoring to develop all required plans and conduct all required monitoring. This on-call consultant will be hired through a competitive qualification based proposal process in accordance with City procurement rules and regulations. Because this project's effectiveness is being evaluated through water quality and quantity, the City will prepare a monitoring plan that will include a description of the monitoring program and objectives, types of constituents to be monitored, methodology, frequency, and duration of monitoring, and sampling locations for the monitoring activities.

Deliverables: Project Assessment and Monitoring Plan (PAEP); Annual PAEP updates.

TASK 5. EDUCATION AND OUTREACH

The City will conduct outreach during the NEPA/CEQA effort and install signage at the project site to increase the public's understanding of the project and its environmental benefits. The signage will educate over 4,000 monthly park visitors about methods to conserve water and energy through capturing and infiltrating storm water, as well as efforts to reduce storm water pollution.

Deliverables: Public meeting notices/summaries; Installation of educational sign at site; photos.

Table 1 contains the proposed project schedule, which assumes that the project begins in 3rd quarter of 2018 and is completed by the 3rd quarter of 2021. The City, and the proposed project team, are experienced with completing similar projects under similar conditions and has no reservations for meeting the task deliverables, within the proposed schedule and budget.

Permits. The City of Anaheim owns the land where the project will be constructed. There are no water rights associated with the proposed intercepted water. Only four permits are expected to be needed for this project: 1) **Plan Check:** The project will be submitted to the City's Planning Department for "plan check" prior to implementation; 2) **National Pollution Discharge Elimination System (NPEDS) permit:** To be requested during the final design process; 3) **Water Quality Plan:** To be submitted during the final design process and 4) **Right-of-Way access permit:** To be obtained prior to the start of construction. The City anticipates no difficulties in obtaining local construction permits. As mentioned earlier, the City believes that NEPA/CEQA will be either a Categorical Exemption/Notice of Exemption or a Finding of No Significant Impact/Negative Declaration because all work will take place underneath an existing parking lot. The City expects to have CEQA determination by Winter 2018.

Engineering/Design Work Performed for Proposed Project. The City completed preliminary designs for the project in order to calculate the amount of infiltration and drought benefits. In addition, the team

TABLE 1 – Proposed Project Schedule

Proposed Project Schedule (Assumes a Funding Date of September 2018)																		
No.	**Timeline: Major Project Tasks and Milestones**	**Start Date**	**End Date**	*Based on Calendar Year Quarters*														
				2018				*2019*				*2020*				*2021*		
				1	*2*	*3*	*4*	*1*	*2*	*3*	*4*	*1*	*2*	*3*	*4*	*1*	*2*	*3*	*4*
1.	**Project and Grant Admin.**																		
1.1	Grant Kick-off Meeting/Execution of Agreement	07/18	08/18																
1.2	Project and Grant Management	7/18	12/20																
2.	**Planning/Design/Engineering/ Environmental**																		
2.1	Issue RFQ, Procure Consultant, Kick-off Meeting	9/18	11/18																
2.2	Planning, Design, Engineering	11/18	06/19																
2.3	NEPA/CEQA (including public outreach)	12/18	06/19																
2.4	Permits/Construction Permits	02/19	05/19																
3.	**Construction/Implementation**																		
3.1	Issue RFQ, Procure Contractor, Kick-off Meeting	04/19	06/19																
3.2	Staging/Mob., Demo., Construction/ Installation	07/19	01/21																
4.	**Monitoring/Performance***																		
4.1	Develop Project Assessment/Evaluation Plan, Conduct Monitoring and Reporting	07/19	06/21															*	*
5.	**Education/Outreach**																		
5.1	Design, Fabricate, Install signs	12/18	05/20																

**Note: Monitoring and evaluation of project effectiveness will continue beyond the 36-month grant period*

analyzed the site against available GeoTracker data (source: geotracker.waterboards.ca.gov/), determining that there are no known leaking underground storage tanks, clean-up sites, land disposal sites or other significant sites within 1,000 feet of the proposed project. The team has also reviewed the State's EnviroStor website (source: www.envirostor.dtsc.ca.gov/public/), and there are no federal superfund sites, state resource sites, or other potential site cleanup issues in the surrounding area of the proposed project.

Policies or Administrative Actions. No new policies/administrative actions are required.

How Environmental Compliance Estimate Was Developed. The City has begun working toward CEQA compliance and has estimates from consultants on costs related to completing that process. In addition, the City reached out to the southern regional office of the Bureau of Reclamation to discuss NEPA requirements and projected costs for BOR and City staff to complete NEPA.

Evaluation Criterion E—Nexus to Reclamation

The City of Anaheim receives nearly 25% of its water supply from MWD, which imports water from the State Water Project (SWP) and the Colorado River Project (a BOR facility). Implementation of the proposed project will help improve local reliability and reduce dependency on the SWP and the Colorado River Project. The development of local projects reduces dependency on the SWP and the Colorado River Project. Investment in local projects will improve reliability of the SWP for State Water Contractors, and allow for potential water availability for the Central Valley Project (CVP), including San Luis Reservoir, both BOR projects. Similarly, investment in local supply projects improves reliability of the Colorado River Project by to easing oversubscription issues. This project, like much of Southern California's water supply, is intertwined with numerous BOR projects and facilities. The project is not located on Reclamation project lands, and does not involve reclamation facilities. It is not located in a basin where a reclamation project is located, and will have no impact related to BOR's trust responsibilities to any tribes.

- End 20 Page Technical Proposal and Evaluation Criteria -

2. PROJECT BUDGET

2a. Funding Plan and Letters of Commitment

The total project cost is estimated to be $3,421,443. This project has been selected for funding under the California Proposition 1 Storm Water Grant Program for $1,624,018, and the Orange County Transportation Authority (OCTA) M2 Tier 1 grant for $500,000. The cover page of the agreement with the State of California, and the funding announcement from OCTA are included on the following pages. The full agreements are included in the appendices. The City of Anaheim will provide an additional match of $547,425 in City funds. The non-Federal portion of this request amounts to 78% of the total project cost (see Table 2). Funding from BOR will provide the final funding needed for the City to begin construction.

TABLE 2 – Funding Sources

Funding Source	Funding Amount	Percent of Total
State Water Resources Control Board*	$1,624,018	47%
OCTA Measure M2 Tier 1 grant*	$500,000	15%
City of Anaheim*	$547,425	16%
Non-Federal Subtotal	**$2,671,443**	**78%**
Requested Reclamation	**$750,000**	**22%**
Total Request	**$3,421,443**	**100%**

*Funding secured. Note that the total project cost in attached announcement varies from the amount included in this application, due to the removal of monitoring/evaluation costs as expressly instructed in the guidelines, and the addition of construction contingency.

PROP 1

GOVERNOR EDMUND G. BROWN, JR.
WATER BOND 2014
RELIABILITY | RESTORATION | RESILIENCE

PROPOSITION 1
STORM WATER

CITY OF ANAHEIM

AND

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

GRANT

STORM WATER CONSTRUCTION/IMPLEMENTATION

MODJESKA PARK UNDERGROUND STORM WATER DETENTION AND INFILTRATION SYSTEM

AGREEMENT NO. D1712673

GRANT FUNDS: $1,624,018

ELIGIBLE START DATE: DECEMBER 20, 2016
WORK COMPLETION DATE: MARCH 31, 2021
FINAL DISBURSEMENT REQUEST DATE: APRIL 30, 2021
RECORDS RETENTION TERM END DATE: MARCH 31, 2057

2017 M2 Environmental Cleanup Program Tier 1 Call for Projects - Applications Received

Agency	Project	Final Score	Funding	Cumulative
Placentia	Catch Basin Inserts Project - Phase IV	97	$ 160,000	$ 160,000
Buena Park	Buena Park Full Capture Catch Basin Insert Project	92	$ 302,165	$ 462,165
Yorba Linda	Arterial Roadway CPS Project	92	$ 70,400	$ 532,565
Anaheim	Modjeska Park Underground Storm Water Detention and Infiltration System	92	$ 500,000	$ 1,032,565
Tustin	City of Tustin Catch Basin Retrofit Program	87	$ 169,556	$ 1,202,121
Aliso Viejo	Aliso Viejo Stormwater Litter Control Project - Phase V	86	$ 423,396	$ 1,625,517
La Habra	Installation of Full Capture Trash Inserts in Catch Basins	85	$ 177,288	$ 1,802,805
Cypress	Catch Basin Inserts Project - CPS	84	$ 107,912	$ 1,910,717
Laguna Hills	Laguna Hills ARS Screen Project - Phase VI	82	$ 120,000	$ 2,030,717
Orange	Orangewood Avenue BioClean Unit Installation	82	$ 300,000	$ 2,330,717
Villa Park	Catch Basin Enhacement Project - Round 3	80	$ 175,000	$ 2,505,717
Lake Forest	CPS and ARS Catch Basin Retrofit - Phase VII	80	$ 106,800	$ 2,612,517
Irvine	Irvine Spectrum Catch Basin CPS Installation	77	$ 30,720	$ 2,643,237
Costa Mesa	Costa Mesa CPS Installation	76	$ 43,544	$ 2,686,781
Mission Viejo	Mission Viejo TRAP: Crown Valley to South City Limit	73	$ 278,235	$ 2,965,016
Laguna Niguel	Laguna Niguel Catch Basin Installation Project	72	$ 165,235	**$ 3,130,251**
UNFUNDED (Insufficient funding)				
Newport Beach	Polaris Drive Trash Mitigation Project	69	$ 500,000	$ 3,630,251
County of Orange	Bandalong Litter Trap and Boom System, Bolsa Chica Channel, Phase II	66	$ 500,000	$ 4,130,251
San Clemente	Trafalgar Canyon Runoff Treatment Project	65	$ 11,176	$ 4,141,427
Westminster	Beach Boulevard Median and Curb Inlet Improvement	59	$ 374,000	$ 4,515,427
UNFUNDED (Projects ineligible to receive M2 funds)				
Westminster	Premier and Barney Storm Drain System	0	$ 140,000	$ 4,655,427
San Juan Capistrano	Storm Water Treatment Project (Camino Capistrano)	0	$ 193,000	$ 4,848,427
UNFUNDED (Projects withdrawn by applicant)				
Santa Ana	Bristol Street Phase IIIA - Civic Center Drive to Washington Avenue	0	$ 240,000	$ 5,088,427
Santa Ana	Bristol Street Phase IV - Warner Avenue to Saint Andrew Place	0	$ 240,000	$ 5,328,427

Total M2 Funds Requested: $ 5,328,427

M2 - Measure M2

CPS - Connector Pipe Screen

ARS - Automatic Retractable Screen

TRAP - Trash and Runoff Abatement Project

ATTACHMENT A

2B. Budget Proposal

Budget Item Description	Unit Price	Units	Quantity	Total Project Costs	Bureau of Reclamation Grant Request	Local Contributions (Committed) (Cash)	Other Funding Source (Award Announced) (State Funds)
Salaries and Wages							
Project Director	Hrs	395	113.17	$44,702		$44,702	
Project Manager	Hrs	540	83.54	$45,112		$45,112	
Project Assistant	Hrs	328	71.36	$23,398		$23,398	
Manager/Construction Manager	Hrs	760	83.54	$63,490		$63,490	
Construction Management Assistant	Hrs	470	71.36	$33,539		$33,539	
Water Quality Manager	Hrs	80	83.54	$6,683		$6,683	
Fringe Benefits*							
Project Director	Hrs	395	73.75	$29,131		$29,131	
Project Manager	Hrs	540	61.38	$33,145		$33,145	
Project Assistant	Hrs	328	58.61	$19,217		$19,217	
Manager/Construction Manager	Hrs	760	64.30	$48,868		$48,868	
Construction Management Assistant	Hrs	470	57.39	$26,973		$26,973	
Water Quality Manager	Hrs	80	61.38	$4,910		$4,910	
Travel							
None expected				$0			
Equipment							
None expected				$0			
Supplies and Materials							
None expected				$0			
Contractual/Construction							
Planning, Design & Permitting	LS	1	349,550.00	$349,550	$22,680	$127,465	$199,414
Environmental Planner-Consultant	Hrs	120	125.00	$15,000	15000		
Consultant/PM/CM	Hrs	18	225.00	$4,500			$4,500
Construction Manager (Contractor)	Hrs	250	225.00	$56,250			$56,250
Staging, Mobilization and Excavation	LS	1	225,000.00	$225,000	12668		$212,332
Pre-manufactured underground system (materials and installation	LS	1	2,100,000.00	$2,100,000	$687,594		$1,412,406
Subgrade and Backfill	LS	1	180,000.00	$180,000	6884		$173,116
New Parking Lot Paving (pervious material) and striping	LS	1	69,974.00	$69,974	3974		$66,000
Design, Fabricate & Install Signage	LS	1	12,000.00	$12,000	1200	$10,800	
Other							
Permit Costs	LS	LS	30,000.00	$30,000		$30,000	
PROJECT GRAND TOTAL:				$3,421,443	$750,000	$547,434	$2,124,018
* The City's calculation for fringe benefits also includes non-billable time.							

