



NORTH COAST RESOURCE PARTNERSHIP 2018/19 IRWM Project Application

The North Coast Resource Partnership (NCRP) 2018/19 Project Application Instructions and additional information can be found at the NCRP 2018/19 Project Solicitation webpage (<https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/>). Please fill out grey text boxes and select all the check boxes that apply to the project. Application responses should be clear, brief and succinct.

Project Applications will be accepted until 5:00 pm, March 8, 2019 March 15, 2019. It is important to save the application file with a distinct file name that references the project name. When the application is complete, please email to kgledhill@westcoastwatershed.com

If you have questions, need additional information or proposal development assistance please contact:

- Katherine Gledhill at kgledhill@westcoastwatershed.com or 707.795.1235
- Tribal Projects: Sherri Norris, NCRP Tribal Coordinator at sherri@cieaweb.org or 510.848.2043

Project Name: ONSITE EMERGENCY POWER SUPPLY FOR SANITARY SEWER LIFT STATIONS

A. ORGANIZATION INFORMATION

- 1. Organization Name: County Service Area No. 1**
- 2. Contact Name/Title**
Name: Rosanna Bower
Title: Assistant County Engineer
Email: rbower@co.del-norte.ca.us
Phone Number (include area code): 707-464-7229
- 3. Organization Address (City, County, State, Zip Code):**
981 H Street, Suite 110; Crescent City, CA 95531

4. Organization Type

- ☒ Public agency
☐ Non-profit organization
☐ Public utility
☐ Federally recognized Indian Tribe
☐ California State Indian Tribe listed on the Native American Heritage Commission's California Tribal Consultation List
☐ Mutual water company
☐ Other:

5. Authorized Representative (if different from the contact name)

Name: Heidi Kunstal

Title: CDD Director

Email: hkunstal@co.del-norte.ca.us

Phone Number (include area code): 707-464-7254

6. Has the organization implemented similar projects in the past? ☒ yes ☐ no

Briefly describe these previous projects.

New pumps, motors, pulleys, valves, and incidental piping have been installed at 10 lift stations, SCADA (remote monitoring) will be installed by the end of 2020 at all 15 lift stations. Onsite emergency power at 11 lift stations is the remaining concern.

7. List all projects the organization is submitting to the North Coast Resource Partnership for the 2018/19 Project Solicitation in order of priority.

Onsite Emergency Power Supply for Sanitary Sewer Lift Stations

8. Organization Information Notes:

B. ELIGIBILITY

1. North Coast Resource Partnership and North Coast IRWM Objectives

GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT

☒ Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation

☒ Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation

☒ Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

GOAL 2: ECONOMIC VITALITY

☒ Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing

☒ Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT

☒ Objective 6 – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity

☒ Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

GOAL 4: BENEFICIAL USES OF WATER

☒ Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, and recreational uses while minimizing impacts to sensitive resources

☒ Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities

☒ Objective 10 - Protect groundwater resources from over-drafting and contamination

GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE

☒ Objective 11 - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health

☒ Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

GOAL 6: PUBLIC SAFETY

☒ Objective 13 - Improve flood protection and reduce flood risk in support of public safety

2. Does the project have a minimum 15-year useful life?

☒ yes ☐ no

If no, explain how it is consistent with Government Code 16727.

3. Other Eligibility Requirements and Documentation

CALIFORNIA GROUNDWATER MANAGEMENT SUSTAINABILITY COMPLIANCE

a) Does the project that directly affect groundwater levels or quality?

☐ yes ☒ no

b) If Yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?

☐ yes ☐ no

CASGEM COMPLIANCE

a) Does the project overlie a medium or high groundwater basin as prioritized by DWR?

☐ yes ☒ no

b) If Yes, list the groundwater basin and CASGEM priority:

c) If Yes, please specify the name of the organization that is the designated monitoring entity:

d) If there is no monitoring entity, please indicate whether the project is wholly located in an economically disadvantaged community.

☒ yes ☐ no

URBAN WATER MANAGEMENT PLAN

- a) Is the organization required to file an Urban Water Management Plan (UWMP)?
☐ yes ☒ no
- b) If Yes, list the date the UWMP was approved by DWR:
- c) Is the UWMP in compliance with AB 1420 requirements?
☐ yes ☐ no
- d) Does the urban water supplier meet the water meter requirements of CWC 525?
☐ yes ☐ no
- c) If Yes, will the organization be able to provide compliance documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

AGRICULTURAL WATER MANAGEMENT PLAN

- a) Is the organization – or any organization that will receive funding from the project – required to file an Agricultural Water Management Plan (AWMP)?
☐ yes ☒ no
- b) If Yes, list date the AWMP was approved by DWR:
- c) Does the agricultural water supplier(s) meet the requirements in CWC Part 2.55 Division 6?
☐ yes ☐ no

SURFACE WATER DIVERSION REPORTS

- a) Is the organization required to file surface water diversion reports per the requirements in CWC Part 5.1 Division 2?
☐ yes ☒ no
- d) If Yes, will the organization be able to provide SWRCB verification documentation outlined in the instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?
☐ yes ☐ no

STORM WATER MANAGEMENT PLAN

- a) Is the project a stormwater and/or dry weather runoff capture project?
☐ yes ☒ no
- b) If yes, does the project benefit a Disadvantaged Community with a population of 20,000 or less?
☐ yes ☐ no
- e) If No, will the organization be able to provide documentation that the project is included in a Stormwater Resource Plan that has been incorporated into the North Coast IRWM Plan, should the project be selected as a Priority Project?
☐ yes ☒ no

