

# 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 (<a href="https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/">https://northcoastresourcepartnership.org/proposition-1-irwm-round-1-implementation-funding-solicitation/</a>). 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 <a href="mailto:sherri@cieaweb.org">sherri@cieaweb.org</a> or 510.848.2043

**Project Name:** Weaverville Sanitary District Sewer Improvements Project

#### A. ORGANIZATION INFORMATION

1. Organization Name: Weaverville Sanitary District (District)

#### 2. Contact Name/Title

Name: Jim Cloud Title: Operator

Email: weavervillesd@yahoo.com

Phone Number (include area code): (530) 623-6529

#### 3. Organization Address (City, County, State, Zip Code):

Weaverville, Trinity County, CA, 96094

#### 4. Organization Type

Public agency

	<ul> <li>Non-profit organization</li> <li>Public utility</li> <li>Federally recognized Indian Tribe</li> <li>California State Indian Tribe listed on the Native American Heritage Commission's California Tribal</li> <li>Consultation List</li> <li>Mutual water company</li> <li>Other:</li> </ul>
5.	Authorized Representative (if different from the contact name) Name: Same as contact Title: Email: Phone Number (include area code):
6.	Has the organization implemented similar projects in the past? ☐ yes ☒ no Briefly describe these previous projects.  None
7.	List all projects the organization is submitting to the North Coast Resource Partnership for the 2018/19 Project Solicitation in order of priority.  Sewer Improvements Project
8.	Organization Information Notes: None
4	ELIGIBILITY  North Coast Resource Postpoughin and North Coast IRWM Chiestines
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

B.

	<ul> <li>☑ Objective 6 – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity</li> <li>☑ Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes</li> </ul>
	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?
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
	<ul> <li>b) If Yes, list the groundwater basin and CASGEM priority:</li> <li>c) If Yes, please specify the name of the organization that is the designated monitoring entity:</li> <li>d) If there is no monitoring entity, please indicate whether the project is wholly located in an economically disadvantaged community.</li> <li>yes  no</li> </ul>
	URBAN WATER MANAGEMENT PLAN
	a) Is the organization required to file an Urban Water Management Plan (UWMP)?

2.	Elig	gible 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
1.		NERAL PROJECT INFORMATION  Dject Name: Weaverville Sanitary District Sewer Improvements Project
		project be selected as a Priority Project?  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
	b)	If yes, does the project benefit a Disadvantaged Community with a population of 20,000 or less?  yes \sum no
		DRM WATER MANAGEMENT PLAN  Is the project a stormwater and/or dry weather runoff capture project?  yes  no
	-	Priority Project?  yes no
	d)	5.1 Division 2?  yes on no  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
		RFACE WATER DIVERSION REPORTS  Is the organization required to file surface water diversion reports per the requirements in CWC Part  5.1 Division 22
	b) c)	If Yes, list date the AWMP was approved by DWR:  Does the agricultural water supplier(s) meet the requirements in CWC Part 2.55 Division 6?  yes no
	aj	an Agricultural Water Management Plan (AWMP)?  yes \( \sum \) no
	AG a)	RICULTURAL WATER MANAGEMENT PLAN  Is the organization – or any organization that will receive funding from the project – required to file
	·	instructions, to include in the NCRP Regional Project Application should the project be selected as a Priority Project?  yes no
	c)	yes no If Yes, will the organization be able to provide compliance documentation outlined in the
	d)	yes no Does the urban water supplier meet the water meter requirements of CWC 525?
	c)	Is the UWMP in compliance with AB 1420 requirements?
	b)	If Yes, list the date the UWMP was approved by DWR:

C.

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

The District has identified 5 segments of the existing sewer collection system that are the most problematic and require significant effort to maintain. These areas of concern increase the difficulty of treatment due to infiltration and inflow (I&I) and may decrease the groundwater quality by introducing raw sewage to the surrounding groundwater. This project will rank the problematic areas and develop construction phases to implement replacement based upon ranking and funding availability.

#### 4. Project Description

The project will involve replacement of existing 6" sanitary sewer identified by the District as failing or problematic due to root balls or blockages. The problematic zones have been identified and ranked by the District in terms of greatest need as follows:

Zone 1. Lower Barbara - Pipe lining, pipe bursting, or open trench replacement of approximately 700 feet of existing 6" transite pipe installed in 1957. Frequent maintenance required to remove root balls or blockages.

Zone 2. Timber Ridge Rd. to Syphon - Pipe bursting or open trench replacement of approximately 800 feet of existing 6" transite pipe installed circa 1970. Frequent maintenance required to remove root balls or blockages.

Zone 3. Upper Timber Ridge Rd. and Meadow Ln. - Pipe bursting or open trench replacement of approximately 2200 feet of existing 6" transite pipe installed circa 1970. Frequent maintenance required to remove root balls or blockages.

Zone 4. Easter Ave. - Pipe bursting or open trench replacement of approximately 2700 feet of existing 6" transite pipe installed in 1957. Frequent maintenance required to remove root balls or blockages.

Zone 5. Ridge Rd. - Pipe bursting or open trench replacement of approximately 1900 feet of existing 6" transite pipe installed in 1957. Frequent maintenance required to remove root balls or blockages.

Please see Attachment 1 for a map of the existing sanitary sewer system with the zones described above identified.