2C. Budget Narrative

Salaries and Wages – Total salaries of $216,924 are anticipated for the following staff:

1) **Administrative/Project Management Support Staff** – It is estimated that a combination of administrative and project management staff will spend 2,573 hours of their time over the three years of the project to manage the RFP process to hire the appropriate consultants and contractors, as well as to manage the design, environmental, and construction of the project for the City. The team will include a Project Director, Project Manager, and Project Assistant, a Construction Manager and Construction Management Assistant, and a Water Quality Manager. Duties will include developing an RFP, reviewing proposals and selecting the contractors, coordinating and participating in monthly meetings with consultants/contractors, managing the design, environmental, and construction process, reviewing design documents and plans, and securing permits. In addition, the project assistant and project manager will be responsible for managing the reporting, payments, and invoicing associated with the grant project.

Fringe Benefits – Fringe benefits (which also includes burden for non-billable hours) for the staff identified above are estimated at approximately 75% of salary for a total cost of $162,245.

Travel **-** Not Applicable.

Equipment **-** Not Applicable.

Supplies and Materials **-** Not Applicable.

Contractual/Construction – Total Contractual/Construction costs represent the bulk of the project costs ($3,012,274).

Upon execution of the grant award, a contract will be awarded to a pre-selected contractor who will manage all aspects of the project – from design to project completion – under the direction of City of Anaheim staff, including the purchase and installation of all requisite equipment. Consultants/contracts will include Planning, Design, and Permitting, Environmental Planner, Consultant PM, and Construction Manager (Contractor). The budget's line items also include the key costs associated with construction of the project, including Staging, Mobilization and Excavation, the Doubletrap Equipment (BOR funds would be used to purchase this equipment specifically) and installation, Subgrade and backfill, Permeable pavement, and signage.

Other Costs – Other costs include $30,000 in permit for preparation, coordination, submittal and securing the permits.

Indirect Costs – There are no indirect costs associated with this project.

3. ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

Will the proposed project impact the surrounding environment? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

The project location is a City-owned parking lot, and will entail removal of existing impermeable surfaces, excavation of dirt from the park site to make room for the infiltration chambers, and repavement using a permeable surface. The City will enforce the following mitigation activities during the construction phase of the project:

- Water trucks will be on site to keep the soil damp enough to prevent dirt/dust from leaving the site.
- The construction disturbance area shall be kept as small as possible.
- All haul trucks shall be washed on site to prevent dust from impacting the surrounding areas.
- Comply with AQMD Rule 403, particularly to minimize fugitive dust and noise to surrounding areas.
- Construction equipment shall be maintained in peak operating condition to reduce emissions.
- Use low sulfur (0.5%) fuel by weight for construction equipment.
- Truck idling shall be prohibited for periods longer than 10 minutes.
- Attempt to phase and schedule activities to avoid high ozone day's first stage smog alerts.
- Discontinue operation during second stage smog alerts.
- A Traffic Control Plan shall be prepared.
- Water Pollution Control Plan as required during construction.

City staff have preliminarily evaluated this project and believe it will be either a Categorical Exemption or Finding of No Significant Impact (for NEPA) and a Notice of Exemption or Negative Declaration (for CEQA) because all work will take place underneath an existing parking lot. The Initial Study will determine if additional environmental analysis is necessary beyond a Finding of No Significant Impact for NEPA or a Negative Declaration for CEQA. The City expects to have NEPA/CEQA determination by Winter 2018.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area?

We do not believe there are any threatened or endangered species on or near the project site. The site is already fully developed and is not a designated critical habitat. Implementation of the project will not have any negative impact on threatened species or habitat.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under Clean Water Act (CWA) jurisdiction as "Waters of the United States?"

There are no wetlands or other surface waters inside the project boundaries.

When was the water delivery system constructed?
The City of Anaheim water system has been constructed progressively since 1879.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)?

This project will not require any modifications to or effects on individual features of the existing irrigation such as headgates, canals, or flumes.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?

No buildings are eligible for listing on the National Register of Historic Places located within the project boundaries.

Are there any known archeological sites in the proposed project area?

No archeological sites or areas of cultural in the proposed project area.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

The proposed project will not have a disproportionately high or adverse effect on low income or minority populations.

Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

The proposed project will not limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

4. REQUIRED PERMITS AND/OR APPROVALS

The City of Anaheim owns the land where the project will be constructed. There are no water rights associated with the proposed intercepted water. Only four permits are expected to be needed for this project: 1) **Plan Check:** The project will be submitted to the City's Planning Department for "plan check" prior to implementation; 2) **National Pollution Discharge Elimination System (NPEDS) permit:** To be requested during the final design process; 3) **Water Quality Plan:** To be submitted during the final design process and 4) **Right-of-Way access permit:** To be obtained prior to the start of construction.

The City does not expect any additional permits for the proposed project. Furthermore, the City anticipates no difficulties in obtaining local construction permits. As mentioned earlier, preliminary evaluation leads the City to believe that NEPA/CEQA will be completed with either a Categorical Exemption/Notice of Exemption or a Finding of No Significant Impact/Negative Declaration because all work will take place underneath an existing parking lot. The Initial Study will determine if additional environmental analysis is necessary beyond a Negative Declaration. The City expects to have CEQA determination by Winter 2018.

5. DROUGHT PLAN

Relevant pages of the planning documents that guide the City's effort related to drought resiliency are included in Appendix A.

6. LETTERS OF PROJECT SUPPORT

Letters of support from Anaheim Public Utilities, Anaheim Union High School District, and the West Anaheim Neighborhood Development Council are included in Appendix B.

7. OFFICIAL RESOLUTION

Appendix C contains a "Draft" of the official resolution in support of this application and this project. The signed resolution will be submitted to BOR prior to the March 12, 2018 deadline.

8. APPENDICES

A. Drought Plan
B. Letters of Project Support
C. Resolution
D. Funding Agreements

Appendix B.

Letters of Project Support

City of Anaheim
PUBLIC UTILITIES DEPARTMENT
Administration

February 8, 2018

Mr. Kevin Connolly
Bureau of Reclamation
Denver Federal Center
Building 67, Room 152
6th Avenue and Kipling Street
Denver, CO 80225

Re: **Modjeska Park: Urban Model for Storm Water Detention and Infiltration**

Dear Mr. Connolly,

Anaheim Public Utilities (APU) is pleased to support the City of Anaheim's Drought Resiliency Grant Program application for the Underground Storm Water Detention and Infiltration Project at Modjeska Park. This innovative project plans to utilize the existing footprint of a 37,000 square foot parking lot adjacent to a City park to capture and infiltrate urban runoff. More importantly, it will serve as a pilot project for future storm water projects at other potential municipal sites that target infiltrating up to 1,800 acre feet of water (based on preliminary investigation by Anaheim Public Works) to recharge our groundwater – water that is otherwise lost to the storm drain system.

The proposed project aligns with APU's goal to provide reliable, high-quality water that meets or surpasses all state and federal regulations for drinking water. The project will capture and infiltrate a minimum of 150-acre feet of urban runoff and first flush storm water into the City's groundwater each year. This stormwater would otherwise flow untreated to the Bolsa Chica Channel.

APU recognizes the importance of capturing and infiltrating storm water, particularly as changes in climate continue to severely impact rainfall in the Southern California region. We strongly urge you to support the City of Anaheim's efforts to improve storm water infrastructure and replenish the ground water resources in our community.

Sincerely,

Dukku Lee
General Manager

201 S. Anaheim Blvd.
M.S. #1101
Anaheim, CA 92805
TEL: 714.765.5173
FAX: 714.765.4138

Learning With Purpose
ANAHEIM UNION HIGH SCHOOL DISTRICT
College and Career Ready
MICHAEL B. MATSUDA
Superintendent

February 8, 2018

Mr. Kevin Connolly
Bureau of Reclamation
Denver Federal Center
Bldg. 57, Room 152
6th Avenue and Kipling Street
Denver, CO 80225

Re: Modjeska Park Underground Storm Water Detention and Infiltration Project

Dear Mr. Connolly,

The Anaheim Union High School District (AUHSD) is excited to learn about the city of Anaheim's innovative plans to capture, recharge, and infiltrate storm water under Modjeska Park. We urge you to support their application for Drought Resiliency Project Grant funds, so they can carry out this multi-benefit project.

AUHSD has two high schools located within two blocks of Modjeska Park, and our students will certainly benefit from the proposed signage explaining the principles of responsible storm water management as a significant way to save water and energy. The close proximity of our schools to the park may provide opportunities for walking field trips for our science classes as they study water and water management, as well as the importance of protecting our natural resources.

The project, as proposed by the City, will illustrate to our students how best management practices and low-impact development, which can reduce pollution in our area waterways and add to our regions' supply of drinking water, while reducing flooding on neighborhood streets. Students will also be able to better understand the role they play in reducing the pollution that flows from our streets to our rivers and ocean.

We encourage you to support this proposed project. Finding innovative solutions for increasing water supply will provide benefits to the entire region.

Sincerely,

Michael B. Matsuda
Superintendent

February 7, 2018

Mr. Kevin Connolly
Bureau of Reclamation
Denver Federal Center
Bldg. 67, Rm. 152
6th Avenue and Kipling Street
Denver, CO 80225

Re: Modjeska Park - Urban Model for Storm Water Detention and Infiltration

Dear Mr. Connolly:

On behalf of the West Anaheim Neighborhood Development Council (WAND), a grass-roots organization of West Anaheim residents dedicated to "building a better tomorrow" for the City of Anaheim, we urge you to support the City of Anaheim's application to the WaterSMART: Drought Resiliency Project Grant for its innovative approach to capturing, infiltrating, and recharging storm water around Modjeska Park.

The City's plans for the grant funds, including utilizing the area underneath the parking lot of Modjeska Park to detain and infiltrate storm water flows, align with the goals and mission of WAND, which has been on the forefront of promoting positive change in our neighborhood for more than a decade. The project directly benefits the residents we serve by filtering contaminants, improving water quality and water supply reliability, as well as improving flood management.

WAND will help promote educational messages provided by the City regarding the importance of reducing storm water pollution and conserving water resources. Signage at the park will allow park visitors to understand the innovative solutions the City has embraced to address storm water management. In addition, WAND meets regularly to discuss community issues (including water pollution and conservation), and we will provide information about the project and its purpose during these meetings.

WAND strongly encourages the Bureau of Reclamation to join us in supporting the City of Anaheim's proposed Modjeska Park project. We are excited about the City's commitment to water management and water quality improvement in the West Anaheim area.

Sincerely,

Esther Wallace

Esther Wallace
WAND Chairman

C. Official Resolution

Scheduled to go before City Council for approval on March 6, 2018

RESOLUTION NO:

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ANAHEIM AUTHORIZING THE DIRCTOR OF PUBLIC WORKS OR DESIGNEE TO SUBMIT AN APPLICATION TO THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION FOR THE WATERSMART GRANTS: DROUGHT RESILIENCY PROJECTS FOR FISCAL YEAR 2018 FOR THE MODJESKA PARK: URBAN MODEL FOR STORM WATER DETENTION AND INFILTRATION PROJECT AND IF AWARDED, AUTHORIZING THE ACCEPTANCE OF SUCH GRANT ON BEHALF OF THE CITY AND AMENDING THE BUDGET ACCORDINGLY.