C. GENERAL PROJECT INFORMATION

1. Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations

2. Eligible Project Type under 2018/19 IRWM Grant Solicitation

- ☐ Water reuse and recycling for non-potable reuse and direct and indirect potable reuse
- ☐ Water-use efficiency and water conservation
- ☐ Local and regional surface and underground water storage, including groundwater aquifer cleanup or recharge projects
- ☐ Regional water conveyance facilities that improve integration of separate water systems
- ☒ Watershed protection, restoration, and management projects, including projects that reduce the risk of wildfire or improve water supply reliability
- ☐ Stormwater resource management projects to reduce, manage, treat, or capture rainwater or stormwater
- ☐ Stormwater resource management projects that provide multiple benefits such as water quality, water supply, flood control, or open space
- ☐ Decision support tools that evaluate the benefits and costs of multi-benefit stormwater projects
- ☐ Stormwater resource management projects to implement a stormwater resource plan
- ☐ Conjunctive use of surface and groundwater storage facilities
- ☐ Decision support tools to model regional water management strategies to account for climate change and other changes in regional demand and supply projections
- ☒ Improvement of water quality, including drinking water treatment and distribution, groundwater and aquifer remediation, matching water quality to water use, wastewater treatment, water pollution prevention, and management of urban and agricultural runoff
- ☒ Regional projects or programs as defined by the IRWM Planning Act (Water Code §10537)
- ☐ Other:

3. Project Abstract

Provide onsite emergency power at 11 lift station locations throughout the CSA protecting public health and safety, and avoiding impacts to water quality and sensitive habitats by substantially decreasing the potential for sanitary sewer overflows (SSOs). A map of all 15 CSA lift stations has been included with the application. The CSA serves the urban unincorporated Crescent City area or a total of about 3,500 equivalent single-family connections.

4. Project Description

The CSA has a total of 15 lift stations. Eleven of the lift stations do not have an onsite emergency power source which will be corrected system wide by this project. Generators will have an automated response to power failures protecting public health and safety, and avoiding impacts to water quality and sensitive habitat by substantially decreasing the potential for SSOs.

Five lift stations have existing onsite generators in the event of power failure, these include: Elk Valley, Hodge, Northcrest, Roy, and Olive. The Elk Valley, Hodge, and Northcrest generators are relatively new, protected, and function reliably. The Roy generator is near the end of its useful life. The Olive generator has failed and is budgeted for replacement in 2019. In the interim, a portable generator requiring frequent restarts during use is permanently affixed to the station due to the single-phase power; all other CSA lift stations are on three-phase power. This project will replace the existing fixed generator at the Roy lift station and protect the replacement generator with a structure.

Two lift stations have auxiliary motors, these include: Walmart and Pebble Beach. Auxiliary motors allow the same one of two pumps to run during a power failure. Since power failures commonly coincide with high inflow and infiltration rates and there is an inability to switch the auxiliary motor to the second pump redundancy and capacity are lacking during a power failure. The auxiliary motors were installed in the

late 1980s and are near the end of their useful life. This project includes fixed generators and generator structures at the Walmart and Pebble Beach lift stations.

Eight lift stations have no onsite generator in the event of power failure. Currently, emergency power is obtained from unreliable portable generators at or near the end of their useful life. The CSA uses 5 portable generators to service these lift stations, but only 4 of the portable generators are owned by the CSA; 1 of the generators belongs to the City of Crescent City with no obligation or guarantee it will remain available for the benefit of the CSA; it is the backup generator for the City's WWTP and is only available for use at the lift stations when power is not out at the WWTP. 3 of the CSA generators were purchased about 40 years ago, are unreliable, and it is difficult to obtain parts. 1 of the CSA generators was purchased in the late 2000s and is reliable with parts readily available. The CSA is making critical decisions regarding generator replacement with very limited resources. The CSA has considered replacing the portable generators with both portable generators and fixed generators. The upfront costs of purchasing fewer portable generators appears less than several fixed generators with protective structures. However, the long term benefit of fixed generators appears greater with one backup portable generator on hand. Benefits of fixed generators are included in the "Specific Project Goals/Objectives" section of this application. This project includes a fixed generator and generator structure at the Burtschell, Oregon, Pacific, Seawood, Modoc, Madison, Small, and Tedsen lift stations.

5. Specific Project Goals/Objectives

Goal 1: Protect water quality and public health by reducing potential for sanitary sewer overflows (SSO).

Goal 1 Objective: Install onsite emergency power at all CSA lift stations that do not currently have emergency power.

Goal 1 Objective: Eliminate the need for 3 unreliable portable generators to be transported between 11 dispersed lift stations during power outages. Eliminate the need to borrow portable generators from the City.

Goal 1 Objective: Reduce the need for staff to work in inclement weather, at any hour of the day, and without the ability to anticipate relief.

Goal 1 Objective: Prepare for the potential routine shutoff of power in response to recent wildfires caused by charged power lines and wind.

Goal 1 Objective: Eliminate the inability for emergency power to reach lift stations during power outages when downed trees, flooding, and/or other hazards obstruct access.

