

Project Information Form (PIF)

A. PROJECT INFORMATION

- | | | |
|-----------------------------|---|---|
| 1. Project Title: | Paradise Valley Creek Water Quality and Community Enhancement | |
| 2. Project Sponsor(s): | City of National City | |
| 3. Eligible Applicant Type: | Public Agency | ▼ |
| 4. IRWM Project Region(s): | San Diego IRWM Region | |
5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.
6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.
7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.
8. Funding Category:
 DAC Implementation Project
 General Implementation Project
9. Project Type: Stormwater management ▼ Other:
- Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No
2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:
a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

- Obj. A: Provide an integrated solution to water management issues by addressing flooding, storm water flow control, and pollutant control in partnership with the City of San Diego.
- Obj. B: Provide recreational uses to nearby residents and visitors by way of a single multi-use sidewalk/educational path along the south side of the creek.
- Obj. C: Determine the required capacity of the biofiltration basin and water quality sampling using hydraulic modeling to determine the creek's specific point-source pollutants.
- Obj. F: Construct, operate, and maintain a reliable infrastructure system related to flood control and stormwater to address, improve, and maintain water quality. Protect and enhance natural resources including mitigating for the potential of roadway failures and sewer spills.
- Obj. G: Increase the capacity of creek to reduce the frequency of flooding beyond the extents of the creek, attenuate flow and divert sediment to the biofiltration basin constructed in a previous phase. Increase infiltration and groundwater recharge to offset some of the hydrological effects of development in the project's drainage area.

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3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

Yes. The project will have a greater than a 30-year life cycle, similar to the typical procedure of a flood control project designed for a 100-year storm event. The recommendations of the materials for the project are specific to greenbook specifications and have been rated to last longer than 20 years. In addition, features to aid in effective maintenance and extend the useful life of the biofiltration basin installed in a previous project phase, such as a forebay for the basin, have been added to the design with input from National City Public Works Operations and Maintenance staff. These features will allow the project to have an overall longer life cycle and provide a more predictable annual maintenance budget. In addition, the reinforcement of the creek will help extend the useful life of the flood control facility. Riprap will prevent scouring at the culvert crossing, preserving the creek geometry.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

Drainage infrastructure in the project area is undersized, resulting in frequent flooding on parcels adjacent to the creek. Climate change is projected to lead to larger, more intense storm events due to precipitation regime changes. Current flooding concerns will be addressed by removing 1.35 acres (16 properties) from FEMA Special Flood Hazard Area (SFHA) and increasing stability of the creek by decreasing erosion through vegetation. This will improve pollutant loading reductions (see Attachment 4 Work Plan). Planted trees and vegetation will be drought-tolerant, which will be better adapted to the heat waves resulting from changes in rainfall patterns and will provide a net GHG benefit through carbon sequestration. Estimated GHG removal from tree planting is 153 MT CO₂e, which was calculated using the California ARB spreadsheet tool.

The Project addresses the following climate change vulnerabilities from the San Diego IRWM Plan:

- High: Increase in flash flooding and inundation (extreme weather)

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

No, this project does not create new water or offset imported water demands. It will percolate stormwater into a groundwater basin as a secondary benefit but will not affect production of water from that basin.

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6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

8. Increase Flood Protection



7. Will CEQA be completed within 12 months of Final Award?

Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

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C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

The project will direct and treat stormwater runoff along Paradise Valley Road from Paradise Avenue to 700 feet east of East Plaza Boulevard. The system will address pollutants and direct stormwater runoff towards a biofiltration basin located along Paradise Valley Road, east of East Plaza Boulevard. The project will remove the existing deteriorated concrete lining of the channel to the east and replace it with turf reinforcement to allow for a grass lined channel, reducing the potential for sediment transport due to erosion.

Modifications of the existing curb inlets will allow for diversion of the street runoff to flow into the stormwater treatment area. The modifications will provide safe access to the crosswalk and limit the amount of street flooding on Plaza Blvd, which is located along a sump crossing. The project will increase the flood conveyance capacity of the existing creek by upsizing a culvert and reducing erosion, removing 16 properties from the FEMA SFHA. The project will also divert a minimum of 30 AFY of peak flow and divert stormwater runoff from adjacent streets to the creek for treatment and flood control conveyance. It will be a welcoming site for the local residents and encourage outdoor recreational use through a sidewalk and recreational path. Community members will be notified of the improvements via flyers and mailers, as well as handouts posted at key civic locations, and door-to-door outreach. The sidewalk and walking path will include educational signage on the stormwater improvements. The new infrastructure will reduce the frequency of flooding and improve the stormwater quality through the area.

All planning, design, and permitting work for this project was funded through a Proposition 1 Disadvantaged Community (DAC) Involvement Grant. The DAC Involvement Grant allowed the City of National City to get this project ready for construction. All work completed under the DAC Involvement Grant has been included as completed work in Attachment 4 Work Plan. None of the work funded by the DAC Involvement Grant has been included as tasks in the Work Plan or included in the budget or schedule for this implantation project.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$0	\$100,000	\$0	\$100,000
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design /Engineering /Environmental Documentation	\$0	\$10,000	\$0	\$10,000
(d)	Construction/Implementation	\$0	\$3,571,056	\$0	\$3,571,056
(e)	Grand Total (Sum rows (a) through (d) for each	\$0	\$3,681,056	\$0	\$3,681,056

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

The scope of work included in this Proposal has been limited to reduce grant administration and ensure schedule compliance, in accordance with preferences expressed by DWR at the pre-application workshop. This project is a DAC project and is requesting a 100% cost-share waiver. Planning, environmental compliance, and design were completed as part of the DACI Grant. Phase 1 – biofiltration basin (not included in this Proposal), was funded by a combination of Proposition 84 Clean Beaches Program and City match of \$1,344,425.

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3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

The project area is 100% DAC by both population and geography, providing direct flood protection benefits to DAC households, as well as broader recreational benefits to other nearby residents.

The project will directly benefit residents of National City, which is mapped as a DAC using DWR's DAC Mapping Tool. The project area has a median household income of \$42,178 per year, well below the income threshold for DACs. Additionally, the City is an underrepresented community, composed of diverse minority nationalities, with approximately 66% being of Hispanic descent and half of all residents are non-native English speakers. Historically, the project area has faced challenges communicating issues and concerns about existing storm water and flood related issues. The community currently experiences frequent flooding from Paradise Creek, which would be alleviated by this project. 100% of project benefits will assist the DAC. The proposed grant funding will assist National City in being the voice for its people by tackling an existing known stormwater issue and potentially inspiring community members by beautifying the area.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
Category	(a) Start Date	(b) End Date
(a) Direct Project Administration	5/2/2020	11/4/2022
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	8/2/2020	11/2/2020
(d) Construction/Implementation	5/2/2020	7/20/2022

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D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

The Project area is within a 100-Year FEMA SFHA floodplain and has been a large contributor of water quality impairment for the entire San Diego Bay watershed. The Project site is at the bottom of a hill that collects stormwater runoff that confluences with the stormwater runoff from East Plaza Boulevard. This stormwater carries trash, bacteria, metals, and other pollutants towards the creek on the western portion of the Project site. It often floods the area when small storm events occur and impairs the overall quality of life of residents in the area. Paradise Creek is on the 303(d) list as an impaired water body for phosphorus and selenium (TMDLs for both completed in 2005), and drains into San Diego Bay, which is 303(d) listed for mercury, PAHs, and PCBs. The project area overlies the San Diego Formation, a brackish groundwater basin whose water is extracted and treated by Sweetwater Authority to serve the cities of National City and Chula Vista, as well as the City of San Diego.

The project identified 1.35 acres (including 16 properties) through aerial imagery and FEMA Flood Insurance Rate Maps that will be removed from the FEMA SFHA through Project implementation. This will be achieved through upsizing an existing 66-inch culvert to a 10'x8' box culvert that will be able to convey the 100-year storm event, limiting the flooding that occurs at intersection of Plaza Blvd and Paradise Valley Road, installing turf-reinforcement mats that will divert, treat, and/or infiltrate a minimum of 30 AFY of peak flow. Long-term continuous hydrologic simulation based on characteristics of the tributary area and the proposed biofiltration basin was used to calculate the amount of water filtered and released and the amount of water infiltrated. This project will additionally improve water quality. Pollutant removal was estimated by applying standard removal efficiencies, based on literature review, for the applicable treatment mechanisms (biofiltration and infiltration) and will result in load reductions of copper, lead, zinc, total suspended solids (TSS), total nitrogen, and total phosphorus. Benefits range from 6,834 lbs/year for TSS (approximately 83.8 mg/L) to 1 lb/year for lead (approximately 0.01 mg/L).

Paradise Creek has been identified as one of the top five problem areas in the San Diego Regional Water Quality Control Board's Environmental Justice Plan. The community is underrepresented due to that fact that there many non-native English speakers that do not have the ability to communicate their local issues to the local government. Paradise Creek is a known flood problem, and project improvements will address resident concerns through stormwater and recreation improvements. The project will encourage local residents to use the sidewalks and recreational path with learning stations describing the stormwater improvements. The educational signage will promote community behaviors that help to reduce pollutant loading in stormwater.

This Project was previously awarded a DWR Proposition 1 IRWM DAC Involvement Program Planning Grant in 2017. Grant funding was used to complete the planning stages for this project, including completion of CEQA and permitting. The project is shovel-ready and leverages the investment from DWR to implement the Project.

Feasibility Studies completed include: biological constraints report, wetland delineation, hydrology/hydraulics report, and floodplain study.

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2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		>30
Primary (Required)		
Type of Benefit Claimed:	Flood Damage Reduction ▼	Benefit Units*: Other ▼
Secondary (Optional)		
Type of Benefit Claimed:	Water Quality ▼	Benefit Units*: mg/L ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Acres removed from the FEMA SFHA	Removal of 1.35 acres from FEMA SFHA
Secondary	Water Quality Improvement	Copper: 0.024 mg/L; Lead: 0.012 mg/L; Zinc 0.184 mg/L TSS: 83.978 mg/L; Total Nitrogen: 0.6267 mg/L; Total Phosphorus: 0.135 mg/L
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
N/A		
Comments: [Include narrative on additional benefits, as warranted.]		
<p>The project will divert, treat, and infiltrate peak flow and stormwater runoff while improving water quality. A total of 30 AFY will be treated by the project. The load reduction for the following pollutants are estimated to be: Copper: 0.024 mg/L; Lead: 0.012 mg/L; Zinc 0.184 mg/L TSS: 83.978 mg/L; Total Nitrogen: 0.6267 mg/L; Total Phosphorus: 0.135 mg/L.</p> <p>The improvements to area including recreational enhancements and outreach will enhance the community, improve the quality of life of residents, and provide a sense of place. The project will also improve water quality in Paradise Creek and farther downstream in the Sweetwater River and San Diego Bay, to which Paradise Creek is tributary. The Sweetwater River is on the current 303(d) list of impaired waters. Additional benefits include 153 MT CO₂e GHG removed by tree planting, climate resilience in the form of flood improvements, drought resistance through the use of drought-tolerant plantings to support project success, and direct benefits to a DAC because it will provide flood improvements in a DAC neighborhood.</p>		

- * DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:
- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
 - For water quality, enter constituent concentration reduced in mg/L
 - For flood damage reduction, enter inundated acres reduced in acres
 - For habitat improved, restored or protected, enter habitat restored in acres
 - For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
 - For species protection, enter number of species benefited

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3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

Alternatives were evaluated through the Hydrology and Hydraulics and Floodplain Report that would achieve similar goals and meet the minimum requirements of the project site, but the project footprint was larger and involved more environmental impacts. One such alternative provided protection to only the creek banks instead of the full width of the creek. In this case, the creek would be susceptible to toe scour and would require additional toe down along the banks making the excavation area very large. This alternative was eliminated because the project work limits would go beyond the City's right-of-way and additional easement would be required which would be cost prohibitive. Because the preferred alternative was selected before a full economic analysis was completed, cost estimates were only prepared for the current project. Based on the alternatives considered, the current project addresses the lowest cost and minimum requirements to achieve desired improvements to the water quality and flood conveyance, given the characteristics of the project and the alternatives. Additionally, the approved MND identified less than significant impacts for the current project, while alternatives would have greater environmental impacts, adding to their costs.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

N/A – although the project is not expected to address the contaminants in AB 1249 because they are not found in exceedance of applicable thresholds in the project area, if they are present in stormwater flows, they would be addressed by the biofiltration treatment provided by the project.

- c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

N/A

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6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

The Project would infiltrate water to the San Diego Formation, which is a source of water that serves disadvantaged communities. While the Project could contribute to sustainable yield of the basin, the water infiltrated by the Project would not affect the volume of water produced from the groundwater basin.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

N/A

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

The project is 100% DAC by population and geography. The project area has a median household income of \$42,178 per year and suffers from financial hardship. Paradise Creek has been identified as one of the top five problem areas in the San Diego Regional Water Quality Control Board's Environmental Justice Plan and has a history of flooding. The San Diego IRWM Plan identifies flooding as a known issue in urban DACs. This project would directly address this identified need. The project area is comprised of diverse minority nationalities, with approximately 66% being of Hispanic descent. Approximately 50% of its inhabitants are non-native English speakers, which causes communication issues and concerns about existing storm water and flood related issues. The community currently experiences frequent flooding from Paradise Creek, and this project would alleviate current flood concerns from residents by diverting 30 AFY of peak flow and removing 16 properties from the FEMA SFHA.

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9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

N/A - Project is not in a mapped EDA area.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A – Project does not serve a tribe.

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

Project work will occur in and adjacent to the creek. The land that will be used for construction of the project is owned by the City and has been since the early 1900's. No work will need to occur on private property to remove the 1.35 acres from the FEMA SFHZ. No additional land or easement purchase is required.

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E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	Yes	-
Notice of Preparation	Yes	-
Draft EIR/MND/ND	Yes	-
Public Review	Yes	-
Final EIR/MND/ND	Yes	2/18/2019
Adoption of Final EIR/MND/ND	Yes	6/11/2019
Notice of Determination	Yes	6/18/2019

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

CEQA and permitting required to begin construction have been completed and secured through the DACI Grant. All preparation needed to construct Phase 1-3 of this project were completed prior to this Proposal. Therefore, CEQA has been completed and still compliant with Phase 2 construction design and plans. The dates presented above for CEQA are not for this proposal's schedule because it was completed and funded through the DACI Grant. No legal challenges were received on the completed CEQA documentation.

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	401	Regional Water Quality Control Board	6/11/2019
2.	404	US Army Corps of Engineers	7/17/2019
3.	1602	US Fish and Wildlife	2/11/2019
4.			
5.			
6.			
n.			

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	N/a	N/A
2.		
3.		
4.		
5.		
n.		

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3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes No

If yes, please explain:

No federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area.

b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes No

If yes, please explain:

Yes, excavation and fill will occur in the waters of the US. The USACE 404 permit has been attained to mitigate for these impacts.

c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes No

If yes, please explain:

N/A

d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes No

If yes, please explain:

Yes, the Project is within waters of the US. Both the RWQCB 401 and USACE 404 permit have been attained to mitigate any issues.

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e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

Yes, the project will divert flows for certain storm events. The USFW 1602 permit has been attained to mitigate any issues.

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

Yes, the Project will repair the creek bed and banks. The USFW 1602 permit has been attained to mitigate any issues.

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

Yes, the Project will use materials from the creek bed and banks. The USFW 1602 permit has been attained to mitigate any issues.

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

N/A

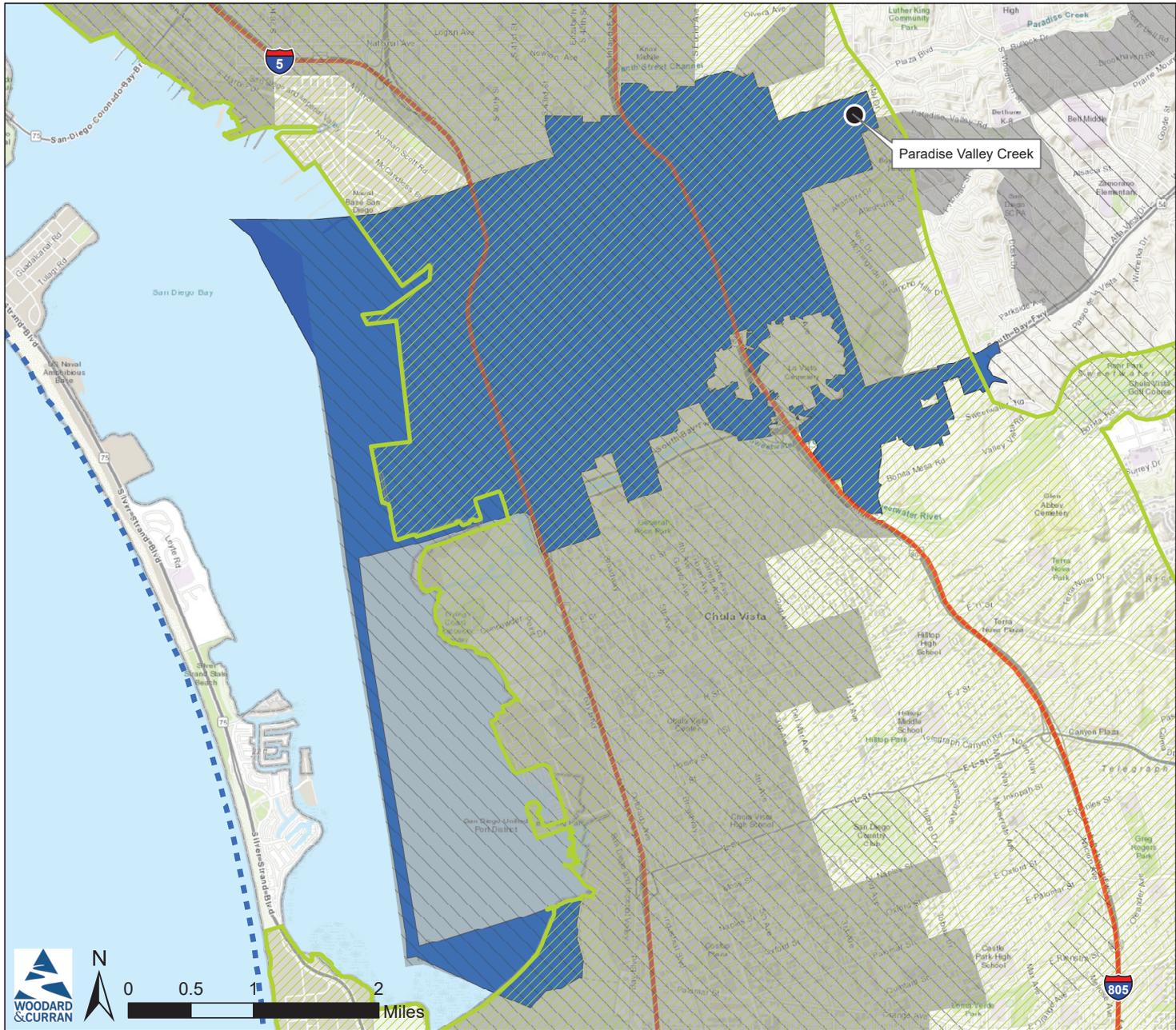
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j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

Yes No

If yes, please explain:

N/A



IRWM Proposition 1 Round 1 2019 Implementation Grant Paradise Valley Creek Water Quality and Community Enhancement *City of National City*

Legend

- Paradise Valley Creek Water Quality and Community Enhancement
- City of National City Service Area
- Highways
- SDIRWM Region
- Prop 1 San Diego Sub-Region Funding Area
- Disadvantaged Community
- EDA: < 85% CA. MHI, Pop <= 20K with Local Financial Hardship
- Coastal Plain of San Diego Groundwater Basin



*Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026

Project Information Form (PIF)

A. PROJECT INFORMATION

1. Project Title: North City Pure Water Facility Influent Pump Station and Conveyance Pipeline
2. Project Sponsor(s): City of San Diego
3. Eligible Applicant Type: Public Agency
4. IRWM Project Region(s): San Diego IRWM Region
5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.
6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.
7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.
8. Funding Category:
 DAC Implementation Project
 General Implementation Project
9. Project Type: Water reuse Other:
- Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No
2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:
a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

- Obj. A: This project produces a new locally controlled potable water supply, diverts wastewater flows, reduces energy use, and addresses impacts across multiple watersheds.
- Obj. B: The demonstration facility maximizes stakeholder and community involvement and outreach efforts.
- Obj. C: Data developed through the Project will increase industry knowledge of how to regulate and implement water reuse.
- Obj. D: The City has provided information to the State Water Resources Control Board to be used to obtain approval and to lay the groundwork for surface water augmentation regulation.
- Obj. E: The project would facilitate development of a new water source which expands the region's water supply; developments through this project will greatly expand the number of potable reuse endeavors throughout the San Diego Region and State.
- Obj. F: Pure Water employs several failure prevention and response strategies to ensure that water quality exceeds state regulations to ensure resiliency to drought, disaster and climate change.