The project addresses the critical needs of the state and local region by facilitating ecosystem restoration and enhancement, improvement of economic vitality for the district, and protection of public health. Please see Table 1 for total project cost and Table 2 for Phase 1 project cost including Zones 1-3 in Attachment 4.

#### 5. Specific Project Goals/Objectives

Goal 1: Ecosystem restoration and enhancement

Goal 1 Objective: Reduce I&I, allowing the groundwater to recharge aquifers and feed local streams.

Goal 1 Objective: Goal 1 Objective: Goal 1 Objective:

Goal 2: Improve economic vitality for the District Goal 2 Objective: Reduce emergency labor costs. Goal 2 Objective: Improve personnel utilization.

Goal 2 Objective: Reduced I&I will likely reduce wastewater treatment costs.

Goal 2 Objective:

Goal 3: Protect public health

Goal 3 Objective: Prevent sanitary sewer overflows into nearby streams and drainages.

Goal 3 Objective: Goal 3 Objective:

Additional Goals & Objectives (List)

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

The project adresses the NCRP and the North Coast IRWM Plan Goals and Objectives in the following ways:

- 1. This project addresses Phase III Goal 1: Intraregional Cooperation & Adaptive Management Objective-1 by actively working with the District to establish the need and scope for this project.
- 2. This project addresses Phase III Goal 2: Economic Vitality Objective-3 by helping to reduce the financial burden of O&M required to maintain the failing zones of the collection system, as well as minimizing unnecessary treatment costs due to I&I.
- 3. This project addresses Phase III Goal 3: Ecosystem Conservation & Enhancement Objectives-5 & 6 by reducing the probability of sewer overflows that may pollute surrounding watersheds. Additionally the reduction of I&I will allow more clean groundwater to migrate to its natural aquifers and watersheds instead of infiltrating into the sanitary sewer where it requires additional energy to be treated and discharged.

#### 7. Describe the need for the project.

The District's staff is very limited, and the failing sewer collection zones identified in the project description utilize a large amount of man hours to maintain. This project will provide significant benefit to the District by reducing the amount of sewer blockages and repairs needed in these critical locations. The District will then be able to utilize labor to other projects and maintenance that have been deferred because of the failing system zones. During wet weather, the District experiences a Peak Wet Weather Flow of approximately five times their normal flows due in part to I&I from the identified failing zones. Reducing I&I from these zones will minimize the unnecessary treatment thus improving treatment efficiency and groundwater quantity and quality.

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

The Trinity River is listed as an impaired water body. The reduced potential for sanitary sewer overflows and leaks into groundwater will protect the Trinity watershed to Weaver Creek, which is a tributary to the Trinity River. Multiple IRWM regions are located along the Trinity River and would be negatively impacted by decreased water quality of the river.

	impacted by decreased water quality of the river.
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.  The community of Weaverville is identified as a Severely Disadvantaged Community (SDAC) with a mean household income of less than \$38,270, see Attachment 2 - Weaverville SDAC Map.
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) Weaverville, CA
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) Weaverville, CA
13.	Does the project provide direct water-related benefits to a Tribe or Tribes?  •

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

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.  Replacement of the failing sanitary sewer zones will reduce the potential for sanitary sewer overflows and exfiltration, which have the potential to degrade groundwater and surface water quality.
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?
16.	<b>Describe how the project contributes to regional water self-reliance.</b> By improving existing quantity and quality of water supplies in the region, the community will be more independent and better protected against water scarcity in the future.
17.	Describe how the project benefits salmonids, other endangered/threatened species and sensitive habitats.  The Trinity River flows into the Klamath River, which enters the ocean in an area of Special Biological Significance. Reduced potential for sanitary sewer overflows and leakages will protect the Trinity River water quality from adversely affecting this biological area.
18.	Describe local and/or political support for this project.  No public outreach has been done at this time; however, this project will allow the District to avoid significant capital costs and lending costs to complete these projects on their own. These costs would need to be passed to the customers in the form of rate increases. Grant funding of this project will help the District avoid significant rate increases for its SDAC.
19.	List all collaborating partners and agencies and nature of collaboration. $\ensuremath{\text{N/A}}$
20.	Is this project part or a phase of a larger project?
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.  None at this time.
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 provides a benefit for Statewide Priority #5 by reducing I&I to ensure groundwater is able to recharge aquifers and watersheds instead of being contaminated by wastewater.

The proposed project also meets Statewide Priority Action #1, in that the proposed project will result in energy conservation by minimizing treatment of unnecessary I&I; Statewide Priority Action #4, in that possible sources of contamination to existing water supplies will be minimized, thus being more prepared for the next drought that occurs by maximizing the quality and quantity of all available water sources; and Statewide Priority Action #7, in that the proposed project will allow the District to contintue to provide safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes to its customers by minimizing possible sources of contamination.

23.	Project Information Notes: None
	PROJECT LOCATION
1.	Describe the location of the project Geographical Information The District services an area of approximately 10 square miles and is located at Latitude of 40° 43′ 33″ and Longitude of 122° 56′ 06″ (NAD83 UTM: 10 0505604E 4508228N).
2.	Site Address (if relevant): N/A, see Attachment 1.
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. It is not clear at this time if the District has an existing easement to access and maintain the sanitary sewer line in Zone 1. The District is researching their records to confirm at this time. Costs have been included in the cost estimate to acquire easements if there is no existing easement.
4.	Project Location Notes: None
	PROJECT TASKS, BUDGET AND SCHEDULE
1.	Projected Project Start Date: 3/1/20 Anticipated Project End Date: 10/31/21
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

D.

