

### A. General Project Information

- 1. Organization / Project Sponsor Name: Junction City Elementary School Districty
- 2. Project Name: JCESD Potable Water Filtration System Replacement
- 3. Has the organization implemented similar projects in the past? yes no
- 4. If the project sponsor has worked with NCRP in the past, describe the project and outcome. N/A
- 5. Please describe the qualifications, experience, and capacity of the project team that will be overseeing project implementation.

Christine Camara - Juction City Elementary School District, Superintendent Jeff Morris - Trinity County Office of Education, Facilities Fiscal Analyst Tom Warnock - PACE Engineering, Principal Engineer General Contractor (s) - To be chosen through a public procurement process. Additional background info on the team is available in the Technical & Reference Supporting Manual

6. Is this project part of a larger project or program? If so, what effectiveness monitoring is being conducted and what are the results?

This is NOT part of a larger project or program

7. **Project Abstract** [500 characters max.]

JCESD's approx 80 students and staff are served by a 1994 era water filtration system that is at the end of its useful service life and overdue for replacement. Water is supplied by a well and treated using a filtration and disinfection process. Treated water is stored in a clearwell and booster pumped to maintain pressure. DDW's 2019 inspection report recommended installation of an emergency generator, which supports JCESD's role as an emergency shelter in disasters and power outages.

**8. Project Description** [3,000 characters max.]

The Junction City Elementary School is a non-transient noncommunity water system that serves treated surface water to approximately 80 students and staff. The source water is a newly constructed well located immediately adjacent to the Trinity River and is therefore deemed a surface water source that is then treated using the conventional filtration process and then



disinfected using a solution of calcium hypochlorite. The treated water is stored in a 12,000 clearwell and then booster pumped using a hydropneumatic tank to maintain pressure throughout the school. The facilities, which require a T2 and D1 certified operator, were originally permitted in 1994. The Junction City Elementary School can also serve the community as an emergency relief staging area during wildland fires.

The Junction City Elementary School does not have an emergency power generator on site to power the water treatment plant. In addition, there are numerous water treatment components including online turbidimeter, chlorine residual analyzer, coagulant and disinfectant dosing pumps, day tank mixers, flash mixer, control panel, automatic butterfly valve actuators, and media that have already failed or have met then end of their useful service life and are about to fail. These problems sorely undercut the resiliency of the facilities to provide potable drinking water to the students, staff and others that need to use the facilities during an emergency. DDW's 2019 Inspection report recommended that an emergency power generator be installed.

JCESD serves not only the students of the surrounding area and their families, but the entire community of Junction City and "downriver" Trinity County during emergency events, like wildfires, as an emergency shelter and evacuation center. Similar to other communities across Trinity County, Junction City is a rural area, surrounded by natural resource amenities and sparsely populated across multiple watersheds and rural transportation routes. Junction City has a significant percentage of students who qualify for Free and Reduced lunch programs (67.1%) and the community economic levels reflect this dynamic as well. The major components of the project will be:

- Assessment and status of current equipment
- Analysis of current and future water volume needs
- Design of replacement system
- Development of detailed cost estimate for full system replacement
- Cost estimate for backup generator implementation
- Needed environmental and regulatory reviews
- Project implementation

After funding and design approvals, JCESD will work with TCOE facilities fiscal analyst and PACE to bid out the project to appropriate vendors and contractors with likely a single general contractor being chosen for the entire proproject. PACE, school district and county office staff will monitor the progress and implementation in addition to coordination with other regulatory agencies, as required. Benefits are operations of the system for future decades.

#### 9. Specific Project Goals/Objectives

Goal 1: Project Evaluation & Pre-design Engineering [100 characters max.] Goal 1 Objective: ID water treatment and power challenges, feasible system improvements needed to meet water quality standards, system demands.



[200 characters max.]

Goal 1 Objective: Analyze alternatives, recommend a selected project

Goal 1 Objective: Draft Preliminary Engineering Report

Goal 1 Objective:

Goal 2: Geotechnical Investigation & Site Surveying

Goal 2 Objective: Perform geotechnical investigation to located emergency generator.

Goal 2 Objective: Identify feasible locations to drill test wells.

Goal 2 Objective: Prepare geotechnical investigation report for the site

Goal 2 Objective: Perform required land surveying

Goal 3: Consolidation Analysis - evaluate consolidation of potable water

systems/facilities within 5 miles

Goal 3 Objective: Determine if there are any nearby possible consolidation candidates

Goal 3 Objective: Evaluate of cost of construction and benefit

Goal 3 Objective: Goal 3 Objective:

Additional Goals & Objectives (List)

Goal 4: CEQA Analysis

Review project for possible CEQA Exemptions, prepare and file required documents. Include a site visit for biological and wetlands screening in addition to a cultural resources records search with appropriate level of resulting studies being produced.

Goal 5: Produce Designs, Plans and Specifications

Conduct final design of selected construction project

Develop the construction plans, specifications, and detailed cost breakdown for the selected construction project.

Secure needed review / approvals from Division of State Architect

Goal 6: Miscellaneous Items to Proceed to Construction

Determine and submit applications for the required permits for the new emergency generator.

Goal 7: Full Project Implementation

Secure contractors through a public procurement process

Establish project procedures with PACE and contractors

Monitor Implementation

Review and approve work at regular intervals

Finalize project / test system



#### 10. Describe how the project addresses the NCRP Goals and Objectives selected. [1,000 characters max.]

GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT

Obj 1 - This project will ensure the long autonomy of a vital public resource, Junction City Elementary School, as both a local educational institution while also serving, when needed, as a community evacuation center.

**GOAL 2: ECONOMIC VITALITY** 

Obj 4 - This project will ensure that a vital potable water system remains viable for the next 30 years of elementary school students, their families and the greater community.

GOAL 4: BENEFICIAL USES OF WATER

Obj 9 - This project will ensure that a vital potable water system remains viable for the next 30 years of elementary school students, their families and the greater community.

**GOAL 6: PUBLIC SAFETY** 

Obj 13 - While the project maintains the current levelof potable water delivery to the school and community, the addition of an emergency generator will reduce the public safety impacts associated with wildfire to ensure continued potable water is available on site during an emergency

# 11. Describe the physical, biological and/or community need for the project. [1,000 characters

Junction City Elementary serves a pivotal role within the "downriver" community in Trinity County.

- Red Cross Shelter in case of emergency
- The only more "modern" facility in terms buildings within the immediate community
- Safe haven and connection point for community families

Without a dependable potable water system, the ability of the school to serve these crucial roles within the community is severely diminished. Combine this with a nearly non-existent tax base and scant school facility funding available from the state and the 30+ year current filtration system presents a significant risk to this community asset and the vulnerable population it serves.

#### **12. Describe the financial need for the project**. [1,000 characters max.] 915,953.00

The estimated cost of the project far exceeds annual deferred maintenance and other funding sources. Funding for school facilities from the state and local sources runs far behind basic maintenance needs, much less funding this kind of significant expenditure. Additionally, Trinity County's local tax base is significantly smaller than any other county within the NCRP service territory due, in part, to the significant percentage of federal lands, 25 % or more of which are necessarily protected as Wilderness Areas or Roadless Areas.



13. Describe potential adverse impacts from project implementation and how they will be mitigated.

We don't expect any significant adverse impacts from project implementation as all work will be conducted on the existing school site within the existing "industrial" footprint of the

	be conducted on the existing school site within the existing "industrial" footprint of the current system.
14.	Will this project mitigate an existing or potential Cease and Desist Order or other regulatory compliance enforcement action?   yes  no If yes, please describe. [500 characters max.]
15.	Does the project address a contaminant listed in AB 1249 (nitrate, arsenic, perchlorate, or hexavalent chromium)?  yes  yes  lf yes, provide a description of how the project helps address the contamination. [500 characters max.]
pro	Describe how the project contributes to regional water self-reliance and addresses climate change. [1,000 characters max.]  This project, combined with JCESD's developed well, provides the most effective way to evide potable water to this local community facility asset. Other alternatives (trucking water) and result in increased carbon emissions and or depleting an alternate water source.
oth ins	Does the project increase public safety with regards to flood protection, wildfire hazard risk reduction, increasing firefighting capacity, or in other ways contribute to regional emergency resiliency?  yes
18	Does the project employ new or innovative technologies or practices, including <a href="Decision Support Tools">Decision Support Tools</a> 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. [500 characters max.]



- 19. Describe the population served by this project, including any economically disadvantaged communities or Tribes that will directly benefit.
  - Current and future students and staff at Junction City Elementary School
  - Over 65% of the students qualifying for the free or reduced lunch program
  - Over 20% of students enrolled are non-white from a variety of ethnic backgrounds

Verifiable potable water supplies can be challenging in an impoverished community with minimal shared water systems and heavy reliance on personal wells and springs. Project will also support water security for the greater community during emergency events.

- **20.** Describe local and/or political support for this project. [500 characters max.]
- The greater Junction City community places a high value on the quality facilities of their elementary school and the additional community services that it provides. We are in the midst of soliciting letters from the following individuals / organizations:
- Trinity County Superintendent of Schools, Sarah Supahan
- District 4 Count Supervisor, Jeremy Brown
- North Fork Grange Junction City Fire Department, Chief Justin Kerwick

V	ist all collaborating partners and agencies and nature while no explicit partnerships are involved in this proje	-
to be	enefit the local community.	
	s this project part or a phase of a larger project?	yes no
	re there similar efforts being made by other groups? yes to either, please describe. [500 characters max.]	☐ yes ☑ no

## **B.** Project Location

1.	Describe the latitude and longitude of the	e project site.
	Latitude: 40.733542451189976	Longitude: -123.05969120630238

- 2. Site Address (if relevant): 430 Red Hill Road, Junction City, CA 96048
- 3. Does the applicant have legal access rights, easements, or other access capabilities to the property to implement the project?