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3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

Yes, the North City Pure Water Facility Influent Pump Station Project has a life cycle greater than 15 years. The useful life of the structure is 50 years, and the useful life of the IRWM Project components (influent pump station) is 20 years.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

The project will address the City of San Diego's Climate Action Plan objectives by producing new potable water, thereby decreasing the City's current 85% reliance on imported water and increasing the City's water resilience. The project will address the effects of climate change by reducing greenhouse gas emissions, because it uses renewable energy to reuse and purify local water versus importing water.

The Pure Water project will use the renewable energy facility to capture Miramar Landfill gas and methane produced by the anaerobic digesters at the Metropolitan Biosolids Center to generate energy and help meet the Climate Action Plan objectives. The renewable energy facility will produce most of the power needed for the Phase 1 - North City facilities, including those components included in the project. In total, the project is expected to reduce GHG emissions by 20,935 MT CO₂e per year by offsetting imported water.

The project addresses the following climate change vulnerabilities from the San Diego IRWM Plan:

- Very High: Decrease in imported water supply

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

Yes, the project is integral to the City of San Diego's Pure Water Program, which as a whole will add 30 mgd of potable water by 2024. This will reduce the City of San Diego's dependence on imported water and increase regional self-reliance.

Project Information Form (PIF)

6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

2. Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government



7. Will CEQA be completed within 12 months of Final Award?

- Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

- Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

Project Information Form (PIF)

C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

The project is a key part of Phase 1 of the City of San Diego's multi-phased Pure Water San Diego program, a large-scale potable reuse program. Phase 1 will provide an annual average of approximately 30 million gallons per day (mgd) of new local water supply to the City of San Diego, or 33,600 AFY. The scope of work included in this proposal is the Pure Water Facility Inflow Pump Station, a key component of Pure Water San Diego - Phase 1 program. The pump station will transport 42.5 mgd of non-chlorinated tertiary treated effluent from the North City Water Reclamation Plant (NCWRP) to the future North City Pure Water Facility (Pure Water Facility), where it will be purified for potable reuse. The pump station is a crucial component of Pure Water because it connects the source of recycled water (NCWRP) with the Pure Water Facility, where it will be treated for potable use.

The North City Pure Water Facility Inflow Pump Station is a two-story cast-in-place concrete structure which will be placed south of the existing chlorine contact tanks and east of the existing effluent pump station at the NCWRP. There will be two main rooms in the facility: a pump room and electrical room. The architectural concept of the new pump station building will emulate the architectural character of the existing NCWRP. Overall, construction of the pump station will encompass the following work: geotechnical, site civil, structural, mechanical, plumbing, fire protection, electrical and instrumentation and control. The pump room will be a rectangular space approximately 70 by 30 feet and will be equipped with five adjustable speed vertical turbine pumps (four duty units and one standby unit). The pump station flow will range from a minimum of 6.0 mgd with one pumping unit in operation to a maximum of 42.5 mgd with four pumping units in operation. Similarly, the electrical room will be a single rectangular space approximately 37 by 14 feet. The pump station will be connected to a 42-inch diameter cement mortar lined and coated welded steel pipe approximately 1,525 feet long, which will deliver tertiary treated flows from the NCWRP to the Pure Water Facility. The new pump station will deliver a consistent flow as required by the treatment demands of the Pure Water Facility and will be designed to be as reliable as possible because it will serve as the sole delivery source of influent to the Pure Water Facility. The Phase 1 conveyance pipeline is being constructed concurrently with the pump station, but is not included in this scope of work to simplify this project for grant administration and schedule purposes.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$0	\$0	\$74,055	\$74,055
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design/Engineering/Environmental Documentation	\$0	\$0	\$4,800	\$4,800
(d)	Construction/Implementation	\$4,959,303	\$1,477,600	\$3,402,848	\$9,839,751
(e)	Grand Total (Sum rows (a) through (d) for each)	\$4,959,303	\$1,477,600	\$3,481,703	\$9,918,606

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

Match funds and Other Cost Share: Match funds and Other Cost Share includes the City's water revenue funds and US EPA WIFIA loan funds. The City has already entered into a WIFIA loan agreement to partially fund this project. Other funding sources for the full Pure Water Program entail: City water and wastewater funds, short-term commercial paper loans, USBR Watersmart grant to fund planning and design, Municipal Bonds, and potential State Water Resources Board Clean Water and Drinking Water State Revolving Fund (SRF) loans and Proposition 68 (the Pure Water projects have been included in the SRF Intended Use Plans for FY2020).

Project Information Form (PIF)

3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

No the project is not requesting a cost share waiver. The Project benefit area is 14% DAC by geography and 32% DAC by population, and 23% EDA by geography and 37% EDA by population. The City of San Diego is not requesting a DAC cost share waiver for this project and has sufficient matching funds to meet the 50% non-state cost share requirement.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
Category	(a) Start Date	(b) End Date
(a) Direct Project Administration	5/1/2020	3/15/2025
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	5/1/2020	8/1/2020
(d) Construction/Implementation	7/7/2021	12/10/2024

Project Information Form (PIF)

D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

The project included in this Proposal would construct the pump station to convey influent to the North City Pure Water Facility for advanced water treatment for potable reuse. It is a key component of the City's Pure Water Program. The Pure Water Program is needed in order to provide a safe, secure, and sustainable local drinking water supply for the City of San Diego. The City faces significant issues with water supply, 85-90% of water comes from imported sources, which is not a reliable or affordable long-term solution. Under San Diego's existing water system, only 8% of the wastewater leaving homes and businesses is recycled; the rest is treated and discharged into the ocean. By transforming the City's water system into a complete water cycle, San Diego will maximize use of this limited resource. Phase 1 of the Pure Water Program is expected to produce up to 30 mgd of purified drinking water by 2024, based on design capacity. Based on the 2019 San Diego IRWM Plan's Climate Change Vulnerability Assessment, State Water Project supply availability is expected to decrease by 25% and Colorado River supplies are expected to decrease by 20%, resulting in a regional shortfall of 164,000 AFY of imported water. Additionally, supply reliability in the face of drought was identified as a "high" priority level and a decrease in groundwater supply a "medium" priority. By contributing to a new local supply that is reliable even during drought, the project will help to address reliability concerns exacerbated by climate change, while also offsetting energy demands (and consequently greenhouse gas emissions) associated with importing water. This project will advance the San Diego region in becoming self-reliant in securing water supplies for all residents. Additionally, it will aid the region to manage and prepare for dry periods, while providing safe water for many communities. Pure Water Reports can be found on: <https://www.sandiego.gov/public-utilities/sustainability/pure-water-sd/reports>. Additional information can be found in Attachment 4 – Workplan.

The volume of new water supply was calculated using the designed capacity of the pump station and the Pure Water Program – Phase 1 (of which this project is a key component). Greenhouse gas (GHG) offsets were calculated based on the energy to import, treat, and convey water to the San Diego region (2,297 MWh/AF, from California Public Utilities Commission's 2011 Embedded Energy in Water Pilot Programs Impact Evaluation), the energy demands of Pure Water – Phase 1 (13,200 MWh/year from City of San Diego), and GHG emissions per MWh used in California (0.327 MT CO₂e/MWh, based on California's energy mix [from California Energy Commission] and emissions factors for energy grids that serve California [from U.S. EPA]). The project would offset 33,600 AFY imported water (with an embedded energy of 77,179 MWh/yr), saving 63,979 MWh/yr, or 20,935 MT CO₂e/year.

Project Information Form (PIF)

2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		20 years for IRWM Project Components
Primary (Required)		
Type of Benefit Claimed:	Water Supply - Recycled Water ▼	Benefit Units*: AFY ▼
Secondary (Optional)		
Type of Benefit Claimed:	Other ▼	Benefit Units*: Other ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Drought proof water production	33,600 AFY
Secondary	Offset of green house gases through decreased imported water	20,935 MT CO2e/year
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
N/A		
Comments: [Include narrative on additional benefits, as warranted.]		
<p>This project achieves two goals: 1) creating a new local water supply for the region while reducing flows to the PLWTP and 2) addressing the requirement to renew PLWTP modified permit. These both provide benefits, including creation of 33,600 AFY of new, drought-proof, reliable, local water, which will offset 20,935 MT CO2e per year through avoided purchases of imported water. Additionally, the project will address regulatory uncertainty by addressing requirements to renew the PLWTP's modified permit. Other benefits include supply reliability and climate resilience from a drought-proof supply to improve resilience to climate change impacts on supply availability.</p> <p>Overall, Pure Water benefits are producing a locally-controlled sustainable water supply by treating wastewater, reducing salt loadings to the local watersheds, while enhancing a water integrated system that reduces dependence on imported water.</p>		

* DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:

- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
- For water quality, enter constituent concentration reduced in mg/L
- For flood damage reduction, enter inundated acres reduced in acres
- For habitat improved, restored or protected, enter habitat restored in acres
- For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
- For species protection, enter number of species benefited

Project Information Form (PIF)

3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

Project alternatives were evaluated in the City's Recycled Water Study and the Final EIR. Cost information was developed, with pumping costs being a particularly important component because of the variability of pumping costs for potable reuse using reservoir augmentation, non-potable water, and wastewater. Alternatives that required extensive wastewater pumping were identified as having added costs and risks. Per the EIR, two project alternatives were identified for IPR using reservoir augmentation, the San Vicente Reservoir and Miramar Reservoir. The Miramar Reservoir alternative was determined superior to San Vincente, because it will result in less biological resources, air quality, and aesthetic impacts, less electricity consumption and a greater net decrease in GHG. A 2013 Advanced Water Purification Facility Study Report estimated construction using San Vicente Reservoir would cost \$369 million, with an annual O&M cost of \$15.5 million. Conveyance to San Vicente Reservoir would require 28 miles of pipeline, compared to 8 miles to convey to Miramar Reservoir, through the treatment facilities would be consistent between the alternatives. Conveyance to San Vicente accounted for 30% of construction costs (\$114.2 million) in 2013.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

Pure Water-Phase 1 includes the construction of the North City Pure Water Facility, which will provide advanced purification of reclaimed water. The advanced treatment process will entail a robust barrier system to control for chemical contamination such as nitrate, nitrite, and perchlorate.

- c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

No, but the City of San Diego provides and services all communities, including DACs with safe drinking water. Pure Water-Phase 1 will provide safe potable water to customers within the service area of the Miramar Water Treatment Plant. Within the service area, two communities have been identified as DAC: University Community and Clairemont. These DACs include more than 10,000 people, and therefore do not meet the definition of a small DAC.

Project Information Form (PIF)

6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

The City of San Diego provides safe, clean, affordable and accessible water that meets and exceeds safety standards. Pure Water - Phase I's proposed advanced treatment of reclaimed water and augmentation of surface water has been reviewed and approved by the State Water Control Board. It will serve to improve supply reliability and protect against rising costs of imported water. Pure Water is projected to cost between \$1,700 and \$1,900 per AF. Based on projected increases to imported water costs, the project is expected to be more cost effective than imported water in less than 10 years.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

As the first potable reuse reservoir augmentation project in California, the City has provided reports with information on treatment of wastewater for indirect potable reuse with reservoir augmentation to State Water Resources Control Board Division of Drinking Water to be used along with other information in order to obtain approval and support through the State's regulation of indirect potable reuse and is laying the groundwork that will allow for the expansion of potable reuse by jurisdictions throughout California.

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

No, the project does not provide benefits to at least 75% DAC. Project benefit area is 14% DAC by geography and 32% DAC by population. This project benefits residents throughout the service area equally with improved supply reliability and other benefits. DACs have been included in outreach for the project, including input in the decision-making process. Various forms of outreach and education have been provided at the Pure Water Facility. These outreach and education events have included all economic/cultural/ethnic backgrounds. DACs and EDAs are affected more greatly by increases in water costs than non-DACs and EDAs. The Project supports stability in the cost of water as compared to imported water.

Project Information Form (PIF)

9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

No, the project does not provide benefits to at least 75% EDA. Project benefit area is 23% EDA by geography and 37% EDA by population. The project will benefit residents within the City's service area equally. DACs and EDAs are affected more greatly by increases in water costs than non-DACs and EDAs. The project supports stability in the cost of water as compared to imported water.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A – Project does not serve a tribe.

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

This Project is being constructed on City owned property. The City of San Diego is not seeking funding for land and easement purchase through this application.

Project Information Form (PIF)

E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	Yes	2016
Notice of Preparation	Yes	8/4/2016
Draft EIR/MND/ND	Yes	9/7/2017
Public Review	Yes	11/21/2017
Final EIR/MND/ND	Yes	2/27/2018
Adoption of Final EIR/MND/ND	Yes	4/10/2018
Notice of Determination	Yes	11/1/2018

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

The Pure Water San Diego EIR (SCH No. 2016081016) was certified on April 10, 2018 by City Council Resolution R-311671 and submitted to the State Clearinghouse on April 12, 2018. No addendums are required; the project described in this Proposal was included in the certified EIR. One legal challenge was filed by the University City Community Foundation. On May 9, 2018, the University City Community Foundation filed a Complaint for Declaratory Relief and Injunctive Relief and Petition for Mandate under CEQA (UCCF Petition). The UCCF Petition challenges the City's approval of the project and certification of the EIR. The UCCF Petition does not provide any specific CEQA claims, but makes a generic claim that the project and EIR were illegally approved. Based upon the comments by the UCCF Attorney during the administrative process, it is likely the UCCF will argue the City failed to consider a reasonable range of project alternatives. A court likely will find this argument unpersuasive because the City did in fact study multiple alternatives, including reservoir augmentation via San Vicente Reservoir and Miramar Reservoir. Based on the City's evaluation of claims raised in the administrative process, and in light of the deferential standard of review, the City anticipates that it will defend against the UCCF Petition.

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	Hazardous Materials Division	County of San Diego	Acquired June 2018
2.	RWQCB MS4 Permit Compliance	California SWRCB	Acquired May 2018
3.	APCD Authority to Construct	County of San Diego	Acquired August 2019
4.	DSD Site Development Permit	City of San Diego	Acquired April 2018
5.	DSD Site Development Permit–Package 3	City of San Diego	Acquired April 2018
6.	Fire-Rescue Dept Pre-const. Plan Review	City of San Diego	Acquired August 2019
7.	FAA Notice of Construction	Federal Aviation Administration	Acquired June 2018
8.	Section 404 permit	U.S. Army Corps of Engineer	Dec-18
9.	Section 401 permit	San Diego RWQCB	Dec-18
10.	ESA Section 7 Consultation	US Fish and Wildlife	Nov-18
11.	Section 106 Consultation	SHPO	Nov-18

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	N/A	N/A
2.		

Project Information Form (PIF)

3.		
4.		
5.		
n.		