E.

<ul><li>NA, Project benefits entirely to DAC, EDA water-related benefit entirely to DACs, EDAs, from this requirement].</li><li>No</li></ul>	or Tribes, or projects			
<ol> <li>Please complete the CEQA Information Table Indicate which CEQA steps are currently com- estimated date for completion.</li> </ol>		at are not complete,	provide the	
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	N/A			
If additional explanation or justification of the timeling please describe.  The project consists of categorically exempt improved District will be the lead agency and file a categorical ecompleted within two months of award of funding.  4. Will all permits necessary to begin construct  Yes  NA, Project benefits entirely to DAC, EDA,  NO  5. PERMIT ACQUISITION PLAN	ments for replacement exemption with the sta	t of existing infrastrute clearinghouse. The	cture. The nis will be	
Type of Permit	Permitting Agency		Date Acquired or Anticipated	
Encroachment Permit	Trinity County		3/1/21	
2.13.000	······································		-/-/	
	<u> </u>			

For permits not acquired: describe actions taken to date and issues that may delay acquisition of permit. The contractor will be responsible for acquiring the encroachment permit prior to start of construction. No issues are anticipated that would delay this.

6	<b>Describe</b>	the	financial	need fo	or the	nroject
ο.	Describe	uie	IIIIaiiciai	neeu n	oi tile	DI DIECL.

As discussed earlier, the District is located entirely in an SDAC according to the DAC Mapping Tool provided by DWR and included as Attachment 2. All phases of the proposed project are estimated to cost approximately \$2.6 million. If grant funding is not obtained, a 100% loan at 2.5% interest over 40 years would result in a yearly cost increase for the District of \$113,900. These costs would need to be passed along to the customers.

7. Is the project budget scalable? yes no

Describe how a scaled budget would impact the overall project.

The project is broken into five discrete zones and two phases. Phase 1 of the project consists of design of all five zone improvements and construction implementation of Zones 1-3. If costs are too high to implement Zone 3 in Phase 1, Zone 3 can be shifted to Phase 2 for the next round of construction implementation funding.

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

Derived budget costs for the proposed project are based on planning, design, and construction costs from similar prevailing wage rate public works projects that have been recently bid and constructed in the north state incremented up by the ENR Construction Cost Index to reflect present industry costs. Costs included are for open-cut or trenchless installation of new wastewater mains and appurtenances based on average market value and equal those required by prevailing wage.

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

Project phases will try to address as many zones as possible within funding limits. Cost considerations in final design will consider trenchless methods such as slip lining or pipe bursting to reduce costs especially in Zone 1 where the existing piping alignment is within customer yards and replacing fencing and landscaping can be expensive and problematic.

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

N/A

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

N/A

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. The project is located completely within an SDAC. The median household income (MHI) of the community of Weaverville is less than \$38,270. As stated earlier, the project will reduce the potential for sanitary sewer overflows and will reduce I&I. Reduced I&I will allow groundwater to replenish natural aquifers and the Trinity watersheds in the region. Reduced sanitary sewer overflows and leakages protect the Trinity watershed and reduce risks to public water supplies and public health.

13.	Major Tasks, Schedule and Budget for NCRP 2018 IRWM Project Solicitation
	Please complete MS Excel table available at <a href="https://northcoastresourcepartnership.org/proposition-1-">https://northcoastresourcepartnership.org/proposition-1-</a>
	<u>irwm-round-1-implementation-funding-solicitation/</u> ; see instructions for submitting the required excel
	document with the application materials.
14.	Project Tasks, Budget and Schedule Notes:
	None
	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.
	The reduced potential for sanitary sewer overflows and leakages will protect the Trinity watershed to
	Weaver Creek, which is a tributary to the Trinity River. Multiple IRWM regions are located along the
	Trinity River and would be negatively impacted by decreased water quality of the river. Improving the
	collection system of Weaverville Sanitary System is one small contribution to ensuring this wild and scenic river is protected for the benefit of all downstream users.
	scenic river is protected for the benefit of all downstream users.
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.
	The 1989 Master Sewer Plan for the Weaverville Sanitary District identifies an excessive amount of
	ground and surface water I&I due to leakage in the piping system, and some of the larger sewers
	operate at maximum capacity during intense wet weather periods when the ground tends to be saturated, see Attachment 3. Identification and correction of some sources for I&I have been corrected
	since the Master Plan was issued, but replacement of these main sections will greatly contribute to
	reduction of the leakage and I&I identified in the Master Plan.
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.
	Reduced potential for sanitary sewer overflows and leakages will protect the Trinity watershed from
	nitrate and potentially other listed constituents that are common components of sanitary sewer flows.
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.
	The proposed project will minimize a source of contamination to groundwater and surface water
	supplies, thus resulting in improved water quality adequate for human consumption, cooking, and
	sanitary purposes.
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?

F.

If Yes, please describe.