If yes, please describe below × yes



If no, please provide a concise narrative below with a schedule, to obtain

no

<ul> <li>4. Project Location Notes:         <ul> <li>Junction City Elementary School's site is located close to system is sourced from a newly constructed well located im River and is therefore deemed a surface water source.</li> </ul> </li> <li>C. Benefits To Disadvantaged Communication</li> </ul>	vical access to a property is not ace and has the access needed to fully nrough U.S. Bureau of Land for this purpose.
C. Benefits To Disadvantaged Communi	•
	ties and/or Tribes
<ol> <li>Does the project provide direct water-related benefits to Disadvantaged Communities or Economically Distressed estimate percentage of project that benefits disadvantate communities.         <ul> <li>Entirely</li> <li>Partially; estimate the percentage of benefits providing No</li> <li>List the Disadvantaged Community(s)</li> <li>Junction City, Big Bar, Big Flat and a variety of other information of the provided of the provid</li></ul></li></ol>	d Communities? If partially, please ged communities and list the led directly to DAC:
<ol> <li>Does the project provide direct water-related benefits to Severely Disadvantaged Communities (SDAC)? If partial project that benefits disadvantaged communities and line</li> </ol>	ly, please estimate percentage of
Entirely Partially; estimate percentage of benefits provided on the No List the Severely Disadvantaged Community(s)	directly to SDAC:

The project provides direct water-related benefits to a project area comprised of Severely Disadvantaged Communities including Junction City, Big Flat and Big Bar. According to data available at https://northcoastresourcepartnership.org/data/, Junction City is a Severely Disadvantaged Community, as is the "downriver" corridor of the Trinity River of JCESD's larger service area. With a funding award and resulting implementation, the children of this area and their families will directly benefit from continuing to have a viable potable water supply not only



for their elementary school but also for their community during disaster events. 100% of the communities served qualify as Severly Disadvantaged.

3.	Does the project provide direct water-related benefits to a Tribe or Tribes? If partially, please
	estimate percentage of project that benefits Tribe(s) and list the Tribes.
	Entirely
	Partially; estimate percentage of benefits provided directly to Tribe(s):
ber	No
	List the Tribal Community(s)
	Although there may be tribal members that attend Junction City ESD, there is no direct
	nefit to a specific tribe.
	If yes, please provide a letter of support from each Tribe listed as receiving these benefits.

4. 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. [750 characters max.]

This project is of critical, immediate importance to the disadvantaged communities it serves, including providing potable water for elementary aged school children and potable water for the greater community during emergency / disaster events. With the high risk of near future infrastructure failure, we believe that there is an immediate need to address the system deficiencies and potential improvements.

5. Describe the kind of notification, outreach and collaboration that has been completed with the county(ies) and/or Tribes within the proposed project impact area, including the source and receiving watersheds, if applicable. [500 characters max.] As indicated above, this is a very discreet project taking place on the existing JCESD campus footprint and we have not noticed the County of Trinity or any tribal entities other than filing a copy of the NOE with the Trinity County Clerk's Office.

### D. Project Benefits & Justification

1. 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. Provide quantitative benefit amounts for at least the primary and secondary benefits. Provide a qualitative narrative description of expected benefits that cannot be quantified. See the NCRP Project Application Instructions for more information and a listing of potential benefits.

PROJECT BENEFITS TABLE

Benefit Description	Units	Quantitative Amount	Qualitative Description			
Water Supply						
Avoided Costs -	1	\$ 1,000,000	System replacement			
Emergency repairs	<b>-</b>	7 1,000,000				
Temporary Water	1	\$ 6,000	annually			
supply purchases	_	+ -/				
Reliable Potable						
Water Supply for		Priceless				
future generations of						
school students						
Water Quality		T				
Climate Change		T				
Other Ecosystem Servi	ce Benef	its				
Jobs Created or Mainta	ained					
Other Benefits						
Community	1		Intrinsic Value			
Emergency Center	1					
	1					

2.	Does the yes	proposed p ⊠ no	oroject p	rovide physical	benefits <u>outside</u> of the North Coast Region?



If yes, describe the impacts to areas outside the North Coast Region. [500 characters max.]

3.	List the impaired water bodies (303d listing) that the project benefits: $\ensuremath{\text{N/A}}$
4.	Describe how the project benefits salmonids, endangered/threatened species and sensitive habitats.  N/A
5.	Have alternative methods been considered to achieve the same types and amounts of physical benefits as the proposed project?  yes  Please explain. [500 characters max.]
6.	Is the proposed project the lowest cost alternative to achieve the physical benefits?  yes
7.	How will the project be monitored to determine whether it is producing the desired benefits?
	PACE Engineering and the combined project team will work with the selected contractor (s) ensure the project is completed with fidelity by monitoring and confirming each compoenent t of the project is installed and functional.
8.	Provide a narrative for project technical justification. Include any other information that supports the justification for this project, including how the project can achieve the claimed level of benefits listed below. [3,000 characters max.]  See reports from the State Water Resources Control Board in the Technical & Reference Supporting Manual
9.	List and include any studies, plans, designs or engineering reports completed for the project as a "Technical & Reference Supporting Materials" into one document that includes a Table of Contents and is limited to approximately 50 pages. <i>Please see the instructions for more</i>

10. Project Justification & Technical Basis Notes: Please provide any additional information not included above that you think is important.

information about submitting these documents with the final application.



# E. Project Tasks, Budget, And Schedule

1.	Projected Project Start Date: 8/1/23 Anticipated Project End Date: 8/1/26
2.	Describe the basis for the costs used to derive the project budget in each budget category. [500 characters max.] Costs were derived through an Engineers Estimate from PACE Engineering
3.	Provide a narrative on cost considerations including alternative project costs. [500 characters max.] Costs may vary slightly depending on project timing, supply chain issues and other factors.
4.	List the sources of non-state matching funds, amounts and indicate their status. Proposition 1 requires a minimum cost share of 50% of the total project costs, though a waiver may apply (see Question 6 below). N/A
5.	List the sources and amount of State matching funds. $\ensuremath{\text{N/A}}$
6.	Cost Share Waiver Requested (DAC or EDA)?
	Is the project budget scalable?  yes  no
8.	Describe how a scaled budget would impact the overall project, its expected benefits and state the minimum budget amount that would be viable (see Instructions E.7 for scaled budget examples). [500 characters max.]  No scaling available
9.	Major Tasks, Schedule and Budget for Project Solicitation Please complete MS Excel table available at https://northcoastresourcepartnership.org/ncrp-

proposition-1-irwm-round-2-solicitation/see instructions for the information to be included



in this document and for how to submit the required excel document with the application materials.

#### 10. Project Tasks, Budget and Schedule Notes:

See attached Excel File and companion Technical & Reference Supporting Manual

11. Project Information Notes. Please provide any information that that has not been specifically requested that you feel is important for the NCRP to know about your project.

Project Name: Organization Name: JCESD Potable Water Filtration System Replacement

Junction City Elementary School District

Task #	Major Tasks	Task Description	Major Deliverables	IRWM Task Budget	Non-State Match	Other Match	Total Task Budget	25% Scaled IRWM Budget	50% Scaled IRWM Budget	Current Stage of Completion	Start Date	Completion Date
Α	Category (a): Direct Project Admi	nistration										
1	Construction Contract Administration	PACE Engineering, in conjunction with JCESD and TCOE, will manage the public procurement process	Bid packages, Contract Agreements, Pre Construction Meeting, Notice of Completion	\$31,427.00	\$0.00	\$0.00	\$31,427.00	\$23,570.25	\$0.00	0%		
2	Project Management	Manage and monitor contractor progress and activity	Review and approve contractor's schedule, submittals. Respond to Contractor RFIs, Change order requests, reimbursement claims.  Onsite project monitoring.	\$143,904.00	\$0.00	\$0.00	\$143,904.00	\$107,928.00	\$0.00	0%	work	le for this will be
3	Other Services	Various related tasks	Conduct Prevailing Wage Monitoring, Review Environmental compliance, prepare and submit Project Reports, Prepare Record Drawings and Update O&M Manual, Assist in 11-month inspection	\$36,420.00	\$0.00	\$0.00	\$36,420.00	\$27,315.00	\$0.00	0%	fundin Work is	ed pending ag award. project to on for 11
В	Category (b): Land Purchase/Ease	ment			•						•	s and start
1	N/A			\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%	date w	ill largely
С	Category (c): Planning/Design/En	gineering/Environmental Documentation										on award
1	Design Development	Develop Plans and Specifications	Approved design plans with full specifications document	\$84,240.00	\$0.00	\$0.00	\$84,240.00	\$63,180.00	\$0.00		_	n addition school
2	Associated Cost and Regulatory document dvelopment	Prepare documents	General Package, Technical Package, Finanical Package, Environmental package	\$58,000.00	\$0.00	\$0.00	\$58,000.00	\$43,500.00	\$0.00	0%	occu	pation, schedules,
3	Pre Application Planning	Initial Assessment by PACE Engineering and Coordination Activity by TCOE		\$0.00	\$0.00	\$6,890.00	\$6,890.00	\$0.00	\$0.00	0%	•	etc.
D	Category (d): Construction/Imple	mentation			-							
1	Project Construction	Acquisition and Installation of new water filtration system and emergency generator	Product procurement and delivery. Crew mobilization. Current system removal. Installation of new system.	\$561,602.00	\$0.00	\$0.00	\$561,602.00	\$421,201.50	\$0.00	0%		
	See more detailed construction es	stimates in the attached Technical & Referenc	e Supporting Document.									
	Total North Coast Resource Partnership IRWM Grant Request				\$0.00	\$6,890.00	\$922,483.00	\$686,694.75	\$0.00			
	Percentage of Total Project Cost	99.25%	0.00%	0.75%	100.00%	74.44%	0.00%					

#### **BUDGET DETAIL**

Row (a) Direct Project Administration Costs						
Project Management Type	Personnel by Discipline	Number of Hours	Hourly Wage	% of Cost *	Total Admin Cost	
Total						
* What is the percentage based on (including total amounts)?						
* How was the percentage of cost determined?		n/a				

Row (b)	Land Purchase/Easement

Row (c) Planning/Design/Engineering & Environmental Documentation					
Personnel (Discipline) Major Task Name Number Hourly Total Cost					
		of Hours	Wage		
Pre Application Initial Assessment and Report	Principal Engineer			5000	
Development Provided by Pace Enginerring					
Pre Application In kind hours provided by Trinity County	Facilities Fiscal Analyst	42	\$45	1890	
Office of Education staff in site visits, prep and planning					
Total				\$6,890	\$6,890

Row (d) Construction/Implementation					
Personnel (Discipline)	Work Task and Sub-Task	(from	Number	Hourly	Total Cost
	Work Task Table)		of Hours	Wage	
Materials and Equipment	Work Task and Sub-Task	(from	Number	Unit Cost	
Total					