Goal 1 Objective: Reduce the need for the only 2 sewage pumping trucks in the region to assist with preventing SSOs by pumping and transporting sewage.

Goal 2: Maximize life of generators and guarantee adequate fuel supply during power outages.

Goal 2 Objective: Install structures around generators to protect against loss caused by inclement weather and illegal activity.

Goal 2 Objective: Install fuel tanks to serve generators.

Goal 2 Objective: Install transfer switches to transfer between primary and secondary power sources.

Goal 2 Objective:

Goal 3: Improve safety in the work place and maximize staff availability during power outages.

Goal 3 Objective: Reduce the need to handle high voltage power during power outages, inclement weather, and in the dark.

Goal 3 Objective: Eliminate routine staffing obligations during power outages.

Goal 3 Objective: Reduce exhaustion associated with the unpredictable nature of power outages including callouts, inclement weather, and unknown duration.

Additional Goals & Objectives (List)

Reduce requests for the only 2 sewage pumping trucks available between Del Norte County, CA and Curry County, OR. Currently, the regional demand for trucks exceeds their availability. During this last storm, February 2019, the CSA requested a truck from Humboldt County and they were unable to reach the CSA since US Highway 101 closed; this resulted in SSOs. Requesting a truck from Humboldt County usually happens after flows are already high and requires approval from the Curry County company since Del Norte County is in the Curry County service area. Additionally, the CSA must pay truck and driver time each way which is usually at least 4 hours of cost with no direct benefit to the CSA. Ultimately, it is expensive and inefficient.

6. Describe how the project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected.

This project, onsite emergency power supply, will reduce the number of SSOs that impact various sensitive and protected habitats. Impacts to surface water quality caused by SSOs affect the ability of the community to attract the financial benefits of recreational tourism. The economic benefits of North Coast working landscapes and natural areas will be conserved by reducing the number of SSOs. Additionally, reducing the number of SSOs that impact watershed and aquatic ecosystems, including functions, habitats, and elements to support biological diversity will be conserved and enhanced. Reducing SSOs that impact soil/surface water near lift stations will result in the protection of groundwater from future impact or contamination from SSOs which contain municipal and industrial wastewaters.

7. Describe the need for the project.

The CSA consists of economically disadvantaged communities (DACs). Due to its rural location and financial challenges, the CSA has unreliable emergency power for wastewater lift stations. The lack of reliable emergency power for wastewater lift stations impacts the economic vitality in a number of ways: causing the use of scarce financial/human resources to temporarily fix failing equipment while not having the resources to comprehensively address infrastructure needs; creating a situation where the community is subject to fines and regulatory actions (due to SSOs) that do not support the correction of the underlying problem; and impacts to water quality (wetlands, streams, estuaries, ocean) that affect the ability to attract the financial benefits associated with recreational tourism. Tourism, recreation, and natural resources based industries provide the foundation for the economy.

8. List the impaired water bodies (303d listing) that the project benefits:

N/A

9. Will this project mitigate an existing or potential Cease and Desist Order or other regulatory compliance enforcement action? ☐ yes ☒ no

If so, please describe?

10. Describe the population served by this project.

This project is 100% in a DAC/EDA. The majority of the project serves a SDAC including the Elk Valley Rancheria and the minority serves a DAC. The CSA does not agree with the data that shows portions of the CSA (south of Washington Boulevard and west of the Crescent City limits) are not an SDAC or DAC. In 2015, El Dorado Street from Pacific Avenue to Harding Avenue qualified for a Community

Development Block Grant project based on the very-low and low-moderate incomes of the community being served.

11. Does the project provide direct water-related benefits to a project area comprised of Disadvantaged Communities or Economically Distressed Communities?

- ☒ Entirely
- ☐ Partially
- ☐ No

List the Disadvantaged Community(s) (DAC)

Crescent City (unincorporated and incorporated)

12. Does the project provide direct water-related benefits to a project area comprised of Severely Disadvantaged Communities (SDAC)?

- ☐ Entirely
- ☒ Partially
- ☐ No

List the Severely Disadvantaged Community(s)

Crescent City (unincorporated and incorporated)

13. Does the project provide direct water-related benefits to a Tribe or Tribes?

- ☐ Entirely
- ☒ Partially
- ☐ No

List the Tribal Community(s)

Elk Valley Rancheria

If yes, please provide evidence of support from each Tribe listed as receiving these benefits.

Evidence of Support: The Elk Valley Rancheria provided the CSA with \$589,650 in US EPA funds to assist with the rehabilitation of 9 CSA lift stations in FY16/17; 7 of the rehabilitated lift stations would receive generators under this project.

14. If the project provides benefits to a DAC, EDA or Tribe, explain the water-related need of the DAC, EDA or Tribe and how the project will address the described need.

The water related needs of the DAC, EDA, and Tribe within the project area are the same. The CSA needs Onsite Emergency Power Supply for Sanitary Sewer Lift Stations to prevent SSOs which impact water quality and public health.

The Elk Valley Rancheria (Tribe) is served by the CSA. The Tribe has the same needs and priorities as the community at large for reliable sanitary sewer infrastructure to serve the Rancheria and tribal members. Recently, the Tribe contributed \$589,650 to assist with new pumps, motors, pulleys, valves, and incidental piping installed at 9 CSA lift stations. Onsite emergency power at 11 lift stations is the remaining concern.