3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes No If yes, please explain:

The Coastal California gnatcatcher is present adjacent to the Project area (within Marine Air Corps Station Miramar). Conservation measures applicable to this area from the EIR include MM-BIO-64b. In accordance with MM-BIO- 4b from the Final EIR/EIS, a preconstruction nesting survey has been done that concluded the presence of gnatcatcher east of the Project area on MCAS Miramar. Since occupied habitat is within 500 feet of the Project area, noise attenuation is required to minimize indirect impacts to listed species if noise were to exceed ambient levels. This condition is incorporated into the construction documents and is a required compliance element for the Project.

b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes No If yes, please explain:

N/A

c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes No If yes, please explain:

No resources are known to exist within the project area. There is a potential for unknown buried resources to exist and therefore mitigation measure MM-HIS-3 applies to construction. This mitigation measure requires monitoring during ground disturbing activities. This condition is incorporated into the construction documents and is a required compliance element for the Project.

d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes No If yes, please explain:

N/A

Project Information Form (PIF)

e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

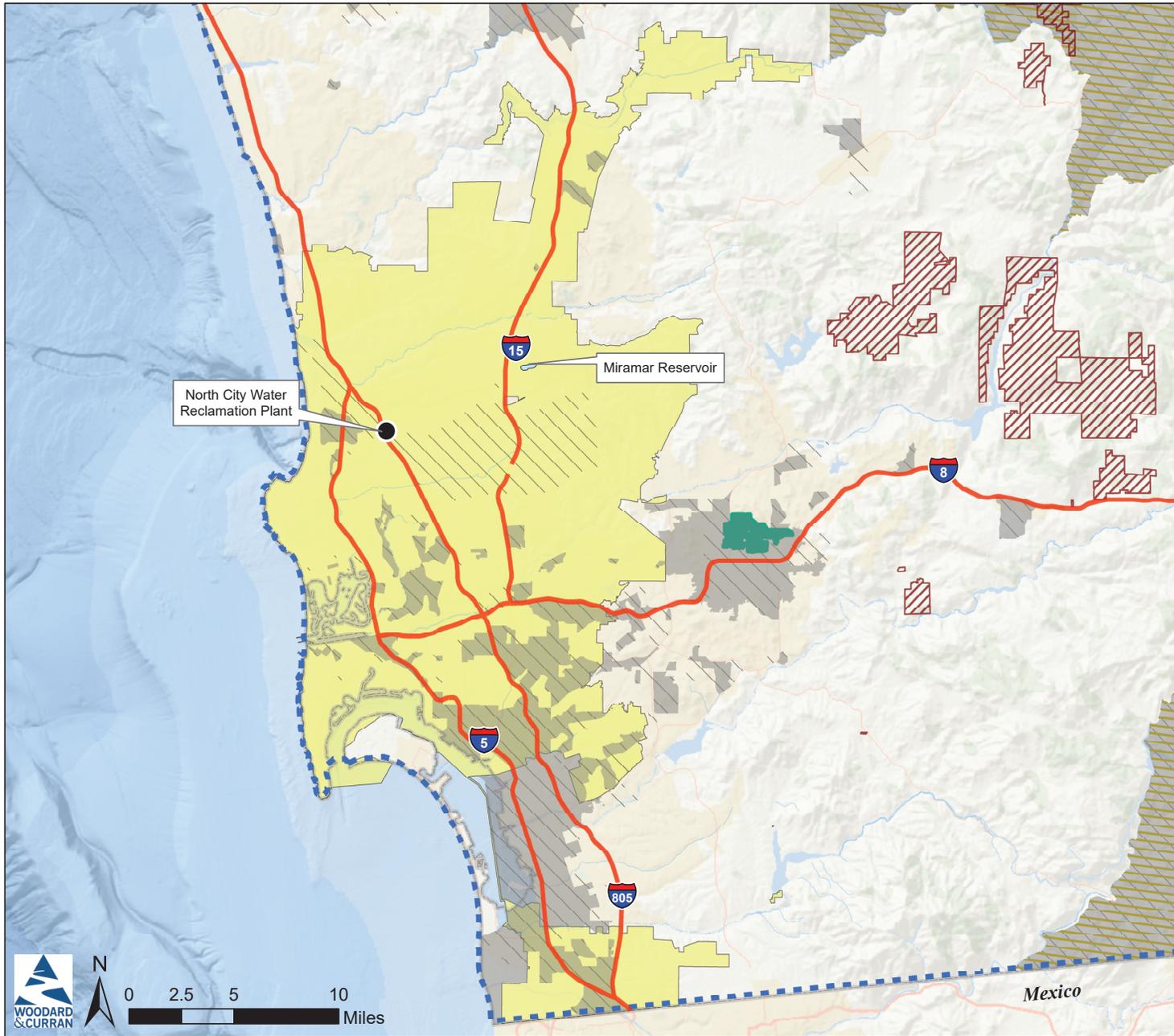
N/A

Project Information Form (PIF)

j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

Yes No If yes, please explain:

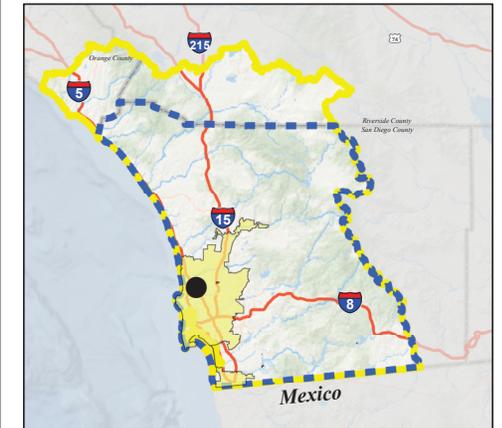
N/A



IRWM Proposition 1 Round 1 2019 Implementation Grant North City Pure Water Facility Influent Pump Station City of San Diego

Legend

- North City Pure Water Facility Influent Pump Station
- City of San Diego Service Area
- Miramar Reservoir
- Highways
- - - SDIRWM Region
- Prop 1 San Diego Sub-Region Funding area
- Disadvantaged Community
- Tribal Lands (URC)
- EDA: <85% CA MHI Pop <= 20K with UnEmp 2% > CA Avg.
- EDA: <85% CA MHI Pop <= 20K with Low Pop Density
- EDA: <85% CA. MHI, Pop <= 20K with Local Financial Hardship



*Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026

Project Information Form (PIF)

A. PROJECT INFORMATION

1. Project Title:	2020 Regional Water Use Efficiency Programs	
2. Project Sponsor(s):	San Diego County Water Authority	
3. Eligible Applicant Type:	Public Agency	▼
4. IRWM Project Region(s):	San Diego IRWM Region	

5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.

6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.

7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.

8. Funding Category:
 DAC Implementation Project
 General Implementation Project

9. Project Type: ▼ Other:

Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No

2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:

a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

<ul style="list-style-type: none">• Obj. A: This Project utilizes partnerships for cost-effectiveness and to achieve multiple benefits for SDCWA's entire service area. It will achieve sustainable results, enhance the region's quality of life and minimize climate change impacts.• Obj. B: The Project will educate the public on the linkage between outdoor water use, regional water quality, and the health of our watersheds. Homeowners, landscapers and farmers will be given the skills, knowledge and assistance to create and maintain sustainable landscapes that will thrive in the region.• Obj. E: Outreach and education activities will support successful implementation and promote a water-wise culture• Obj. G: Sustainable landscapes are permeable and encourage retention or filtration of stormwater and support reuse or soil absorption. This includes minimum plant coverage, a stormwater retention feature, permeable hardscape and replacement/modification of overhead spray sprinklers. This aids the hydrological process and can improve regional flood management efforts.

Project Information Form (PIF)

3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

Physical installation components of the project include turf conversions and agricultural irrigation efficiency equipment (all other components are educational). For turf conversions, once turf is converted to water wise landscaping, it is unlikely to be converted back to turf by the current owners. Per US Department of Housing and Development, average home ownership duration is 13 years, with buyers who have previously owned homes (i.e., not first-time buyers) staying with their properties for more than 15 years. Given the region's successful shift in cultural values related to turf versus water-wise landscaping and the low maintenance requirements of water-wise landscaping, water-wise landscaping is a selling point for properties. As such, the expected useful life of turf conversions is a minimum of 15 years. Similarly, the agricultural irrigation efficiency devices are designed for long-term use and have a documented 15-year useful life. Based on USDA Conservation Practice Standard Code 441, microirrigation systems – low pressure, low volume irrigation systems that are commonly used to improve distribution uniformity in agricultural crops and reduce overwatering – have a lifespan of 15 years based on standard manufacturing.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

The Project has multiple water conservation elements that will reduce water demands, buffering the region against drought. Benefits will be realized through agricultural and urban water use strategies, education, urban runoff management, and pollution prevention. This project will reduce water waste and improve water-use efficiency. Landscape incentives encourage a minimum 50% plant coverage, a measure designed to pre-empt the replacement of living landscapes with inert and inorganic products which contribute to the heat island effect. Living landscapes reduce GHGs and support a cooler environment. Water savings achieved through drought tolerant habitats and efficient irrigation measures will reduce the demand for imported water and generate indirect benefits such as embedded energy savings, reduction in greenhouse gas emissions, and reduced runoff and biomass production. This Project addresses the following Climate Change Vulnerabilities in the 2019 San Diego IRWM Plan:

- Water Supply: Decrease in imported supply (very high priority), sensitivity due to higher drought potential (high priority), and decrease in groundwater supply (high priority)

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

It is anticipated that the impacts of project implementation on regional water self-reliance include the reduction of potable water use by an estimated 1,330 AFY. The project will also expand the local population's understanding of water as the region's most precious resource and promote an appreciation of the value of water and the need to use it wisely – achieved by making both behavioral modifications, adoption of best management practices and implementation of device-based upgrades. By reducing water consumption throughout the region, this Project regulates demand, thereby reducing the need for imported water and achieving greater regional water self-reliance.

Project Information Form (PIF)

6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

1. Make Conservation a California Way of Life



7. Will CEQA be completed within 12 months of Final Award?

Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

Project Information Form (PIF)

C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

Landscape incentives include turf rebates, landscape makeovers, and landscaper training, which is the Landscape Efficiency Program (LEP). Agricultural incentives will be offered to growers that invest in improving irrigation system efficiency through the Agriculture Irrigation Efficiency Program (Ag IEP).

Under the LEP, SDCWA will promote outdoor water use efficiency and reduction in water use by offering incentives to replace turf grass with sustainable landscapes. To improve participation and reduce administrative costs, grant funds for turf rebates will be used to supplement the base level rebate offered through Metropolitan Water District of Southern California's (MWD) regional turf replacement program. Currently, MWD offers a rebate of \$2 per square foot to remove turf grass and replace it with sustainable landscaping. Grant funds through this Proposal will add an additional \$1 per square foot, for a total rebate of \$3 per square foot. Approximately 3,952,257 square feet, or roughly 90 acres, of turf will be converted by this project (combination of grant and match). To support and promote the LEP, SDCWA will deliver two training programs that promote successful implementation of water-wise landscaping and support long-term success of the turf conversions. The WaterSmart Landscape Makeover (WSLM) Program educates homeowners about outdoor water use efficiency using climate-appropriate landscape design through a four-class series, three-hour workshops, and online resources. The Qualified Water Efficient Landscaper (QWEL) Program provides proactive, locally-based training and certification for landscape professionals on sustainable landscaping practices appropriate for San Diego's climate. QWEL classes will be delivered in both English and Spanish, and incorporated into the curriculum of semester-long horticultural classes at local community colleges. SDCWA established a goal to provide 15% of the QWEL trainings in DACs.

The Ag IEP will offer opportunities to local farmers to improve on-farm irrigation system efficiencies. The program will provide farmers with technical assistance and cost-sharing as reimbursement for recommended irrigation system equipment retrofits that improve distribution uniformity and efficiency. Growers will receive an itemized list of suggested components and a 50% cost share estimate. This grant will fund incentives of approximately \$550 per acre for 700 acres of irrigated cropland upgrades. It is expected that the retrofits implemented under this program will show an increase in efficiency of 20%.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$0	\$122,300	\$0	\$122,300
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/Environmental Documentation	\$0	\$5,000	\$0	\$5,000
(d)	Construction/Implementation	\$6,964,114	\$1,312,700	\$0	\$8,276,814
(e)	Grand Total (Sum rows (a) through (d) for each)	\$6,964,114	\$1,440,000	\$0	\$8,404,114

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

Funding match is provided through turf removal rebates anticipated for the Steele Canyon Golf Club and Del Mar Country Club.

Project Information Form (PIF)

3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

Based on data from DWR's online DAC and EDA mapping tools, and using SDCWA's service area as the Project boundaries, the Project benefit area is 25% DAC by geography and 34% DAC by population. It is 15% EDA by geography and 37% EDA by population. Although eligible for a partial waiver, the Project has sufficient match and is not requesting a cost share wavier.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
Category	(a) Start Date	(b) End Date
(a) Direct Project Administration	5/1/2020	4/30/2024
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	7/1/2020	10/1/2021
(d) Construction/Implementation	5/1/2020	1/31/2024

Project Information Form (PIF)

D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

Water-use efficiency is an important part of the Water Authority's long-term strategy to increase water reliability. Since 1990 these efforts have contributed to a potable water use decrease of 43%. To continue this trend and anticipate new State regulations, funding is requested for programs to improve water use efficiency in the region.

SDCWA has a history of successfully delivering water use efficiency programs, including turf rebates that leverage MWD's reimbursement program, using IRWM grant funding (note that those programs were closed after grant funding and match were exhausted). Water savings are expected from the landscape upgrades incentives component and the Ag IEP component. Estimated water savings from converting turf to sustainable landscaping are based on the 2015 Turf Removal and Replacement: Lessons Learned report by CUWCC, which found Southern California agencies reported 45 gallons saved per square foot of turf converted. An estimated 3,952,257 square feet will be converted under this task, resulting in 177,851,565 gallons or 546 AFY in reduced water demands. Given the high cost of agricultural operations in the region and the farming community's history as committed stewards of the land, SDCWA anticipates participation in the Ag IEP will also be high. A similar program completed by Mission Resource Conservation District for Rancho California Water District, in neighboring Riverside County, found a 60% participation rate in system improvement implementation, and a potential annual water savings of 1.44 AFY/acre for avocado, 1.10 AFY/acre for citrus, and 0.53 AFY/acre for wine grapes. Based on the Rancho California program (in neighboring Riverside county), it is expected that the retrofits implemented under this program will show an increase in water-use efficiency of 20%. An estimated 700 irrigated acres of avocado, citrus, and wine grapes will be upgraded with water efficient irrigation components under this task. In the region, agriculture uses an average of 5.6 AFY per acre of irrigated cropland. Conserving 20% across 700 acres of irrigated cropland will result in 784 AFY water savings to the region

Energy Savings will be achieved as a result of water conservation. Energy to import, treat, and convey water to the San Diego region is 2.297 MWh/AF (from California Public Utilities Commission's 2011 Embedded Energy in Water Pilot Programs Impact Evaluation). This program will offset a total of 1,330 AFY imported water, which saves 3,054 MWh/year. GHG emissions per MWh used in California is 0.327 MT CO₂e/MWh, based on California's energy mix (from California Energy Commission) and emissions factors for energy grids that serve California (from U.S. EPA). This program will therefore offset 999 MT CO₂e/year through improved water use efficiency.

Project implementation will increase the region's climate change responsiveness through use of climate appropriate plants compatible, healthy soils that hold water and reduce runoff, on-site rainwater capture and retention, and high-efficiency irrigation.

Project Information Form (PIF)

2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		15 years
Primary (Required)		
Type of Benefit Claimed:	Water Conservation ▼	Benefit Units*: AFY ▼
Secondary (Optional)		
Type of Benefit Claimed:	Other ▼	Benefit Units*: Other ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Water savings	1,330 AFY
Secondary	GHG offsets	999 MTCO ₂ e/year
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
N/A		
Comments: [Include narrative on additional benefits, as warranted.]		
<p>Water savings benefits from turf conversion and Ag IEP components are calculated based on studies of similar projects in similar regions, as described under Project Justification. Less water will be used when turf is converted to sustainable landscaping. Turf conservation is expected to average 45 gallons of water conserved per square foot converted to water-wise landscaping. Ag IEP devices and cost incentives will improve water irrigation efficiency and is expected to result in a 20% increase in water use efficiency. In total, the program will conserve 1,330 AFY. Energy savings will be realized from the embedded energy associated with importing, treating and conveying water to the region, estimated to be 2.297 MWh/AF, which will be offset by the program. A total of 999 MT CO₂e per year are expected to be avoided through implementation of the program. Additional benefits include improved climate resiliency through reduced water demands (imported supplied are expected to be less available in the face of climate change, per the 2019 San Diego IRWM Plan's Climate Change Vulnerability Assessment). The project will improve drought resistance by converting approximately 90 acres of turf to native and water-wise landscaping, and improving water use efficiency for agricultural users. As more customers convert to water-wise landscaping, and more residents and professionals are educated on water-wise landscape and water use efficiency, the community as a whole will become more water-wise, contributing to a culture of water use efficiency.</p>		

- * DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:
- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
 - For water quality, enter constituent concentration reduced in mg/L
 - For flood damage reduction, enter inundated acres reduced in acres
 - For habitat improved, restored or protected, enter habitat restored in acres
 - For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
 - For species protection, enter number of species benefited

Project Information Form (PIF)

3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

The estimated average cost to save water of \$930/AF from the project is significantly less than the cost to purchase an acre foot of water (currently between \$1,200 and \$1,400 per acre-foot for SDCWA member agencies). Although in relative terms educational programs like QWEL have lower quantifiable benefits, they are essential to market transformation and invaluable in terms of assuring a balanced portfolio. Various aspects of project elements have been refined over several years of implementation and funded through different rounds of grant funding. Evaluation studies have been conducted to determine benefits of these project components, and the most beneficial aspects of these projects have been selected for this project. For example, the amount of rebate per square foot of turf converted has been reduced under this project as compared to previous, similar, rebate programs due to sustained high demand, which allows additional conversions to occur. The components included in this project have historically proven to provide optimum benefits for all project participants. As such, no other alternatives were considered.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

N/A

- c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

N/A the project does provide safe drinking water to a small DAC.

Project Information Form (PIF)

6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

The Project would not provide water but would conserve water, allowing existing supplies to continue to meet human needs.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

State of the art technology, practices and devices will be promoted for irrigation customers and the commercial and residential sectors through Landscape Efficiency Program and Ag Irrigation Efficiency Program. Such technologies, best management practices and efficient devices together promote water use efficiency, thus providing a positive impact on water supply. LEP will provide the most up-to-date knowledge and practices for sustainable landscaping. Ag IEP will help agricultural users get the most up-to-date irrigation technology to promote efficient water use and best management practices.

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

No, the project does not provide benefits to at least 75% DAC. Although the project's benefit area does not meet the 75% threshold for DAC status, it will provide some DAC benefits. 25% of SDCWA's service area qualifies as a DAC, and 34% of the population served by SDCWA qualifies as a DAC. This program will be implemented throughout the service area, so potential reductions in non-point source pollutant loading and improved water quality from landscape and agricultural improvement projects will benefit the whole project area, inclusive of DACs. Trainings and educational programs offered through this grant are free, eliminating an economic barrier to participation. Incentive programs make water use efficiency upgrades affordable for customers located in DACs, and data show DAC residents participate. The Program has established a goal of siting at least 15% of all QWEL professional training classes at facilities within DACs.