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				
Increased water supply reliability	1,828	connections	\$42,958	\$23.50/ connection
Water Quality				
Reduced potential of Nitrate contamination	6	breaks/yr	See Item 7 below	
Reduced potential of BOD contamination	6	breaks/yr	See Item 7 below	
Reduced potential of turbidity contamination	6	breaks/yr	See Item 7 below	
Other Ecosystem Service Benefits				
	T		T	T
Other Benefits	T		Τ,	Ι
Reduced emergency blockage removals	24	labor-hrs/yr	\$4,800	\$200/hr
Social Health and Safety	3,600	people	See Item 7 below	
Reduced wastewater treatment costs	3,600	kW-hr/yr	\$540	\$0.15/kW-hr

7. Project Justification & Technical Basis Notes:

Failing sanitary sewers not only allow I&I into the sewers, but also can result in contaminants leaching out of the sewers. Additionally, sewer blockages can result in overflows into surrounding surface waters. Reducing contamination to the surrounding groundwater and surface water ensures the social health and safety of the public which cannot be monetized.

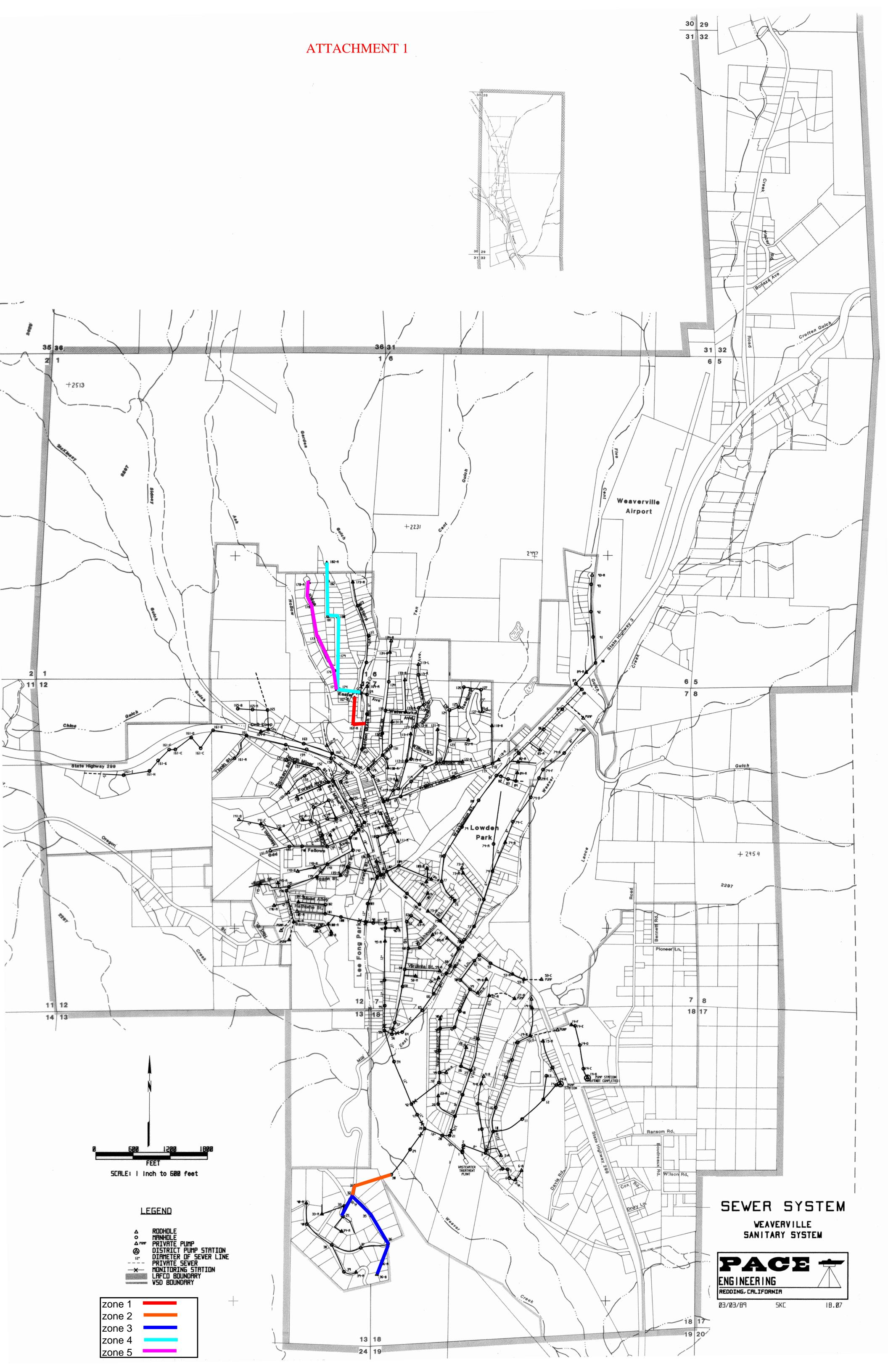
#### Major Tasks, Schedule and Budget for North Coast Resource Partnership 2018/19 IRWM Project Solicitation