WHEREAS, the City of Anaheim has prepared an application to apply for federal funding from the United States Department of the Interior, Bureau of Reclamation ("Reclamation") ("Grantor") to assist in the funding of the Drought Resiliency Project; and

WHEREAS, the funding opportunity is provided by Reclamation through their Grant Program entitled "WaterSMART Grants: Drought Resiliency Projects for Fiscal Year 2018" ("Grant"); and

WHEREAS, the Modjeska Park: Urban Model for Storm Water Detention and Infiltration ("Project") will capture storm water runoff that currently flows untreated to the Bolsa Chica Channel and into the Pacific Ocean, and will instead recharge the runoff and percolate at least 182 acre-feet of water annually, or 59.3 million gallons, into the City's groundwater; and

WHEREAS, the City of Anaheim ("City"), if selected, will enter into an agreement with Reclamation to carry out the Project; and

WHEREAS, the City is familiar with the terms, conditions and limitations of any such Grant; and

WHEREAS, the City desire to accept any such Grant which may be awarded to the City.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Anaheim as follows:

1. Approves the filing of an application for the implementation of the Modjeska Park Underground Storm Water Detention and Infiltration System Project;

2. Certifies that the City understands the City will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement; and,

3. Certifies that City is capable of providing the amount of funding specified in the application; and,

4. Certifies that the City understands the assurances and certifications in the application; and

5. Certifies that the City will have sufficient Funds to operate and maintain the Project consistent with the land tenure requirements; or will secure the resources to do so; and

6. Certifies that it will comply with all provisions of Section 1771.5 of the California Labor Code; and,

7. If applicable, certifies that the Project will comply with any laws and regulations, legal requirements for building codes, health and safety codes, disabled access laws, and, that prior to commencement of construction, all applicable permits will have been obtained; and

8. The Anaheim Director of Public Works, or his/her designee is hereby authorized to submit a Grant Application for and on behalf of the City of Anaheim, a public entity established under the laws of the State of California, and the Anaheim Director of Public Works, or his/her designee is authorized to take any actions necessary for the purpose of obtaining financial assistance provided by the Grantor; and

9. The City Council of the City of Anaheim hereby agrees to, and by this resolution, does accept any such Grant so awarded to the City of Anaheim without further action of the City Council being required; and

10. The City of Anaheim hereby agrees to comply with each and all of the terms, conditions, and limitations imposed by the Grantor upon said Grant, and the Anaheim Director of Public Works or his/her designee is hereby authorized and directed to conduct all negotiations, execute any agreements, assurances, or other documents as may be necessary in connection with completion of the Project(s) and the acceptance of said Grant as may be required by the Grantor, if such Grant is awarded to the City; and

11. Contingent upon the award of said Grant, the annual budget of the City of Anaheim is hereby amended by increasing revenue and expenditures in an amount equal to the amount of the Grant Funds awarded.

THE FOREGOING RESOLUTION is approved and adopted by the City Council of the City of Anaheim this _____ day of _____, 2018, by the following roll-call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

CITY OF ANAHEIM

By: _____
MAYOR OF THE CITY OF ANAHEIM

ATTEST:

_____
CITY CLERK OF THE CITY OF ANAHEIM

D. Funding Agreements

PROP 1

GOVERNOR EDMUND G. BROWN, JR.
WATER BOND 2014
RELIABILITY | RESTORATION | RESILIENCE

PROPOSITION 1
STORM WATER

CITY OF ANAHEIM

AND

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

GRANT

STORM WATER CONSTRUCTION/IMPLEMENTATION

MODJESKA PARK UNDERGROUND STORM WATER DETENTION AND INFILTRATION SYSTEM

AGREEMENT NO. D1712673

GRANT FUNDS: $1,624,018

ELIGIBLE START DATE: DECEMBER 20, 2016
WORK COMPLETION DATE: MARCH 31, 2021
FINAL DISBURSEMENT REQUEST DATE: APRIL 30, 2021
RECORDS RETENTION TERM END DATE: MARCH 31, 2057

WHEREAS,

1. The State Water Board is authorized to provide funding under this Agreement pursuant to the following:

   Proposition 1 Storm Water - Section 79747 of the Water Code (Prop 1)

2. The State Water Board determines eligibility for financial assistance, determines a reasonable schedule for providing financial assistance, establishes compliance with Prop 1, and establishes the terms and conditions of a funding agreement.

3. The Recipient has applied to the State Water Board for funding for the Project described in Exhibit A of this Agreement, and the State Water Board has selected the application for funding through a competitive process.

4. The State Water Board proposes to assist in funding the costs of the Project, and the Recipient desires to participate as a recipient of financial assistance from the State Water Board, upon the terms and conditions set forth in this Agreement, all pursuant to Prop 1.

NOW, THEREFORE, in consideration of the premises, mutual representations, covenants and agreements in this Agreement, the State Water Board and the Recipient, each binding itself, its successors and assigns, do mutually promise, covenant, and agree as follows:

1. Definitions

Unless otherwise specified, each capitalized term used in this Agreement has the following meaning:

"Agreement" means this Grant Agreement, including all exhibits and attachments hereto.

"Authorized Representative" means the duly appointed representative of the Recipient as set forth in the certified original of the Recipient's authorizing resolution that designates the Authorized Representative by title.

"Days" means calendar days unless otherwise expressly indicated.

"Disbursement Period" means the period during which Grant Funds may be disbursed.

"Disbursement Request" means the form used by the Recipient to document Match Funds and request reimbursement of Project Costs.

"Division" means the Division of Financial Assistance of the State Water Board or any other segment of the State Water Board authorized to administer the funding program(s) set forth in this Agreement.

"Eligible Start Date" means the date set forth in Exhibit B, establishing the date on or after which reimbursable Project Costs may be incurred and eligible for reimbursement hereunder.

"Final Disbursement Request Date" means the date established in Exhibit B, after which date no further Grant Funds disbursements may be requested.

"Fiscal Year" means the period of twelve (12) months terminating on June 30 of any year.

"Force Account" means the use of the Recipient's own employees or resources for the Project.

"GAAP" means generally accepted accounting principles, as issued by the Governmental Accounting Standards Board.

"Grant Contact" means the employee of the Recipient who has been delegated by the Project Director to oversee the day-to-day activities of the Project.

"Grant Funds" means funds provided by the State Water Board towards eligible reimbursable Project Costs.

"Grant Manager" means the person designated by the State Water Board to manage performance of the Agreement. The Grant Manager is set forth in Section 2 of this Agreement.

"Guidelines" means the State Water Board's "Proposition 1 Storm Water Grant Program Guidelines," as amended from time to time.

"Indirect Costs" means those costs that are incurred for a common or joint purpose benefiting more than one cost objective and are not readily assignable to the Project (i.e., costs that are not directly related to the Project). Examples of Indirect Costs include, but are not limited to: central service costs; general administration of the Recipient; non-project-specific accounting and personnel services performed within the Recipient's organization; depreciation or use allowances on buildings and equipment; the costs of operating and maintaining non-project-specific facilities; tuition and conference fees; generic overhead or markup; and taxes.

"Match Funds" means funds provided by the Recipient towards the Project Costs incurred after November 4, 2014.

"Party Contact" means, for the Recipient, the Authorized Representative of the Recipient or any designee of the Authorized Representative, and, for the State Water Board, the Grant Manager.

"Project" means the Project as described in Exhibit A and in the documents incorporated by reference.

"Project Completion" means, as determined by the Division, that the Project is complete to the reasonable satisfaction of the Division.

"Project Costs" means the incurred costs of the Recipient which are eligible under this Agreement, which are allowable costs as defined under the Guidelines, and which are reasonable, necessary and allocable by the Recipient to the Project under GAAP.

"Project Director" means an employee of the Recipient designated by the Authorized Representative to be responsible for the overall management of the administrative and technical aspects of the executed Agreement. The Project Director is set forth in this Agreement.

"Recipient" means City of Anaheim.

"Regional Water Quality Control Board" or "Regional Water Board" means the appropriate Regional Water Quality Control Board.

"State" means State of California.

"State Water Board" means the California State Water Resources Control Board, an administrative and regulatory agency of the State of California.

"Work Completion" means the Recipient's submittal of all work set forth under Exhibit A for review and approval by the Division. The Division may require corrective work to be performed prior to Project Completion. Any work occurring after the Work Completion Date will not be reimbursed under this Agreement.

"Work Completion Date" means the date set forth in Exhibit A that is the last date on which Project Costs may be incurred under this Agreement.

"Year" means calendar year unless otherwise expressly indicated.

2. Party Contacts

The Party Contacts during the term of this Agreement are:

State Water Board		City of Anaheim	
Section:	Division of Financial Assistance		
Name:	Ravinder Jawanda, Grant Manager	Name:	Rudy Emami, Project Director
Address:	1001 I Street, 17th Floor	Address:	200 South Anaheim Blvd., Suite 276
City, State, Zip	Sacramento, CA 95821	City, State, Zip:	Anaheim, CA 92805
Phone:	(916) 341-5865	Phone:	(714) 765-5065
Fax:	(916) 341-5296	Fax:	(714) 765-5225
Email:	Ravinder.Jawanda@waterboards.ca.gov	Email:	remami@anaheim.net

Direct inquiries to:

State Water Board		City of Anaheim	
Section:	Division of Financial Assistance		
Name:	Kari Holzgang, Program Analyst	Name:	Khanh Chu, Grant Contact
Address:	1001 I Street, 17th Floor	Address:	200 South Anaheim Blvd., Suite 276
City, State, Zip:	Sacramento, CA 95814	City, State, Zip:	Anaheim, CA 92805
Phone:	(916) 341-5461	Phone:	(714) 765-5259
Fax:	(916) 341-5296	Fax:	(714) 765-5225
Email:	Kari.Holzgang@waterboards.ca.gov	Email:	kchu@anaheim.net

The Recipient may change its Project Director upon written notice to the Grant Manager, which notice shall be accompanied by authorization from the Recipient's Authorized Representative. The State Water Board will notify the Project Director of any changes to its Party Contacts.

3. Exhibits and Appendices Incorporated

The following exhibits and appendices to this Agreement, including any amendments and supplements hereto, are hereby incorporated herein and made a part of this Agreement:

EXHIBIT A – SCOPE OF WORK

EXHIBIT B – FUNDING PROVISIONS

EXHIBIT C – STANDARD TERMS AND CONDITIONS

4. Representations, Warranties, and Commitments

The Recipient represents, warrants, and commits to the following as of the Eligible Start Date set forth in Exhibit B and continuing thereafter for the term of this Agreement:

(a) General Commitments. The Recipient accepts and agrees to comply with all terms, provisions, conditions, and commitments of this Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and commitments made by the Recipient in its application, accompanying documents, and communications filed in support of its request for financial assistance and throughout the term of this Agreement.

(b) Authorization and Validity. The execution and delivery of this Agreement, including all incorporated documents, has been duly authorized. This Agreement constitutes a valid and binding obligation of the Recipient, enforceable in accordance with its terms, except as such enforcement may be limited by law.

(c) No Violations. The execution, delivery, and performance by the Recipient of this Agreement, including all incorporated documents, do not violate any provision of any law or regulation in effect as of the date set forth on the first page hereof, or result in any breach or default under any contract, obligation, indenture, or other instrument to which the Recipient is a party or by which the Recipient is bound as of the date set forth on the first page hereof.

(d) No Litigation. There are no pending or, to the Recipient's knowledge, threatened actions, claims, investigations, suits, or proceedings before any governmental authority, court, or administrative agency which affect the financial condition or operations of the Recipient, and/or the Project.

(e) Solvency. None of the transactions contemplated by this Agreement will be or have been made with an actual intent to hinder, delay, or defraud any present or future creditors of the Recipient. As of the date set forth on the first page hereof, the Recipient is solvent and will not be rendered insolvent by the transactions contemplated by this Agreement. The Recipient is able to pay its debts as they become due.

(f) Legal Status and Eligibility. The Recipient is duly organized and existing and in good standing under the laws of the State of California, and will remain so during the term of this Agreement. The Recipient shall at all times maintain its current legal existence and preserve and keep in full force and effect its legal rights and authority. The Recipient shall maintain its eligibility for funding under this Agreement for the term of this Agreement.

(g) Good Standing. The Recipient is currently in compliance with the State requirements set forth in Exhibit C. Within the preceding ten years, the Recipient has not failed to demonstrate compliance with previous State audit disallowances.