Project Information Form (PIF)

9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

No, the project does not provide benefits to at least 75% EDA. SDCWA's service area is 15% EDA by geography and 37% EDA by population. Although it does not meet the 75% threshold to be considered an EDA project, benefits will be realized within EDAs, and the programs will be accessible to residents of EDAs, similar to DACs.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A – Project does not directly serve a tribe, though tribal members residing within SDCWA's service area will be able to participate in the program.

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

No land purchase is needed to implement the Project because improvements will be made directly by property owners.

Project Information Form (PIF)

E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	N/A	N/A
Notice of Preparation	N/A	N/A
Draft EIR/MND/ND	N/A	N/A
Public Review	N/A	N/A
Final EIR/MND/ND	N/A	N/A
Adoption of Final EIR/MND/ND	N/A	N/A
Notice of Determination	N/A	N/A

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

N/A, not a Project under CEQA

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	No permits are required for this Project	N/A	N/A
2.			
3.			
4.			
5.			
6.			
n.			

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	N/A	N/A
2.		
3.		
4.		
5.		
n.		

Project Information Form (PIF)

3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes No

If yes, please explain:

N/A

b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes No

If yes, please explain:

N/A

c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes No

If yes, please explain:

N/A

d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes No

If yes, please explain:

N/A

Project Information Form (PIF)

e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

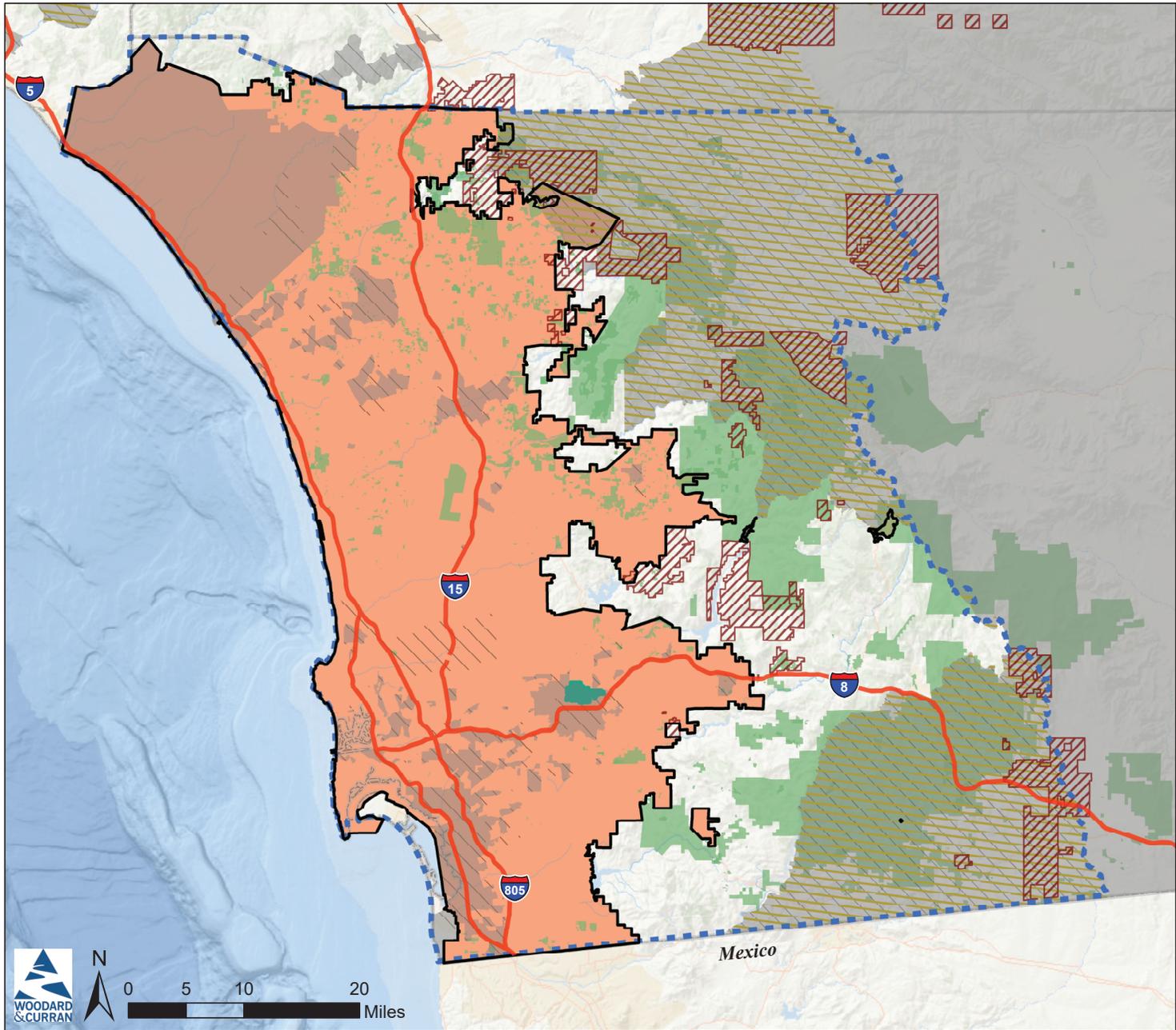
N/A

Project Information Form (PIF)

j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

Yes No If yes, please explain:

N/A – although a portion of the project area is within the Coastal Zone, no project activities would require acquisition of a Coastal Development Permit.

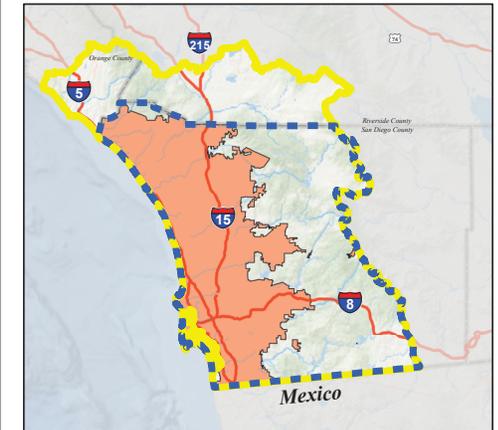


IRWM Proposition 1 Round 1 2019 Implementation Grant 2020 Regional Water Use Efficiency Programs San Diego County Water Authority

Legend

- 2020 Regional Water Use Efficiency Programs
- San Diego County Water Authority Service
- Agricultural Land Use*
- Highways
- SDIRWM Region
- Prop 1 San Diego Sub-Region Funding Area
- Disadvantaged Community
- Tribal Lands (URC)
- EDA: < 85% CA MHI Pop <= 20K with UnEmp 2% > CA Avg.
- EDA: <85% CA MHI Pop <= 20K with Low Pop Density
- EDA: < 85% CA. MHI, Pop <= 20K with Local Financial Hardship

*The Landscape Efficiency Programs will be offered to all residents throughout SDCWA's service area. The Agricultural Irrigation Efficiency Programs will be targeted to residents residing on agricultural land.



Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026

Project Information Form (PIF)

A. PROJECT INFORMATION

1. Project Title: Lower Santa Margarita River IPR Pilot Project
2. Project Sponsor(s): Fallbrook Public Utility District (Fallbrook PUD)
3. Eligible Applicant Type: Public Utility ▼
4. IRWM Project Region(s): San Diego IRWM Region
5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.
6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.
7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.
8. Funding Category:
 DAC Implementation Project
 General Implementation Project
9. Project Type: Decision support tool ▼ Other:
- Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No
2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:
- a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

- Obj A: The Project is based on continued collaboration between FPUD and Camp Pendleton, sharing water resources from the Lower Santa Margarita River Basin as well as groundwater recharge and recovery facilities.
- Obj B: Upon completing the Pilot Project, a public outreach and education effort will be made to transfer results and knowledge gained to the community and water reuse industry.
- Obj C: Data obtained during the Project will be shared through the San Diego Regional Project Database.
- Obj D: The Pilot Project will increase scientific knowledge and understanding of water management by addressing the feasibility of effectively treating reclaimed water for potable reuse in the Lower Santa Margarita River Basin without the use of reverse osmosis before application to live stream discharge and ground water basin infiltration. If the Pilot Project shows full-scale IPR is feasible, full-scale implementation would:
- Obj E: Increase local supply reliability and reduce dependence on imported water supplies.
- Obj F: Increase water supply diversity by creating a new source of water and improve operational flexibility through the increased utilization of Santa Margarita River Conjunctive Use Project (SMRCUP) facilities.

Project Information Form (PIF)

3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

N/A – this is a pilot project and therefore falls under the category of Decision Support Tool, which is not subject to the 15-year minimum project life. If a full-scale project is deemed feasible as an outcome of this pilot project, the full-scale project would have a greater than 15-year project life.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

Reverse osmosis as a treatment process for IPR is highly energy intensive, with significant energy use associated with the execution of the process itself and waste disposal. By using a less energy intensive process such as biological activated carbon filtration, significant energy savings could be made, reducing the amount of greenhouse gases in the atmosphere. Increased energy efficiency will also be achieved by increasing local supply and reducing demand for imported supplies. This pilot project explores the feasibility of a new supply to support a community that is dependent on groundwater and surface water flows, the availability of which is expected to vary because of climate change. The project would address the following climate change vulnerabilities related to water supply from the San Diego IRWM Plan if full-scale IPR is determined feasible:

- Very High: Decrease in imported supply.
- High: Lack of groundwater storage to buffer drought – the Project would increase groundwater storage.
- Medium: Decrease in groundwater supply – the Project would reduce concerns of decreasing groundwater supply.
- Very Low: Limited ability to meet summer demand – the Project would produce water year-round

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

This is a pilot project intended to determine the optimum process and financial feasibility of full-scale implementation. If full-scale IPR is determined feasible, the project would supply between 10% and 20% of both FPUD's and Camp Pendleton's current demands. Any water supplied locally offsets the need to import water from outside the region.

Project Information Form (PIF)

6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

7. Provide Safe Water for All Communities 

7. Will CEQA be completed within 12 months of Final Award?

Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

Project Information Form (PIF)

C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

This pilot project will install two treatment facilities. The first will be located at FPUD's Fallbrook Water Reclamation Plant where FPUD will determine the optimal dosage and efficacy of treatment options. The second treatment facility will be constructed at Camp Pendleton's Southern Regional Tertiary Treatment Plant, where Camp Pendleton will determine the optimal dosage and efficacy of microfiltration, ozone addition, biofiltration, hydrogen peroxide addition, and ultraviolet (UV) treatment. Water will also be diverted from the treatment process to conduct off-site soil column filtration testing to determine pathogen removal in native soil. Each location will have a skid-mounted pilot treatment train specifically designed to address water quality needs of each plant's effluent. Each treatment facility would produce approximately 32 AFY (64 AFY total).

FPUD will develop a testing protocol to look at nutrient uptake through the discharge in Fallbrook Creek, which will include sampling of the effluent and testing. Camp Pendleton will conduct a tracer test at the Upper Ysidora Subbasin of the Santa Margarita Groundwater Basin. Existing monitoring and production wells will be used to map the vertical and horizontal distribution of the tracer.

The project will evaluate pilot treatment equipment including a microfiltration system, ozone dosing system, biofiltration unit, hydrogen peroxide dosing system, and UV dosing system. Source water for the pilot will be from a portion of the effluent stream from the two existing wastewater treatment facilities. After processing and testing, the water will be diverted back to FPUD's and Camp Pendleton's existing recycled water systems. Should the pilot project demonstrate feasibility and supports permitting for full-scale implementation, a future full-scale project would provide up to 1,770 AFY potable water.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$28,800	\$0	\$8,760	\$37,560
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/Environmental Documentation	\$81,800	\$3,600	\$0	\$85,400
(d)	Construction/Implementation	\$585,700	\$683,900	\$0	\$1,269,600
(e)	Grand Total (Sum rows (a) through (d) for each)	\$696,300	\$687,500	\$8,760	\$1,392,560

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

Match funds: Fallbrook PUD CIP Funds. The approved capital projects budget for FY19-20 includes \$350,000 for the Project. Another \$350,000 is planned for the following fiscal year, which starts in July 2020. The CIP funds allocated to the project are slightly higher than the anticipated project budget to cover a small contingency if needed.

Project Information Form (PIF)

3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

A cost share waiver is not requested for this project because sufficient non-state funding match is available. The project area is 84% DAC by geography and 85% DAC by population.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
Category	(a) Start Date	(b) End Date
(a) Direct Project Administration	3/1/2020	12/31/2021
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	3/1/2020	9/30/2020
(d) Construction/Implementation	9/1/2020	10/1/2021

Project Information Form (PIF)

D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

This project is part of the Santa Margarita Conjunctive Use Project, which is designed to resolve water supply conflicts for users of the Santa Margarita River (including environmental uses), support supply availability and reliability, and protect water supplies from rising costs. Additionally, because Camp Pendleton is downstream of FPUD, and their supply is affected by water availability and quality in the Santa Margarita River, it is critical for both parties to coordinate on this project. Both currently operate water reclamation plants within the Lower Santa Margarita River Basin which discharge treated effluent to the ocean. If the treated effluent were to be diverted to the existing Upper Ysidora Percolation Ponds, it could be utilized as IPR. The proposed pilot project will determine the most effective treatment process for and feasibility of utilizing reclaimed water currently discharged to the ocean as indirect potable reuse.

Currently, during extended dry periods, both parties (not just FPUD) would need imported water. This project is to improve water reliability for both Camp Pendleton and FPUD. Camp Pendleton relies 100% on local water from the Santa Margarita River. This project is a key component in creating drought proof water security for Camp Pendleton. Creating water security for Camp Pendleton is critical to ensuring water availability does not negatively impact critical military training activities.

The pilot project will produce 64 AFY for testing the proposed IPR approach, providing the framework and justification for full-scale implementation that would provide up to 1,770 AFY water suitable for indirect potable reuse. This pilot project was developed based on a series of technical and feasibility studies completed by FPUD and Camp Pendleton between 2012 and 2018, that support the potential of the basin to support 1,770 AFY recharge for potable reuse (i.e., targeted full-scale implementation). This pilot project would be part of the final planning phases for full-scale implementation and would provide the data and understanding necessary to support permitting and development of a full-scale project. Results from this project will be shared with the community and water reuse industry through a public outreach and education effort. This project also includes preparation of presentation materials to share at future conferences that share the lessons-learned and outcomes of the pilot project, and the feasibility of using a most-cost effective approach to implement IPR than current practices. Feasibility studies completed in support of the project include the 2018 Conceptual Report – Indirect Potable Reuse in the Lower Santa Margarita River Basin, prepared for the Water Resources Division of Camp Pendleton.

Project Information Form (PIF)

2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		N/A – Project is a Decision Support Tool
Primary (Required)		
Type of Benefit Claimed:	Water Supply - Recycled Water ▼	Benefit Units*: AFY ▼
Secondary (Optional)		
Type of Benefit Claimed:	Water Supply Reliability ▼	Benefit Units*: AFY ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Create new water supply, increase local groundwater supply and reduce dependency on imported water.	64 AFY of water produced through the Pilot Project
Secondary	N/A	N/A
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
The pilot project will produce 64 AFY. The purpose of the project is to determine if full-scale implementation is feasible (technological and regulatory) and cost-effective. If shown to be viable, full-scale implementation would produce approximately 1,770 AFY (between 10% and 20% of both agencies' demand). Full-scale IPR would improve water supply reliability by decreasing reliance on imported water and increasing efficiency by maximizing use of existing and planned facilities. By expanding use of recycled water through potable reuse, fewer surface water diversions will be necessary, and the groundwater basin will be recharged, protecting the health of riparian habitats and vulnerable species in the basin, including Arroyo Toad, Least Bell's Vireo, Southwestern Willow Flycatcher, and steelhead. If full-scale implementation is pursued, the project will also support climate resiliency. Reverse osmosis is highly energy intensive. By using a less energy intensive process such as biological activated carbon filtration, significant energy savings could be made, reducing the amount of greenhouse gases in the atmosphere. Increased energy efficiency will also be achieved by reducing demand for imported supplies. As climate change increases evapotranspiration rates and drought frequency, increased reliance on recycled water is necessary to maintain ecosystem and public health. Information learned would be shared with the wider water industry and could support other regions looking to implement alternative approaches for IPR.		
Comments: [Include narrative on additional benefits, as warranted.]		
N/A		

* DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:

- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
- For water quality, enter constituent concentration reduced in mg/L
- For flood damage reduction, enter inundated acres reduced in acres
- For habitat improved, restored or protected, enter habitat restored in acres
- For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
- For species protection, enter number of species benefited

Project Information Form (PIF)

3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

The purpose of this pilot project is to determine if full-scale IPR would be more cost effective than current supply options to meet the identified water supply and supply reliability needs of FPUD and Camp Pendleton. The project will allow FPUD to test the process and equipment before committing to full-scale IPR. The primary alternative to the project is to continue purchasing imported water, which currently costs \$1,200 to \$1,400 per AF for SDCWA member agencies and is expected to double in the next ten years. Traditional reverse osmosis IPR is another alternative and construction can cost anywhere from \$3 billion for 93,000 AFY (Pure Water San Diego) to \$528 million for 12,890 AFY (East County Advanced Water Purification). These project examples are substantially larger than full-scale implementation for FPUD and Camp Pendleton, which allows for greater efficiency of scale when considering a cost-per-acre-foot. The design feasibility study that will be completed with this project will compare the cost of IPR in comparison to other alternatives.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

N/A

- c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

N/A – Although a portion of the benefit area is a DAC, it does not meet the definition of a small DAC (<10,000 people).

Project Information Form (PIF)

6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

N/A – this is a pilot project and will be used to support permitting of a full-scale project if deemed feasible following the pilot. As such, it would not be able to acquire the appropriate permits to use water produced by the pilot to serve potable demands, but would support future full-scale project that would provide water that could be used for human consumption, cooking, and sanitary purposes consistent with AB 685.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

The pilot project will employ an innovative technology to increase scientific knowledge and understanding of water management by addressing the feasibility of effectively treating reclaimed water for potable reuse in the Lower Santa Margarita River Basin without the use of reverse osmosis before application to live stream discharge and ground water basin infiltration. To-date, livestream discharge for IPR without the use of reverse osmosis has not been permitted in the region. This project seeks to demonstrate the feasibility and safety of the proposed approach.