Project Name: Sewer Improvements Project

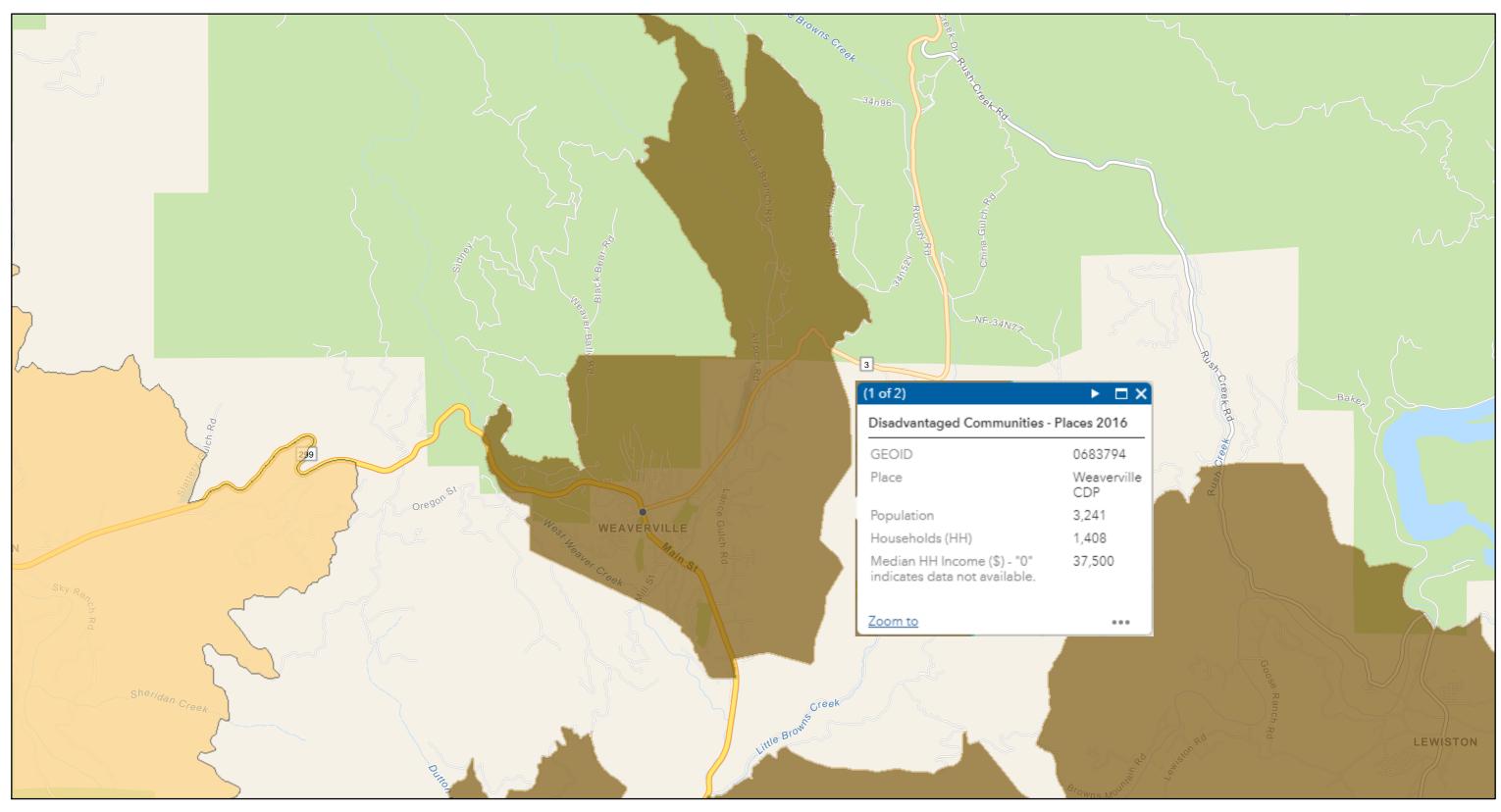
Organization Name: Weaverville Sanitary District

Refer to Attachment 4, Table 2 for detailed cost breakdown of the phased recommended project.