(h) Insurance. The Recipient maintains sufficient insurance coverage considering the scope of this Agreement including, for example, but not necessarily limited to: General Liability, Automobile Liability, Worker's Compensation and Employer's Liability, and Professional Liability.

5. Project Completion

The Recipient shall expeditiously proceed with and complete the Project in accordance with this Agreement.

6. Notice

(a) The Recipient shall notify the Division in writing within five (5) working days of the occurrence of the following:

(1) Bankruptcy, insolvency, receivership or similar event of the Recipient; or

(2) Actions taken pursuant to State law in anticipation of filing for bankruptcy.

(b) The Recipient shall notify the Division within ten (10) working days of any litigation pending or threatened against the Recipient regarding its continued existence, consideration of dissolution, or disincorporation.

(c) The Recipient shall notify the Division promptly of the following:

(1) Any proposed change in the scope of the Project. Under no circumstances may the Recipient make changes to the scope of the Project without receiving prior review and approval by the Division. Most changes will require an amendment to this Agreement;

(2) Cessation of work on the Project where such cessation of work is expected to or does extend for a period of thirty (30) days or more;

(3) Any circumstance, combination of circumstances, or condition, which is expected to or does delay Work Completion;

(4) Discovery of any potential archaeological or historical resource. Should a potential archaeological or historical resource be discovered during construction, the Recipient agrees that all work in the area of the find will cease until a qualified archaeologist has evaluated the situation and made recommendations regarding preservation of the resource, and the Division has determined what actions should be taken to protect and preserve the resource. The Recipient agrees to implement appropriate actions as directed by the Division;

(5) Any monitoring activities such that the State Water Board Division of Drinking Water and/or Regional Water Board staff may observe and document such activities;

(6) Any public or media event publicizing the accomplishments and/or results of this Agreement and provide the opportunity for attendance and participation by State representatives with at least ten (10) working days' notice to the Division; or

(7) Work Completion and Project Completion.

7. Project Access and Public Records

The Recipient shall ensure that the State Water Board, the Governor of the State, or any authorized representative of the foregoing, will have safe and suitable access to the Project site at all reasonable times during Project construction and thereafter for the term of the obligation.

8. No Obligation of the State; and State Budget Act Contingency

Any obligation of the State Water Board contained herein shall not be an obligation, debt, or liability of the State and any such obligation shall be payable solely out of the monies appropriated by the State Legislature to the State Water Board from the special fund associated with this Agreement.

If the Budget Act of the current year and/or any subsequent years covered under this Agreement does not appropriate sufficient funds for the program, this Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of the State Water Board to make any payments under this Agreement. In this event, the State shall have no liability to pay any funds whatsoever to the Recipient or to furnish any other considerations under this Agreement, and the

Recipient shall not be obligated to perform any provisions of this Agreement. Nothing in this Agreement shall be construed to provide the Recipient with a right of priority for payment over any other recipient.

If this Agreement's funding for any Fiscal Year is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an Agreement amendment to the Recipient to reflect the reduced amount.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto.

CITY OF ANAHEIM:

By: _____

Name: Rudy Emami

Title: Director of Public Works

Date: 11/27/17

STATE WATER RESOURCES CONTROL BOARD:

By: _____ for

Name: Leslie S. Laudon

Title: Deputy Director
Division of Financial Assistance

Date: 12/1/17

APPROVED AS TO FORM:
ANAHEIM CITY ATTORNEY'S OFFICE

BY _____

EXHIBIT A – SCOPE OF WORK

A-1. Completion Date

The Work Completion Date is established as MARCH 31, 2021. Work occurring after the Work Completion Date, including corrective actions, is not eligible for reimbursement with Grant Funds and cannot be paid for using Match Funds.

A-2. Purpose

This grant is for the benefit of the Recipient. This grant is for the purpose of capturing and infiltrating dry weather urban runoff and first flush storm water to reduce pollutant discharges to the Bolsa Chica Channel.

A-3. Project-Specific Scope of Work

The Recipient agrees to do the following:

1. Project Management

    1.1 Provide all technical and administrative services as needed for Project completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to ensure the Project is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.

    1.2 Notify the Grant Manager at least fifteen (15) working days in advance of upcoming meetings, workshops, and trainings.

    1.3 Develop and update appropriately a detailed Project schedule, including key Project milestones, and submit to the Grant Manager.

    1.4 Conduct periodic and final site visits with the Grant Manager.

    1.5 Conduct pre-, during, and post-construction photo monitoring at the Project site and submit to the Grant Manager.

2. General Compliance Requirements/Project Effectiveness and Performance

    2.1 Submit Global Positioning System (GPS) information for project site(s) and monitoring location(s) for this Project to the Grant Manager. Submittal requirements for GPS data are available at: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/grant_info/docs/gps.pdf.

    2.2 Prepare and submit, to the Grant Manager for approval, a Monitoring and Reporting Plan (MRP) using a template or outline provided by the Grant Manager. The MRP becomes final upon Grant Manager approval. Any changes to the MRP must be approved by the Grant Manager. The MRP may be submitted as separate documents or in one report and shall include the following:

        2.2.1 A Project Assessment and Evaluation Plan (PAEP) which describes the manner in which the Project performance will be assessed, evaluated, and reported to the Grant Manager. The PAEP shall detail the methods of measuring and reporting Project benefits. Implementation of any monitoring

and performance assessment and/or evaluation actions shall not occur prior to PAEP approval by the Grant Manager.

2.2.2 A Monitoring Plan (MP) in a format provided by the Grant Manager. Any costs related to monitoring data collected prior to and not supported by the approved MP will not be reimbursed. Changes to the MP shall be submitted to the Grant Manager for approval prior to implementation.

2.3 Monitor Project effectiveness in accordance with the approved MRP.

2.3.1 Document implementation of the Project effectiveness confirmation and/or monitoring in accordance with the approved MRP that confirms the effectiveness of the implemented storm water project, and include the results in the associated quarterly progress report. A summary of all project effectiveness monitoring and data analysis shall be included in the Final Project Report.

2.4 Prepare, maintain, and implement a Quality Assurance Project Plan (QAPP) in accordance with the United States Environmental Protection Agency's (USEPA) QAPP guidance document (EPA QA/G-5) or the State Water Board's Surface Water Ambient Monitoring Program's (SWAMP) QAPP and data reporting requirements, as appropriate for the proposed monitoring activities. Water quality monitoring data includes physical, chemical, and biological monitoring of any surface water. The QAPP shall be submitted to the Grant Manager for approval. Any costs related to monitoring data collected prior to and not supported by the approved QAPP will not be reimbursed. A template for the USEPA QAPP is available from the Grant Manager. Guidance for preparing the QAPP is available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/qapp/shtml

2.4.1 Upload a pdf version of the final approved document(s) to the Financial Assistance Application Submittal Tool (FAAST) system.

2.5 Prepare and upload all water quality data obtained through implementation of the MP to the California Environmental Data Exchange Network (CEDEN) or in a comparable format provided by the State Water Board and submit a receipt of successful data submission to CEDEN or the State Water Board, to the Grant Manager. Guidance for submitting data, including required minimum data elements and data formats, is available at http://www.ceden.org or a Regional Data Center (RDC) (Moss Landing Marine Lab, San Francisco Estuary Institute, Southern California Coastal Water Research Project, or Central Valley RDC). Contact information for the RDCs is included in the CEDEN web link.

3. Permitting and Environmental Compliance

3.1 Complete documentation required under the California Environmental Quality Act (CEQA) for the proposed implementation project. Take all required steps to prepare, circulate, and certify the required CEQA document(s).

3.1.1 Submit the final CEQA document to the Grant Manager.

3.1.2 Obtain written environmental clearance from the State Water Board confirming the State Water Board has made its own environmental findings and concurred that implementation/construction may proceed.

3.2 Obtain all public agency approvals, entitlements, or permits required for project implementation before fieldwork begins. If the Project is carried out on lands not owned by the Recipient, the Recipient must obtain adequate rights of way for the useful life of the Project. Submit a list and signed copies of such approvals, entitlements or permits to the Grant Manager.

4. Planning, Design, and Engineering

4.1 Prepare a Design Report that includes a geotechnical analysis and groundwater hydrology study to support the design plans and specifications, and submit to the Grant Manager.

4.2 Prepare the fifty percent (50%) design plans and specifications and submit to the Grant Manager for approval. The Project shall be designed to capture, infiltrate, and treat a minimum of one hundred fifty (150) acre feet per year of dry weather urban runoff and first flush storm water using the following approaches:

4.2.1 Install an underground, pre-manufactured infiltration/retention system.

4.2.2 Install a minimum of two (2) laterals to divert dry weather flow and storm water into and out of the infiltration/retention system.

4.2.3 Remove a minimum of thirty-five thousand (35,000) square feet of impermeable pavement and replace with pervious pavement.

4.3 Complete the one hundred percent (100%) design plans and specifications and prepare a summary identifying any changes from the fifty percent (50%) plans. Submit the one hundred percent (100%) design plans and specifications and summary of changes for the Project to the Grant Manager for approval.

4.4 Complete the bid documents in accordance with the approved design plans, after receiving all required approvals, and advertise the Project for bid. Submit the advertised bid documents and bid summary to the Grant Manager.

5. Construction and Implementation

5.1 Award the construction contract(s) and submit the Notice(s) to Proceed and awarded contract(s) for the Project to the Grant Manager.

5.2 Construct the Project in accordance with the approved design plans and specifications in Item 4.3 after obtaining environmental clearance in Item 3.1.2 and the necessary approvals, permits, and entitlements in Item 3.2.

5.3 Submit any proposed changes that arise during construction that may affect the Project's benefits listed in Item 4.2, schedule, or costs to the Grant Manager for approval.

5.4 Submit as-built drawings and a summary of changes from the approved design plans and specifications that occurred during construction to the Grant Manager.

5.5 Prepare an Operations and Maintenance Plan that addresses operation and maintenance of the Project for its useful life and submit to the Grant Manager for approval.

6. Stakeholder Outreach

6.1 Conduct a minimum of two (2) outreach meetings to inform the public of the purpose and timelines of the Project construction activities. Submit outreach materials and photo documentation to the Grant Manager.

A-4. Disclosure and Signage

(a) The Recipient shall place a sign at least four (4) feet tall by eight (8) feet wide made of ¾-inch-thick exterior grade plywood or other approved material in a prominent location on the construction site and shall maintain the sign in good condition for the duration of the construction period. The sign shall include the following disclosure statement and color logos (available from the Division):

"Funding for this project has been provided in full or in part by Proposition 1 – the Water Quality, Supply, and Infrastructure Improvement Act of 2014 through an agreement with the State Water Resources Control Board."

The sign may include another agency's required promotional information so long as the above logos and disclosure statement are equally prominent on the sign. The sign shall be prepared in a professional manner.

(b) The Recipient shall include the following disclosure statement in any document, written report, or brochure prepared in whole or in part pursuant to this Agreement:

"Funding for this project has been provided in full or in part through an agreement with the State Water Resources Control Board using funds from Proposition 1. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use."

A-5. Reporting

(a) Progress Reports. The Recipient shall submit quarterly progress reports, using a format provided by the Grant Manager, within forty-five (45) days following the end of the calendar quarter (March, June, September, and December) to the Grant Manager. Progress Reports shall provide a brief description of activities that have occurred, milestones achieved, monitoring results (if applicable), and any problems encountered in the performance of the work under this Agreement during the applicable reporting period. Reporting shall be required even if no grant-related activities occurred during the reporting period. The Recipient shall document all activities and expenditures in progress reports, including work performed by contractors.

(b) As Needed Information or Reports. The Recipient agrees to provide expeditiously, during the term of this Agreement, such reports, data, and information as may be reasonably required by the Division including, but not limited to, material necessary or appropriate for evaluation of the funding program or to fulfill any reporting requirements of the state or federal government.

(c) Final Reports. At the conclusion of the Project, the Recipient must submit the following to the Grant Manager:

(1) Draft Final Project Report. Prepare and submit to the Grant Manager, for review and comment, a draft Final Project Report in a format provided by the Grant Manager.

(2) Final Project Report. Prepare a Final Project Report that addresses, to the extent feasible, comments made by the Grant Manager on the draft Final Project Report. Submit one (1) reproducible master copy and an electronic copy of the final. Upload an electronic copy of the final report in pdf format to the FAAST system.