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

No, this project does not provide benefits to at least 75% DAC. FPUD is 17% DAC by geography and 69% DAC by population. The pilot project would not provide water for use because it is a pilot but would support future implementation of full-scale IPR which would serve some DACs, including Camp Pendleton. The project would only result in full-scale implementation if it demonstrates that IPR can be provided at a lower cost than other supply options, which would support affordable water, a particular concern of DACs. However, the project does not meet the 75% DAC threshold to be considered a DAC project.

Project Information Form (PIF)

9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

No, this pilot project does not provide benefits to at least 75% EDA during this time. 75% of the pilot project service area population meets the criteria for an EDA and if the results of the pilot project show that IPR water can be treated and delivered at a lower cost than imported water supplies, full-scale implementation would alleviate cost/rate increases for the entire FPUD service area.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A – the Project does not serve a Tribe

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

No additional land or easements are required. Project footprint is within existing rights-of-way at existing treatment facilities and percolation ponds.

Project Information Form (PIF)

E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	N/A	N/A
Notice of Preparation	N/A	N/A
Draft EIR/MND/ND	N/A	N/A
Public Review	N/A	N/A
Final EIR/MND/ND	N/A	N/A
Adoption of Final EIR/MND/ND	N/A	N/A
Notice of Determination	Yes	11/15/2018

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

A Notice of Exemption was filed for FPUD and a Categorical Exclusion for Camp Pendleton in November 2018.

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	Discharge Permit	RWQCB	8/30/2020
2.			
3.			
4.			
5.			
6.			
n.			

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	RFP issued 11/4/19 to consultant to prepare discharge perm	None anticipated
2.		
3.		
4.		
5.		
n.		

Project Information Form (PIF)

3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes No If yes, please explain:

N/A

b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes No If yes, please explain:

N/A

c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes No If yes, please explain:

N/A

d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes No If yes, please explain:

One goal of the Project is to determine the feasibility of and requirements to discharge into the Fallbrook Creek based on the water quality produced by the Pilot Project. However, the Pilot Project will not discharge into the creek.

Project Information Form (PIF)

e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

N/A

Project Information Form (PIF)

j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

Yes No If yes, please explain:

N/A

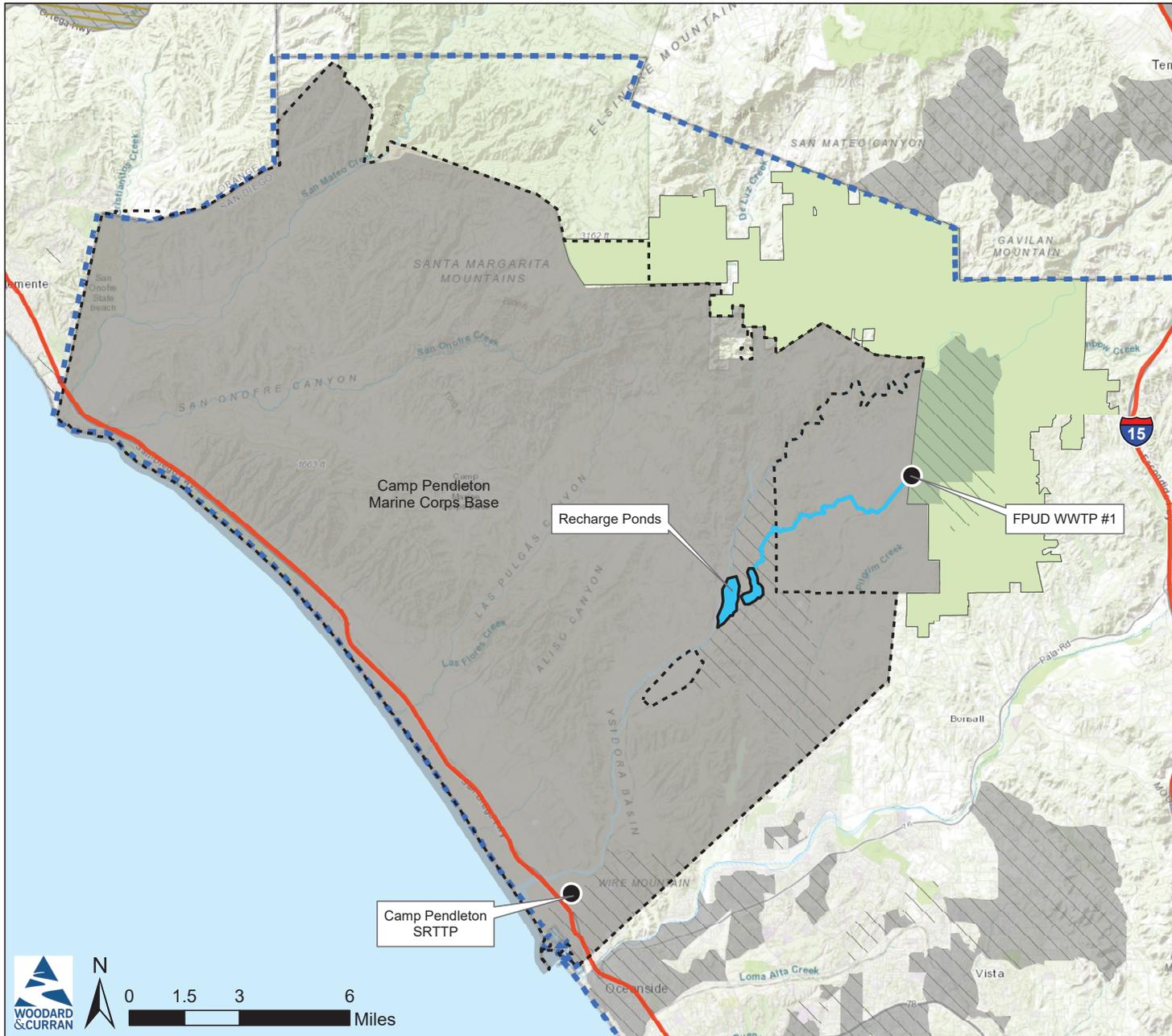
IRWM Proposition 1 Round 1 2019 Implementation Grant

Lower Santa Margarita River IPR Pilot Project

Fallbrook Public Utility Department

Legend

- Lower Santa Margarita River IPR Pilot Project
- Fallbrook Creek
- Recharge Ponds
- Fallbrook Public Utility District Service Area
- - - Camp Pendleton Marine Corps Base
- Highways
- SDIRWM Region
- Prop 1 San Diego Sub-Region Funding Area
- Disadvantaged Community
- EDA: < 85% CA. MHI, Pop <= 20K with Local Financial Hardship



*Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026

Project Information Form (PIF)

A. PROJECT INFORMATION

1. Project Title:
2. Project Sponsor(s):
3. Eligible Applicant Type: ▼
4. IRWM Project Region(s):
5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.
6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.
7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.
8. Funding Category:
 DAC Implementation Project
 General Implementation Project
9. Project Type: ▼ Other:
- Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No
2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:
- a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

- Obj. A: This project encourages the development of integrated solutions to address water management issues and conflicts through the creation of a local water supply.
- Obj. B: Conduct community outreach and education through Pure Water signage, fact sheet brochures, webpage updates, E-newsletters, boards, banners, videos, photography, maps, community outreach meetings, facility tours, and a public opinion survey.
- Obj. E: Facilitate the development of a major new water source under local control, thus diversifying and expanding the regions water supply throughout the San Diego Region and the state.
- Obj. F: Provide additional water supply reliability through drinking water and recycled water infrastructure to help ensure future water supplies and reduce reliance on imported water.

Project Information Form (PIF)

3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

Yes. Injection wells and conveyance will have a 30-year project life, providing Project benefits beyond the minimum 15-year useful life.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

Pure Water Oceanside will create a sustainable local water supply and reduce dependency on imported water. This Project will allow the region to become less impacted by climate change (extended drought, warmer temperatures), improve water management and supply in the Mission Basin, and provide an additional source of recycled water for irrigation and industrial uses. Advanced treated water has a lower GHG footprint than imported water. Imported water requires 2.297 MWh/AF to pump to San Diego, compared to 1.5-2.0 MWh/AF for potable reuse. Using an average of 1.75 MWh/AF energy demand of the Project, this project would reduce energy demands by 0.547 MWh/AF. Based on the State's energy mix and associated emissions factors, approximately 0.327 MT CO₂e are released per MWh used. This project would save 601 MT CO₂e per year. Advanced treated recycled water created by this project will decrease the demand on imported water and the associated carbon footprint.

The Project addresses the following climate change vulnerabilities from the San Diego IRWM Plan:

- Very High: Decrease in imported supply
- High: Water supply sensitivity due to higher drought potential

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

This Project uses Indirect Potable Reuse (IPR) to offset imported water supplies, contributing to regional self-reliance. The City will be implementing a phased approach that would consist of recharging 3,360 AFY (3.0 mgd) of highly treated recycled water via injection wells and conveyance from the Advanced Water Treatment Facility (AWTF) in the near term and 1,700 AFY (1.5 mgd) in a future project to the Mission Basin Basin for future use. Declining yields and quality of water extracted from the Mission Basin have resulted in increased purchases from non-local sources. This Project will increase water supply resiliency to climate change (extended drought, warmer temperatures), improve water management and supply in the Mission Basin through augmentation, and provide an additional source of recycled water for irrigation and industrial uses.

Project Information Form (PIF)

6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

2. Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government



7. Will CEQA be completed within 12 months of Final Award?

Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

Project Information Form (PIF)

C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

Pure Water Oceanside is a potable reuse project that will inject 3,360 acre-feet per year (AFY) of advanced treated water into Mission Basin through injection wells and conveyance to the AWTF. Advanced treated recycled water from the AWTF will be conveyed by underground pipe to two injection wells. The targeted annual injection volume is 3 mgd (3,360 AFY) for groundwater (subterranean flow) replenishment. The City of Oceanside is requesting IRWM funding for the construction of two injection wells and accompanying conveyance in the public right-of-way: Well 1 on Coco Palms Drive and Well 3 at the end of Alipaz Court. Both injection wells will be constructed south of the San Luis Rey River and will be equipped with the following components: injection well, piping, valves, and appurtenances; electrical and control equipment for power distribution to the facilities and local/remote control of monitoring of well operations; and concrete pad for mounting piping, electrical and other support equipment. Injection Well Supply Pipelines (IWSP), or conveyance, will consist of 12- and 18-inch diameter pipe, which will be cement mortar lined and coated steel pipe, consistent with the product water pipeline at the AWTF site.

In addition to the creation of a local, resilient water supply through the injection of 3,360 AFY, the project will offset 601 MT CO2e annually beginning in the year of 2023. Additional benefits include improved water quality through a decrease in TDS concentrations due to the quality of the advanced treated recycled water, with an expected TDS of 50-100 mg/L through dilution. Current TDS levels in Mission Basin range between 500 mg/L and 2,000 mg/L, requiring desalting prior to distribution and use.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$0	\$0	\$50,078	\$50,078
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design/Engineering/Environmental Documentation	\$1,162,000	\$0	\$39,919	\$1,201,919
(d)	Construction/Implementation	\$3,233,836	\$3,115,000	\$1,190,839	\$7,539,675
(e)	Grand Total (Sum rows (a) through (d) for each)	\$4,395,836	\$3,115,000	\$1,280,836	\$8,791,672

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

City of Oceanside CIP Funds. The City has also applied for a U.S. Bureau of Reclamation WIIN grant and expects to hear whether the project was awarded funding under that program by the end of December 2019. Should WIIN grant be awarded, it would be used to offset the City of Oceanside's CIP fund contribution to this project.

Project Information Form (PIF)

3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

The project does not meet the 75% DAC threshold to qualify as a DAC project and is not requesting a cost share waiver. However, it still benefits DACs throughout the service area equally by creating a local, resilient water supply. The Project will help 21% DAC by geography and 36% DAC by population minimize fluctuations and increases in the cost of water due to imported water supplies.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
	(a) Start Date	(b) End Date
(a) Direct Project Administration	5/4/2020	9/30/2021
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	1/1/2018	8/1/2020
(d) Construction/Implementation	5/1/2020	6/30/2021

Project Information Form (PIF)

D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

San Diego and California are facing water supply concerns brought on by a variety of factors including drought, population growth, and historical over-drafting of our water resources. A safe, reliable, and local water supply is crucial for the vitality of the San Diego region's economy and quality of life. The Project aims to construct infrastructure to provide a safe, reliable, and local water supply in the City of Oceanside via injection of advanced treated recycled water through Pure Water Oceanside. This includes the construction of a 4.5 mgd AWP Facility, injection wells, conveyance piping to the injection wells, two monitoring wells, and backwash piping. The IRWM funding requested in this Proposal is for the construction of two injection wells and a portion of the IWSP conveyance. The other portions of the near-term project will be constructed by the City of Oceanside concurrently with the injection wells but have not been included herein in order to simplify this Proposal's work plan and budget.

Benefits of this Project include Mission Basin replenishment, which was quantified based on the capacity of the Mission Basin Groundwater Purification Facility (MBGPF) and the recharge capacity of the Mission Basin. Mission Basin, referred to as the Lower San Luis Rey Basin in DWR's Bulletin 118 was reclassified in 2019 as a very low priority basin and as subterranean flow, not a groundwater basin, but is suitable for recharge and storage. A numerical hydraulic model was used to investigate the available storage capacity of the Mission Basin, potential recharge locations for injection and surface spreading, and identify recharge volume limitation at these locations. A total of 3,360 AFY (3 mgd) will be injected into the basin by two injection wells.

The Pure Water Oceanside project is estimated to use 5,880 MWh/year of energy for its recycled water treatment and injection processes; however, imported water from SDCWA is much more energy intensive. The energy intensity to supply and distribute 3,360 AFY of water to Oceanside would result in approximately 7,718 MWh/yr. Thus, the net energy savings of the Project could be up to is 1,838 MWh/year. Assuming a carbon intensity of 0.327 metric tons of CO2 equivalent per MWh, the project would offset about 601 metric tons of CO2 equivalent annually beginning in the year 2023.

Technical Feasibility Studies Completed:

- RMC Water & Environment, Indirect Potable Reuse Study (March 2016)
- Tetrattech, Preliminary Geotechnical Study: Proposed Pure Water Oceanside (September 2018)
- Woodard & Curran, Pure Water Oceanside Engineering Report (December 2019)

Project Information Form (PIF)

2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		30 Years
Primary (Required)		
Type of Benefit Claimed:	Water Supply - Groundwater ▼	Benefit Units*: AFY ▼
Secondary (Optional)		
Type of Benefit Claimed:	Other ▼	Benefit Units*: Other ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Increase local water supplies with advanced treated recycled water injection into Mission Basin	3360 AFY
Secondary	Use of potable reuse water in lieu of imported water	601 metric tons of CO2 equivalent annually
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
This project is not a decision support tool but provides non-physical benefits including increased resiliency to climate change through the creation of a local water supply.		
Comments: [Include narrative on additional benefits, as warranted.]		
The project's anticipated impact on water quality with respect to salinity in Mission Basin would be a decrease in TDS concentrations due to the quality of the advanced treated recycled water, with an expected TDS of 50-100 mg/L, more than ten times lower than current levels in basin. The advanced treated water will be designed to exceed the requirements set forth by Title 22, which include total nitrogen limit, TOC limit, Primary and Secondary MCLs, lead and copper Action Levels, pathogenic microorganism control, and Division of Drinking Water Notification Levels (NLs). The advanced treated water must also meet the San Diego RWQCB's Water Quality Control Plan for the San Diego Basin (Basin Plan) Water Quality Objectives for the Mission Basin. Implementation of this project helps the City meet its state-mandated water use reduction goals and water use objective to help prepare for drought. The City of Oceanside's 2015 UWMP assumed expanded beneficial use of recycled water, including Basin recharge, to address the 20% reduction in per capita demand by 2020 as required by the State (per SBx7-7). Pure Water Oceanside will assist the City in reaching its mandated water use reduction goals. Additionally, the Project helps meet the water supply needs of California by addressing recent water efficiency legislation: Assembly Bill 1668 and Senate Bill 606, signed May 31, 2018. This legislation includes a 15% credit towards a City's water use objective for water suppliers who achieve water recycling by January 2022 to prepare for drought.		

* DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:

- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
- For water quality, enter constituent concentration reduced in mg/L
- For flood damage reduction, enter inundated acres reduced in acres
- For habitat improved, restored or protected, enter habitat restored in acres
- For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
- For species protection, enter number of species benefited

Project Information Form (PIF)

3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

The Pure Water Oceanside Feasibility Study evaluated an alternative that proposed surface spreading 1,700 AFY of partially denitrified recycled water (near-term), then 3,360 AFY injection of advanced treated recycled water using AWT product water (long-term). Cost/AF = \$1,580.

The Pure Water Oceanside Feasibility Study was based on a desktop analysis of the Mission Basin. However, after completing subsequent validation via borings and geophysical surveying, the hydrogeology did not support this alternative and the IRWM Project described here was selected instead.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

Although the Project does not specifically target the constituents identified in AB 1249, overall improvement in water quality in Mission Basin is expected. Mission Basin is subterranean flow and considered surface flow of the San Luis Rey River. Mission Basin is currently high in salinity, and injection of advanced treated water is expected to lower TDS. Through overall water quality improvement, the project may also reduce concentrations of nitrate, perchlorate, arsenic, and hexavalent chromium, if present in Mission Basin.

c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

N/A – The benefit area is not a small DAC.

Project Information Form (PIF)

6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

This Project is creating new advanced treated water and enhancing the City's water supply reliability for all customers. This Project will allow the City to continue providing uninterrupted service in the event of drought or climate change disasters.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

The construction of Pure Water Oceanside will advance potable reuse throughout the state. Water treatment uses state-of-the-art purification steps to create local, sustainable supplies and enhance resiliency during drought and climate change. It will help advance knowledge of potable reuse systems, develop strategies to optimize operations, expand TMF capacity for potable reuse systems, and expand water and wastewater integration.

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

The project does not meet the definition of a DAC Project (75% of benefit area as DAC). The project benefit area is 36% DAC by population and 21% by geography, and benefits residents throughout the service area equally. This project is not requesting a partial DAC cost-share waiver. These calculations were based on the populations and size of a combination of Census block-groups and tracts within the boundaries of the City of Oceanside that met the 80% median household income definition of a DAC.

Project Information Form (PIF)

9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

The project does not meet the definition of an EDA Project (75% of benefit area as EDA). The Pure Water Oceanside Project is 42% EDA by population and 25% by geography and benefits residents throughout the service area equally. The project will create a reliable, local supply of water via injection of advanced treated recycled water into Mission Basin and supports stability in the cost of water as compared to imported water.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A – project does not benefit a Tribe

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

No land purchases or easements are required for this project because the City of Oceanside will construct injection wells and conveyance in a public right-of-way.