#### ORGANIZATION INFORMATION

1. Project Name:

JCESD Potable Water Filtration System Replacement

2. Applicant Organization Name:

Junction City Elementary School District

3. Contact Name/Title

Name: Jeff Morris

Title: Facilities Fiscal Analyst for Trinity County Office of Education

Email: jmorris@tcoek12.org

Phone Number (include area code): 530.355.9880

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

430 Red Hill Road, Junction City, Trinity County, CA 96093

5.	Organization	ype
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1 1	$\Gamma \cap 1$	/ \	121	N 1	C.,	organization	
1 1	5111	101	131	Mon-	nrotit	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:

**6. Authorized Representative** (if different from the contact's name)

Name: Christine Camara Title: Superintendent

Email: ccamara@tcoek12.org

Phone Number (include area code): 530.623.6381

7. List all projects the organization is submitting to the NCRP for this Solicitation in order of priority.

1

8. Organization Information Notes:



#### ELIGIBILITY

1. North Coast Resource Partnership Goals and 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 NCRP project implementation Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans 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 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 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 Objective 11 - Address climate change effects, impacts, vulnerabilities, including droughts, fires, floods, and sea level rise. Develop adaptation 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 Objective 13 - Improve flood protection, forest and community resiliency to reduce

the public safety impacts associated with floods and wildfires



	bes the project have a minimum 15-year useful life?
а	yes no
b	) If yes, will the organization be able to provide compliance documentation outlined in the
	instructions should the project be selected as a Priority Project?
	⊠ yes  □ no
3. Of	ther Eligibility Requirements and Documentation
	ORNIA GROUNDWATER MANAGEMENT SUSTAINABILITY COMPLIANCE
a)	Does the project directly affect groundwater levels or quality?
	☐ yes ☐ no
b)	, ,
	instructions including a Groundwater Sustainability Agency letter of support, to include in
	the NCRP Regional Project Application should the project be selected as a Priority
	Project?
	yes no
CASG	EM 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)	
	entity:
d)	If yes, please specify whether the local Groundwater Sustainability Agency has endorsed
,	the project:
URBA	N WATER MANAGEMENT PLAN
	Is the organization required to file an Urban Water Management Plan (UWMP)?
u,	yes \(\sigma\) no
h)	International I Supermonth
D)	
<i>c1</i>	femoretained / homeometric
()	
-17	
a)	
	urban water supplier?
	yes no
e)	Does the urban water supplier meet the water meter requirements of CWC 525?
	yes no
f)	Does the urban water supplier meet the State Water Resources Control Board's Water
	Conservation and Production Reporting requirement?
	yes no
c) d) e)	If yes, has DWR verified the current 2020 UWMP?  yes no  If the 2020 UWMP has not been verified by DWR, explain and provide anticipated date for verification:  Has DWR verified a water loss audit report in accordance with SB 555 as submitted by the urban water supplier?  yes no  Does the urban water supplier meet the water meter requirements of CWC 525?  yes no  Does the urban water supplier meet the State Water Resources Control Board's Water Conservation and Production Reporting requirement?



g)	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
AGRIC	ULTURAL 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)?
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?
SURFA	CE WATER DIVERSION REPORTS
a)	Is the organization required to file State Water Resources Control Board (SWRCB) annual surface water diversion reports per the requirements in CWC Part 5.1?  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
STORM	1 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?
c)	If this is a stormwater/dry weather runoff project but does not benefit a small DAC population, please provide documentation that the project has been included in a Stormwater Resource Plan that has been incorporated into the NCRP IRWM Plan:
d)	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 NCRP IRWM Plan, should the project be selected as a Priority Project?



1.	Eligible Pr	oject Type under 2022 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
	$\boxtimes$	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:
	Describe h	now the project provides a benefit that meets at least one of the Statewide

- 5. Priorities as defined in DWR's Final 2022 Guidelines (see page 7) and Tribal priorities as defined by the NCRP?
- Priority #3: Drought Preparedness. This project will ensure a potable water supply for Junction City Elementary and, during emergency events, the greater downriver area. Without this potable water source, Junction City Elementary would likely need to acquire its potable water from another source outside of its existing watershed. Priority #2: Encourage regional approaches among water users sharing watersheds. The project ensures some degree of water security at the local level.



#### CERTIFICATION OF AUTHORITY

By signing below, the Authorized Representative executing the certificate on behalf of the Project Sponsor affirmatively represents that s/he has the requisite legal authority to do so on behalf of the Project Sponsor. The Authorized Representative executing this proposal on behalf of the project sponsor understands that the NCRP is relying on this representation in receiving and considering this proposal. The person signing below hereby acknowledges that s/he has read the entire NCRP 2022 Project Review and Selection Process Guidelines and the NCRP 2022 Proposition 1 IRWM Round 2 Project Application & Instructions documents and has complied with all requirements listed therein.

Official Authorized to Sign for Proposal

Clamara 11.3.22

Signature

Date

### **Technical & Reference Supporting Manual**

JCESD Potable Water Filtration System Replacement

Please see the enclosed list of materials.

Project Team Description	Page 2
Cost Share Waiver Request	Page 3
Prior Agreement Draft and Early Project Narrative(from previous application with Drinking Water State Revolving Funding)	Page 4
PACE Project Cost Estimate	Page 14
PACE Services During Construction Detail	Page 15
California State Water Resources Control Board Division of Drinking Water Inspection Report	Page 16
California State Water Resources Control Board Inspection Report Letter	Page 24
Initial Notice of Exemption	Page 28

## For additional questions please contact:

Jeff Morris, Facilities Fiscal Analyst
Trinity County Office of Education
<a href="mailto:jmorris@tcoek12.org">jmorris@tcoek12.org</a> 530.355.9880

#### **Project Team**

JCESD Potable Water Filtration System Replacement

#### **Christine Camara, Superintendent**

Junction City Elementary School District

Christine has been a teacher for 28 years and has served as Principal / Superintendent at Junction City Elementary School for the lion's share of her 26 years in Trinity County. During Christine's time at Junction City ESD, the school has consistently been one of the top performing schools in the county with test scores consistently ranking well above the state averages in both Math and English Language Arts. In addition to here "titled" duties Christine has also served multiple teaching roles and both facility manager and water treatment plant operator as needs / vacancies have arisen and is has a robust working knowledge of the school's potable water system.

#### **Tom Warnock, Principal Engineer**

PACE Engineering

Tom oversees the planning, funding, testing and construction of all of PACE's water and wastewater projects and has served as the water resources instructor at Shasta College for over 30 years. Founded in 1976, PACE has served the north state for over 40 years and houses a team of 60+ professionals.

#### **Jeff Morris, Facilities Fiscal Analyst**

Trinity County Office of Education

Building on his 15+ years as a natural resource communications consultant, Jeff now serves as the Facilities Fiscal Analyst for the Trinity County Office of Education. Over the last 4 years, Jeff has been responsible for drawing down over \$ 35 million in facilities funding for local school districts within Trinity County in addition to assisting districts with project implementation and planning in addition to the post-project financial reconciliation and auditing processes.

A General Contractor(s) will be chosen for project implementation through a public procurement process after funding has been secured and project designs are complete and approved.

#### **Cost Share Waiver Request**

JCESD Potable Water Filtration System Replacement

Junction City Elementary School District is requesting a Cost Share Waiver based on the fact that JCESD is located in a Severely Disadvantaged Community (SDAC). JCESD (and Trinity County generally) is extremely challenged to acquire matching funds due to the large amount of federal (un-taxable) property within their boundaries and the high level of poverty within the county.

The poverty levels and local political environment also make the success of a local bond ballot measure extremely unlikely.

Without this waiver, JCESD will not be able to fund the proposed match. The current water system has lasted 30 years and we expect the replacement system to last at least that long. If there was a case study for a match waiver (kids, education, public safety, % of poverty) this is it.

Thank you for your consideration.



Phone: (530)244-0202

Consultant Job No.: 2931.01 Project Manager: TWW Billing Manager: TWW Billing Code: PD Date File Opened:

#### **ENGINEERING AGREEMENT**

This agreement has been entered into at Redding, California on the CLIENT signature date set forth below and is by and between the CLIENT as listed below and PACE Engineering, Inc., hereinafter called the CONSULTANT.

CLIENT: Junction City Elementary School	PHONE: 530-623-6381
ATTENTION: Christine Camara, Superintendent	
ADDRESS: 52680 Red Hill Road, Junction City, CA 960	148
PROJECT TITLE: Water System Improvements Project	
APN:	CLIENT PROJECT NO:
PROJECT DESCRIPTION:	
Provide engineering assistance on potable water sys	tem.
SCOPE OF SERVICES BY CONSULTANT:	
See draft California Rural Water Association's R School, CA5304209, attached.	Request for Proposal for Junction City Elementary
Phase 1 – Address SWRCB questions on fundir	ng application.
The CONSULTANT agrees to perform the above-described services for such services as follows:	or the CLIENT. The CLIENT agrees to compensate CONSULTANT
☐ A lump-sum amount of \$, payable per Item 21.	
<ul><li>At the CONSULTANT'S STANDARD RATES (see attached</li><li>Other. Describe:</li></ul>	
□ Special Billing Instructions:	
This Agreement is subject to the Standard Provisions 1 through 50 coluttached herewith and made a part hereof. Other exhibits not identifie	
N WITNESS WHEREOF, the parties hereto have accepted, made, and the referenced attaches.	nd executed this Agreement upon the terms, conditions, and provisions ed exhibits.
CONSULTANT:	CLIENT:
icense No.: C45008	Ву:
Ву:	Print Name: Christine Camara
Name/Title: Thomas W. Warnock/Principal Engineer	Title: Superintendent Date:
Date: May 7, 2021	
	Form of doing business: Owner, Partnership, Corporation

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#### **Standard Provisions of Agreement**