(3) Final Project Summary. Prepare a brief summary of the information contained in the Final Project Report, using a format provided by the Grant Manager, and include accomplishments, recommendations, and lessons learned, as appropriate. Upload an electronic copy of the Final Project Summary in pdf format to the FAAST system.

(4) Final Project Inspection and Certification. Upon completion of the Project, the Recipient shall provide for a final inspection and shall certify that the Project has been completed in accordance with this Agreement, any final plans and specifications submitted to the State Water Board, and any amendments or modifications thereto. If the Project involved the planning, investigation, evaluation, design, or other work requiring interpretation and proper application of engineering, or other professionals, the final inspection and certification shall be conducted by a California Registered Civil Engineer or other appropriate California registered professional. The results of the final inspection and certification shall be submitted to the Grant Manager.

A-6. Submittal Schedule

Failure to provide items by the due dates indicated in the Submittal Schedule below may constitute a material violation of this Agreement. However, the dates in the "Estimated Due Date" column of this Submittal Schedule may be adjusted as necessary during the Disbursement Period with Grant Manager approval. All work or submittals must be achieved with relevant submittals approved by the Division prior to the Work Completion Date, and the final Disbursement Request submitted prior to the Final Disbursement Request Date set forth in Exhibit B.

ITEM	DESCRIPTION OF SUBMITTAL	CRITICAL DUE DATE	ESTIMATED DUE DATE
EXHIBIT A-3 PROJECT-SPECIFIC SCOPE OF WORK			
1.	Project Management		
1.2	Notification of Upcoming Meetings, Workshops, and Trainings		Ongoing
1.3	Detailed Project Schedule	60 Days After Execution	
1.4	Site Visits		Ongoing
1.5	Photo Documentation		Ongoing
2.	General Compliance Requirements/Project Effectiveness and Performance		
2.1	GPS Information		October 2017
2.2	Monitoring and Reporting Plan		October 2017
2.2.1	Project Assessment and Evaluation Plan		October 2017
2.2.2	Monitoring Plan		October 2017
2.3.1	Project Effectiveness	Quarterly	
2.4	Quality Assurance Project Plan		November 2017
2.4.1	QAPP Upload to FAAST		December 2017
2.5	Water Quality Data Upload to CEDEN	Prior to Final Project Report	
3.	Permitting and Environmental Clearance		
3.1.1	Final CEQA Document		Complete
3.2	Agency Approvals, Entitlements, and Permits		As Needed
4.	Planning, Design, and Engineering		
4.1	Design Report		June 2018
4.2	50% Design Plans and Specifications	September 30, 2018	
4.3	100% Design Plans and Specifications		December 2018
4.4	Advertised Bid Documents and Bid Summary		March 2019

ITEM	DESCRIPTION OF SUBMITTAL	CRITICAL DUE DATE	ESTIMATED DUE DATE
EXHIBIT A-3 PROJECT-SPECIFIC SCOPE OF WORK			
5	Construction and Implementation		
5.1	Notice(s) to Proceed and Awarded Contract(s)	June 30, 2019	
5.3	Proposed Changes During Construction		June 2020
5.4	As-built Drawings, Summary of Changes	January 31, 2021	
5.5	Operations and Maintenance Plan		January 2021
6.	Stakeholder Outreach		
6.1	Outreach Materials and Photo Documentation		September 2019
EXHIBIT A-5 REPORTING			
(a)	Progress Reports	Quarterly	
(b)	As Needed Information or Reports		As Needed
(c)	Final Reports		
(c)(1)	Draft Final Project Report	January 31, 2021	
(c)(2)	Final Project Report	February 28, 2021	
(c)(3)	Final Project Summary	Before Work Completion Date	
(c)(4)	Final Project Inspection and Certification	Before Work Completion Date	
EXHIBIT B – FUNDING PROVISIONS			
4 (b)	Final Disbursement Request	April 30, 2021	
9 (b)(4)	Disbursement Requests		Quarterly

EXHIBIT B – FUNDING PROVISIONS

B-1. Project Funding

Subject to the terms of this Agreement, the State Water Board agrees to provide Grant Funds in the amount of up to ONE MILLION, SIX HUNDRED TWENTY-FOUR THOUSAND, EIGHTEEN DOLLARS ($1,624,018).

B-2. Match Funds

(a) The Recipient agrees to provide Match Funds in the amount of ONE MILLION, SIX HUNDRED TWENTY-FOUR THOUSAND, EIGHTEEN DOLLARS ($1,624,018).

(b) This Match Funds amount is based on the budget, funding sources, and amounts submitted by the Recipient in its application and during the negotiation of this Agreement. Any Match Funds changes or adjustments requested by the Recipient must be approved, in advance and in writing, by the Grant Manager and may require an amendment to this Agreement.

(c) Only expenses that would be considered eligible under the Guidelines will be counted towards the Recipient's Match Funds.

(d) Any costs incurred prior to the adoption of Proposition 1 on November 4, 2014, will not count towards the Recipient's Match Funds.

(e) If, at Work Completion, the Recipient has provided Match Funds in an amount that is less than the Match Funds amount set forth above, the State Water Board may proportionately reduce the Grant Funds amount and/or the Recipient's Match Funds amount, upon approval of the Deputy Director of the Division, provided the reduced amount(s) satisfy statutory requirements and Guidelines.

B-3. Estimated Reasonable Total Project Cost

The estimated reasonable cost of the total Project is THREE MILLION, TWO HUNDRED FORTY-EIGHT THOUSAND, THIRTY-SIX DOLLARS ($3,248,036).

B-4. Funding Dates

(a) The Eligible Start Date is DECEMBER 20, 2016. Otherwise eligible costs incurred prior to this date will not be reimbursed.

(b) The Final Disbursement Request Date is APRIL 30, 2021. The Deputy Director of the Division may extend this date for good cause. Extensions may require an amendment to this Agreement. All Disbursement Requests must be submitted to the Division such that they are received prior to this date. Late Disbursement Requests will not be honored, and remaining amounts will be deobligated.

B-5. Funding Conditions and Exclusions

The State Water Board's disbursement of Grant Funds hereunder is contingent on the Recipient's compliance with the terms and conditions of this Agreement.

Grant Funds may not be used for any Indirect Costs. Any Disbursement Request submitted including Indirect Costs will cause that Disbursement Request, in its entirety, to be disputed and will not be paid until the dispute is resolved. This prohibition applies to the Recipient and any subcontract or sub-

agreement for work on the Project that will be reimbursed with Grant Funds pursuant to this Agreement. (Gov. Code, § 16727.)

B-6. Budget Summary

LINE ITEM	GRANT FUNDS	MATCH FUNDS	TOTAL PROJECT COSTS
Direct Project Administration Costs	$134,087	$134,087	$268,174
Planning/Design/Engineering/Environmental	$189,649	$189,649	$379,298
Construction/Implementation	$1,220,188	$1,220,189	$2,440,377
Monitoring Performance	$77,094	$77,093	$154,187
Education/Outreach	$3,000	$3,000	$6,000
TOTAL	$1,624,018	$1,624,018	$3,248,036

B-7. Budget Flexibility

(a) Subject to the prior review and approval of the Grant Manager, adjustments between existing line items may be used to defray allowable direct costs up to fifteen percent (15%) of the total amount (excluding Match Funds), including any amendment(s) thereto. Line item adjustments in excess of fifteen percent (15%) require an Agreement amendment. If the detailed budget includes an amount for the Recipient's personnel costs, that amount is based on the hours, classifications, and rates submitted by the Recipient in its application. Any changes to the hours, classifications, and rates must be approved, in advance and in writing, by the Grant Manager.

(b) The Recipient may submit a request for an adjustment in writing to the Grant Manager. Such adjustment may not increase or decrease the total grant amount. The Recipient shall submit a copy of the original Agreement budget sheet reflecting the requested changes and shall note proposed changes by striking out the original amount(s) followed with proposed change(s) in bold and underlined. Budget adjustments deleting a budget line item or adding a new budget line item shall require a formal amendment. The Division may also propose budget adjustments.

(c) The sum of adjusted line items shall not exceed the total budget amount.

B-8. Amounts Payable by the Recipient

The Recipient agrees to pay any and all costs connected with the Project including, without limitation, any and all Project Costs. If the Grant Funds are not sufficient to pay the Project Costs in full, the Recipient shall nonetheless complete the Project and pay that portion of the Project Costs in excess of available Grant Funds, and shall not be entitled to any reimbursement therefor from the State Water Board.

B-9. Disbursement of Grant Funds; Availability of Grant Funds

(a) The State Water Board's obligation to disburse Grant Funds is contingent upon the availability of sufficient funds to permit the disbursements provided for herein. If sufficient funds are not available for any reason including, but not limited to, failure of the State government to appropriate funds necessary for disbursement of Grant Funds, the State Water Board shall not be obligated to make any disbursements to the Recipient under this Agreement. This provision shall be construed as a condition precedent to the obligation of the State Water Board to make any

disbursements under this Agreement. Nothing in this Agreement shall be construed to provide the Recipient with a right of priority for disbursement over any other recipient. If any disbursements due the Recipient under this Agreement are deferred because sufficient funds are unavailable, it is the intention of the State Water Board that such disbursement will be made to the Recipient when sufficient funds do become available, but this intention is not binding. If this Agreement's funding for any fiscal year is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Agreement with no liability occurring to the State, or offer an amendment to the Recipient to reflect the reduced amount.

(b) Except as may be otherwise provided in this Agreement, disbursement of Grant Funds will be made as follows:

(1) Upon execution and delivery of this Agreement, the Recipient may submit a Disbursement Request for eligible Project Costs as well as to support Match Funds as specified in this Exhibit from the Project Costs through submission to the State Water Board using the Disbursement Request form provided by the Grant Manager.

(2) Disbursement Requests shall contain the following information:

a. The date of the request;

b. The time period covered by the request, i.e., the term "from" and "to";

c. The total amount requested;

d. Documentation of Match Funds used;

e. Original signature and date (in ink) of the Recipient's Project Director or his/her designee; and

f. The Final Disbursement Request shall be clearly marked "FINAL DISBURSEMENT REQUEST" and shall be submitted NO LATER THAN APRIL 30, 2021.

(3) Disbursement Requests must be itemized based on the line items specified in the budget in this Exhibit. Disbursement Requests must be completed, signed by the Recipient's Project Director or his/her designee, and addressed to the Grant Manager as set forth in the Party Contacts section of this Agreement. Disbursement Requests submitted in any other format than the one provided by the State Water Board will cause a Disbursement Request to be disputed. In the event of such a dispute, the Grant Manager will notify the Recipient. Payment will not be made until the dispute is resolved and a corrected Disbursement Request submitted. The Grant Manager has the responsibility for approving Disbursement Requests. Project Costs incurred prior to the Eligible Start Date of this Agreement will not be reimbursed.

(4) Grant Funds must be requested quarterly via Disbursement Request for eligible costs incurred during the reporting period of the corresponding Progress Report, describing the activities and expenditures for which the disbursement is being requested. Each Disbursement Request must be accompanied by a Progress Report. Failure to provide timely Disbursement Requests may result in such requests not being honored.

(5) The Recipient agrees that it will not submit any Disbursement Requests that include any Project Costs until such costs have been incurred and are currently due and payable by the Recipient; although, the actual payment of such costs by the Recipient is not required as a condition of the Disbursement Request. Supporting documentation (e.g., receipts) must be submitted with each Disbursement Request as well as to support Match Funds claimed, if

any. The amount requested for administration costs must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = total amount claimed). Disbursement of Grant Funds will be made only after receipt of a complete, adequately supported, properly documented and accurately addressed Disbursement Request.

(6) The Recipient will not seek reimbursement of any Project Costs that have been reimbursed from other funding sources.

(7) The Recipient shall use Grant Funds within thirty (30) days of receipt to reimburse contractors, vendors, and other Project Costs. Any interest earned on Grant Funds shall be reported to the State Water Board and will either be required to be returned to the State Water Board or deducted from future disbursements. In the event that the Recipient fails to disburse Grant Funds to contractors or vendors within thirty (30) days from receipt of the Grant Funds, the Recipient shall immediately return such Grant Funds to the State Water Board. Interest shall accrue on such Grant Funds from the date of disbursement through the date of mailing of Grant Funds to the State Water Board. If the Recipient held such Grant Funds in interest-bearing accounts, any interest earned on the Grant Funds shall also be due to the State Water Board.