Project Information Form (PIF)

E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	Yes	2/1/2018
Notice of Preparation	Yes	2/2/2018
Draft EIR/MND/ND	Yes	8/8/2018
Public Review	Yes	9/26/2018
Final EIR/MND/ND	Yes	10/31/2018
Adoption of Final EIR/MND/ND	Yes	12/3/2018
Notice of Determination	Yes	12/6/2018

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

No legal challenges were made to the certified CEQA documentation.

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	Conditional Use Permit	City of Oceanside	Acquired in 2018
2.	General Permit for Stormwater Discharges	San Diego Regional Water Quality Control	Acquired in 2012
3.	Well Discharge	San Diego Regional Water Quality Control	Acquired in 2019
4.	Well/Boring Installation Permit	San Diego County Department of	Anticipated by December 2019
5.	Well/Boring Destruction Permit	San Diego County Department of	Anticipated by December 2020
6.	Air Pollution Control Permit for Standby Gene	San Diego Air Pollution Control District	Anticipated by December 2019

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	General Construction Permit is in place	N/A
2.	N/A - Complete	N/A
3.	Well Discharge – Using existing permit	N/A
4.	Procured during construction	N/A
5.	Procured during construction	N/A
6.	Procured during construction	N/A

Project Information Form (PIF)

3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes No If yes, please explain:

The Project area is located within a Multiple Habitat Conservation Area and within proximity to USFWS Species Critical Habitats. Only two special-status avian species were detected during the site visit: the Least Bell's Vireo (LBVI) and yellow warbler (YEWA). LBVI is a federally endangered and state endangered species, and the YEWA is a species of special concern. The Project will have the potential to adversely affect special-status avian species such as LBVI, southwestern willow flycatcher, yellow-breasted chat, YEWA, white-tailed kite, and CAGN, as well as raptors and other nesting birds through noise of construction activities, direct mortality, or abandonment of nests. Any potential impacts to these species will cease with the end of project construction. The City's construction contractor will implement mitigation measures to minimize impacts to special-status avian species and critical habitat, including pre-construction surveys, buffers, and construction limits to ensure avoidance of direct and indirect impacts. With mitigation, biological resource impacts identified in the 2018 MND will be reduced to less than significant levels.

b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes No If yes, please explain:

N/A

c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes No If yes, please explain:

N/A. A Cultural Resources Assessment was conducted as part of the CEQA process for the project. Although most of the project would be constructed within previously disturbed areas, there is potential to encounter cultural resources. Mitigation has been identified and will be required to avoid impacts to cultural resources. They include tribal monitoring, an archaeologist monitor and evaluation report, consultation with a Luiseno Native American monitor, pre-construction meetings, and protocol to implement in the event of unanticipated discovery of cultural resources.

d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes No If yes, please explain:

N/A

Project Information Form (PIF)

e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

N/A

Project Information Form (PIF)

j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

Yes No

If yes, please explain:

N/A

IRWM Proposition 1 Round 1 2019 Implementation Grant

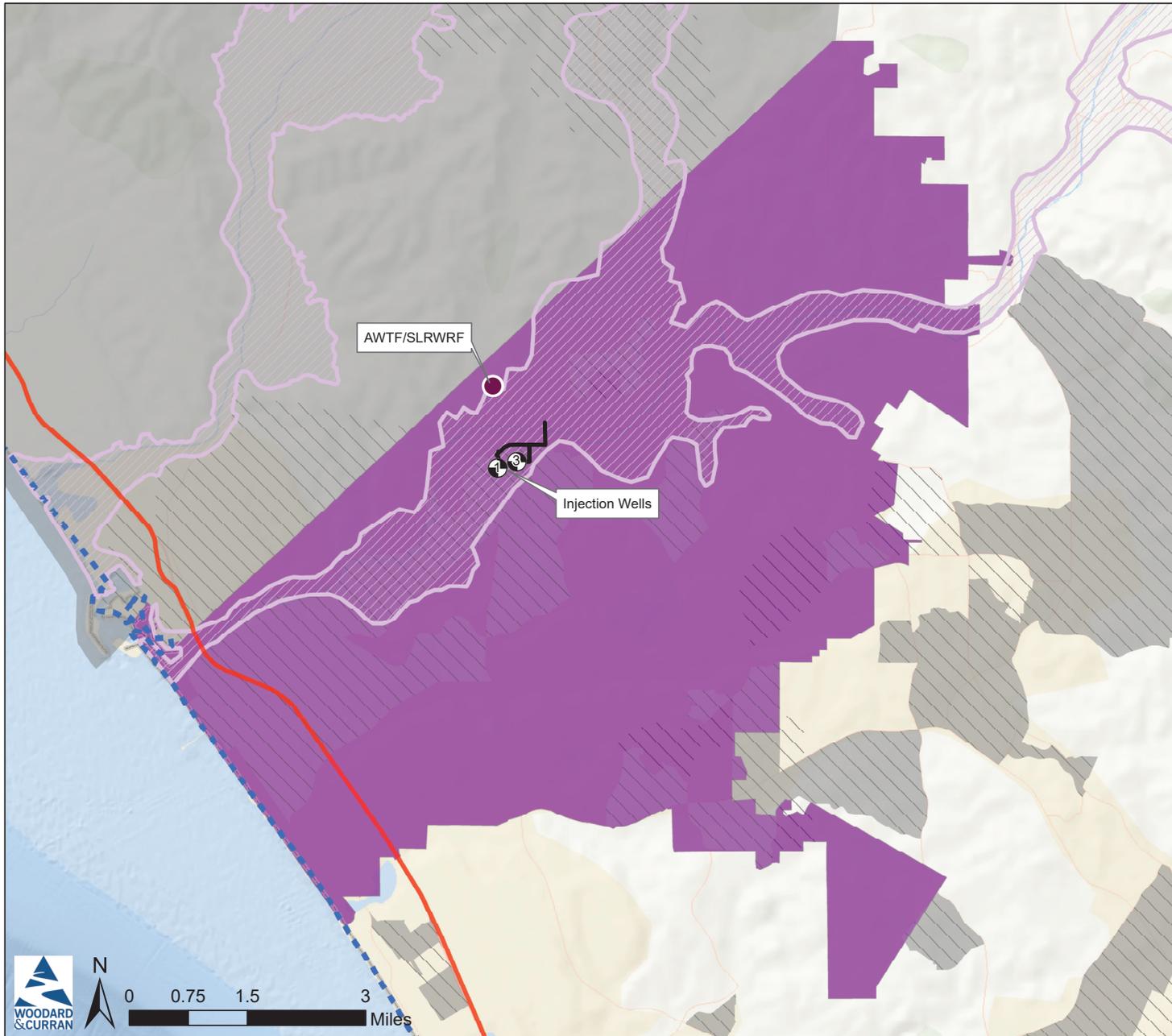
Pure Water Oceanside City of Oceanside

Legend

-  Pure Water Oceanside - Injection Wells
-  Pure Water Oceanside - Conveyance Pipeline
-  Advanced Water Treatment Facility (AWTF) / San Luis Rey Water Reclamation Facility (SLRWRF)
-  City of Oceanside Service Area
-  Highways
-  SDIRWM Region
-  Prop 1 San Diego Sub-Region Funding Area
-  Disadvantaged Community
-  EDA: < 85% CA. MHI, Pop <= 20K with Local Financial Hardship
-  Groundwater Basins



*Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026



Project Information Form (PIF)

A. PROJECT INFORMATION

1. Project Title: North County Recycled Water Project
2. Project Sponsor(s): San Elijo Joint Powers Authority
3. Eligible Applicant Type: Public Agency
4. IRWM Project Region(s): San Diego IRWM Region
5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.
6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.
7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.
8. Funding Category:
 DAC Implementation Project
 General Implementation Project
9. Project Type: Water recycling Other:
- Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No
2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:
a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

- Obj. A: The project provides an integrated solution to water supply and climate change issues through the North San Diego Water Reuse Coalition (Coalition), which consists of multiple agencies working together to meet the recycled water demands of northern San Diego, regardless of agency boundaries. The project includes interagency connections to increase the capacity and connectivity of their combined recycled water storage and distribution systems.
- Obj. B: The Coalition maintains a website and conducts frequent outreach through community workshops, public community meetings, website publications, community flyers and handouts on the benefits of using recycled water.
- Obj. E: The project will diversify and expand northern San Diego County's water supply portfolio through the installation of new recycled water pipelines that will allow for the distribution of approximately 245 AFY of recycled water which will directly offset potable water use.
- Obj. F: The project will expand the existing inter-agency recycled water storage and distribution system through the construction of recycled water pipeline extensions at multiple locations in northern San Diego County, improving recycled water infrastructure in the region.

Project Information Form (PIF)

3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

Yes. Pipelines have an expected useful life of approximately 30 years. The The recycled water storage tank and pumping station has an expected useful life of 30 years.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

Of the climate change vulnerabilities listed in the 2019 San Diego IRWM Plan, the project chiefly addresses the water demand issues ranging from priority levels “very low” (where there is limited ability to meet summer potable water demands) to “very high” (where there is a decrease in available water supplies). This would be accomplished through Tier 1 management strategies identified in the IRWM Plan that address: urban water efficiencies, recycled municipal water offsets, and urban runoff management to name a few.

The North San Diego Recycled Water Project will help to address climate resiliency by preparing the area for an increased occurrence of drought conditions expected as a result of climate change. It expands availability of a local recycled water supply for the region, improving supply reliability because this local supply will be available in all climate and demand conditions. The project will reduce energy use and greenhouse gas emissions from reduced conveyance of 245 AFY of potable water, helping to offset 80 MT CO₂e per year GHG, the underlying cause of climate change.

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

As San Diego County’s major sources of potable water – the State Water Project and the Colorado River – are facing significant challenges, local supplies such as recycled water are imperative to maintaining a reliable source of water. The Regional Recycled Water Project, and these project components, involve connecting discrete recycled water systems to one another, increasing recycled water storage capacity, and distributing recycled water to effectively meet recycled water demands. Supply reliability in the face of drought was identified as a “high” priority vulnerability in the San Diego IRWM Plan’s Climate Change Vulnerability Assessment. By increasing use of recycled water, Coalition partners will be able to reduce their purchases of imported water from SDCWA by 245 AFY, creating regional water self-reliance while helping to mitigate their impacts on climate change (including energy demands and associated greenhouse gases).

Project Information Form (PIF)

6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

2. Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government



7. Will CEQA be completed within 12 months of Final Award?

- Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

- Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

Project Information Form (PIF)

C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

The North County Recycled Water Project will implement recycled water conveyance and storage improvements to expand recycled water storage, distribution, and use across service areas of multiple water purveyors in northern San Diego County. The project partners will construct 39,000 linear feet (LF) of pipeline, expand distribution pumping by up to 1,200 gallons per minute (gpm) and add 0.25 million gallon (MG) recycled water storage (components are described below). The project will result in 245 AFY of recycled water supply, which will offset potable use.

Recycled Water Storage and Pumping System Expansion (SE) – Project includes 0.25 MG recycled water storage constructed at San Elijo Water Reclamation Facility (SEWRF) for finished water storage, prior to distribution and expansion of the existing distribution pump station to increase peak demand deliveries. The tank construction will be reinforced concrete that will expand the existing clear well storage from approximately 15,000 to 265,000 gallons, an expansion of 250,000 gallons. The project will also include increasing the existing distribution pump station capacity with the construction of 150 HP pump motor, 1,200 gpm vertical turbine pump, approximately 80 LF of 12-inch diameter ductile iron connecting piping, 12-inch diameter gate and check valves, altitude valves, and other associated electrical, SCADA, and appurtenances necessary for automated control and operation to move water efficiently between the existing 3 offsite system reservoirs.

Recycled Water Pipeline: North El Camino Real (OC) - This will replace the existing 10-inch recycled water main with a larger main from the San Luis Rey Water Reclamation Facility (SLRWRF) south on El Camino Real to the Fire Mountain neighborhood to serve current and new customers. The recycled water pipeline will extend east on North River Road from SLRWRF to Douglas Drive, south on Douglas Drive (including an HDD crossing of the San Luis Rey River), and continue south on El Camino Real to Fire Mountain. A new 2.2 MG tank and 75 HP pump station are being constructed separately from, and concurrent with the Project to allow the increased pipeline capacity to be used (not included in this proposal). This system will install 36,000 LF of new pipeline and deliver over 200 AFY recycled water with construction beginning in May 2020.

Recycled Water Pipeline: South El Camino Real (OM) – This alignment will construct approximately 3,700 LF of 6-inch pipe along South El Camino Real, from Calle Ryan to Manchester Avenue, within the City of Encinitas. The extension will serve 45 AFY of recycled water to 9 customers for irrigation. An additional southern section of pipe was previously funded through a Proposition 84, Round 4 IRWM Implementation Grant.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$0	\$25,000	\$62,620	\$87,620
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/Environmental Documentation	\$242,868	\$0	\$53,967	\$296,835
(d)	Construction/Implementation	\$6,059,703	\$2,795,000	\$3,365,983	\$12,220,686
(e)	Grand Total (Sum rows (a) through (d) for each)	\$6,302,571	\$2,820,000	\$3,482,570	\$12,605,141

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

Match funds and Other Cost Share (Columns (a) and (c)): San Elijo JPA, City of Oceanside, and Olivenhain MWD CIP funds.

Project Information Form (PIF)

3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

The benefit area does not contain enough DACs or EDAs to qualify for a cost share waiver. The project is 16% DAC by population and 7% by geography, and 16% EDA by population and 6% by geography. The project benefits residents throughout the service area equally.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
Category	(a) Start Date	(b) End Date
(a) Direct Project Administration	5/1/2020	10/30/2022
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	8/1/2015	11/30/2020
(d) Construction/Implementation	5/1/2020	7/30/2022

Project Information Form (PIF)

D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

Due to California's increasing water supply concerns stemming from drought, population growth and over-drafting of water resources, water suppliers are mandated to conserve potable water at increasing levels (e.g., AB1668 and SB 606). Agencies in the North San Diego Water Reuse Coalition are working together to evaluate, implement, and expand upon projects designed to conserve local water supply resources and improve northern San Diego County's resiliency to climate change. The Project is part of this greater effort, and is designed to expand a multi-agency recycled water distribution and storage system, significantly increasing the supply of local, safe, and reliable drinking water across multiple cities and watersheds in the region.

Recycled water delivered by this Project would offset demands for potable water, specifically imported supplies. The volume of potable water offset by the Project is equivalent to the volume of recycled water, determined to be 265 AFY. Imported water is more energy intensive to deliver and treat than recycled water, with an average energy demand of 2.297 MWh/AF (from California Public Utilities Commission's 2011 Embedded Energy in Water Pilot Programs Impact Evaluation). Recycled water has an energy intensity of approximately 1.3 MWh/AF, so conversion to recycled water would offset energy demands by 0.997 MWh/AF (2010 Equinox Report). Based on U.S. EPA data on emissions from different energy grids in the county and data from the California Energy Commission on the state's sources of energy, each MWh of energy used in the state results in 0.327 metric tons of carbon dioxide equivalent (MT CO₂e). By offsetting 245 AFY imported water with recycled water, this project will reduce emissions by 80 MT CO₂e per year. By reducing potable demands, this project also directly addresses the very high priority climate change vulnerability identified in the San Diego IRWM Plan of reduced availability of imported supplies. Imported supply availability is expected to be reduced by 20%-25% as a result of climate change impacts and the region as a whole anticipates a 164,000 AFY shortfall in imported supplies.

The following feasibility studies and CEQA documentation have been completed in support of the Project: North San Diego County Regional Recycled Water Project – Regional Recycled Water Facilities Plan; North San Diego Water Reuse Coalition Regional Recycled Water Project - Final Program Environmental Impact Report; North San Diego County Water Reuse Coalition Regional Recycled Water Program – 2020 Project Feasibility Study; OMWD 2015 Potable Water and Recycled Water Master Plan

Project Information Form (PIF)

2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		> 15 Years
Primary (Required)		
Type of Benefit Claimed:	Water Supply - Recycled Water ▼	Benefit Units*: AFY ▼
Secondary (Optional)		
Type of Benefit Claimed:	Other ▼	Benefit Units*: Other ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Potable water savings through recycled water savings	245 AFY
Secondary	Reduced greenhouse gas emissions	80 MT CO2e per year of emissions reduced.
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
The project is not a decision support tool but will provide climate change benefits by reducing energy demands associated with providing imported potable water and support the region's climate change resiliency through increased local drought-resistant supply.		
Comments: [Include narrative on additional benefits, as warranted.]		
Potable water offsets were determined using water meter data for irrigation. The resulting potable water savings benefit was determined to be 245 AFY. Wastewater effluent currently treated to secondary level is discharged to the Pacific Ocean. By putting the recycled water to use, the Project will result in less effluent being discharged to the Pacific Ocean. This will result in a decrease in mass discharge of contaminants, resulting in an overall improvement in the quality of the Pacific Ocean along coastal North County. In addition to reducing effluent discharge to the Pacific Ocean, dry weather flows that eventually discharge to the Pacific Ocean are also reduced. The majority of the proposed recycled water developed under the Project will be used to fulfill irrigation demands. Using recycled water for irrigation reduces the need for chemical fertilizer as recycled water contains higher levels of nutrients, such as nitrogen, than potable water. As a result, potential irrigation runoff and percolation to groundwater will contain less synthetic fertilizer. In addition, recycled water use regulations include strict controls for overspray and irrigation efficiency requirements. This can help to reduce the volume of dry weather flows and associated pollutants to local streams and drainages and eventually to the Pacific Ocean.		

* DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:

- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
- For water quality, enter constituent concentration reduced in mg/L
- For flood damage reduction, enter inundated acres reduced in acres
- For habitat improved, restored or protected, enter habitat restored in acres
- For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
- For species protection, enter number of species benefited

Project Information Form (PIF)

3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

Olivenhain MWD analyzed several potential recycled water main extensions throughout the service area of differing water supply savings benefits and cost. The current proposed recycled water pipeline extensions were selected based on providing the largest offset of potable water, being a lower cost than other alternatives, and the feasibility to complete the Project in a timely manner. Additionally, customers along the alignment could easily be converted to recycled water. Oceanside has analyzed several projects for producing local water including desalination and indirect potable reuse, both of which were more expensive than the component included in this Project and treated water to a higher quality than necessary to meet irrigation needs.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

The project does not specifically target AB1249 constituents (nitrate, perchlorate, arsenic, hexavalent chromium) but will improve the quality of urban runoff through controls on overspray and runoff for recycled water use.

c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

N/A – the project is a non-potable recycled water project. While it supports improved management of potable supplies by offsetting potable demands, it does not provide drinking water to a small DAC.