Task #	Major Tasks	Task Description	Major Deliverables	Current Stage of Completion	IRWM Task Budget	Non-State Match	Total Task Budget	Start Date	Completion Date
Α	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%	\$5,000.00	\$0.00	\$5,000.00	3/1/20	10/31/21
2	Monitoring Plan	Develop Monitoring Plan to include goals and measurable objectives	Final Monitoring Plan	0%	\$5,000.00	\$0.00	\$5,000.00	4/1/20	5/1/20
3	Labor Compliance Program	Execute service agreement with Labor Compliance Program company	Submission of Labor Compliance Program	0%	\$25,000.00	\$0.00	\$25,000.00	3/1/21	7/30/21
4	Reporting	Develop monthly reports describing work completed, challenges, and strategies for reaching remaining project objectives. Develop Final Report	Quarterly and Final Reports	0%	\$10,000.00	\$0.00	\$10,000.00	3/1/20	10/31/21
В	Category (b): Land Purchase/Easement							•	
1	Land Purchase/Easements	Research/acquire record maps, prepare legal descriptions, obtain preliminary title reports, get property appraisal, and acquire land and/or easements		0%	\$30,000.00	\$0.00	\$30,000.00	4/1/20	8/28/20
С	Category (c): Planning/Design/Engineering/En	vironmental Documentation		1			I		_
1	Final Design /Plans & Specifications	Develop a Project Manual including drawings and specifications for bid.	Project Manual	0%	\$102,000.00	\$0.00	\$102,000.00	4/1/20	9/30/20
2	Environmental Documentation: CEQA *	Submit Categorical Exemption for replacement of existing infrastructure	Categorical Exemption filed with the state clearing house	0%	\$15,000.00	\$0.00	\$15,000.00	4/1/20	5/1/20
3	Permit Development *: TRINITY COUNTY ENCROACHMENT PERMIT	Develop and submit an encroachment permit for all construction activities within Trinity County Right of Way	Final Trinity County Encroachment Permit - Costs are included in construction costs as the contractor will be responsible for it.	0%	\$0.00	\$0.00	\$0.00	1/1/21	3/1/21
D	Category (d): Construction/Implementation								
1	Construction/Implementation Contracting	Develop advertisement for bids and contract documents; conduct pre-bid contractors meeting; perform evaluation of bids; award contract	Summary of Bids and Contract Award	0%	\$50,000.00	\$0.00	\$50,000.00	10/1/20	1/29/21
2	Mobilization and Site Preparation	Prepare Site and mobilize project: 1. Initiate project site preparation; 2. Order project equipment and supplies; 3. Assure project permits are in place; 4. Conduct pre-project site photo-monitoring	Summary of site preparation activities in monthly reports; pre- project site photos	0%	\$80,000.00	\$0.00	\$80,000.00	3/1/21	5/1/21
3	Project Construction/Implementation	Installation of 4,200 feet of 6-inch wastewater pipeline.	Summary of construction activities in monthly progress report; Photo documentation; Construction completed	0%	\$810,000.00	\$0.00	\$810,000.00	3/1/21	7/30/21
4	Project Construction/Implementation: 10% Contingency	10% Construction Contingency	Summary of construction activities in monthly progress report; Photo documentation; Construction completed	0%	\$88,000.00	\$0.00	\$88,000.00	3/1/21	7/30/21
5	Project Signage	Install construction project sign	Project sign	0%	\$1,000.00	\$0.00	\$1,000.00	3/1/21	7/30/21
6	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	\$5,000.00	6/1/21	9/30/21
7	Project Performance Monitoring	The performance of the project will be monitored in accordance to the Monitoring Plan using the following measurement tools and methods: Comparing the number of leak repairs and blockage removal calls in each zone before and after the project	Project Performance Updates	0%	\$25,000.00	\$0.00	\$25,000.00	4/1/20	10/31/24
8	Construction Administration	Complete tasks necessary to administer construction contract. Keep daily records of construction activities, inspection, and progress. Conduct project construction photomonitoring.	Construction Management Logs; Completed construction administration tasks documented in monthly progress reports	0%	\$131,000.00	\$0.00	\$131,000.00	3/1/21	7/30/21
	Total North Coast Resource Partnership 20	018/19 IRWM Grant Request			\$1,382,000.00	\$0.00	\$1,382,000.00		
	Is Requested Budget scalable by 25%? If yes,	indicate scaled totals; if no delete budget amount provided.			\$1,036,500.00	\$0.00	\$1,036,500.00		
	Is Requested Budget scalable by 50%? If yes,	indicate scaled totals; if no delete budget amount provided.			\$691,000.00	\$0.00	\$691,000.00		



## Weaverville SDAC Map

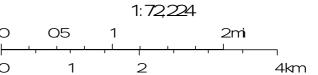


3/14/2019, 23349PM

California Counties

Disadvantaged Communities - Places 2016

- Data Not Available
- Severely Disadvantaged Communities (MH < \$38,270)
- Disadvantaged Communities (\$38,270 > MH < \$51,026)



US Census Bureau, U.S. Bureau of Redamation, California Department of Conservation, California Department of Fish and Game, California Department of Forestry and Fire Protection, National Oceanic and Atmospheric Administration

### **ATTACHMENT 3**

#### INTRODUCTION

Most of the community of Weaverville is served by a publicly owned sewer system under the authority of the Weaverville Sanitary District (WSD or District). Some of the outlying residential areas and the commercial area at the south end of town, called the "straight stretch," are still on septic systems.

The sewer system began in about 1957, at which time an assessment district (1957-1) was formed within the WSD to finance the sewage collection system. Not all of the properties within the WSD were included within the assessment district. Thus, some properties have been assessed for a collection system and others have not. The initial treatment plant and the trunk sewers were funded by a general obligation bond issue, together with federal grant funds. The bonds were repaid with an ad valorem tax on all properties within the WSD. Through the years numerous sewer main extensions have been added to the initial system. In 1972-73 a new treatment plant was constructed adjacent to the older plant in order to meet more stringent discharge standards. This plant was funded mainly by a Clean Water (Federal-State) Grant, but assisted by local financing through Farmers Home Administration (FmHA) revenue bonds. These are being repaid essentially from users' fees.

The plant and the sewer system are generally quite adequate to meet the community's present needs. The treatment plant was designed for a population equivalent of 5,000 people and is currently serving a population equivalent of just over 2,500 people. However, there are some improvements to the plant that are needed to allow continued growth within the sanitary district.