(8) The Recipient shall submit its final Disbursement Request no later than the Final Disbursement Request Date specified herein unless prior approval is granted by the Division. If the Recipient fails to do so, then the undisbursed balance of this Agreement will be deobligated.

(9) The Recipient agrees that it will not request a disbursement unless that cost is allowable, reasonable, and allocable.

(10) Notwithstanding any other provision of this Agreement, no disbursement shall be required at any time or in any manner that is in violation of or in conflict with federal or state laws, policies, or regulations.

(11) The Recipient agrees that it shall not be entitled to interest earned on undisbursed Grant Funds.

(12) Any reimbursement for necessary travel and per diem shall be at rates not to exceed those set by the California Department of Human Resources. These rates may be found at http://www.calhr.ca.gov/employees/Pages/travel-reimbursements.aspx. Reimbursement will be at the State travel and per diem amounts that are current as of the date costs are incurred by the Recipient. No travel outside the State of California shall be reimbursed unless prior written authorization is obtained from the Grant Manager.

(13) The Recipient must include any other documents or requests required or allowed under this Agreement.

B-10. Withholding of Disbursements and Material Violations

(a) Notwithstanding any other provision of this Agreement, the Recipient agrees that the State Water Board may retain an amount equal to ten percent (10%) of the Grant Funds until Project Completion. Any retained amounts due to the Recipient will be promptly disbursed to the Recipient, without interest, upon Project Completion.

(b) The State Water Board may withhold all or any portion of the funds provided for by this Agreement in the event that:

(1) The Recipient has materially violated, or threatens to materially violate, any term, provision, condition, or commitment of this Agreement; or

(2) The Recipient fails to maintain reasonable progress toward Project Completion.

B-11. Remaining Balance

In the event the Recipient does not request all of the Grant Funds encumbered under this Agreement, any remaining Grant Funds revert to the State.

B-12. Fraud and Misuse of Public Funds

All Disbursement Requests submitted shall be accurate and signed under penalty of perjury. Any and all costs submitted pursuant to this Agreement shall only be for the tasks set forth herein. The Recipient shall not submit any Disbursement Request containing costs that are ineligible or have been reimbursed from other funding sources unless required and specifically noted as such (i.e., match costs). Any eligible costs for which the Recipient is seeking reimbursement shall not be reimbursed from any other source. Double or multiple billing for time, services, or any other eligible cost is illegal and constitutes fraud. Any suspected occurrences of fraud, forgery, embezzlement, theft, or any other misuse of public funds may result in suspension of disbursements of Grant Funds and/or termination of this Agreement requiring the repayment of all Grant Funds disbursed hereunder. Additionally, the Deputy Director of the Division may request an audit and refer the matter to the Attorney General's Office or the appropriate district attorney's office for criminal prosecution or the imposition of civil liability. (Civ. Code, §§ 1572-1573; Pen. Code, §§ 470, 489-490.)

EXHIBIT C – STANDARD TERMS AND CONDITIONS

C-1. Accounting and Auditing Standards

The Recipient shall maintain GAAP-compliant Project accounts, including GAAP requirements relating to the reporting of infrastructure assets.

C-2. Amendment

No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties, and approved as required. No oral or written understanding or agreement not incorporated in this Agreement is binding on any of the parties.

C-3. Assignability

This Agreement is not assignable by the Recipient, either in whole or in part.

C-4. Audit

(a) The Division, at its option, may call for an audit of financial information relative to the Project, where the Division determines that an audit is desirable to assure program integrity or where such an audit becomes necessary because of state or federal requirements. Where such an audit is called for, the audit shall be performed by a certified public accountant independent of the Recipient and at the cost of the Recipient. The audit shall be in the form required by the Division.

(b) Audit disallowances will be returned to the State Water Board. Failure to comply with audit disallowance provisions shall disqualify the Recipient from participating in State Water Board funding programs.

C-5. Bonding

Where contractors are used, the Recipient shall not authorize construction to begin until each contractor has furnished a performance bond in favor of the Recipient in the following amounts: faithful performance (100%) of contract value, and labor and materials (100%) of contract value. This requirement shall not apply to any contract for less than $25,000.00.

C-6. Continuous Use of Project; Lease or Disposal of Project

The Recipient agrees that, except as provided in this Agreement, it will not abandon, substantially discontinue use of, lease, or dispose of the Project or any significant part or portion thereof during the useful life of the Project without prior written approval of the Deputy Director of the Division. Such approval may be conditioned as determined to be appropriate by the Deputy Director of the Division, including a condition requiring repayment of all Grant Funds or any portion of all remaining Grant Funds covered by this Agreement together with accrued interest and any penalty assessments which may be due.

C-7. Claims

Any claim of the Recipient is limited to the rights, remedies, and claims procedures provided to the Recipient under this Agreement.

C-8. Competitive Bidding

The Recipient shall adhere to any applicable state law or local ordinance for competitive bidding and applicable labor laws.

If the Recipient is a private entity, any construction contracts related in any way to the Project shall be let by competitive bid procedures that ensure award of such contracts to the lowest responsible bidders. The Recipient shall not award a construction contract until a summary of bids and identification of the selected lowest responsible bidder is submitted to and approved in writing by the Division. The Recipient must provide a full explanation if the Recipient is proposing to award a construction contract to anyone other than the lowest responsible bidder.

C-9. Compliance with Law, Regulations, etc.

The Recipient agrees that it shall, at all times, comply with and require its contractor and subcontractors to comply with all applicable federal and state laws, rules, guidelines, regulations, and requirements. Without limitation of the foregoing, the Recipient agrees that, to the extent applicable, the Recipient shall:

(a) Comply with the provisions of the adopted environmental mitigation plan, if any, for the term of this Agreement;

(b) Comply with the Guidelines; and

(c) Comply with and require compliance with the list of state laws (cross-cutters) in Section C-32 of this Agreement.

C-10. Conflict of Interest

The Recipient certifies that its owners, officers, directors, agents, representatives, and employees are in compliance with applicable state and federal conflict of interest laws.

C-11. Damages for Breach Affecting Tax-Exempt Status or Federal Compliance

In the event that any breach of any of the provisions of this Agreement by the Recipient shall result in the loss of tax-exempt status for any bonds of the State or any subdivision or agency thereof, including bonds issued on behalf of the State Water Board, or if such breach shall result in an obligation on the part of the State or any subdivision or agency thereof to reimburse the federal government by reason of any arbitrage profits, the Recipient shall immediately reimburse the State or any subdivision or agency thereof in an amount equal to any damages paid by or loss incurred by the State or any subdivision or agency thereof due to such breach. In the event that any breach of any of the provisions of this Agreement by the Recipient shall result in the failure of Grant Funds to be used pursuant to the provisions of this Agreement, or if such breach shall result in an obligation on the part of the State or any subdivision or agency thereof to reimburse the federal government, the Recipient shall immediately reimburse the State or any subdivision or agency thereof in an amount equal to any damages paid by or loss incurred by the State or any subdivision or agency thereof due to such breach.

C-12. Disputes

(a) The Recipient may appeal a staff decision within thirty (30) days to the Deputy Director of the Division or designee, for a final Division decision. The Recipient may appeal a final Division decision to the State Water Board within thirty (30) days. The Office of the Chief Counsel of the State Water Board will prepare a summary of the dispute and make recommendations relative to its final resolution, which will be provided to the State Water Board's Executive Director and each State Water Board Member. Upon the motion of any State Water Board Member, the State Water Board will review and resolve the dispute in the manner determined by the State Water

Board. Should the State Water Board determine not to review the final Division decision, this decision will represent a final agency action on the dispute.

(b) This clause does not preclude consideration of legal questions, provided that nothing herein shall be construed to make final the decision of the State Water Board, or any official or representative thereof, on any question of law.

(c) The Recipient shall continue with the responsibilities under this Agreement during any dispute.

C-13. Financial Management System and Standards

The Recipient agrees to comply with federal standards for financial management systems. The Recipient agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to permit preparation of reports required by the federal or state government and tracking of Project Costs to a level of expenditure adequate to establish that such Grant Funds have not been used in violation of federal or state laws or the terms of this Agreement.

C-14. Governing Law

This Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

C-15. Income Restrictions

The Recipient agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Recipient under this Agreement shall be paid by the Recipient to the State Water Board, to the extent that they are properly allocable to Project Costs for which the Recipient has been reimbursed by the State Water Board under this Agreement.

C-16. Indemnification and State Reviews

The parties agree that review or approval of Project documents by the State Water Board is for administrative purposes only, including conformity with application and eligibility criteria, and expressly not for the purposes of design defect review or construction feasibility, and does not relieve the Recipient of its responsibility to properly plan, design, construct, operate, and maintain the Project. To the extent permitted by law, the Recipient agrees to indemnify, defend, and hold harmless the State Water Board, and its officers, employees, and agents (collectively, "Indemnified Persons"), against any loss or liability arising out of any claim or action brought against any Indemnified Persons from and against any and all losses, claims, damages, liabilities, or expenses, of every conceivable kind, character, and nature whatsoever arising out of, resulting from, or in any way connected with (1) the Project or the conditions, occupancy, use, possession, conduct, or management of, work done in or about, or the planning, design, acquisition, installation, or construction, of the Project or any part thereof; (2) the carrying out of any of the transactions contemplated by this Agreement or any related document; (3) any violation of any applicable law, rule or regulation, any environmental law (including, without limitation, the Federal Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, the California Hazardous Substance Account Act, the Federal Water Pollution Control Act, the Clean Air Act, the Toxic Substances Control Act, the Occupational Safety and Health Act, the Safe Drinking Water Act, the California Hazardous Waste Control Law, and California Water Code Section 13304, and any successors to said laws), rule or regulation or the release of any toxic substance on or near the Project; or (4) any untrue statement or alleged untrue statement of any material fact or omission or alleged omission to state a material fact necessary to make the statements required to be stated therein, in light of the circumstances under which they were made, not misleading with respect to any information provided by the Recipient for use in any disclosure document utilized in connection with any of the transactions contemplated by this Agreement. To the fullest extent permitted by law, the Recipient agrees to pay and discharge any judgment or award entered or made against Indemnified Persons with

respect to any such claim or action, and any settlement, compromise or other voluntary resolution. The provisions of this section shall survive the term of this Agreement and the discharge of the Recipient's obligation hereunder.

C-17. Independent Actor

The Recipient, and its agents and employees, if any, in the performance of this Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State Water Board.

C-18. Integration

This Agreement is the complete and final Agreement between the parties.

C-19. Non-Discrimination Clause

(a) During the performance of this Agreement, the Recipient and its contractors and subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, sexual orientation, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, denial of family care leave, or genetic information, gender, gender identity, gender expression, or military and veteran status.

(b) The Recipient, its contractors, and subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment.

(c) The Recipient, its contractors, and subcontractors shall comply with the provisions of the Fair Employment and Housing Act and the applicable regulations promulgated thereunder. (Gov. Code, §12990, subds. (a)-(f) et seq.; Cal. Code Regs., tit. 2, § 7285 et seq.) Such regulations are incorporated into this Agreement by reference and made a part hereof as if set forth in full.

(d) The Recipient, its contractors, and subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

(e) The Recipient shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Agreement.

C-20. No Third Party Rights

The parties to this Agreement do not create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or of any duty, covenant, obligation, or undertaking established herein.

C-21. Operation and Maintenance; Insurance

The Recipient agrees to sufficiently and properly staff, operate, and maintain all portions of the Project during its useful life in accordance with all applicable state and federal laws, rules, and regulations.

The Recipient will procure and maintain or cause to be maintained insurance on the Project with responsible insurers, or as part of a reasonable system of self-insurance, in such amounts and against such risks (including damage to or destruction of the Project) as are usually covered in connection with systems similar to the Project. Such insurance may be maintained by the maintenance of a self-insurance plan so long as any such plan provides for (i) the establishment by the Recipient of a separate segregated self-insurance fund funded in an amount determined (initially and on at least an annual basis) by an independent insurance consultant experienced in the field of risk management employing accepted

actuarial techniques and (ii) the establishment and maintenance of a claims processing and risk management program.