15. Does the project address and/or adapt to the effects of climate change? Does the project address the climate change vulnerabilities in the North Coast region? ☒ yes ☐ no

If yes, please explain.

Climate change is forecast to result in more frequent storms with higher precipitation intensities directly affecting sanitary sewer lift stations by increasing inflow and infiltration. Storms are also expected to decrease the reliability of the conventional power grid. Hazardous conditions resulting from wind events along with anticipated flooding will decrease the reliability of human response. Providing reliable onsite emergency power should minimize SSOs.

16. Describe how the project contributes to regional water self-reliance.

The project reduces the potential for sanitary sewer overflows by providing onsite emergency power that starts automatically. SSOs contribute negatively to regional water self-reliance. Without this project the CSA will continue to rely on dated portable generators and on call manpower. Reliability of this method will continue to decrease as equipment ages, and storms continue to become more frequent and intense. Additionally, only 2 sewage pumping trucks are available between Del Norte County, CA and Curry County, OR; the licenses held by the drivers routinely limit their availability. Currently, the regional demand for trucks exceeds their availability. During this last storm, February 2019, the CSA requested a truck from Humboldt County and they were unable to reach the CSA since US Highway 101 closed; this resulted in SSOs. Requesting a truck from Humboldt County usually happens after flows are already high and requires approval from the Curry County company since Del Norte County is in the Curry County service area. Additionally, the CSA must pay truck and driver time each way which is usually at least 4 hours of cost with no direct benefit to the CSA. Ultimately, it is expensive and inefficient.

17. Describe how the project benefits salmonids, other endangered/threatened species and sensitive habitats.

The project benefits salmonids, other endangered/threatened species and sensitive habitats by avoiding SSOs which affect water quality and public health.

18. Describe local and/or political support for this project.

Nobody likes raw sewage where it should not be. Meaning, the community supports protection of natural resource and public health. The Sanitary Sewer Master Plan for the CSA places a very high priority on minimizing sanitary sewer overflows (see 1.2 SSMP Goals attachment).

19. List all collaborating partners and agencies and nature of collaboration.

The CSA is responsible for this entire project since all lift stations are in the CSA. The Oregon Lift Station is shared between the City and CSA; 82% CSA responsibility and a 18% City of Crescent City responsibility. The Roy, Hodge, and Elk Valley Lift Station serve the Elk Valley Rancheria.

20. Is this project part or a phase of a larger project? ☒ yes ☐ no

Are there similar efforts being made by other groups? ☐ yes ☒ no

If so, please describe?

Over the past few years the CSA focused on lift station improvements to prevent SSOs. New pumps, motors, pulleys, valves, and incidental piping has been installed at 10 lift stations, SCADA (remote monitoring) will be installed by the end of 2020 at all 15 lift stations. Onsite emergency power at 11 lift stations is the remaining concern.

21. Describe the kind of notification, outreach and collaboration that has been done with the County(ies) and/or Tribes within the proposed project impact area, including the source and receiving watersheds, if applicable.

The CSA and Elk Valley Rancheria have been collaborating over the past few years. In FY16/17, the Elk Valley Rancheria provided the CSA with \$589,650 in US EPA funds to assist with the rehabilitation of 9 CSA lift stations; 7 of the rehabilitated lift stations will receive generators under this project.

22. Describe how the project provides a benefit that meets at least one of the Statewide Priorities as defined in the 2018 IRWM Grant Program Guidelines and Tribal priorities as defined by the NCRP?

This project will Make Conservation a California Way of Life, Protect and Restore Important Ecosystems, Provide Safe Water for All Communities, Increase Flood Protection, and Increase Operational and Regulatory Efficiency by substantially decreasing the likelihood of SSOs.

23. Project Information Notes:

D. PROJECT LOCATION

1. Describe the location of the project

Geographical Information

The location of each of the lift stations to be included in this project is as follows: Burtschell (41.770934, -124.195188), Oregon (41.771220, -124.201576), Pacific (41.758332, -124.215260), Seawood (41.767104, -124.217556), Modoc (41.764034, -124.218170), Madison (41.778161, -124.205910), Small (41.769061, -124.214483), Tedsen (41.769657, -124.190719), Roy (41.744779, -124.156609), Walmart (41.772945, -124.191400), Pebble Beach (41.763587, -124.228251)

2. Site Address (if relevant):

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

☒ Yes If yes, please describe

☐ No If No, please provide a clear and concise narrative with a schedule, to obtain necessary access.

☐ NA If NA, please describe why physical access to a property is not needed.

All improvements will be located in existing easements.

4. Project Location Notes:

E. PROJECT TASKS, BUDGET AND SCHEDULE

1. Projected Project Start Date: 3/1/20

Anticipated Project End Date: 3/31/23

2. Will CEQA be completed within 6 months of Final Award?

☐ Yes

State Clearinghouse Number:

- ☒ NA, Project is exempt from CEQA
- ☐ NA, Not a Project under CEQA
- ☒ NA, Project benefits entirely to DAC, EDA or Tribe, or is a Tribal local sponsor. [Projects providing a water-related benefit entirely to DACs, EDAs, or Tribes, or projects implemented by Tribes are exempt from this requirement].
- ☐ No

3. Please complete the CEQA Information Table below

Indicate which CEQA steps are currently complete and for those that are not complete, provide the estimated date for completion.