Project Information Form (PIF)

6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

No, the project will offset demands for potable water, allowing existing potable supplies to be conserved, which will reduce competition for potable water, allowing it to be used for human consumption, cooking, and sanitary purposes. Improved management of potable resources from the Project will support water management during drought or in the event of supply disruption, where consistent access to clean, safe, and affordable water may be threatened.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

Although non-potable recycled water has been used in the region for decades, this project expands the use of recycled water through the connection of multiple jurisdictions and collaboration that is new and innovative. The North San Diego Water Reuse Coalition has been working together for years to develop regional recycled water infrastructure to increase the capacity and connectivity of the Coalition partners' recycled water systems and maximize reuse of available wastewater supplies. The Coalition recently released a Feasibility Study with steps to connect recycled water throughout the nine water and wastewater agencies jurisdictions in northern San Diego County.

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

The project does not provide benefits to a 75% DAC population. The project is 17% DAC by population and 5% by geography and benefits residents throughout the service area equally. The project supports stability in the cost of water as compared to imported water.

Project Information Form (PIF)

9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

The project does not provide benefits to a 75% EDA population. The project is 19% EDA by population and 6% by geography and benefits residents throughout the service area equally. The project supports stability in the cost of water as compared to imported water.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A - Project does not benefit a Tribe.

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

Land and Purchase Easement will not be required for this project. The Project will primarily be constructed within roadway rights-of-way, and upsized transmission mains will replace existing mains to which the Project partners already have access.

Project Information Form (PIF)

E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	Yes	5/1/2019
Notice of Preparation	Yes	6/1/2019
Draft EIR/MND/ND	Yes	12/1/2019
Public Review	Yes	12/30/2019
Final EIR/MND/ND	Yes	1/14/2020
Adoption of Final EIR/MND/ND	Yes	2/12/2020
Notice of Determination	Yes	2/15/2020

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

The CEQA Timeline Table above reflects the Recycled Water Pipeline: El Camino Real (OM) timeline for an Initial Study/Mitigated Negative Declaration (IS/MND) currently underway. Estimated completion is February 2020. All project partners will obtain necessary permitting and prepare the necessary design and engineering documents including geotechnical investigations, topographic surveys, project cost estimates, and final design documents. CEQA for Recycled Water Storage and Pumping Station (SE) (MND, SCH #2016021055, May 2016) and Lower Recycled Water Distribution System (OC) (Addendum to PEIR, SCH #2014081028, October 2019) is complete. No legal challenges were raised for the CEQA documents that have been completed for the project to-date.

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	Coastal Development Permit	California Coastal Commission	11/20/2020
2.	Section 404 Permit	U.S. Army Corps of Engineers	Dec-19
3.	1602 Streambed Alteration Agreement	California Dept. of Fish and Wildlife	Dec-19
4.	Section 401 Permit	San Diego Regional Water Quality Control	Dec-19
5.	Tunnel Classification	Cal/OSHA	Dec-18
6.	Notification of trenchless construction	CDFW	Dec-18
n.			

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	The Coastal Commission hearing will be scheduled following	N/A
2.	City of Oceanside has applied for a Section 404 Permit	N/A
3.	City of Oceanside has applied for a 1602 Streambed Alteration	N/A
4.	City of Oceanside has applied for a Section 401 Permit	N/A
5.	N/a - permit has been acquired	
6.	N/a - permit has been acquired	

Project Information Form (PIF)

3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

- a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes

No

If yes, please explain:

Consistent with the CEQA documentation, the Project would not affect listed species or habitat.

- b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes

No

If yes, please explain:

The project will include trenchless crossing of the San Luis Rey River by the Lower Recycled Water Distribution System (OC) pipeline. A 404 permit for this crossing is expected in December 2019

- c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes

No

If yes, please explain:

N/A – the project will be constructed within previously disturbed areas and not expected to affect historical, archaeological, or cultural resources, consistent with the findings of the CEQA documentation.

- d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes

No

If yes, please explain:

The trenchless crossing included in Lower Recycled Water Distribution System (OC) requires Section 401 and Section 404 permits, expected December 2019.

Project Information Form (PIF)

e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A – project would not alter a river stream or lake, or divert the natural flow, or involve a creek crossing, and would not require a Lake or Streambed Alteration Agreement.

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

The project would include a trenchless creek crossing in Lower Recycled Water Distribution System (OC) that would change the bed, channel, or bank of a river, stream, or lake. A 1602 Streambed Alteration Agreement is expected in December 2019.

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A – project would not use any material from the bed, channel, or bank of a river, stream, or lake.

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A – the project will not deposit or dispose of debris, waste, or other material where it can pass into a river, stream, or lake.

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

N/A – project is a recycled water project and does not require acquisition of water rights.

Project Information Form (PIF)

j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

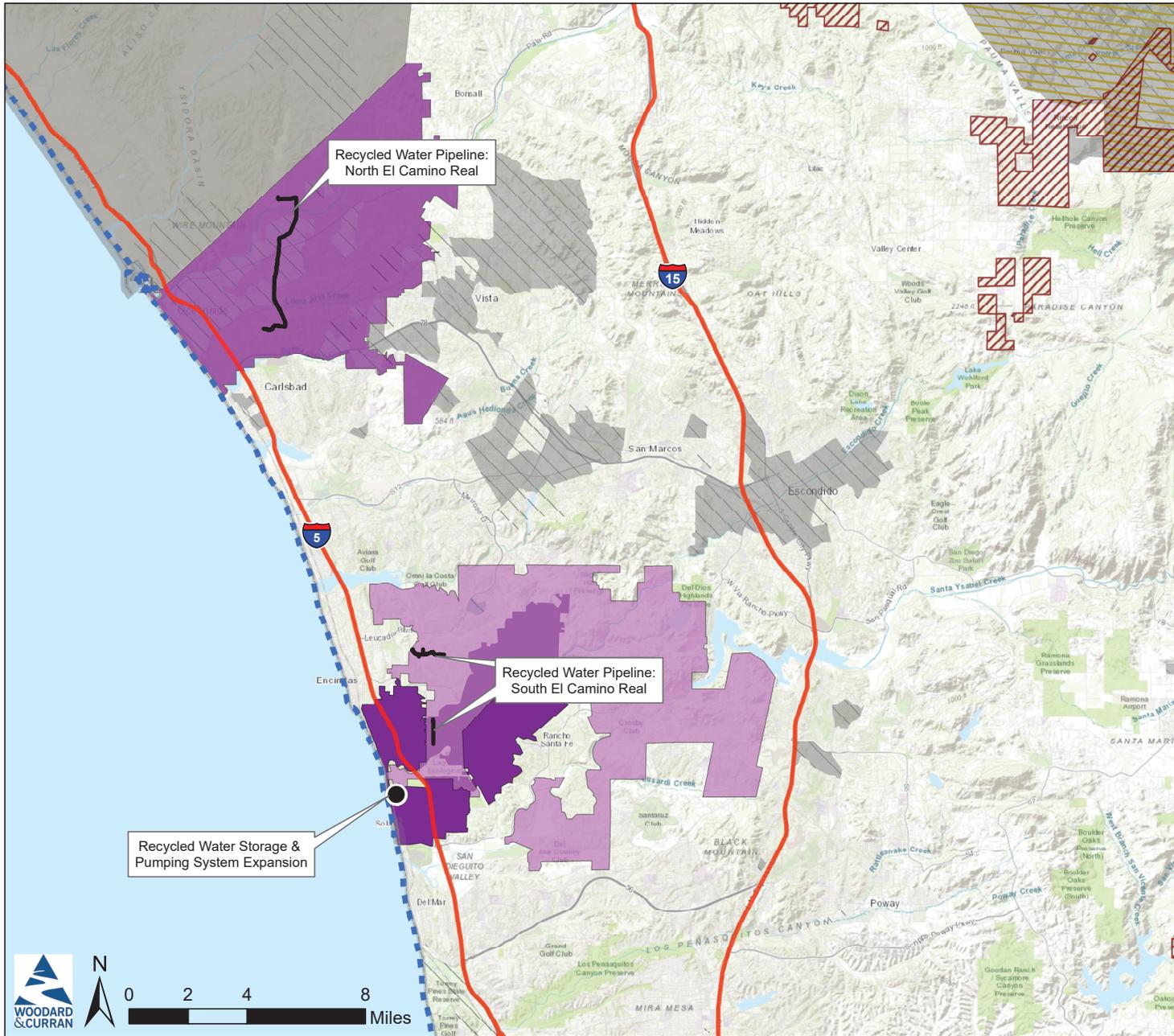
Yes No If yes, please explain:

Project is located within a coastal zone and will acquire a Coastal Development Permit for the applicable components, which includes Olivenhain MWD's pipeline. A CDP will be acquired within the Planning/Design/Engineering/Environmental Documentation stage of the Project.

IRWM Proposition 1 Round 1 2019 Implementation Grant North County Recycled Water Project San Elijo Joint Powers Authority

Legend

- North County Recycled Water Project - Recycled Water Storage (SE)
- North County Recycled Water Project - Proposed Recycled Water Pipeline
- San Elijo JPA Service Area
- City of Oceanside Service Area
- Olivenhain MWD Service Area
- Highways
- SDIRWM Region
- Prop 1 San Diego Sub-Region Funding Area
- Disadvantaged Community
- ▨ Tribal Lands (URC)
- ▨ EDA: <85% CA MHI Pop <= 20K with Low Pop Density
- ▨ EDA: < 85% CA. MHI, Pop <= 20K with Local Financial Hardship



*Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026

Project Information Form (PIF)

A. PROJECT INFORMATION

1. Project Title: San Elijo Stormwater Capture & Reuse
2. Project Sponsor(s): San Elijo Joint Powers Authority
3. Eligible Applicant Type: Public Agency
4. IRWM Project Region(s): San Diego IRWM Region
5. Does the project provide benefits directly to a Disadvantaged Communities (DAC) and/or Economically Distressed Areas (EDA) (minimum 75% by population or geography)?
 Yes No If yes, please complete D.8 and/or D.9. Show on map if applicable.
6. Is the Project Sponsor a Tribe, or does the project provide benefits to a Tribe (minimum 75% by population or geography) as defined by Proposition 1?
 Yes No If yes, please complete D.10. Show on map if applicable.
7. Provide project map. Include location of project, project benefit and/or service area, and other applicable information.
8. Funding Category:
 DAC Implementation Project
 General Implementation Project
9. Project Type: Water recycling Other:
- Select most applicable project type. See Section II.C. of the 2019 Guidelines for full description of eligible project types. If "Other" is selected, please write in the space provided the proposed project type.

B. SELECTED ELIGIBILITY REQUIREMENTS

1. Will the project be included in the IRWM Plan, that will be adopted prior to anticipated Agreement Execution?
 Yes No
2. Does the project address a critical need(s) and/or priority(ies) of the IRWM Region as identified in the IRWM Plan?
 Yes No If yes, complete part a:
- a. What IRWM Plan goal(s)/objective(s) does the project address? Identify and explain.

- Obj. A: The project provides an integrated solution to water supply and climate change issues through the partnership between San Elijo JPA and The Nature Collective to address stormwater pollution.
- Obj. B: The Nature Collective will install signage and conduct educational field trips to the San Elijo Lagoon for up to 2,000 students each year.
- Obj. E: The project will diversify and expand northern San Diego County's water supply portfolio through stormwater capture and use of 19 AFY.
- Obj. F: The project will improve the San Elijo Water Reclamation Facility (SEWRF) headworks in order to handle the flows from the stormwater diversion project to remove trash, sediment, and nutrients.

Project Information Form (PIF)

3. Does the project have an expected useful life consistent with Government Code §16727 (generally 15 years)? If not, explain why this requirement is not applicable.

Yes. The expected useful life is 15 years, with many of the components having an expected useful life of 30 years.

4. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities assessed in the IRWM Plan?

Yes No If yes, please explain below.

Of the climate change vulnerabilities listed in the 2019 San Diego IRWM Plan, the project chiefly addresses the water demand issues ranging from priority levels: “very high” (where there is a decrease in available water supplies) to “very low” (where there is limited ability to meet summer potable water demands).

San Elijo Stormwater Capture & Reuse will help to address climate resiliency by preparing the area for an increased occurrence of drought conditions expected as a result of climate change. It expands availability of a local water supply for the region through stormwater capture and use, improving supply reliability because this local supply will be available in all climate and demand conditions. The project will reduce energy use and greenhouse gas emissions from reduced conveyance of 19 AFY of potable water, helping to offset the cause of climate change. The project will also help address flash flooding and inundation for extreme weather events (high priority level) through the expanded SEWRF headworks to capture additional stormflow.

5. Does the project contribute to regional water self-reliance?

Yes No If yes, please explain below.

Diverting polluted stormwater away from the San Elijo Lagoon and routing water to the SEWRF will increase water recycling into the existing San Elijo JPA non-potable recycled water systems serving communities in northern San Diego County. The San Elijo recycled water system serves four water purveyors: San Dieguito Water District, Santa Fe Irrigation District, Olivenhain Municipal Water District, and the City of Del Mar. The San Diego Region is heavily reliant on imported water, with up to 80% of its demands being met with water imported from the State Water Project (SWP) and Colorado River. As identified in the Climate Change Vulnerability Assessment included in the San Diego IRWM Plan, climate change is expected to reduce the availability of imported water by 20%-25%, and a shortfall of 164,000 AFY imported water is anticipated. Development of additional sustainable supplies is a critical component of the Region’s strategy to address climate change impacts and continue to serve supplies that meet human and environmental needs. Captured stormwater will be treated and utilized as recycled water for irrigation, directly offsetting imported water supply. In doing so, the project also helps to address the causes of climate change by reducing energy demands associated with imported water.

Project Information Form (PIF)

6. Does the project provide a benefit that meets at least one of the Statewide Priorities as defined in the 2019 IRWM Grant Program Guidelines?

Yes No If yes, please identify below.

2. Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government



7. Will CEQA be completed within 12 months of Final Award?

Yes
 NA, project is exempt under CEQA
 NA, not a project under CEQA
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

8. Will all permits necessary to begin construction be acquired within 12 months of Final Award?

Yes
 NA, project benefits DAC/EDA/Tribe (minimum 75%), or a Tribe is a local project sponsor
 No

Project Information Form (PIF)

C. WORK PLAN, BUDGET, and SCHEDULE SUMMARY

1. Project Description: Provide a brief project description summarizing major components, objectives, goals, and intended outcomes/benefits (quantitative and qualitative).

This project involves construction of stormwater capture and reuse improvements in San Elijo JPA's service area, including 1) upgrades at the San Elijo Water Reclamation Facility (SEWRF); 2) desilting basin improvements to reduce sediment transportation into the San Elijo Lagoon; and 3) education and outreach for storm water pollution prevention and health watersheds conducted at the SEWRF and San Elijo Lagoon. This project will capture stormwater from a regional stormwater channel, along with surface runoff from the SEWRF, in order to increase the amount of available recycled water for delivery within the region and reduce stormwater pollution in the San Elijo Lagoon. San Elijo Lagoon is a 303(d) impaired water body for sediment, bacteria, and nutrients.

San Elijo JPA will construct improvements to divert and treat stormwater from the regional stormwater channel that runs along the facility, as well as provide treatment for stormwater runoff from the SEWRF site. Treatment will include the construction of desilting basins and vegetated earthen basins to remove trash, sediment, and nutrients. Treated stormwater will be diverted to the SEWRF headworks for final treatment, filtration, and recycling. The regional stormwater channel collects stormwater from a 0.78 square mile watershed that discharges directly into the San Elijo Lagoon. Surface stormwater will be diverted from the regional channel and pumped to a series of desilting and vegetated basins prior to final treatment at the SEWRF. The treated and disinfected water will then be fed into the recycled water distribution system for offsite storage and use.

In order to handle the flows from the stormwater diversion project, some upgrades to the SEWRF headworks are needed. Construction of these upgrades began in June 2017 and are currently underway. Work includes the construction and installation of new preliminary treatment to improve debris screening and trash removal, construction of new concrete channels to increase hydraulic capacity, construction of new emergency overflow protection, and improved system automation.

San Elijo JPA is partnered with The Nature Collective, a non-governmental organization (NGO), that will provide community outreach directly related to the project and its benefits. The Nature Collective will provide educational field trips to the San Elijo Lagoon for approximately 2,000 students and educators annually to educate on stormwater capture and reuse for community benefit, along with protection of stormwater quality and pollution impacts on the environment in addition to installing signage at the Nature Center.

2. Budget: Provide cost estimates for each Budget Category listed in the table below. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 1 - Project Budget					
Category		(a)	(b)	(c)	(d)
		Cost Share: Non-State Fund Source	Requested Grant Amount	Other Cost Share (including other State Sources)	Total Cost
(a)	Project Administration	\$0	\$105,820	\$0	\$105,820
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design /Engineering /Environmental Documentation	\$0	\$237,832	772263	\$1,010,095
(d)	Construction/Implementation	3072837	\$851,348	\$0	\$3,924,185
(e)	Grand Total (Sum rows (a) through (d) for each	\$3,072,837	\$1,195,000	\$772,263	\$5,040,100

Note: Provide information or other documentation to support the cost estimate in a separate attachment. Identify the source of all cost share and other funds. If other funds are not used, describe efforts to obtain other funding and/or why other funding sources were not used.

Match funds and Other Cost Share (Columns (a) and (c)): San Elijo JPA CIP Funds and The Nature Collective staff time.

Project Information Form (PIF)

3. Cost Share Waiver Requested (DAC or EDA)? Yes No If yes, continue below:

Cost Share Waiver Justification: Describe what percentage of the proposed project area encompasses a DAC/EDA, how the community meets the definition of a DAC/EDA, and the need of the DAC/EDA that the project addresses. In order to receive a cost share waiver, the applicant must demonstrate that the project will provide benefits (minimum 25% by population or geography) that address a need of a DAC and/or EDA.