- **1.** This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of Client and Consultant.
- **2.** This Agreement shall not be assigned by either Client or Consultant without the prior written consent of the other.
- 3. This Agreement contains the entire Agreement between Client and Consultant relating to the project and the provision of services to the project. Any prior agreement, promises, negotiations or representations not expressly set forth in this Agreement are of no force or effect. Subsequent modifications to this Agreement shall be in writing and signed by both Client and Consultant.
- **4.** Consultant's waiver of any term, condition, or covenant, or breach of any term, condition, or covenant, shall not constitute the waiver of any other term, condition, or covenant, or the breach of any other term, condition, or covenant.
- **5.** If any term, condition, or covenant of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall be valid and binding on Client and Consultant.
- **6.** This Agreement shall be governed by and construed in accordance with the laws of the State of California.
- 7. Consultant shall only act as an advisor in all governmental relations.
- **8.** All original papers, documents, drawings and other work product of Consultant, and copies thereof, produced by Consultant pursuant to this Agreement shall remain the property of Consultant and may be used by Consultant without the consent of Client. Upon request and payment of the costs involved, Client is entitled to a copy of all papers, documents, and drawings provided Client's account is paid current.
- **9.** Client acknowledges that its right to utilize the services and work product provided pursuant to this Agreement will continue only so long as Client is not in default pursuant to the terms and conditions of this Agreement. Client further acknowledges that Consultant has the unrestricted right to use the services provided pursuant to this Agreement as well as all work product provided pursuant to this Agreement.
- **10.** Client and Consultant agree to cooperate with each other in every way on the project.
- 11. Upon request, Client shall execute and deliver, or cause to be executed and delivered, such additional instruments, documents, governmental fees and charges which are necessary to perform the terms of this Agreement.
- **12.** Consultant makes no representations concerning soil conditions unless specifically included in writing in this Agreement, and he is not responsible for any liability that may arise out of the making or failure to make soil surveys, or sub-surface soil tests, or general soil testing.
- 13. Client agrees not to use or permit any other person to use plans, drawings, or other work product prepared by Consultant, which plans, drawings, or other work product are not final and which are not signed, and stamped or sealed by Consultant. Client agrees to be liable and responsible for any such use of nonfinal plans, drawings, or other work product not signed and stamped or sealed by Consultant and waives liability against Consultant for their use. Client further agrees that final plans, drawings or other work product are for the exclusive use of Client and may be used by Client only for the project described on the face hereof. Such final plans, drawings or other work product may not be changed nor used on a different project without the written authorization or approval by Consultant. If Consultant's work product exists in electronic or computerized format, or is transferred in electronic or computerized format, the stamp, seal and signature shall be original and may not be a computer-generated copy, photocopy, or facsimile transmission of the original.

- 14. Consultant has a right to complete all services agreed to be rendered pursuant to this contract. In the event this Agreement is terminated before the completion of all services, unless Consultant is responsible for such early termination, Client agrees to release Consultant from all liability for services performed. In the event all or any portion of the services or work product prepared or partially prepared by Consultant be suspended, abandoned, or terminated, Client shall pay Consultant for all fees, charges, and services provided for the project, not to exceed any contract limit specified herein. Client acknowledges if the project services are suspended and restarted, there will be additional charges due to suspension of the services which shall be paid for by Client as extra services.
- 15. If the scope of services to be provided by Consultant pursuant to the terms of this agreement includes an ALTA survey, Client agrees that Consultant may sign one of the two ALTA Survey Statements attached hereto and incorporated herein by reference. In the event that Consultant is required to sign a statement or certificate which differs from the ALTA Survey Statements contained in the attachment, Client hereby agrees to indemnify and hold Consultant harmless from any and all liability arising from or resulting from the signing of any statement which differs from those statements contained in the attachment.
- 16. If the scope of services to be provided by Consultant pursuant to the terms of this Agreement include the preparation of grading plans but exclude construction staking services, Client acknowledges that such staking services normally include coordinating civil engineering services and the preparation of asbuilt drawings pursuant to Uniform Building Code Appendix, Chapter 33 or local grading ordinances and Client will be required to retain such services from another Consultant or pay Consultant pursuant to this Agreement for such services as extra work in accordance with Provision 26.
- 17. Consultant shall be entitled to immediately, and without notice, suspend the performance of any and all of its obligations pursuant to this Agreement if Client files a voluntary petition seeking relief under the United States Bankruptcy Code or if there is an involuntary bankruptcy petition filed against Client in the United Stated Bankruptcy Court, and that petition is not dismissed within fifteen (15) days of its filing. Any suspension of services made pursuant to the provisions of this paragraph shall continue until such time as this Agreement has been fully and properly assumed in accordance with the applicable provisions of the United States Bankruptcy Code and in compliance with the final order or judgment issued by the Bankruptcy Court.
- **18.** This Agreement shall not be construed to alter, affect or waive any lien or stop notice right which Consultant may have for the performance of services pursuant to this Agreement. Client agrees to separately provide to Consultant the present name and address of the record owner of the property on which the project is to be located. Client also agrees to separately provide Consultant with the name and address of any and all lenders who would loan money on the project and who are entitled to receive a preliminary notice.
- **19.** If payment for Consultant's services is to be made on behalf of Client by a third-party lender, Client agrees that Consultant shall not be required to indemnify the third-party lender, in the form of an endorsement or otherwise, as a condition of receiving payment for services.
- **20.** If Client fails to pay Consultant within thirty (30) days after invoices are rendered, Client agrees Consultant shall have the right to consider such default in payment a material breach of this entire Agreement, and upon written notice, the duties, obligations, and responsibilities of Consultant under this Agreement are suspended or terminated. In such event, Client shall promptly pay Consultant for all fees, charges, and services provided by Consultant.

Client initials

- **21.** All fees and other charges will be billed monthly and shall be due at the time of billing unless otherwise specified in this Agreement. For lump sum work the amount due shall be based upon the Consultant's estimate of the percent complete at the time that the invoice is prepared.
- **22.** Client agrees that the periodic billings from Consultant to Client are correct, conclusive, and binding on Client unless Client, within ten (10) days from the date of receipt of such billing, notifies Consultant in writing of alleged inaccuracies, discrepancies, or errors in the billing.
- **23.** Client agrees to pay a monthly late payment charge, which will be the lesser of, one and one-fourth percent (1½%) per month or a monthly charge not to exceed the maximum legal rate, which will be applied to any unpaid balance commencing thirty (30) days after the date of the original billing.
- **24.** If Consultant, pursuant to this Agreement, produces plans, specifications, or other documents and/or performs field services, and such plans, specifications, and other documents and/or field services are required by one or more governmental agency, and one or more such governmental agency changes its ordinances, policies, procedures or requirements after the date of this Agreement, any additional office or field services thereby required shall be paid for by Client as extra services.
- 25. In the event Consultant's fee schedule changes due to any increase of costs such as the granting of wage increases and/or other employee benefits to field or office employees due to the terms of any labor agreement, or rise in the cost of living, during the lifetime of this Agreement, a percentage increase shall be applied to all remaining compensation.
- **26.** Client agrees that if Client requests services not specified pursuant to the scope of services description within this Agreement, Client agrees to pay for all such additional services as extra work.
- **27.** In the event the staking is destroyed, damaged or disturbed by an act of God or parties other than Consultant, the cost of restaking shall be paid for by Client as extra services.
- Client acknowledges that the design services performed pursuant to this Agreement are based upon field and other conditions existing at the time these services were performed. Client further acknowledges that field and other conditions may change by the time project construction occurs and clarification, adjustments, modifications and other changes may be necessary to reflect changed field or other conditions. If the scope of services pursuant to this Agreement does not include construction staking services by Consultant for this project, or if subsequent to this Agreement Client retains other persons or entities to provide such staking services; or if the scope of services pursuant to this Agreement does not include onsite construction review, construction management, observation of construction of engineering structures, or other construction services for this project, or if subsequent to this Agreement Client retains other persons or entities to provide such construction services, then Client acknowledges that such services will be performed by others, and that Client will defend, indemnify, and hold Consultant harmless from any and all claims arising from or resulting from the performance of such services by other persons or entities except claims caused by the sole negligence or willful misconduct of Consultant; and from any and all claims arising from or resulting from clarifications, adjustments, modifications or other changes which may be necessary to reflect changed field or other conditions except claims caused by the sole negligence or willful misconduct of Consultant.
- **29.** Client shall pay the costs of checking and inspection fees, zoning and annexation application fees, assessment fees, soils engineering fees, soils testing fees, aerial topography fees, and all

- other fees, permits, bond premiums, applicable taxes on professional services, title company charges, blueprints and reproductions, and all other charges not specifically covered by the terms of this Agreement.
- **30.** Client acknowledges and agrees that if Consultant provides surveying services, which services require the filing of a Record of Survey in accordance with Business and Professions Code Section 8762, that all of the costs of preparation, examination and filing for the Record of Survey will be paid by Client as extra work in accordance with Provision 26.
- **31.** Consultant is not responsible for delay caused by activities or factors beyond Consultant's reasonable control, including but not limited to, delays by reason of strikes, lockouts, work slowdowns, or stoppages, accidents, acts of God, failure of Client to furnish timely information or approve or disapprove of Consultant's services or work product promptly, faulty performance by Client or other contractors or governmental agencies. When such delays beyond Consultant's reasonable control occur, Client agrees Consultant is not responsible in damages nor shall Consultant be deemed to be in default of this Agreement.
- **32.** Consultant shall not be liable for damages resulting from the actions or inactions of governmental agencies including, but not limited to, permit processing, environmental impact reports, dedications, general plans and amendments thereto, zoning matters, annexations or consolidations, use or conditional use permits, project or plan approvals, and building permits. The Client agrees that it is the responsibility of the Client to maintain in good standing all government approvals and permits and to apply for any extensions thereof.
- **33.** Consultant makes no representation concerning the estimated quantities and probable costs made in connection with maps, plans, specifications, reports or drawings other than that all such costs are estimates only and actual costs will vary. It is the responsibility of Client to verify costs.
- **34.** Client acknowledges that Consultant is not responsible for the performance of work by third parties including, but not limited to, the construction contractor and its subcontractors.
- **35.** Consultant makes no warranty, either expressed or implied, as to his findings, recommendations, plans, specifications, or professional advice except that the services or work product were performed pursuant to generally accepted standards of practice in effect at the time of performance.
- **36.** Estimates of land areas provided under this Agreement are not to be considered precise unless Consultant specifically agrees to provide the precise determination of such areas.
- 37. In the event the Client agrees to, permits, authorizes, constructs or permits construction of changes in the plans, specifications and documents or does not follow recommendations or reports prepared by Consultant pursuant to this Agreement, which changes are not consented to in writing by Consultant, Client acknowledges that the changes and their effects are not the responsibility of Consultant and Client agrees to release Consultant from all liability arising from the use of such changes and further agrees to defend, indemnify and hold harmless Consultant, its officers, directors, principals, agents and employees from and against all claims, demands, damages or costs arising from the changes and their effects.
- **38.** Client agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours.