CEQA STEP	COMPLETE? (y/n)	ESTIMATED DATE TO COMPLETE
Initial Study	N/A	
Notice & invitation to consult sent to Tribes per AB52	N/A	
Notice of Preparation	N/A	
Draft EIR/MND/ND	N/A	
Public Review	N/A	
Final EIR/MND/ND	N/A	
Adoption of Final EIR/MND/ND	N/A	
Notice of Determination	N/A	
N/A - not a CEQA Project	Y	

If additional explanation or justification of the timeline is needed or why the project does not require CEQA, please describe.

The project is both Class 3 and Class 11 categorically exempt from CEQA.

4. Will all permits necessary to begin construction be acquired within 6 months of Final Award?

- ☒ Yes
- ☒ NA, Project benefits entirely to DAC, EDA, Tribe, or is a Tribal local sponsor
- ☐ No

5. PERMIT ACQUISITION PLAN

Type of Permit	Permitting Agency	Date Acquired or Anticipated
Building Permit	County of Del Norte	8/31/20

For permits not acquired: describe actions taken to date and issues that may delay acquisition of permit.
Plans must be prepared and a Building Permit Application submitted.

6. Describe the financial need for the project.

Each household (SFE) pays \$1,000 per year for sewer service. The CSA receives \$230K per year (\$75/SFE) in revenue for maintenance of 15 lift stations and over 32.5 miles of sanitary sewer mains. The remaining \$925/SFE is received by the City. The CSA expends about \$80K on power bills, \$80K on basic maintenance and emergency response, and \$70K on critical repairs annually. Grant funding is a very high priority to the CSA since the combined cost of sewer service is cumbersome for most CSA households, making a rate increase difficult to consider.

7. Is the project budget scalable? ☒ yes ☐ no

Describe how a scaled budget would impact the overall project.

The project can be scaled by lift station location. The CSA's priorities from highest to lowest are as follows: Burtschell, Oregon, Pacific, Seawood, Modoc, Madison, Small, Tedsen, Roy, Walmart, and Pebble Beach. The CSA would recommend Group 1 (Burtschell, Oregon, Pacific, Seawood, Modoc, Madison, Small, Tedsen) be funded as a base project since no onsite emergency power exists. If funding allows, fund Group 2 (Roy, Walmart, Pebble Beach) which replaces a dated fixed generator at Roy and auxiliary motors at Walmart and Pebble Beach which only allow one of the two pumps to operate during a power failure.

8. Describe the basis for the costs used to derive the project budget according to each budget category.

Direct Project Administration and Planning/Design/Engineering/Environmental Documentation costs are based on similar projects. No Land Purchase/Easement costs are anticipated.

Construction/Implementation costs are based on the compilation of quotes and previous projects.

9. Provide a narrative on cost considerations including alternative project costs.

Cost considerations included consistent equipment system wide, the upfront and long term costs of propane versus diesel generators, and constructing structures to protect equipment from weather and vandalism. The CSA did consider replacing existing portable generators which would be a comparable initial cost to fixed generators but over the life of the project would be significantly more expensive since annual permitting and manpower would be needed to operate in this capacity.

10. List the sources of non-state matching funds, amounts and indicate their status.

The CSA is not offering non-state matching funds for this project. Over the past few years the CSA has focused on lift station improvements to prevent SSOs. This has substantially burdened the CSA fund. New pumps, motors, pulleys, valves, and incidental piping has been installed at 10 lift stations, SCADA (remote monitoring) will be installed by the end of 2020 at all 15 lift stations. These improvements total \$1,507,000 with approximately \$692,000 being non-state funds. Onsite emergency power is the remaining concern.

11. List the sources and amount of state matching funds.

There are no state matching funds proposed.

12. Cost Share Waiver Requested (DAC or EDA)? ☒ yes ☐ no

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 water-related 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 that address a water-related need of a DAC/EDA.

Our project is 100% in a DAC/EDA. The majority of the project serves a SDAC including the Elk Valley Rancheria and the minority serves a DAC. The CSA does not agree with the data that shows portions of the CSA (south of Washington Boulevard and west of the Crescent City limits) are not an SDAC or DAC. However, it does not technically change the outcome of this item. In 2015, El Dorado Street from Pacific Avenue to Harding Avenue qualified for a Community Development Block Grant project based on the very-low and low-moderate incomes of the community being served.

13. Major Tasks, Schedule and Budget for NCRP 2018 IRWM Project Solicitation

Please complete MS Excel table available at <https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/>; see instructions for submitting the required excel document with the application materials.

14. Project Tasks, Budget and Schedule Notes:

F. PROJECT BENEFITS & JUSTIFICATION

1. Does the proposed project provide physical benefits to multiple IRWM regions or funding area(s)?

☐ yes ☒ no

If Yes, provide a description of the impacts to the various regions.

2. Provide a narrative for project justification. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits. List any studies, plans, designs or engineering reports completed for the project. *Please see the instructions for more information about submitting these documents with the final application.*

To avoid duplication, please read "Project Description" as it is quite relevant to this section.

Project benefits include Decreased Operation and Maintenance Costs, prevention of Loss of Wastewater Service, Social Health and Safety, and Avoided Public Water Resources Conflicts. Project benefits will be achieved through the prevention of SSOs. The CSA completed a Sewer System Management Plan (SSMP) in 2017; onsite emergency power is consistent with six of the ten goals included in the SSMP, see attachment.