No, the benefit area does not contain enough DACs or EDAs to qualify for a cost share waiver. Only 3% of the population within San Elijo JPA's service area is considered a DAC/EDA. However, The Nature Collective outreach will include field trips for 90 high school classes in Escondido and Vista, of which approximately 60 classes are from Title 1 schools.

4. Schedule: Include reasonable estimates of the start and end dates for each Budget Category listed in Table 1 - Project Budget. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

Table 2 - Project Schedule		
Category	(a) Start Date	(b) End Date
(a) Direct Project Administration	5/4/2020	11/1/2022
(b) Land Purchase/Easement	N/A	N/A
(c) Planning/Design/Engineering/Environmental Documentation	6/1/2015	8/1/2020
(d) Construction/Implementation	1/1/2016	8/1/2022

Project Information Form (PIF)

D. OTHER PROJECT INFORMATION

1. Provide a narrative for project justification. If applicable, include references to supporting documentation such as models, studies, engineering reports, etc. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits.

The project will create a local source of water and thereby reduce the amount of imported water supplies, creating a more resilient water supply in the region. Captured stormwater will be used as recycled water, offsetting demands for potable water, specifically imported supplies. This project is designed to capture and treat 19 AFY of stormwater. The reduced volume of stormwater runoff was calculated based on an assumed storage capacity of 2.3 acre-feet, and site-specific stormwater runoff parameters gathered from previous stormwater reports prepared for the SEWRF. The runoff volume benefit is based on an estimate of 10 inches of rainfall per year, a runoff coefficient of 0.79, a drainage area of 486.4 acres, a water quality volume of stormwater runoff of 18.89 ac-ft based on an 85th percentile storm, and runoff losses of 50%. All 19 AFY captured will be treated for recycled water use. Offsetting potable water will reduce the need to import water to meet non-potable demands. By capturing and diverting polluted stormwater flows, the project will reduce pollutant loading to the San Elijo Lagoon, listed on the 303(d) list of impaired water bodies for bacteria, sediment, and nutrients. Based on collected stormwater water samples, the average total suspended solids (TSS) is 285 mg/L, which equates to approximately 14,715 pounds of sediment removed annually. Importing water is energy intensive, requiring 2.297 MWh/AF to pump to San Diego (California Public Utilities Commission Embedded Energy in Water Pilot Programs Impact Evaluation). In contrast, recycled water requires an estimated 0.8 MWh/AF to treat (Equinox Center Report, 2010). The project would use MF/RO to treat a portion of the stormwater for recycled water use, which is more energy intensive than disinfected tertiary recycled water treatment, so the energy required for the project is estimated at 1.3 MWh/AF, reducing energy demands by 0.997 MWh. Based on the State's energy mix and associated emissions factors, 0.327 metric tons of carbon dioxide equivalent (MT CO₂e) is emitted per MWh used (California Energy Commission and U.S. EPA). This project would save 6.19 MT CO₂e per year.

The following feasibility studies and CEQA documentation have been completed in support of the Project:

- ESA, San Diego Region Stormwater Capture and Use Feasibility Study, (November 2018)
- Dudek, SEWRF Stormwater Bioretention Basins Basis of Design (January 2017).
- Dudek, Recycled Water Pipeline and Facility Upgrades, Mitigated Negative Declaration; SCH #2016021055 (May 2016)
- Helix Environmental Planning, Inc., San Elijo Reclamation Facility Upgrades, Addendum to the Final Mitigated Negative Declaration; SCH #2016021055 (January 2019).

Project Information Form (PIF)

2. Project Benefits Table:

Table 3 - Project Benefits		
Anticipated Useful Life of Project (years):		15 Years
Primary (Required)		
Type of Benefit Claimed:	Water Supply - Recycled Water ▼	Benefit Units*: AFY ▼
Secondary (Optional)		
Type of Benefit Claimed:	Water Quality ▼	Benefit Units*: Other ▼
Physical Benefits (At project completion or lifetime, as appropriate)		
(a)	(b)	(c)
Benefit	Added Physical Benefit Description	Quantitative Benefit
Primary	Potable water savings through the capture, treatment, and reuse of stormwater	19 AFY
Secondary	Reduce pollutant loading to an impaired water body	14,715 pounds of TSS (285 mg/L)
Qualitative Benefits (For Decision Support Tools, please describe non-physical benefits.)		
<p>The project is not a decision support tool but will provide climate change benefits by reducing energy demands associated with providing imported potable water and support the region's climate change resiliency through increased local drought-resistant supply.</p>		
Comments: [Include narrative on additional benefits, as warranted.]		
<p>This project expands availability of a local recycled water supply for the region, improving supply reliability because this local supply will be available in all climate and demand conditions and will help to address climate resiliency by preparing the area for an increased occurrence of drought conditions expected as a result of climate change.</p> <p>Additional benefits include community education that will improve understanding of stormwater and its relation with watershed systems and health. This outreach is important to promoting a conscientious community that acts to reduce pollutants that affect stormwater quality and the lagoon. It will also help improve understanding of treatment systems and how a combination of engineered and natural systems can address water quality issues.</p>		

- * DWR may require applicant to convert or modify Benefit Claimed and/or Benefit Units. Where applicable, select one of the following units that corresponds to the benefit claimed:
- For water supply produced, saved, or recycled, enter acre-feet per year (AFY)
 - For water quality, enter constituent concentration reduced in mg/L
 - For flood damage reduction, enter inundated acres reduced in acres
 - For habitat improved, restored or protected, enter habitat restored in acres
 - For fishery benefits, enter increased fishery flow rate in cubic feet per second (cfs)
 - For species protection, enter number of species benefited

Project Information Form (PIF)

3. Does the proposed project provide benefits to multiple IRWM regions [or funding areas]? If the project is located in another funding area, please provide the information requested in the 2019 Guidelines, Section 1.A.

Yes No If yes, provide a description of the benefits to the various regions.

N/A

4. Provide a narrative on cost considerations. For example, were other alternatives to achieve the same types and amounts of physical benefits as the proposed project evaluated? Provide a justification as to why the project was selected (e.g., if the proposed project is not the lowest cost alternative, why is it the preferred alternative? Are there any other advantages that the proposed project provides from a cost perspective?)

SEJPA evaluated two alternatives for capturing a minimum 19 AFY of stormwater. Alt. A (this project) utilizes the existing desiltation basin located within the storm channel as the initial capture basin, convey flows to a (new) second desilting structure where additional suspended sediment would be removed. Alt. B would construct a new a new capture and desiltation basin adjacent to the storm channel, from which stormwater would be pumped to a new desilting structure to further remove suspended sediment. For both alternatives, captured water would then flow into a series of earthen, planted, basins for further sedimentation and volume accumulation before entering a belowground vault to be pumped to the San Elijo WRF. Alternative A requires 800 linear feet of 4-inch diameter PVC pipe. Alt. B requires 1,000 linear feet of 4-inch diameter PVC pipe. The main cost differential between the alternatives is that Alt. B requires the construction of a concrete stormwater capture basin of 375,000 gallons. At an assumed cost of \$1.25 per gallon of constructed volume, this structure adds an additional \$469,000 to the project.

5. a. Does the project address a contaminant listed in AB 1249?

Yes No If yes, complete parts b and c:

b. Describe how the project helps address the contamination.

The project will divert and treat polluted stormwater flows and therefore reduce pollutant loading to the San Elijo Lagoon. Based on collected stormwater water samples, the average total suspended solids (TSS) is 285 mg/L, which equates to approximately 14,715 pounds of sediment removed annually. While the Lagoon is not listed for AB1249 constituents (nitrate, perchlorate, arsenic, hexavalent chromium), if such constituents are found in the stormwater treated by this project, the project would reduce loading of these constituents to the Lagoon.

c. Does the project provide safe drinking water to a small disadvantaged community?

Yes No If yes, provide an explanation on how the project benefits a small disadvantaged community as defined in the 2019 IRWM Guidelines.

N/A – the project is a stormwater capture and use project and does not provide drinking water to a small DAC.

Project Information Form (PIF)

6. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes (consistent with AB 685) to meet a specific need(s) of a community?

Yes No If yes, please describe.

No, the project will offset demands for potable water, allowing existing potable supplies to be conserved, which will reduce competition for potable water, allowing it to be used for human consumption, cooking, and sanitary purposes. Improved management of potable resources from the Project will support water management during drought or in the event of supply disruption, where consistent access to clean, safe, and affordable water may be threatened.

7. Does the project employ new or innovative technologies or practices, including decision support tools that support the integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation?

Yes No If yes, please describe.

In recent years, stormwater capture and use is a heavy focus of the San Diego IRWM Program. The San Diego Region Stormwater Capture and Use Feasibility Study was released in November 2018 to determine how to capture stormwater capture and use throughout the County. This project directly implements recommendations from the feasibility study at the SEWRF.

8. If the project provides benefits (75% by population or geography) to a DAC, explain the need of the DAC and how the project will address the described need. Explain how the area/community meets the definition of a DAC.

The project does not provide benefits to a 75% DAC population. Only 3% of the population within San Elijo JPA's service area is considered a DAC/EDA.

Project Information Form (PIF)

9. If the project provides benefits (75% by population or geography) to an EDA, explain the need of the EDA and how the project will address the described need. Explain how the area/community meets the definition of an EDA.

The project does not provide benefits to a 75% EDA population. Only 3% of the population within San Elijo JPA's service area is considered a DAC/EDA.

10. If the project provides benefits (75% by population or geography) to a Tribe or a Tribe is the sponsor of the project, explain the need of the Tribe and how the project will address the described need.

N/A - Project does not benefit a Tribe.

11. Does the project sponsor have legal access rights, easements, or other access capabilities to the property to implement the project?

- Yes If yes, please describe.
 NA If NA, please describe why physical access to a property is not needed.
 No If no, please provide a clear and concise narrative with a schedule to obtain necessary access.

Land and Purchase Easement will not be required for this project. The SEWRF is owned and operated by San Elijo JPA, and The Nature Collective already has access to the Lagoon for field trips.

Project Information Form (PIF)

E. ENVIRONMENTAL

1. Please fill out the CEQA Timeline Table below, if applicable:

Table 4 - CEQA Timeline		
CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	N/A	-
Notice of Preparation	N/A	-
Draft EIR/MND/ND	N/A	-
Public Review	N/A	-
Final EIR/MND/ND	No	6/1/2020
Adoption of Final EIR/MND/ND	No	6/29/2020
Notice of Determination	No	6/30/2020

a. If additional explanation or justification of the timeline is needed, please describe below (optional).

CEQA for Preliminary Treatment Upgrades was completed in May 2016 through an IS/MND, SCH #2016021055, May 2016. No legal challenges for the Preliminary Treatment Upgrades IS/MND were received. The CEQA Timeline Table above reflects the expected Desilting Basins & Pumping System timeline for an addendum to the Preliminary Treatment Upgrades CEQA document, currently underway. Estimated completion is June 2020.

2. Permit Acquisition Plan:

List all permits needed to complete the project. If the project does not provide benefits to a DAC, EDA, or Tribe (min 75%), all permits needed to begin construction must be acquired within 12 months of Final Award.

No.	Type of Permit	Permitting Agency	Date Acquired or Anticipated
1.	Streambed Alteration Agreement	CA Department of Fish and Wildlife	6/30/2020
2.			
3.			
4.			
5.			
6.			
n.			

For each permit not yet acquired, describe the following:

No.	a. Actions taken to date (include dates of any key meetings, consultations, submittals, etc.)	b. Any issues or obstacles that may delay acquisition of permit
1.	Development of project scope, consultation with environment	N/A
2.		
3.		
4.		
5.		
n.		

Project Information Form (PIF)

3. Permitting Checklist: This checklist is provided as a courtesy for documentation purposes. Not all permits which may apply are listed. (Required for Pre-Application Material Submittal; not required for Final Application Submittal)

a. Does the project involve any activities that may affect federally or state listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area? (i.e. Federal Endangered Species Act Section 7 Consultation and Incidental Take Authorization and Section 10 Incidental Take Permit, California Endangered Species Act Permit, and/or ESA & CESA Consistency Determination)

Yes No If yes, please explain:

N/A

b. Would the proposed project work in, over, or under navigable waters of the US or discharge dredged or fill material in waters of the US? (i.e. Rivers & Harbors Act Section 10 Permit and/or Clean Water Act Section 404 Permit)

Yes No If yes, please explain:

N/A

c. Will the proposed project have the potential to affect historical, archaeological, or cultural resources? (i.e. National Historic Preservation Act and/or State Historic Preservation Officer Consultation)

Yes No If yes, please explain:

N/A – the project will be constructed within previously disturbed areas and not expected to affect historical, archaeological, or cultural resources, consistent with the findings of the CEQA documentation.

d. Will the proposed project discharge into a water of the US? (i.e. Clean Water Act Section 401 and/or 404 Permit)

Yes No If yes, please explain:

The project will be constructed within and adjacent to a stormwater channel. SEJPA has open 401 and 404 permits, which will cover the work to be completed by this project.

Project Information Form (PIF)

e. Will the proposed project divert the natural flow of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

The Project would divert flows from a stormwater channel for treatment and recycling at the SEWRF. SEJPA has identified steps to obtain the Streambed Alteration Agreement and begun developing materials for the permit.

f. Will the proposed project change the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

The Project would construct a diversion basin in a stormwater channel to divert for treatment and recycling at the SEWRF. SEJPA has identified steps to obtain the Streambed Alteration Agreement and begun developing materials for the permit.

g. Will the proposed project use any material from the bed, channel, or bank of a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

Construction of the diversion basin may require the use of material from the bed, channel, or bank of the stormwater channel. SEJPA has identified steps to obtain the Streambed Alteration Agreement and begun developing materials for the permit.

h. Will the proposed project deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake? (i.e. Lake or Streambed Alteration Agreement)

Yes No If yes, please explain:

N/A

i. For water supply projects, do you need to obtain a water right? (Water Rights Permit)

Yes No If yes, please explain:

N/A

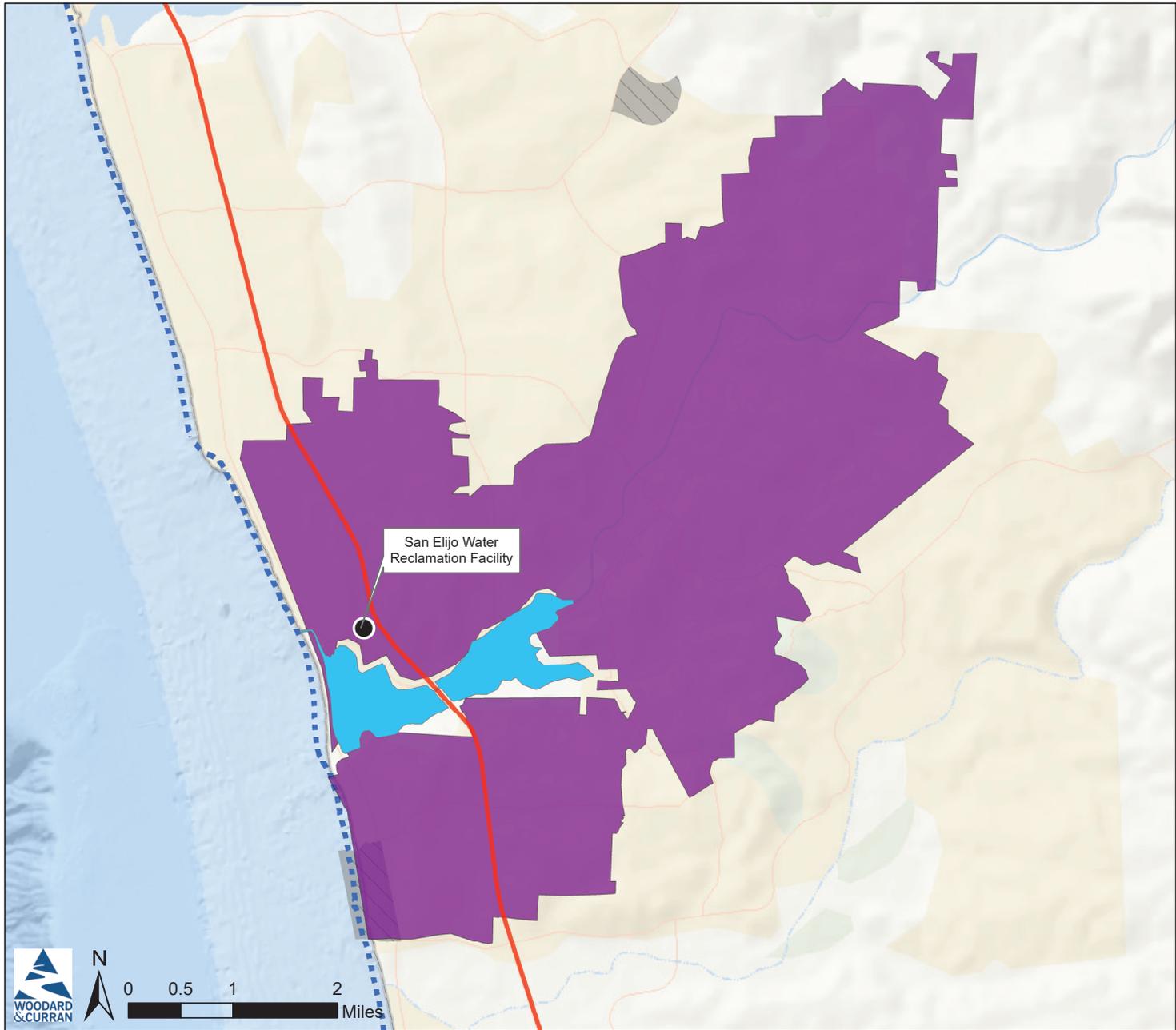
Project Information Form (PIF)

j. Is the proposed project within the defined coastal zone? (Coastal Development Permit)

Yes No

If yes, please explain:

N/A



IRWM Proposition 1 Round 1 2019 Implementation Grant

San Elijo Stormwater Capture & Reuse

San Elijo Joint Powers Authority

Legend

- San Elijo Stormwater Capture & Reuse
- San Elijo JPA Service Area
- San Elijo Lagoon
- Highways
- Prop 1 San Diego Sub-Region Funding Area
- - - SDIRWM Region
- ▨ Disadvantaged Community
- ▨ EDA: < 85% CA. MHI, Pop <= 20K with Local Financial Hardship



*Note: DAC as determined by census tract and block group data for the year 2016, from the American Community Survey 2012-2016 5-year results. DAC determined based on definition of median household incomes below 80% of statewide MHI or \$51,026