Client initials

- **39.** In the event Client discovers or becomes aware of changed field or other conditions which necessitate clarification, adjustments, modifications or other changes during the construction phase of the project, Client agrees to notify Consultant and engage Consultant to prepare the necessary clarifications, adjustments, modifications or other changes to Consultant's services or work product before construction activities commence or further activity proceeds. Further, Client agrees to have a provision in its construction contracts for the project which requires the contractor to notify Client of any changed field or other conditions so that Client may in turn notify Consultant pursuant to the provisions of this paragraph.
- **40.** Client agrees to limit the liability of Consultant, its principals, employees and their subconsultants, to Client and to all contractors and subcontractors on the project, for any claim or action arising in tort, contract or strict liability, to the sum of \$50,000 or Consultant's fee, whichever is greater. Client and Consultant acknowledge that this provision was expressly negotiated and agreed upon.
- **41.** Client agrees to purchase and maintain, during the course of construction, builder's risk "all risk" insurance which will name Consultant as an additional insured as their interest may appear.
- **42.** Client acknowledges that Consultant's scope of services for this project does not include any services related in any way to asbestos and/or hazardous or toxic materials. Should Consultant or any other party encounter such materials on the job site, or should it in any other way become known that such materials are present or may be present on the job site or any adjacent or nearby areas which may affect Consultant's services, Consultant may, at its option, terminate work on the project until such time as Client retains a specialist contractor to abate and/or remove the asbestos and/or hazardous or toxic materials and warrant that the job site is free from any hazard which may result from the existence of such materials.
- 43. The Client hereby agrees to bring no claim for negligence, breach of contract, strict liability, indemnity, delays or otherwise against the Consultant, its principals, employees, and agents if such claim, in any way, would involve the Consultant's services for the investigation, detection, abatement, replacement, use or specification, or removal of products, materials or processes containing asbestos, asbestos cement pipe, and/or hazardous or toxic materials. Client further agrees to defend, indemnify and hold harmless Consultant, its officers, directors, principals, employees and agents from any asbestos and/or hazardous or toxic material related claims that may be brought by third parties as a result of the services provided by the Consultant pursuant to this Agreement except claims caused by the sole negligence or willful misconduct of the Consultant.
- **44.** If any action at law or equity, including an action for declaratory relief, is brought to enforce or interpret the provisions of this Agreement or in any way connected with the performance of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees, which fees may be set by the court in the same action or in a separate action brought for that purpose, in addition to any other relief to which he may be entitled.
- **45.** Client agrees that in the event Client institutes litigation to enforce or interpret the provisions of this Agreement, such litigation is to be brought and adjudicated in the appropriate court in the county in which Consultant's principal place of business is located, and Client waives the right to bring, try or remove such litigation to any other county or judicial district.
- **46.** (a) Except for the provision of subdivision (b) and subdivision (c), and in an effort to resolve any conflicts that arise during the

design or construction of the project or following the completion of the project, the client and the Consultant agree that all disputes between them arising out of or relating to this Agreement shall be submitted to nonbinding mediation or other form of Alternative Dispute Resolution as agreed to by the parties.

The Client and the Consultant further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the project and with other successive third parties including but not limited to construction contractors, lenders and homeowner associations and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with subcontractors, subconsultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

- (b) Subdivision (a) does not preclude or limit consultant's right to elect to file an action for collection of fees if the amount in dispute is within the jurisdiction of the small claims court.
- (c) Subdivision (a) does not preclude or limit consultant's right to elect to perfect or enforce applicable mechanics lien remedies.
- 47. (a) Notwithstanding any other provision of this Agreement and except for the provisions of (b) and (c), if a dispute arises regarding Consultant's fees pursuant to this contract, and if the fee dispute cannot be settled pursuant to Provision 46, such dispute shall be settled by binding arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.
- (b) Subdivision (a) does not preclude or limit Consultant's right to elect to file an action for collection of fees if the amount in dispute is within the jurisdiction of the small claims court.
- (c) Subdivision (a) does not preclude or limit Consultant's right to elect to perfect or enforce applicable mechanics lien remedies.
- **48.** Client agrees to reimburse the Consultant for any time and expense incurred for depositions or appearances at any legal proceedings requested by Client or duly authorized attorney, or when required by a subpoena or court action, as may be required from the Consultant performing work under this Agreement. Client agrees to indemnify and reimburse the Consultant for costs and expenses that may result in legal actions taken against the Consultant unless it is determined by a court of law that the Consultant was negligent in his services leading to such action. Consultant shall be paid by Client for such time and expense at his normal charge-out rate for professional services applicable at the time.
- **49.** Any applicable statute of limitations pertaining to all causes of action, latent or patent, shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of Substantial Completion.
- **50.** In soils, foundation, groundwater, and other subsurface investigations, the actual characteristics may vary significantly between successive test points and sample intervals and at locations other than where observations, exploration, and investigations have been made. Because of the inherent uncertainties in subsurface evaluations, changed underground conditions may occur that could affect total project cost and/or execution. These conditions and cost/execution effects are not the responsibility of Consultant.

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# Exhibit A STANDARD CHARGES FOR PROFESSIONAL SERVICES

Effective through December 31, 2021

LABOR CLASSIFICATION	BILLING CLASS	HOURLY RATE
Senior Engineering Consultant	E8	\$225
Managing Engineer	E7	\$225
Principal Engineer	E6	\$212
Senior Engineer	E5	\$195
Associate Engineer	E4	\$175
Staff Engineer/Grade 3	E3	\$157
Staff Engineer/Grade 2	E2	\$147
Staff Engineer/Grade 1	E1	\$134
Engineering Technician 4	T4	\$147
Engineering Technician 3	Т3	\$133
Engineering Technician 2	T2	\$120
Engineering Technician 1	T1	\$104
One-Man Survey Crew	SC1	\$247
Two-Man Survey Crew	SC2	\$315
Two-Man Survey Crew (O/T)	SC2x	\$372
Three-Man Survey Crew	SC3	\$388
Survey Supervisor	SS1	\$182
Licensed Land Surveyor	LS1	\$164
Admin. Clerk 3	AD3	\$82
Admin. Clerk 2	AD2	\$73
Admin. Clerk 1	AD1	\$66

#### **EXPENSES**

Meals and Lodging: At cost (out-of-town and overnight work only).

Vehicle Transportation: Included in hourly rates unless specifically indicated otherwise in Agreement.

Hourly labor rates are applicable during travel to and from job site.

Express Mail/Federal Express: At cost.

Outside Services and Fees: At cost plus 10% administrative fee.

Computers, Plotters, and Electronic

Distance Measuring Instruments: Included in hourly rate.

Rates for expert witness services will be as set forth in the Engineering Agreement.

Rates are established on an annual basis and are subject to change from year to year.

Refer to Exhibit A-1 for hourly rates on prevailing wage projects.



# Exhibit A-1 STANDARD CHARGES FOR <u>PREVAILING WAGE</u> PROFESSIONAL SERVICES

Effective through December 31, 2021

LABOR CLASSIFICATION	HOURLY RATE
Prevailing Wage Group 2 - Construction Observer	\$190
Prevailing Wage Group 2 - Construction Observer (O/T)	\$224
Prevailing Wage Group 2 - Construction Observer (Double-Time)	\$258
Prevailing Wage One-Man Survey Crew	\$292
Prevailing Wage Two-Man Survey Crew	\$402
Prevailing Wage Two-Man Survey Crew (O/T)	\$476
Prevailing Wage Two-Man Survey Crew (2x O/T)	\$548
Prevailing Wage Three-Man Survey Crew	\$532
Prevailing Wage Three-Man Survey Crew (O/T)	\$626

#### **EXPENSES**

Meals and Lodging: At cost (out-of-town and overnight work only).

Vehicle Transportation: Included in hourly rates unless specifically indicated otherwise in Agreement.

Hourly labor rates are applicable during travel to and from job site.

Express Mail/Federal Express: At cost.

Outside Services and Fees: At cost plus 10% administrative fee.

Computers, Plotters, and Electronic

Distance Measuring Instruments: Included in hourly rate.

Rates for expert witness services will be as set forth in the Engineering Agreement.

Rates are established on an annual basis and are subject to change from year to year.

## REQUEST FOR PROPOSAL

# Junction City Elementary School CA5304209

#### Introduction

The Junction City Elementary School is in the process of applying for Drinking Water State Revolving Funding (DWSRF) and requests proposals from qualified engineering firms to provide expertise related to Public Drinking Water Systems. This expertise will be directed towards assisting in fulfilling the requirements of California Drinking Water Regulations. The result of this Request for Proposal (RFP) will be an opportunity to contract for technical services as described below.

#### **Purpose/Anticipated Results**

The Junction City Elementary School is a non-transient noncommunity water system that serves treated surface water to approximately 80 students and staff. The source water is a newly constructed well located immediately adjacent to the Trinity River and is therefore deemed a surface water source that is then treated using the conventional filtration process and then disinfected using a solution of calcium hypochlorite. The treated water is stored in a 12,000 clearwell and then booster pumped using a hydropneumatic tank to maintain pressure throughout the school. The facilities, which require a T2 and D1 certified operator, were originally permitted in 1994. The Junction City Elementary School can also serve the community as a emergency relief staging area during wildland fires.

The Junction City Elementary School does not have an emergency power generator on site to power the water treatment plant. In addition, there are numerous water treatment components including online turbidimeter, chlorine residual analyzer, coagulant and disinfectant dosing pumps, day tank mixers, flash mixer, control panel, automatic butterfly valve actuators, and media that have already failed or have met then end of their useful service life and are about to fail. These problems sorely undercut the resiliency of the facilities to provide potable drinking water to the students, staff and others that need to use the facilities during an emergency. DDW's 2019 Inspection report recommended that an emergency power generator be installed.