Decreased Operation and Maintenance Costs are the average cost per year for overtime and double time worked by maintenance crews in the past 3.25 years. The CSA does not track time spent responding to power failures or cleaning up SSOs so assumptions were made. For this application, the CSA assumed that all overtime and double time work was related to power failures requiring generators and the cleanup of SSOs; and no straight time was related to power failures requiring generators even though power failures and cleanup of SSOs occurred during straight time too. The number is a reasonable baseline for benefit since the CSA does a lot of power failure response in dark winter weather. The 40 year timeline reflects current generators service life that is in excess of 40 years and very near the end of their useful life.

Prevention of Loss of Wastewater Service is critical. This past year the CSA has lost power system wide at least five times which is not uncommon. FEMA has quantified the loss of wastewater service costs at \$41 per person per day of lost service. Since the precise number of people the CSA serves is unknown, it is assumed to be 3 people per ESFC.

Additionally, there are Social Health and Safety concerns associated with the cleanup of SSOs on private properties and within structures. The CSA has replaced subfloors, floor coverings, cabinets, personal belongings, and provided temporary housing and meal vouchers as a result of SSOs occurring inside of structures. Another event caused an SSO to go through the middle of the yard of the winning Christmas decorating display of a residential community. And, another time the CSA didn't know about the SSO until a week after it occurred because the residents were on vacation. The prices vary substantially between fiscal years; the CSA estimates a cost of \$5,000 per event for abatement and temporary relocation assistance.

Avoided Public Water Resources Conflicts are quite difficult to quantify. Likely fines could be a basis for this component. However, the CSA was unable to determine what fines would be and have been fortunate to not have received any recently. Likely, \$10,000 per year in fines for SSOs associated with no emergency power system wide would not be an unreasonable expectation.

3. Does the project address a contaminant listed in AB 1249 (nitrate, arsenic, perchlorate, or hexavalent chromium)? ☐ yes ☒ no

If yes, provide a description of how the project helps address the contamination.

4. Does the project provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes consistent with AB 685? ☐ yes ☒ no

If Yes, please describe.

5. 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.

Each of the generators will be connected to the new SCADA (remote monitoring) system that will be installed by the end of 2020. The SCADA system integrates with the CSA and City of Crescent City and provides real time information regarding critical features of the station including power source, levels of wet well, pump run times, and other pertinent data.

6. For each of the Potential Benefits that the project claims complete the following table to describe an estimate of the benefits expected to result from the proposed project. [See the NCRP Project Application Instructions, Potential Project Benefits Worksheet and background information to help complete the table. The NCRP Project Application, Attachment B includes additional guidance, source materials and examples from North Coast projects.]

PROJECT BENEFITS TABLE

Potential Benefits Description	Physical Amt of Benefit	Physical Units	Est. Economic Value per year	Economic Units
Water Supply				
Water Quality				
Other Benefits				
Decreased Operation and Maintenance Costs	40	years	\$23,000/year	\$920,000
Community and Social Benefits				
Avoided Public Water Resources Conflicts	40	years	\$10,000/year	\$400,000
Social Health and Safety (1 event per year)	40	years	\$5,000/year	\$200,000
Prevention of "Loss of Wastewater Service" as quantified by FEMA	40	years	\$2,152,500/year	\$86,100,000
Climate Change Amelioration				

7. Project Justification & Technical Basis Notes:

The above table assumes a benefit of 40 years. The 40 year timeline reflects current generators service life that is in excess of 40 years and very near the end of their useful life.