In the event of any damage to or destruction of the Project caused by the perils covered by such insurance, the net proceeds thereof shall be applied to the reconstruction, repair or replacement of the damaged or destroyed portion of the Project. The Recipient shall begin such reconstruction, repair or replacement as expeditiously as possible, and shall pay out of such net proceeds all costs and expenses in connection with such reconstruction, repair or replacement so that the same shall be completed and the Project shall be free and clear of all claims and liens.

C-22. Other Assistance

If funding for Project Costs is made available to the Recipient from sources other than this Agreement and approved match sources, the Recipient shall immediately notify the Grant Manager.

C-23. Permits; Contracting; Disqualification

The Recipient shall comply in all material respects with all applicable federal, state and local laws, rules and regulations. The Recipient shall procure all permits, licenses and other authorizations necessary to accomplish the work contemplated in this Agreement, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. Signed copies of any such permits or licenses shall be submitted to the Division before construction starts.

For any work related to this Agreement, the Recipient shall not contract with any individual or organization on the State Water Board's List of Disqualified Businesses and Persons that is identified as debarred or suspended or otherwise excluded from or ineligible for participation in any work overseen, directed, funded, or administered by the State Water Board program for which funding under this Agreement is authorized. The State Water Board's List of Disqualified Businesses and Persons is located at http://www.waterboards.ca.gov/water_issues/programs/enforcement/fwa/dbp.shtml. The Recipient shall not contract with any party who is debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs under Executive Order 12549, "Debarment and Suspension."

C-24. Public Records

The Recipient acknowledges that, except for a subset of information regarding archaeological records, the Project records and locations are public records including, but not limited to, all of the submissions accompanying the application, all of the documents incorporated by reference into this Agreement, and all reports, disbursement requests, and supporting documentation submitted hereunder.

C-25. Prevailing Wages

The Recipient agrees to be bound by all applicable provisions of the State Labor Code regarding prevailing wages. The Recipient shall monitor all agreements subject to reimbursement from this Agreement to ensure that the prevailing wage provisions of the State Labor Code are being met.

C-26. Professionals

The Recipient agrees that only professionals with valid licenses in the State of California will be used to perform services under this Agreement where such services are called for. All technical reports required pursuant to this Agreement that involve planning, investigation, evaluation, design, or other work requiring interpretation and proper application of engineering, architecture, or geologic sciences shall be prepared by or under the direction of persons registered to practice in California. All technical reports must contain the statement of the qualifications of the responsible registered professional(s). Technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

C-27. Public Funding

This Project is publicly funded. Any service provider or contractor with which the Recipient contracts must not have any role or relationship with the Recipient, that, in effect, substantially limits the Recipient's ability to exercise its rights, including cancellation rights, under the contract, based on all the facts and circumstances.

C-28. Recipient's Responsibility for Work

The Recipient shall be responsible for all work and for persons or entities engaged in work performed pursuant to this Agreement including, but not limited to, contractors, subcontractors, suppliers, and providers of services. The Recipient shall be responsible for responding to any and all disputes arising out of its contracts for work on the Project. The State Water Board will not mediate disputes between the Recipient and any other entity concerning responsibility for performance of work.

C-29. Records

Without limitation of the requirement to maintain Project accounts in accordance with GAAP, the Recipient agrees to:

(a) Establish an official file for the Project, which shall adequately document all significant actions relative to the Project.

(b) Establish separate accounts, which will adequately and accurately depict all amounts received and expended on the Project, including all assistance funds received under this Agreement.

(c) Establish separate accounts, which will adequately depict all income received which is attributable to the Project, specifically including any income attributable to assistance funds disbursed under this Agreement.

(d) Establish an accounting system, which will accurately depict final total costs of the Project, including both direct and Indirect Costs. Indirect Costs are not eligible for funding under this Agreement.

(e) Establish such accounts and maintain such records as may be necessary for the State to fulfill federal reporting requirements, including any and all reporting requirements under federal tax statutes or regulations.

(f) If a Force Account is used by the Recipient for the Project, accounts will be established which reasonably document all employee hours charged to the Project and the associated tasks performed by each employee. Indirect Force Account costs are not eligible for funding. This prohibition applies to the Recipient and any subcontract or sub-agreement for work on the Project that will be reimbursed with Grant Funds pursuant to this Agreement. (Gov. Code, § 16727.)

(g) Maintain separate books, records, and other material relative to the Project.

(h) Retain such books, records, and other material for itself and for each contractor or subcontractor who performed work on this Project for a minimum of thirty-six (36) years after Work Completion. The Recipient shall require that such books, records, and other material be subject at all reasonable times (at a minimum during normal business hours) to inspection, copying, and audit by the State Water Board, the Bureau of State Audits, the Internal Revenue Service, the Governor, or any authorized representatives of the aforementioned, and shall allow interviews during normal business hours of any employees who might reasonably have information related to such records. The Recipient agrees to include a similar right regarding audit, interviews, and

records retention in any subcontract related to the performance of this Agreement. The provisions of this section shall survive the term of this Agreement.

C-30. Related Litigation

The Recipient is prohibited from using Grant Funds or Match Funds to pay costs associated with any litigation the Recipient pursues. Regardless of whether the Project or any eventual related project is the subject of litigation, the Recipient agrees to complete the Project funded by the Agreement or to repay all Grant Funds plus interest to the State Water Board.

C-31. Rights in Data

The Recipient agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of this Agreement are subject to the rights of the State as set forth in this section. The State shall have the right to reproduce, publish, and use all such work, or any part thereof, in any manner and for any purposes whatsoever and to authorize others to do so. If any such work is copyrightable, the Recipient may copyright the same, except that, as to any work which is copyrighted by the Recipient, the State reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish, and use such work, or any part thereof, and to authorize others to do so, and to receive electronic copies from the Recipient upon request.

C-32. State Cross-Cutter Compliance

The Recipient represents and certifies that, to the extent applicable, it is in compliance with the following conditions precedent and agrees that it will continue to maintain compliance during the term of this Agreement:

(a) Agricultural Water Management Plan Consistency. A Recipient that is an agricultural water supplier as defined by section 10608.12 of the Water Code must comply with the Agricultural Water Management Planning Act. (Wat. Code, § 10800 et seq.)

(b) California Environmental Quality Act (CEQA). Implementation and construction activities must comply with CEQA. Upon receipt and review of the Recipient's CEQA documents, the State Water Board shall make its own environmental findings before determining whether to provide any construction funding under this Agreement. Providing environmental clearance and construction funding is discretionary. In the event that the State Water Board does not provide environmental clearance, no construction funding will be provided under this Agreement, all construction funds will be disencumbered, and this Agreement may be terminated. The State Water Board may require changes in the scope or additional mitigation as a condition to providing construction funding under this Agreement. The Recipient shall be prohibited from performing any construction activities prior to environmental clearance by the State Water Board, and the undertaking of any such construction activity will be considered a material breach of this Agreement.

(c) Charter City Project Labor Requirements. (Labor Code, § 1782 and Pub. Contract Code, § 2503.)

(1) Prevailing Wage

Where the Recipient is a charter city or a joint powers authority that includes a charter city, the Recipient certifies that no charter provision nor ordinance authorizes a construction project contractor not to comply with the Labor Code's prevailing wage rate requirements, nor, within the prior two years (starting from January 1, 2015, or after) has the city awarded a public works contract without requiring the contractor to comply with such wage rate requirements according to Labor Code section 1782.

(2) Labor Agreements

Where the Recipient is a charter city or a joint powers authority that includes a charter city, the Recipient certifies that no charter provision, initiative, or ordinance limits or constrains the city's authority or discretion to adopt, require, or utilize project labor agreements that include all the taxpayer protection antidiscrimination provisions of Public Contract Code section 2500 in construction projects, and that the Recipient is accordingly eligible for state funding or financial assistance pursuant to Public Contract Code section 2503.

(d) Contractor and Subcontractor Requirements. (Labor Code, §§ 1725.5 and 1771.1.) To bid for public works contracts, the Recipient acknowledges that the Recipient and the Recipient's subcontractors must register with the Department of Industrial Relations.

(e) Delta Plan Consistency Findings. (Wat. Code, § 85225 and Cal. Code of Regulations, title 23, § 5002.) If the Recipient is a state or local public agency and the proposed action is covered by the Delta Plan, the Recipient will submit a certification of project consistency with the Delta Plan to the Delta Stewardship Council prior to undertaking the implementation/construction project associated with this Project.

(f) Eminent Domain Prohibited. (Wat. Code, § 79711.) Where land acquisition is otherwise authorized under this Agreement, Grant Funds and Match Funds shall not be used to acquire land via eminent domain.

(g) Governor's Infrastructure Plan. (Gov. Code, § 13100.) The Recipient shall ensure that the Project shall maintain consistency with section 13100 of the Government Code (five-year infrastructure plan).

(h) State Water Board's Drought Emergency Water Conservation regulations. (Cal. Code of Regulations, Title 23, article 22.5.) The Recipient will include a discussion of its implementation in Progress Reports submitted pursuant to this Agreement.

(i) SBx7-7: Sustainable Water Use and Demand Reduction (Wat. Code, § 10608 et seq.). SBx7-7 conditions the receipt of a water management grant or loan for urban water suppliers on achieving gallons per capita per day reduction targets with the end goal of a twenty percent (20%) reduction by 2020. The Recipients that are urban water suppliers shall provide proof of compliance with SBx7-7.

(j) Urban Water Demand Management. (Wat. Code, § 10631.5.) If the Recipient is an "urban water supplier" as defined by Water Code section 10617, the Recipient certifies that it is implementing water demand management measures approved by the Department of Water Resources.

(k) Urban Water Management Planning Act. (Wat. Code, § 10610 et seq.) If the Recipient is an "urban water supplier" as defined by Water Code section 10617, the Recipient certifies that it has submitted an Urban Water Management Plan that has been deemed complete by the Department of Water Resources and is in compliance with that plan. This shall constitute a condition precedent to this Agreement.

(l) Urban Water Supplier. (Wat. Code, §§ 526 and 527.) If the Recipient is an urban water supplier as defined by Water Code section 10617, it shall have complied and maintain compliance with sections 526 and 527 of the Water Code relating to installation of meters and volumetric charging.

(m) Water Diverter. (Wat. Code, § 5103.) If the Recipient is a water diverter, the Recipient must maintain compliance by submitting monthly diversion reports to the Division of Water Rights of the State Water Board.

(n) Water Quality Compliance. (Wat. Code, § 79707.) The Recipient shall ensure that the Project shall maintain consistency with Division 7 of the Water Code (commencing with section 13000) and Government Code section 13100.

(o) Water Quality Monitoring. (Wat. Code, § 79704.) If water quality monitoring is required as part of the Project, the Recipient shall collect and report water quality monitoring data to the State Water Board in a manner that is compatible and consistent with surface water monitoring data systems or groundwater monitoring data systems administered by the State Water Board.

(p) Wild and Scenic Rivers. (Wat. Code, § 79711.) The Recipient shall ensure that the Project will not have an adverse effect on the values upon which a wild and scenic river or any other river is afforded protections pursuant to the California Wild and Scenic Rivers Act or the federal Wild and Scenic Rivers Act.

C-33. State Water Board Action; Costs and Attorney Fees

The Recipient agrees that any remedy provided in this Agreement is in addition to and not in derogation of any other legal or equitable remedy available to the State Water Board as a result of breach of this Agreement by the Recipient, whether such breach occurs before or after completion of the Project, and exercise of any remedy provided by this Agreement by the State Water Board shall not preclude the State Water Board from pursuing any legal remedy or right which would otherwise be available. In the event of litigation between the parties hereto arising from this Agreement, it is agreed that each party shall bear its own costs and attorney fees.

C-34. Termination; Immediate Repayment; Interest

(a) This Agreement may be terminated at any time prior to the Work Completion Date set forth on the cover and in Exhibit A, at the option of the State Water Board, upon violation by the Recipient of any material provision of this Agreement after such violation has been called to the attention of the Recipient and after failure of the Recipient to bring itself into compliance with the provisions of this Agreement within a reasonable time as established by the Division.

(b) In the event of such termination, the Recipient agrees, upon demand, to immediately repay to the State Water Board an amount equal to Grant Funds disbursed hereunder, accrued interest, penalty assessments, and additional payments. In the event of termination, interest shall accrue on all amounts due at the highest legal rate of interest from the date that notice of termination is mailed to the Recipient to the date all monies due have been received by the State Water Board.