Because the existing collection system has an excessive amount of ground and surface water infiltration/inflow (I/I) due to leakage in the piping system, some of the larger sewers operate at maximum capacity during intense wet weather periods when the ground tends to be saturated. On a few of these occasions the main trunk sewer has had overflows. These high historical flows, peaking at approximately 1.5 to 1.6 million gallons per day (MGD) have also caused the treatment plant to be operated at its maximum design capacity. These peak flows are approximately six times the average dry weather flow. As a result of these conditions, based on recommendations by PACE Engineering, the District has already (the past few years) began a program of I/I The District staff began by smoke testing the entire Some leaks were detected. Most of the observed sewer system. leakage was in private laterals. Compliance notices were sent to about 52 property owners and in all cases remedial and corrective action was taken. The District also had approximately 86 leaking manholes repaired by injection gel sealing by a Contractor. Finally, the District also adopted an ordinance prohibiting leakage in private sewer laterals in excess of 200 gallons per day. This was done in anticipation of future testing of private laterals in an attempt to further reduce I/I. Television inspection and grout sealing of selected main sewers and repair of leaking laterals is the next anticipated I/I control measure following this study.

Although the treatment plant is usually only operating slightly over half of its design capacity, the solids (sludge) storage facilities are currently at full capacity. These facilities were simply undersized. Modifications have been made to allow the system to function properly until now, but major improvements are now necessary to allow for significant new growth. Without such improvements, odors, especially during the spring months, will occur and increased complaints from neighbors can be expected.

The current policy of the District is that each user pay for construction of their own collection system and lateral sewer that benefits their property. This was how sewers were paid for under the original 1957-1 assessment district, for example. In addition to funding their collection system and lateral, each new user must also pay a connection fee (capital improvement fee) that is needed to pay for their share of future general improvements, (such as expansion of the treatment plant, enlargement of existing trunk sewers, or accelerated I/I control programs that in effect yield additional capacity for growth). Currently, the sewer connection fee is \$600 per household equivalent. This fee is lower than most sewer agencies and needs to be evaluated.

Occasionally, someone connects to the sewer system who has not paid for the collection system benefitting their property. In order to bring about equity, the District now charges such users a front footage fee (currently \$6.00 per foot) to pay for the collection system. Such fees are rarely collected since most new users have somehow paid for their share of the collection system. As an example, sewers in a subdivision are usually funded by the developer/property owner and the lot buyer essentially pays for these sewer improvements in the purchase price of the lot; consequently, these new users do not pay the frontage fee. The existing frontage fee is considerably lower than the normal cost of a sewer collection system and this fee also needs to be evaluated.

The operation and maintenance of the District is funded primarily by a monthly users fee, which is currently set at \$10.00 per residential unit and equivalent charges for other users based on water usage or household equipvalents. This amount must not only cover operation and maintenance, but should also include a

contribution towards a replacement reserve fund. Currently, the capital improvement/replacement fund balance is about \$200,000.

In view of the need to more adequately describe the pending improvements and to evaluate the necessary future improvements and their costs, the Board of Directors retained PACE Engineering to do this Master Plan of Sewer Improvements. A Weaverville Community Plan is currently being developed by the Trinity County Planning Department and was in draft form (May 3, 1988) during preparation of this study. The Community Plan land use designations were used as the basis for estimating future growth and the resulting sewer flows.

### **ABBREVIATIONS**

Certain terms have been abbreviated in the following report as follows:

A	TI o xxm	Description			
<u>Abbreviation</u>	Term				
I/I	Infiltration and Inflow	Leakage of groundwater and surface water inflow into the sewer system.			
MGD	Million Gallons per Day	A rate of hydraulic flow.			
ADWF	Average Dry Weather Flow	This is usually the average sewage flow during summer months when little I/I is present.			
PWWF	Peak Wet Weather Flow	Maximum flow during worst wet weather conditions.			
HE	Household Equivalent	Usually refers to the average flow or organic loading from the average residential unit. Commercial usage is often rated in household equivalents. In this study, 1 HE equals 200 gallons per day.			