The Junction City Elementary School is applying for funding from the California State Water Resources Control Board Division of Financial Assistance. This RFP is for identifying the tasks and the estimated costs associated with addressing the issues identified above. The proposal will include any environmental requirements, permitting, service agreements, application fees or any other administrative costs that might be encountered. In addition to the Estimated Budget/Scope/Schedule please include the following information:

- Brief technical approach
- List of work on similar projects
- Identification of main staff performing the work
- Labor rates on main staff
- Cost estimate with hours for each task.

Please organize the tasks required in the following format and include a detailed description for each task.

# **PROJECT TASK LIST**

Task No.	Scope of the Project
1	<ul> <li>Project Evaluation &amp; Pre-design Engineering</li> <li>Identify water treatment and emergency power problems and identify feasible system improvements needed to facilitate meeting water quality standards and system water demands.</li> <li>Analyze feasible alternatives and recommend a selected project to address the ranked problem.</li> <li>Prepare Preliminary Engineering Report.</li> </ul>
2	<ul> <li>Geotechnical Investigation &amp; Site Surveying</li> <li>Perform geotechnical investigation of the site where an emergency generator would be installed.</li> <li>Identify feasible locations to drill test wells.</li> <li>Prepare geotechnical investigation report for the site to assist with evaluation of project.</li> <li>Perform required land surveying</li> </ul>
3	Consolidation Coordination – evaluate the feasibility of consolidation of potable water systems and facilities within a five (5) mile radius of the water system. Examples of tasks to be performed include:  a. Determine if there are any nearby possible consolidation candidates; b. Evaluate of cost of construction and benefit;
4	<ul> <li>a. Review project for possible CEQA Exemptions.</li> <li>b. Prepare required environmental documents.</li> <li>c. It is envisioned that the project would qualify for a CEQA Categorical Exemption and a NEPA Environmental Package without cross-cutters. One site visit would be required for biological and wetlands screening. A cultural resources records search would be conducted, and provided that no known sites are present in the immediate vicinity, a reduced cultural resources study would be prepared.</li> </ul>
5	Plans and Specifications  Conduct final design of selected construction project  Develop the construction plans, specifications, and detailed cost breakdown for the selected construction project.
6	Miscellaneous Items to Proceed to Construction     Determine and submit applications for the required permits for the new emergency generator.

# PROJECT BUDGET SHEET

Task		Estimated
No.	Scope of the Project	Cost
1	Project Evaluation & Pre-design Engineering	\$35,000
2	Geotechnical Investigation & Site Surveying	\$25,000
3	Consolidation Coordination	\$5,000
4	CEQA	\$25,000
5	Plans and Specifications	\$45,000
6	Miscellaneous Items to Proceed to Construction	\$3,000
	Total	\$138,000

## PROJECT SCHEDULE FOR PLANNING

NOTE: The timeframes should be expressed in months from the ANTICIPATED date of execution of a funding agreement, rather than specific dates. The proposed project schedule should incorporate the items listed in the provided scope of the project.

Task No.	Item Description	Expected Time of Completion from the Date of Execution of a Funding Agreement		
1	Project Evaluation& Pre-design Engineering	9 Months		
2	Geotechnical Investigation & Site Surveying	9 Months		
3	Consolidation Coordination	9 Months		
4	CEQA (Environmental Documentation)	9 Months		
5	Plans and Specifications	12 Months		
6	Miscellaneous Items to Proceed to Construction	12 Months		

# PACE ENGINEERING

## TABLE 1

# TRINITY COUNTY OFFICE OF EDUCATION - JUNCTION CITY SCHOOL WATER TREATMENT PLANT REHABILITATION & EMERGENCY GENERATOR PROJECT PRELIMINARY PROJECT COST ESTIMATE

					T . 10
No.	ltem	Quantity	Unit	Unit Cost	Total Cost
	Blast (SP10) & recoat interior of Water Treatment Plant (WTP) steel tank	1	LS	\$50,000	\$50,000
	Sand (SP6) & recoat exterior of Water Treatment Plant (WTP) steel tank	1	LS	\$20,000	\$20,000
-	Remove and install new sand and coal media	1	LS	\$5,000	\$5,000
	Replace flocculator mixer complete	1	LS	\$6,000	\$6,000
	Replace pressure sensors and liquid level sensors, complete	1	LS	\$20,000	\$20,000
6	Replace WTP control panel, complete	1	LS	\$40,000	\$40,000
7	Replace coagulant mixing tank, mixers, and dosing pumps, complete	1	LS	\$10,000	\$10,000
8	Replace disinfectant mixing tank, mixers, and dosing pumps, complete	1	LS	\$10,000	\$10,000
9	Replace backwash pump & control panel	1	LS	\$6,000	\$6,000
10	Replace filtered effluent pump & control panel	1	LS	\$6,000	\$6,000
11	Replace high pressure pumps & control panel	1	LS	\$12,000	\$12,000
12	Replace effluent flow meter	1	LS	\$2,000	\$2,000
13	Prepare emergency generator site	1	LS	\$10,000	\$10,000
14	Construct emergency generator concrete pad	1	LS	\$5,000	\$5,000
15	Construct underground conduits from service entrance to generator	1	LS	\$4,000	\$4,000
16	Install 125 kW emergency generator with ATS	1	LS	\$150,000	\$150,000
17	Install chain link fence around generator	1	LS	\$6,000	\$6,000
18	Install 1,000-gallon propane tank & concrete pad	1	LS	\$6,000	\$6,000
19	Mobilization/demobilization	1	LS	\$30,000	\$30,000
20	Supply temporary water storage tanks and truck water	2	LS	\$30,001	\$60,002
21	Permits	1	LS	\$10,000	\$10,000
22	Subtotal Construction Costs				\$468,002
23	Construction Contingency @ 20%				\$93,600
24	Total Construction Cost				\$561,602
25	Indirect Costs				
26	Construction Management	1	LS	\$143,904	\$143,904
27	Prepare DWSRF General Package	1	LS	\$5,000	\$5,000
28	Prepare DWSRF Technical Package	1	LS	\$20,000	\$20,000
29	Prepare DWSRF Financial Package	1	LS	\$8,000	\$8,000
30	Prepare DWSRF Environmental Package	1	LS	\$25,000	\$25,000
31	Plans and Specifications	1	LS	\$84,240	\$84,240
32	Construction Administration	1	LS	\$31,633	\$31,633
33	Other Engineering Services	1	LS	\$36,420	\$36,420
34	Total Indirect Costs				\$354,198
35	Total Project Cost Estimate				\$915,800
	-		L		

# PACE ENGINEERING

#### TABLE 2

#### TRINITY COUNTY OFFICE OF EDUCATION - JUNCTION CITY SCHOOL

# WATER TREATMENT PLANT REHABILITATION & EMERGENCY GENERATOR PROJECT SERVICES DURING CONSTRUCTION NOVEMBER 2, 2022

			Workdays	5		Catanami
Work Task	Project Senior Staff			Construction	Office Staff	Category
	Engineer	Engineer	Engineer	Observer	Office Staff	Subtotal
Task 1 - Construction Contract Administration					_	
a. Review bids received		0.5	0.5			\$2,334
b. Conduct background check on apparent low bidder			0.5			\$1,104
C. Prepare bid summary			0.5			\$1,104
d. Issue Recommendation of Award letter to Owner		0.5	0.5		0.2	\$2,519
e. Prepare Final Budget Approval Application to submit to DFA	1		1		0.2	\$5,069
f. Prepare Notice of Award		0.25	1		0.2	\$3,008
g. Prepare Contract Agreement/Bonds/Insurance Certificates for Contractor to submit		1			0.3	\$2,737
h. Review Contract Agreement/Bonds/Insurance Certificates submitted by Contractor		0.5				\$1,230
i. Submit Contract Agreement/Bonds/Insurance Certificates to Owner		0.5				\$1,230
j. Hold pre-construction meeting with Owner, Contractor, and DFA	0.5	1	1			\$6,006
k. Issue Notice of Completion	0.5	1	0.5		0.2	\$5,293
Task 1 Subtotal:	2	5.25	5.5	0	1.1	\$31,633
Task 2 - Project Management						
a. Review and approve Contractor's schedule		0.5	0.5			\$2,334
b. Review and approve submittals		0.5	1			\$3,438
c. Respond to Contractor's RFIs		1	1			\$4,668
d. Prepare Contract Change Orders		1	1			\$4,668
e. Provide intermittent Construction Observation over 6 month		3	3	30		\$86,004
f. Conduct trench compaction tests				1		\$2,400
g- Review Contractor's reimbursement claims		1	2			\$6,876
h. Prepare DFA Forms 260 & 261 for approval and submittal by Owner to DFA		1	2			\$6,876
i. Keep Owner and DFA informed of project status	2	2	2			\$14,688
j. Conduct substantial completion site inspection	1	1	2	1		\$11,952
Task 2 Subtotal:	3	11	14.5	32	0	\$143,904
Task 3 - Other Services						
a. Conduct prevailing wage monitoring			6			\$13,248
b. Review environmental compliance during construction			1			\$2,208
C. Prepare and submit Project Performance Report		1	2		1	\$7,800
d. Prepare Record Drawings & Update O&M Manual			4	0.5	1	\$10,956
e. Assist in 11-month inspection			1			\$2,208
Task 3 Subtotal:	0	1	14	0.5	2	\$36,420
TOTAL PERSON-DAYS:	5	17.25	34	32.5	3.1	
LABOR \$/DAY:	\$2,676	\$2,460	\$2,208	\$2,400	\$924	
LABOR COST PER CLASSIFICATION:	\$13,380	\$42,435	\$75,072	\$78,000	\$2,864	
				Tota	l Cost Estimate:	\$211,957

#### CALIFORNIA STATE WATER RESOURCES CONTROL BOARD **DIVISION OF DRINKING WATER** INSPECTION REPORT

Purveyor Junction City Elementary School	System Number 5304209
Person Contacted & Position Mrs. Christine Camara, Principal;	Brett Holmes, WTO, cell 707-386-0380
Date of Inspection October 24, 2019	Reviewing Engineer I. McFadden
Last Inspection June 15, 2016 by Franklin Saylor	District Engineer Barry Sutter, P.E.

#### INTRODUCTION Α.

1. Permit Full None; Mass Mail permit 01-01-94(P)174 issued on January 14, 1994. Amendments N/A. Are the permit provisions complied with? Yes, no special provisions. Is the permit up to date? Yes

List data sheets on file (permit, files, etc.) 3-page "Principle Features of a Small Water System".