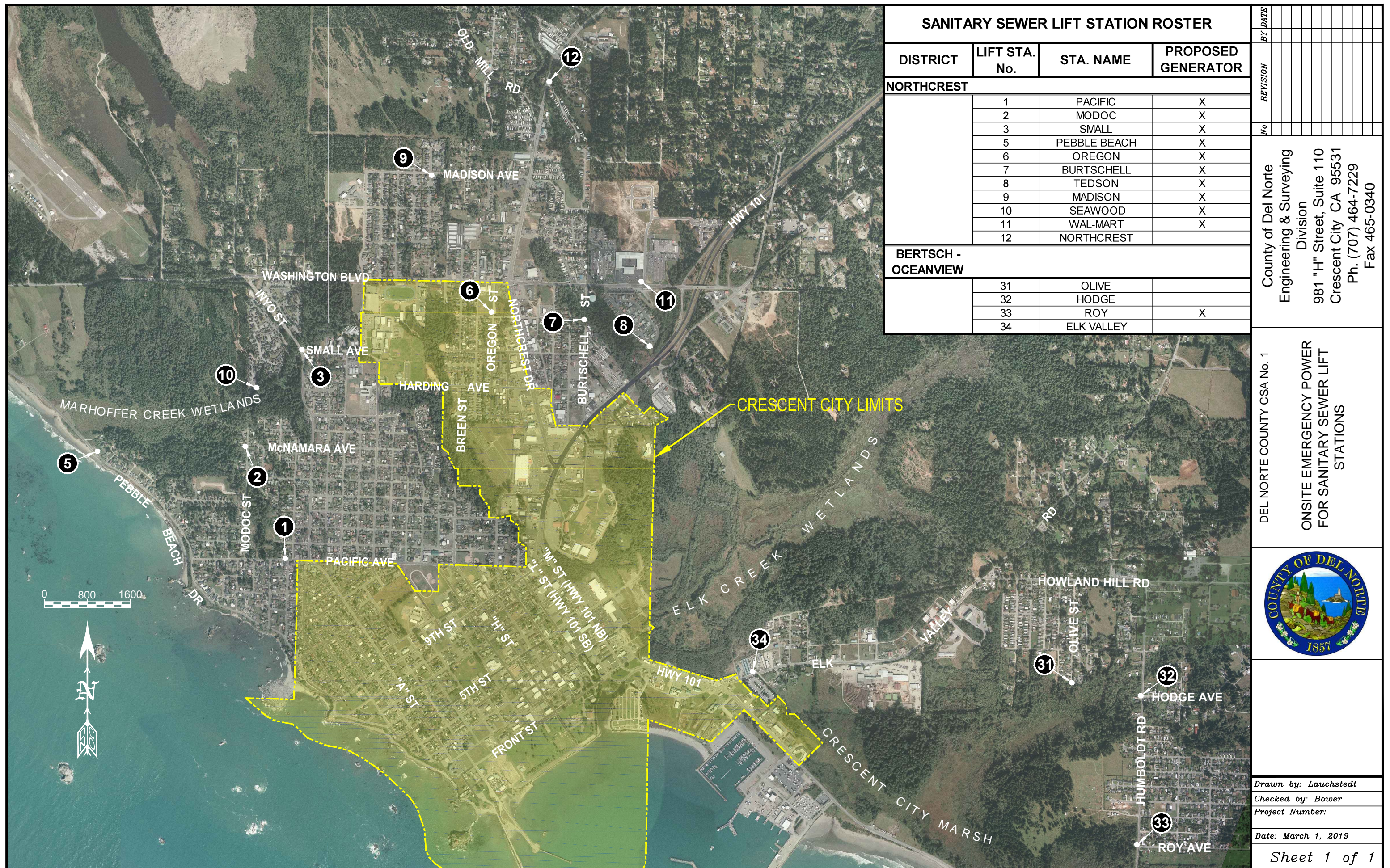
"Loss of Wastewater Service" has been quantified by FEMA, see Attachment. Here is the calculation:
 $(3,500 \text{ ESFC}) \times (3 \text{ PERSONS/ESFC}) \times (5 \text{ DAYS/YEAR WITH POWER OUTAGES}) \times (\$41/\text{PERSON/DAY}) =$
 $\$2,152,500/\text{YEAR}$ "Est. Economic Value per year." This past year the CSA had at least 5 power outages system wide which is reasonable annual average number. The CSA has at least 3,500 equivalent single-family connections (ESFC) served by the CSA and assumed 3 persons per connection.

Additional explanations for the above Project Benefits Table are in Section F, #2.

Major Tasks, Schedule and Budget for North Coast Resource Partnership 2018/19 IRWM Project Solicitation

Project Name: Onsite Emergency Power Supply for Sanitary Sewer Lift Stations
Organization Name: County Service Area No. 1