C-35. Timeliness

Time is of the essence in this Agreement.

C-36. Unenforceable Provision

In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.

C-37. Useful Life of Project

For the purpose of this Agreement, the minimum useful life of any constructed portions of this Project begins upon completion of construction and continues until twenty (20) years thereafter.

C-38. Venue

The State Water Board and the Recipient hereby agree that any action arising out of this Agreement shall be filed and maintained in the Superior Court in and for the County of Sacramento, California.

C-39. Waiver and Rights of the State Water Board

Any waiver of rights by the State Water Board with respect to a default or other matter arising under this Agreement at any time shall not be considered a waiver of rights with respect to any other default or matter.

Any rights and remedies of the State Water Board provided for in this Agreement are in addition to any other rights and remedies provided by law.

COMMITTEE TRANSMITTAL

August 14, 2017

To: Members of the Board of Directors

From: Laurena Weinert, Clerk of the Board

Subject: Measure M2 Environmental Cleanup Program - 2017 Tier 1 Water Quality Grant Funding Allocations

Regional Planning and Highways Committee Meeting of August 7, 2017

Present: Directors Delgleize, Do, M. Murphy, Nelson, Spitzer, and Steel
Absent: Director Donchak

Committee Vote

This item was passed by the Members present.

Committee Recommendation

Approve the 2017 Tier 1 Environmental Cleanup Program funding recommendations to fund 16 projects, in an amount totaling $3,130,251.

August 7, 2017

To: Regional Planning and Highways Com

From: Darrell Johnson, Chief Executive Officer

Subject: Measure M2 Environmental Cleanup Program – 2017 Tier 1 Water Quality Grant Funding Allocations

Overview

The Orange County Transportation Authority's Environmental Cleanup Program provides Measure M2 funding for water quality improvement projects to address transportation-generated pollution. The fiscal year 2017-18 Tier 1 Grant Program call for projects was issued on March 16, 2017. Evaluations have been completed, and a list of projects is presented for review and approval of funding allocations.

Recommendation

Approve the 2017 Tier 1 Environmental Cleanup Program funding recommendations to fund 16 projects, in an amount totaling $3,130,251.

Background

In May 2010, the Orange County Transportation Authority (OCTA) Board of Directors (Board) approved a two-tiered approach to fund the Measure M2 (M2) Environmental Cleanup Program (ECP). The funding plan called for up to $19.5 million in Tier 1 grants on a "pay-as-you-go" basis through seven funding cycles. Approximately $2.8 million has been available for each cycle of Tier 1 calls for projects (call). The fiscal year (FY) 2017-18 call is the seventh cycle.

The Tier 1 Grant Program is designed to remove the more visible forms of pollutants, such as litter and debris, which collect on roadways and in catch basins, or "storm drains", prior to being deposited in waterways and the ocean.

These funds are available for Orange County eligible local agencies to purchase equipment and upgrades for existing catch basins and other related best management practices (BMP) that supplement current requirements.

Examples include screens, filters, and inserts for catch basins, as well as other devices designed to remove the above mentioned pollutants. Proposed projects must demonstrate a direct nexus to the reduction of transportation-related pollution as developed and defined by the Environmental Cleanup Allocation Committee (ECAC).

The Board has approved funding for 138 projects through six Tier 1 calls, totaling approximately $17 million. Staff has estimated that over one million cubic feet of trash has been captured as a result of the installation of Tier 1 devices since the inception of the Tier 1 Program in 2011.

Discussion

The Board issued the FY 2017-18 Tier 1 call on March 16, 2017. Twenty-four applications were submitted from 21 cities and the County of Orange prior to the May 17, 2017 deadline (Attachment A). Applications were reviewed and evaluated by the Chairman of ECAC, an ECAC member, as well as OCTA staff. The applications were ranked based on the following Board-approved criteria:

- Proposed project's effectiveness at removing trash and debris;
- Identification of the affected waterway(s) and the pollutant(s) treated by the proposed BMP;
- Operations and maintenance plan adequate to maintain the efficiency of the proposed BMP for regularly scheduled inspections, maintenance, and cleaning/disposal of pollutants;
- Clear and detailed work plan with a specific implementation period;
- Project readiness.

The evaluation team recommends 16 projects for funding based on total points earned (Attachment B). The Tier 1 proposals recommended for funding consist primarily of catch basin and screen projects. A brief summary is provided below.

- Catch basin inserts and other debris screens or inserts (14 projects): These screens or insert units prevent debris from entering the storm drain system;
- Underground storm water detention and infiltration system (one project): Install an underground, pre-manufactured detention and infiltration system, and repave the lot utilizing pervious surfaces. Reinforced concrete storm water conveyance pipes will direct visible trash and debris to the detention system;

- Hydrodynamic separator (one project): A hydrodynamic separator is a manhole type concrete and steel structure that is effective in capturing pollutants such as trash, sediment, nutrients, and more.

As part of this grant program, local agencies agree to contribute a minimum cash match of 20 percent of the project cost. Given the amount of funding available for each call cycle and the competitive nature of this program, applications are evaluated and scored based upon the thoroughness of the responses to application questions related to water quality benefits of the proposed project. Attachment A also includes projects that were beyond the funding capacity of this cycle. Staff will continue outreach efforts to the sponsor agencies and offer assistance on how their applications can be strengthened.

Staff will also work with the ECAC to evaluate and recommend changes to the funding guidelines for the 2018 call. Guideline changes are expected to return to the Board for approval by December 2017.

Summary

The proposed programming recommendations for the M2 ECP Tier 1 Water Quality Grant Program are presented for approval. Funding for 16 projects, totaling $3,130,251, in M2 funds is proposed. Staff is seeking Board approval of the programming recommendations presented.

Attachments

A. 2017 M2 Environmental Cleanup Program Tier 1 Call for Projects – Applications Received
B. 2017 M2 Environmental Cleanup Program Tier 1 Call for Projects – Programming Recommendations

Prepared by:

Sam Kaur
Section Manager III, Local Programs
(714) 560-5673

Approved by:

Kia Mortazavi
Executive Director, Planning
(714) 560-5741

2017 M2 Environmental Cleanup Program Tier 1 Call for Projects - Applications Received

Agency	Project	Final Score	Funding	Cumulative
Placentia	Catch Basin Inserts Project - Phase IV	97	$ 160,000	$ 160,000
Buena Park	Buena Park Full Capture Catch Basin Insert Project	92	$ 302,165	$ 462,165
Yorba Linda	Arterial Roadway CPS Project	92	$ 70,400	$ 532,565
Anaheim	Modjeska Park Underground Storm Water Detention and Infiltration System	92	$ 500,000	$ 1,032,565
Tustin	City of Tustin Catch Basin Retrofit Program	87	$ 169,556	$ 1,202,121
Aliso Viejo	Aliso Viejo Stormwater Litter Control Project - Phase V	86	$ 423,396	$ 1,625,517
La Habra	Installation of Full Capture Trash Inserts in Catch Basins	85	$ 177,288	$ 1,802,805
Cypress	Catch Basin Inserts Project - CPS	84	$ 107,912	$ 1,910,717
Laguna Hills	Laguna Hills ARS Screen Project - Phase VI	82	$ 120,000	$ 2,030,717
Orange	Orangewood Avenue BioClean Unit Installation	82	$ 300,000	$ 2,330,717
Villa Park	Catch Basin Enhacement Project - Round 3	80	$ 175,000	$ 2,505,717
Lake Forest	CPS and ARS Catch Basin Retrofit - Phase VII	80	$ 106,800	$ 2,612,517
Irvine	Irvine Spectrum Catch Basin CPS Installation	77	$ 30,720	$ 2,643,237
Costa Mesa	Costa Mesa CPS Installation	76	$ 43,544	$ 2,686,781
Mission Viejo	Mission Viejo TRAP: Crown Valley to South City Limit	73	$ 278,235	$ 2,965,016
Laguna Niguel	Laguna Niguel Catch Basin Installation Project	72	$ 165,235	**$ 3,130,251**
UNFUNDED (Insufficient funding)				
Newport Beach	Polaris Drive Trash Mitigation Project	69	$ 500,000	$ 3,630,251
County of Orange	Bandalong Litter Trap and Boom System, Bolsa Chica Channel, Phase II	66	$ 500,000	$ 4,130,251
San Clemente	Trafalgar Canyon Runoff Treatment Project	65	$ 11,176	$ 4,141,427
Westminster	Beach Boulevard Median and Curb Inlet Improvement	59	$ 374,000	$ 4,515,427
UNFUNDED (Projects ineligible to receive M2 funds)				
Westminster	Premier and Barney Storm Drain System	0	$ 140,000	$ 4,655,427
San Juan Capistrano	Storm Water Treatment Project (Camino Capistrano)	0	$ 193,000	$ 4,848,427
UNFUNDED (Projects withdrawn by applicant)				
Santa Ana	Bristol Street Phase IIIA - Civic Center Drive to Washington Avenue	0	$ 240,000	$ 5,088,427
Santa Ana	Bristol Street Phase IV - Warner Avenue to Saint Andrew Place	0	$ 240,000	$ 5,328,427

Total M2 Funds Requested: $ 5,328,427

M2 - Measure M2

CPS - Connector Pipe Screen

ARS - Automatic Retractable Screen

TRAP - Trash and Runoff Abatement Project

2017 M2 Environmental Cleanup Program Tier 1 Call for Projects - Programming Recommendations

Agency	Project	Project Description	Final Score	Funding	Cumulative
Placentia	Catch Basin Inserts Project - Phase IV	Install automatic retractable screens and and connector pipe screens in 95 catch basins.	97	$ 160,000	$ 160,000
Buena Park	Buena Park Full Capture Catch Basin Insert Project	Install 218 catch basin inserts.	92	$ 302,165	$ 462,165
Yorba Linda	Arterial Roadway Connector Pipe Screens Project	Install 184 connector pipe screens.	92	$ 70,400	$ 532,565
Anaheim	Modjeska Park Underground Storm Water Detention & Infiltration System	Install an underground, pre-manufactured detention and infiltration system.	92	$ 500,000	$ 1,032,565
Tustin	City of Tustin Catch Basin Retrofit Program	Install 108 round curb inlet basket inserts.	87	$ 169,556	$ 1,202,121
Aliso Viejo	Aliso Viejo Stormwater Litter Control Project - Phase V	Install 290 round catch basin inserts.	86	$ 423,396	$ 1,625,517
La Habra	Installation of Full Capture Trash Inserts in Catch Basins	Install 343 connector pipe screens.	85	$ 177,288	$ 1,802,805
Cypress	Catch Basin Insterts Project - CPS	Install 218 catch basin inserts.	84	$ 107,912	$ 1,910,717
Laguna Hills	Laguna Hills ARS Screen Project - Phase VI	Install automatic retractable screens in 76 catch basins.	82	$ 120,000	$ 2,030,717
Orange	Orangewood Avenue BioClean Unit Installation	Install a hydrodynamic separator unit.	82	$ 300,000	$ 2,330,717
Villa Park	Catch Basin Enhacement Project - Round 3	Install 109 catch basin insterts.	80	$ 175,000	$ 2,505,717
Lake Forest	CPS & ARS Catch Basin Retrofit - Phase VII	Retrofit 55 catch basins with connector pipe screens and automatic retractable screens.	80	$ 106,800	$ 2,612,517
Irvine	Irvine Spectrum Catch Basin Connector Pipe Screen Installation	Install 100 connector pipe screens.	77	$ 30,720	$ 2,643,237
Costa Mesa	Costa Mesa Connector Pipe Screen Installation	Install 142 connector pipe screens.	76	$ 43,544	$ 2,686,781
Mission Viejo	Mission Viejo Trash and Runoff Abatement Project (TRAP): Crown Valley to South City Limit	Install automatic retractable screens and connector pipe screens in 54 catch basins, and conversion from spray to drip irrigation.	73	$ 278,235	$ 2,965,016
Laguna Niguel	Laguna Niguel Catch Basin Installation Project	Install 149 automatic retractable screens.	72	$ 165,235	**$ 3,130,251**

M2 - Measure M2

CPS - Connection Pipe Screen

ARS - Automatic Retractable Screen

TRAP - Trash and Runoff Abatement Project