### **ATTACHMENT 4**

#### TABLE 1 WEAVERVILLE SANITARY DISTRICT

	SEWER IMPROVEMENTS PROJECT - TOTAL PROJECT COST								
No.	ltem	Quantity	Unit	Unit Cost 1	Total Cost				
1	CONSTRUCTION COSTS								
2	Zone 1 Collection System Improvements								
3	Slip Line or Pipe Burst 6-inch Pipe Complete	650	LF	\$170	\$110,500				
4	6-inch Sewer/A1 Backfill	50	LF	\$180	\$9,000				
5	Lateral reconnect	10	EA	\$500	\$5,000				
6	Zone 1 Collection System Subtotal				\$125,000				
7	Zone 2 Collection System Improvements								
8	Slip Line, Pipe Burst or open trench (CLASS "C" BACKFILL) 6-inch Pipe Complete	800	LF	\$170	\$136,000				
9	Lateral reconnect	5	EA	\$500	\$2,500				
10	Zone 2 Collection System Subtotal				\$139,000				
11	Zone 3 Collection System Improvements								
12	6-inch Sewer/A1 Backfill	2,200	LF	\$180	\$396,000				
13	Lateral reconnect	15	EA	\$500	\$7,500				
14	Zone 3 Collection System Subtotal	•		•	\$404,000				
15	Zone 4 Collection System Improvements								
16	6-inch Sewer/A1 Backfill	2,700	LF	\$180	\$486,000				
17	Lateral reconnect	27	EA	\$500	\$13,500				
18	Zone 4 Collection System Subtotal	ı			\$500,000				
19	Zone 5 Collection System Improvements								
20	6-inch Sewer/A1 Backfill	1,900	LF	\$180	\$342,000				
21	Lateral reconnect	24	EA	\$500	\$12,000				
22	Zone 5 Collection System Subtotal				\$354,000				
23	Bypass Pumping	1	LS	\$45,000	\$45,000				
24	7 1 3			. ,	. ,				
25	Subtotal Construction Cost				\$1,567,000				
26	Inflation Adder For Construction In 2020-2021 @ 3% Per Year								
27	Mobilization/Demobilization @ 10%								
28	Contingency @ 10%								
29	TOTAL CONSTRUCTION COST				\$188,000 \$2,071,000				
30	TOTAL CONSTRUCTION COST								
31	INDIRECT COSTS								
32	Engineering Services								
33	Phase 1 Preliminary Engineering								
34	Television Existing Sewer Lines For Pipe Lining or Bursting				\$25,000				
35	Environmental - Submit Categorical Exemption for replacement of existing infrastructure				\$15,000				
36	Phase 2 - Design				\$166,000				
37	Phase 3 - Services During Bidding								
38	Phase 4 - Construction Contract Administration Services				\$50,000 \$124,000				
39	Phase 5 - Construction Observation								
40	Total Engineering Services								
41	Other Indirect Services				\$438,000				
42	Construction Surveying				\$15,000				
43	Record Drawings								
44	Land and Right-of-Way Appraisal								
45	Land and Right-of-Way Acquisition								
46	Prevailing Wage Monitoring								
47	Project Performance Report				\$25,000 \$30,000				
48	Environmental Compliance During Construction				\$15,000				
49	Agency Administration				\$5,000				
50	Funding Administration				\$10,000				
51	1 Wilding / Williams (Wilding)				710,000				
52	Total Other Indirect Costs				\$135,000				
53	Total Indirect Costs  Total Indirect Costs				\$133,000				
54	TOTAL PROJECT COST ESTIMATE				\$2,644,000				
J <del>4</del>	TOTAL PROJECT COST ESTIMATE				22,044,000				

#### TABLE 2

#### WEAVERVILLE SANITARY DISTRICT

#### SEWER IMPROVEMENTS PROJECT - PHASE 1

SEWER IMPROVEMENTS PROJECT - PHASE 1								
No.	Item	Quantity	Unit	Unit Cost <sup>1</sup>	Total Cost			
1	CONSTRUCTION COSTS							
2	Zone 1 Collection System Improvements							
3	Slip Line or Pipe Burst 6-inch Pipe Complete	650	LF	\$170	\$110,50			
4	6-inch Sewer/A1 Backfill	50	LF	\$180	\$9,000			
5	Lateral reconnect	10	EA	\$500	\$5,000			
6	Zone 1 Collection System Subtotal				\$125,000			
7	Zone 2 Collection System Improvements							
8	Slip Line, Pipe Burst or open trench (CLASS "C" BACKFILL) 6-inch Pipe Complete	800	LF	\$170	\$136,00			
9	Lateral reconnect	5	EA	\$500	\$2,50			
10	Zone 2 Collection System Subtotal				\$139,000			
11	Zone 3 Collection System Improvements							
12	6-inch Sewer/A1 Backfill	2,200	LF	\$180	\$396,00			
13	Lateral reconnect	15	EA	\$500	\$7,50			
14	Zone 3 Collection System Subtotal			•	\$404,000			
15	Bypass Pumping	1	LS	\$30,000	\$30,00			
16								
17	Subtotal Construction Cost	<u>l</u>			\$728,000			
18	Inflation Adder For Construction In 2020-2021 @ 3% Per Year				\$68,000			
19	Mobilization/Demobilization @ 10%							
20	Contingency @ 10%							
21	TOTAL CONSTRUCTION COST				<i>\$88,000</i> \$964,00			
22	TOTAL CONSTRUCTION COST				7504,00			
23	INDIRECT COSTS							
24								
25	Engineering Services  Dhaco 1 Proliminary Engineering							
26	Phase 1 Preliminary Engineering				¢25.00			
	Television Existing Sewer Lines For Pipe Lining or Bursting				\$25,000 \$15,00			
27	Environmental - Submit Categorical Exemption for replacement of existing infrastructure							
28	Phase 2 - Design							
29	Phase 3 - Services During Bidding							
30	Phase 4 - Construction Contract Administration Services				\$58,00 \$57,90			
31	Phase 5 - Construction Observation							
32	Total Engineering Services							
33	Other Indirect Services				\$15,00			
34	Construction Surveying							
35	Record Drawings							
36	Land and Right-of-Way Appraisal							
37	Land and Right-of-Way Acquisition							
38	Prevailing Wage Monitoring							
39	Project Performance Report							
40	Environmental Compliance During Construction							
41	Agency Administration							
42	Funding Administration							
43								
44	Total Other Indirect Costs							
45	Total Indirect Costs							
46	TOTAL PROJECT COST ESTIMATE				\$1,382,00			