2. Changes Since last inspection 1) None.

Planned changes 1) Principal Camara hopes to install emergency power for booster pump from gravity storage tank to distribution so the water system can remain in service during power outages.

#### 3. Consumer & Production Data

Year	MGA	Max. Day	Population	GPM, max day	Comments
2005	2.5	40,000 *est.	60 students, 15 staff	30 gpm	Forest Fires nearby
2006	2.0	20,000* est.	~75 (not reported)	15 gpm	
2007	1.11	4,624	~75 (not reported)	3 gpm	
2008			~75		
2009			~75		
2010			~75 (not reported)		
2014	2.0	15,500	100	11 gpm	
2015	1.87	14,800	100	10 gpm	
2016	1.49	12,000	100	8 gpm	
2017	1.15	9,800	80	7 gpm	203,200 Aug
2018	1.45	14,500	80	10 gpm	338,500 Aug

**Discussion** Daily production records used as maximum day values.

#### В. SOURCE DATA

Sources	Status	Capacity	Comments		
Trinity River	Active	50 gpm	Two, 1.5 hp submersible pumps in a 20-foot deep wells in riverbank gravels. 50 gpm each, alternate operation.		
Ground Water; Emergency Connections: None					

#### Discussion (i.e., does source capacity comply with Waterworks Standards?)

In order to meet Waterworks Standards, the source capacity must be sufficient to supply maximum day demands. Based on the School's 2005 "Annual Report to the Department", the highest reported maximum day demand was 40,000 gallons (28 gpm), which is less than the source capacity of 50 gpm and the treatment plant capacity of 87 gpm. More recent data shows the max day as ~ 15 gpm. The School's source capacity complies with Waterworks Standards.

#### C. STORAGE DATA

Name	Type	Capacity	Zone	Comments
Clearwell	Steel	12,000 gallons	Main	Vent screens new in 2009. Good condition 2019.
Booster	Pressure	1 @ 85 gallons	Main	2012 tank and variable speed pump.
Tank				
Total		12,000 gallons		

Does storage capacity comply with Waterworks Standards? As a noncommunity water system, the School is not required to provide storage in order to meet Waterworks Standards. Based on past water production records, the School has sufficient storage to meet average day total demands including irrigation for only one day; however, there is sufficient storage to meet domestic only demand for over five days.

Are all data sheets completed & on file? Yes

DDW coating procedures adhered to? Unknown, the tank has not been recoated since 1990.

**Discussion** The tank was installed in 1990 and the exterior appears to be in good condition. Last drained and cleaned in 2015.

## D. TREATMENT

1. Surface Water: Filter vessel was recoated inside and out in summer 2015, NSF 61 products used.

**Treatment classification:** The surface water treatment plant is classified as conventional (full) filtration. **Raw Water:** Two 1.5 hp submersible pumps provide water from 20-foot deep wells in the riverbank gravels through approximately 600 feet of 3-inch diameter PVC transmission main to the treatment plant.

Pre-Chlorination: The raw water is injected with a 1.0% calcium hypochlorite solution prior to flash mixer.

Filter Aid: A 5% solution of Calchem 2135 polymer is injected just prior to entering the flash mix chamber. A third port for the injection of soda ash is no longer in use. Soda ash has not been added since ~2010.

Flocculation Basin: Following the flash mix chamber, the water enters the floc basin, which contains a vertical paddle flocculator. The water exits at the top of the flocculation basin through a 3-inch diameter pipe. Sedimentation Basin: Water enters at the bottom of the sedimentation basin, which is equipped with tube settlers. Water leaves sedimentation basin via a single overflow weir. Tube settlers were last cleaned when the filter vessel was recoated, summer 2015.

**Filter:** Water next enters the top of a 14.6 ft² dual media filter. The filter contains sand and anthracite over graded gravel support media. Maximum filter RATE is 87 gpm, so 87 gpm/14.6 ft² = 6.0 gpm/ft². Dual media gravity filters are allowed to operate per regulation (§64660) at no more than 6.0-gpm/ft². However, since source capacity is 50 gpm, (only one pump works at a time) the rate actually is 50/14.6 = 3.4 gpm/ft²

Clearwell--CT tank: The effluent from the bottom of the filter is supplied by a 1 hp centrifugal pump to the of the School's 12,000-gallon horizontal clearwell tank. A 3 hp centrifugal pump then supplies water from the opposite side of the tank to the pressurized distribution system at a reported 37 gpm.

The filtration system is a "Package Plant" design.

Describe filtration removal credits granted by the Department: A conventional filtration system using dual media gravity filters is deemed capable of providing 2.5-log (99.7%) removal of Giardia cysts, 2-log removal of Cryptosporidium (99%), and 2-log (99%) removal of viruses when it meets all performance standard, per CCR Title 22 Section 64653.

Describe applicable filtration performance standards under Section 64653: Performance standards require that the turbidity level of the filtered water should be equal to or less than 0.3 NTU in 95 percent of the measurements taken each month and shall not exceed 1.0 NTU at any time. For those suppliers using a continuous monitoring program, the turbidity level of the filtered water shall not exceed 1.0 NTU for more than eight consecutive hours while the plant is in operation.

# Are filtration performance standards met? Yes. Since new operator in 2017.

(2016 January-April monthly treatment records submitted to the Department by the School, filtration turbidity performance standards were not consistently met in January and April 2016; 4/18 (22% Fail) in January; 7/19 (37% Fail) in April 2016.

# Disinfection of surface water sources

**Type** Calcium hypochlorite CaOCl solution injection. Mixes solution on site with a wooden boat paddle.

Capacity 24 gpd metering pump, 50-gallon storage crock

Standby feeders One 24 gpd metering pump

"CT" values

**Residuals** Typically, the measured chlorine residual was 0.5 mg/L to 1.0 mg/L.

**Retention Time** 12,000-gallon capacity clearwell, 0.1 short-circuiting factor, minimum tank level of 10,000 gallons, minimum effective contact volume 1,000 gallons plus 122 gallons from pressure tank and transmission line. The discharge pump to service is capable of 35 gpm, but daily records in the past 4 years show maximum daily use as 11 gpm. 11 gpm produces the CT time: 1122 gallons/(11 gallons/minute) = 102 minutes.

**pH range** Consistently reported in the past as 6.5.

**Temperature range** <u>5 C in winter to 11C during the summer. Four readings 2007-2010;</u> 12/8/08-45 F; 12/9/08-46 F; 1/4/09-46 F; 11/13/09-51 F. Range (winter times) 46-51 F = 8-11 C.

**CT calculation:** (10,000 gallons X 0.1 (short circuit factor) +122 gallons (pressure tank and piping)/11 gpm X 0.5 mg/L = 51 mg·min/L.

CT Based on the maximum use reported flow rate of 11 gpm, the School provides 102 minutes of contact time. At the minimum reported free chlorine residual of 0.5 mg/L, the School provides 51 mg·min/L of CT. Per CT Tables, 5 C or lower at 6.5 pH yields over 1.0-log Giardia inactivation. The system still meets 0.5 log giardia cyst inactivation at double the recorded maximum flow. System must maintain a 0.25 mg/l chlorine residual in the tank to meet CT.

Describe applicable disinfection performance standards under Section 64654: Disinfection must be sufficient to provide a 0.5-log inactivation of Giardia and a 2-log inactivation of virus. Water delivered to the distribution system must contain a minimum of 0.2 mg/L free chlorine residual. A detectable level of free chlorine residual must be maintained in the distribution system.

**Disinfection performance standards met?** Yes, 1.0-log Giardia inactivation; greater than the required 0.5-log inactivation of Giardia cysts. Less CT is required to provide the required 2-log inactivation of viruses. The School reportedly maintains a measurable chlorine residual throughout the distribution system.

Describe filtration monitoring requirements under Section 64655: Turbidity measurements must be of the combined effluent, before the clearwell, at least once every four hours. Continuous monitoring can be done if the supplier validates the accuracy of the measurements on a weekly basis. Systems serving less than 500 persons per day may reduce the sampling to one grab sample per day.

Are filtration monitoring requirements met? Yes. Currently the School uses a bench turbidity kit, which is reportedly recalibrated every 2 months. This is a Hach 2100Q. Per the California Title 22, Section 64655(d), daily grab samples are adequate for systems serving less than 500 persons.

Are individual filters monitored? N/A, single filter.

Describe disinfection monitoring requirements under Section 64656: Temperature, pH, disinfectant contact time, and residual disinfectant concentration must be recorded. If the population is less than 3,300, the residual disinfectant concentration leaving the plant may be measured once a day.

Are disinfection monitoring requirements met? Yes, the chlorine residual leaving the treatment plant is measured daily, while school is in session. Temperature and pH are not measured routinely, prior year's records show these are fairly stable values. The Company reports the measured values to the Department along with the daily water production as part of the School's monthly treatment records

Flow measuring and recording equipment: The meter measures instantaneous and total flow.

Is filter to waste provided? Yes, 10 minutes following backwash.

**Backwash cycle** The filter is backwashed for approximately 10 minutes with water from the clearwell at a reported design backwash rate of 150 gpm, 10.3 gpm/ft². Surface wash is not provided.

Backwashing The filter is backwashed every 24 hours of run time or at least once per week.

Is backwash water recycled (provide details concerning treatment and settling time)? No, backwashed to dedicated leachfield.

Are filters equipped with surface or subsurface wash? No

For uncontrolled watershed: Alarms None

Standby replacement Back-up 24 gpd metering pump on site

Redundant backup None

**Standby power** None. Principal Camara wants to install emergency power for booster pump from gravity storage tank to distribution so the water system can remain in service during power outages. This is a critical item, as sending school children home mid-day is often not possible, since parents are commonly working or otherwise not at home to receive them.

Describe operating criteria under Section 64660: Dual media gravity filters are allowed to operate per regulation at no more than 6.0-gpm/ft². Filtration rates are to be increased gradually after a backwash cycle. Following backwash or any interruption event, the individual filter turbidity should not exceed 2.0 NTU at any time during the first 4 hours of operation, and 1.0 NTU at any time during the first 4 hours following 90% of the interruptions, and 0.5 NTU after 4 hours of operation.