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
A Category (a): Direct Project Administration									
1	Administration	In cooperation with the County of Humboldt sign a sub-grantee agreement for work to be completed on this project. Develop invoices with support documentation. Provide audited financial statements and other deliverables as required.	Invoices, audited financial statements and other deliverables as required	0%	\$10,000.00	\$0.00	\$0.00	3/1/20	3/31/23
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	\$1,000.00	\$0.00	\$0.00	3/1/20	12/31/20
3	Labor Compliance Program	Execute service agreement with Labor Compliance Program company	Submission of Labor Compliance Program	0%	\$5,000.00	\$0.00	\$0.00	1/1/21	4/30/21
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	0%	\$2,500.00	\$0.00	\$0.00	3/1/20	3/31/23
B Category (b): Land Purchase/Easement									
1				0%	\$0.00	\$0.00	\$0.00	NA	NA
C Category (c): Planning/Design/Engineering/Environmental Documentation									
1	Final Design/Plans	Develop plans and specifications for the structure to protect generator, generator, and fuel source at each lift station.	Plans and Specifications	0%	\$12,000.00	\$0.00	\$0.00	6/1/20	12/31/20
2	Environmental Documentation: CEQA *	A Notice of Exemption was filed on February 19, 2019.	Notice of Exemption	100%	\$0.00	\$0.00	\$0.00	2/19/19	2/19/19
3	Permit Development *: Building Permit	A Building Permit is required from the Building Inspection Division of the County of Del Norte. The Building Permit will include the generator building, electrical connections and transfer switch, propane tank and connections, and mounting each generator at each station.	Building Permit	0%	\$4,400.00	\$0.00	\$0.00	9/1/20	12/31/20
D Category (d): Construction/Implementation									
1	Construction/Implementation Contracting	Bid project to obtain construction contractor(s). CSA may desire to split the project into three construction contracts: (1) generator structures, (2) fuel source, (3) generators.	Construction Contract(s)	0%	\$5,000.00	\$0.00	\$0.00	1/1/21	4/30/21
2	Mobilization and Site Preparation		Notice to Proceed	0%	\$50,000.00	\$0.00	\$0.00	5/1/21	12/31/21
3	Project Construction/Implementation: Generator Structures	Construct generator structure at each lift station.	Contractor Invoice(s)	0%	\$385,000.00	\$0.00	\$0.00	5/1/21	12/31/21
4	Project Construction/Implementation: Fuel Source	Place fuel source at each lift station.	Contractor Invoice(s)	0%	\$24,204.84	\$0.00	\$0.00	5/1/21	12/31/21
5	Project Construction/Implementation: Generators	Install generator and transfer switch at each lift station.	Contractor Invoice(s)	0%	\$532,125.00	\$0.00	\$0.00	5/1/21	12/31/21
6	Project Signage	Project will be at 11 lift station locations, the same sign will be moved amongst all locations.	Photo of Sign	0%	\$1,000.00	\$0.00	\$0.00	5/1/21	12/31/21
7	Project Close Out, Inspection & Demobilization	Inspect project components and establish that work is complete. Verify that all project components have been installed and are functioning as specified will be conducted as part of construction inspection and project closeout. Conduct project completion photo monitoring. Prepare record drawings.	As-Built and Record Drawings; Project completion site photos	0%	\$5,000.00	\$0.00	\$0.00	10/1/21	3/31/22
8	Project Performance Monitoring	The performance of the project will be monitored in accordance to the Monitoring Plan using the following measurement tools and methods: sanitary sewer overflows, power failure maintenance hours	Report of sanitary sewer overflows, and overtime/double time hours due to power failures over a twelve month pre-construction window versus a twelve month post-construction window.	0%	\$2,500.00	\$0.00	\$0.00	3/31/21	3/31/23
9	Construction Administration	Complete tasks necessary to administer construction contract. Keep daily records of construction activities, inspection, and progress. Conduct project construction photo-monitoring.	Construction Management Logs; Completed construction administration tasks documented in monthly progress reports	0%	\$37,125.00	\$0.00	\$0.00	5/1/21	3/31/22
Total North Coast Resource Partnership 2018/19 IRWM Grant Request					\$1,076,854.84	\$0.00	\$0.00		
Is Requested Budget scalable by 25%? If yes, indicate scaled totals; if no delete budget amount provided.					\$807,641.13	\$0.00	\$0.00		
Is Requested Budget scalable by 50%? If yes, indicate scaled totals; if no delete budget amount provided.					\$538,427.42	\$0.00	\$0.00		



COUNTY OF DEL NORTE COUNTY SERVICE AREA NO. 1 SEWER SYSTEM MANAGEMENT PLAN

Prepared for:
Del Norte County
Community Development Department
981 H Street, Suite 110
Crescent City, CA 95531

September 11, 2017

Prepared by:
Stan Thiesen and Orrin Plocher

of



Freshwater Environmental Services

78 Sunny Brae Center
Arcata, California 95521
Phone (707) 839-0091

Approved September 26, 2017 by Resolution No. 2017-049 of the Board of Directors of the County Service Area No. 1.

ELEMENT 1: GOALS

The intent of this section is to identify the goals that the CSA has established for its SSMP. These goals are intended to provide focus for CSA staff to continue proactive management of its wastewater collection system.

1.1 Regulatory Requirements for the Goals Element

The WDR requires that the SSMP goals focus on proper management, operation, and maintenance of all parts of the sanitary sewer system. This will help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that do occur.

1.2 SSMP Goals

The goals of the CSA's SSMP include:

- Maintaining or improving the condition of the collection system infrastructure in order to provide reliable services now and into the future;
- Cost-effectively minimizing infiltration/inflow (I/I) and provide adequate sewer capacity to accommodate design storm flows;
- Minimizing the number and impact of sanitary SSOs that occur;
- Preventing unnecessary damage to public and private property;
- Working cooperatively with local, state, and federal agencies to investigate the causes of, minimize, and mitigate the impacts of SSOs;
- Meeting all applicable regulatory notification and reporting requirements;
- Being available and responsive to the needs of the public to prevent and restore interruptions in service, and to minimize public health and property impacts related to SSOs;
- Implementing regular, proactive maintenance of the system to remove and control roots, debris, and fats, oils and grease (FOG) that may cause SSOs;
- Prioritizing renewal and replacement of wastewater collection system facilities to maximize their useful life and optimize capital expenditures; and
- Maintaining the SSMP, which will serve as a reference for the CSA's sanitary sewer system management practices.

Final

BCA Reference Guide

June 2009



FEMA

Federal Emergency Management Agency
Department of Homeland Security
500 C Street, SW
Washington, DC 20472

FEMA Standard Values for Loss of Service for Utilities

**Economic Impacts of Loss of Utility Services
Per Person per Day of Lost Service**

Loss of Electric Power	Cost of Complete Loss of Service
Total Economic Impact	\$126
Loss of Potable Water Service	Cost of Complete Loss of Service
Total Economic Impact (all hazards)	\$93
Loss of Wastewater Service	Cost of Complete Loss of Service
Total Economic Impact	\$41

FEMA Standard Values for Loss of Service for Roads/Bridges

**Economic Impacts of Loss of Road/Bridge Services
Per Vehicle per Hour of Lost Service**

Loss of Road/Bridge Service	Cost of Complete Loss of Service
Vehicle Delay Detour Time	\$38.15 (per vehicle, per hour)
Vehicle Delay Mileage	Use current Federal Mileage Rate (Current June '09 \$0..55)