**Operations criteria met?** Yes, reportedly, the filter-loading rate does not exceed 6.0 gpm/ft². Turbidity measured and recorded once per day. There were no turbidity spikes in excess of 5 NTU during the past year and no spikes in excess of 0.5 NTU that lasted for more than one hour.

Is up-to-date Operations Plan on file? The Department has a copy of the 2017 operations plan.

Records maintained of treatment (Section 64662): The School reports the daily raw and maximum filtered water turbidities, chlorine and polymer usage, chlorine residual entering the distribution

Describe monthly report sent to the Department (Section 64664): Same as above.

Has a watershed sanitary survey been conducted? Source Water Assessment in 2004. The primary pollutant danger are any large spill on HWY299 just upstream of the school.

Are there significant sewage hazards? No. However, there has been illegal river dumping, homeless camps, and there are permitted waste treatment systems along the Trinity River, as well as individual septic systems.

**Is there significant body-contact recreation?** No, water is quite cold year-round. Boating, rafting, and fishing do occur on the Trinity River.

# Compliance with Federal Long Term 1 Enhanced Water Treatment Rule (LT1)

Summarize the combined filter effluent (CFE) performance N/A-1 filter.

The School provides grab sampling for finished water turbidity once daily. Sometimes not sampled on weekends and school holidays when filter train is not being used.

Is the Monthly Summary of Monitoring for the Federal LT1 being submitted monthly?

-No, small system.

Was disinfection profiling performed? No, small system.

**Discussion** Based on the monthly treatment records submitted to the Department, the School consistently meets current turbidity performance standards, except as discussed above. Filtered water turbidity is consistently less than 0.3 NTU, and frequently less than 0.2 NTU. The filter-loading rates appear to be less than the maximum allowable for a dual media conventional filtration system of 6.0 gpm/ft². Based on the School's monthly treatment records, they consistently provide at least 1-log Giardia cyst inactivation through disinfection, which is twice the required Giardia cyst inactivation for a conventional treatment plant. According to the operator Brett Holmes, the School's turbidimeter is calibrated quarterly. Additionally, the reported backwash filter-loading rate of 10.2 gpm/ft² is much less than the recommended backwash filter-loading rate for a conventional gravity filter of 18 gpm/ft² to 21 gpm/ft². The filter bed expands adequately, some areas would benefit from surface washing with a hose. Advised operator to ask for a variable speed pump when current backwash pump is no longer serviceable.

- 2. Groundwater Sources: None
- 3. Other Treatment or Blending Facilities: None.
- E. TRANSMISSION FACILITIES: Approximately 600 feet of 3-inch diameter PVC pipe between the raw water pumps and the treatment plant.

Are there low head lines? Reportedly, no.

**Discussion** The transmission main is reportedly in good condition, and there are no known low head mains.

- F. DISTRIBUTION SYSTEM
  - 1. Pressure Zones

Pressure Zone	Range	Water Sources	Storage	No. of Conn.
Main	40 psi – 52 psi	All	None-pressurized	All (School)

2. Booster or Reducing Stations

Station	Capacity	Status	From	То	Comments
Clearwell	35 gpm	Active	Clearwell	Main	3 hp centrifugal pump; <b>needs emergency power.</b> Power outages from PSPS will be more often.

3. Mains

Material	Amount, %	Size	Condition	Comments
PVC	All	3-inch & smaller	Good	

- 4. Leak history during past 12 months (mains & connections) No leaks were reported 2015-2019.
- 5. Are Distribution facilities constructed in accordance with Waterworks Standards?

  Reportedly, they are. Based on plans provided to the Department in 1989, the School maintains at least ten feet of horizontal separation between all water mains and sewers. The schools septic system is located approximately 500 feet down from the River Wells.
- **6. Water & sewer line separation practices** Reportedly, minimum separation requirements are met.

- 7. Extent of lead pipes, joints, or solder in distribution & policy No known lead pipes or solder.
- **8. Distribution Classification** Per CCR Title 22 Section 64413.3-A, the School has a Grade D1 distribution system, which requires a state-certified Grade D1 chief distribution operator. Mr. Holmes is T2, #36719, expires 1/1/2021; D1, #45369, expires 5/1/2021.
- 9. Discussion The distribution system appears to be in good overall condition.

# G. WATER QUALITY & MONITORING

**1. Bacteriological Monitoring** The School's operator collects one routine bacteriological sample each month and delivers it to the Weaverville Sanitary District Lab for analysis.

Sampling plan approved & current (do we have a copy?) Most recent Bacteriological Sample Siting Plan (BSSP) for the School was updated 10/2019. Approved, current, and DDW has a copy.

Controlling factor is population or service connections? Either

Number of samples per month or week required? 1 per month.

MCL violations in past year? None from 2015-2019.

**Discussion** Okay.

2. Chemical Monitoring The School relies on chemical monitoring schedules provided by the Department to keep them up to date on what monitoring is required. Routine pristine schedule.

Who collects samples? School operator or Principal.

**Discussion** The School has chemical monitoring due for the Trinity River Source. Prior testing was all below the MCL's. Three rounds of total chromium sampling has been done: 9/22/92, 2/19/93, and 10/11/11 with a detection limit of 10 PPB; all results were non-detect. Two hexavalent chromium tests were done: 10/8/02 and 1/7/2015, both non-detect. With a detection limit of 10 PPB, any exceedance of the hexavalent chromium MCL of 10 PPB would have resulted in a greater than 10 PPB detection for the total chromium tests.

- **3. Other Organics** No special monitoring is required.
- 4. Disinfection Byproducts

**Description of program** The School is required to collect at least one sample each year from a site in the distribution system representing maximum residence time. The sample must be collected during the month of warmest water temperature while the School is providing water (usually September).

**Discussion** The School's disinfection by products monitoring is summarized in the table below. The Stage 2 DBP Monitoring Plan was submitted 10/1/2013. Samples expected once per year from the Teacher's Lounge in August. **Annual TTHM & HAA5 testing is required.** 

Year	Date	TTHMs, mg/L	HAA5s, mg/L
MCL	- →	0.080	0.060
2004	12/20	0.023	0.010
2005	9/9	0.018	0.015
2007	11/12/007	0.0138	0.0079
2010	10/11/2012	0.0069	0.0037
2011	8/1/2011	0.0073	0.005
2012	8/15/2012	0.0089	0.0052
2013	8/14/2013	0.022	0.0179
2014	8/21/2014	0.0088	0.0062
2015	Missed		
2016	7/12/2016	0.012	0.012
2017	9/13/2017	0.015	0.0098
2018	Missed		
2019	7/03/2019	ND	0.0199

5. Lead and Copper Monitoring

Date	Round	# of Samples	90 <sup>th</sup> Percentile Lead, mg/L	Round	90 <sup>th</sup> Percentile Copper, mg/L
		Action Level →	0.015		1.3
6/18/93	1	5	0.023 (>AL)		
7/30/93*	~1	1	0.002		
9/15/93	2	5	0.008		
11/22/93	3	5	0.002		
2/24/98	4	5	0.004	1	0.520
6/9/06	5	5	ND	2	0.375
11/12/07	6	5	0.004	3	0.495
8/1/2011	7	5	ND	4	0.313
2014	missed				
7/12/2016	8	5	ND	5	0.473
7/03/19	9	5	ND	6	0.188

\* Replacement sample collected from the kitchen. Original result from 6/18/93 kitchen sample was 0.0389 mg/L.

**Lead & Copper sampling program** The 90<sup>th</sup> percentile level of lead in the initial round of monitoring performed on June 18, 1993, was 0.023 mg/L, which exceeds the AL for lead of 0.015 mg/L. A single sample collected from the kitchen sample site contained 0.0392 mg/L lead. On July 30, 1993, the School collected a second sample from the kitchen site which contained 0.002 mg/L lead. Based on past results, the School is required to monitor for lead by collecting a set of five tap water samples from the distribution system in accordance with Department procedures at least once every three years during May, June, July, August, or September. The School has completed 6 rounds of annual monitoring for copper with no exceedances of the 90<sup>th</sup> percentile AL for copper. They are reduced to one set of five tap water samples every three years. The School's lead and copper monitoring is summarized in the table above.

6. Is an approved water quality monitoring plan on file? not required for this system.

## H. OPERATION & MAINTENANCE

1. Planning & Personnel: improvements per Waterworks Standards? Reportedly, they are.

Does the utility have up-to-date distribution system maps? Yes

Is up-to-date copy of system schematic on file? Yes

What is the minimum grade requirement? A Grade T2 treatment operator and a Grade D1 distribution system operator.

Certified personnel	Title	Grades
Brett Holmes	Operator	T2, #36719, expires 1/1/2021; D1, #45369, expires 5/1/2021.

2. Cross-Connection Control Program inspector None (by default, Mr. Holmes)

Copy of the cross-connection control ordinance on file? N/A, noncommunity water system. Discussion No cross-connections were noted during the inspection.

- 3. Complaints: Complaints would be documented by the Principal and then acted upon.

  Discussion They have no record of any complaints.
- 4. Is up-to-date emergency notification plan on file? Yes, last updated 8/2017.

Emergency response plan Would shut down system until fixed and provide bottled water.

**Notification of DDW of significant system problems** Principal Camara and Brett Holmes are aware that the Department should be notified of any significant problems.

**Discussion** Small system with just 65 students and 15 staff. Will handle emergencies with hands-on.

**5. Main Disinfection Program:** Main repairs are contracted out.

Does the main disinfection program comply with AWWA specifications? No, the School does not have a main disinfection program and relies on the contractor to perform the disinfection following construction or repairs.

**Discussion** All main repairs are contracted out, and the School relies on the contractor to perform the required main disinfection. The School operator needs to ensure that the contractor follows AWWA procedures for disinfecting water mains in the future.

	6.	Valve Maintenance Program The School has no formal valve maintenance program.	
		Are number & location of valves satisfactory? Reportedly, they are.	
		Discussion All valves are in boxes raised to grade, and maps of all valve locations are maintained a	nd
		available. The School may wish to begin a systematic program of turning all valves and recording the numb	
		of turns to full open and full close.	
	7.	Flushing program The School's pipes are flushed once per year in fall prior to opening of School.	
		Approximate number of dead ends0 Percent with flushing valvesN/A	
		Discussion Small noncommunity system serving two buildings. The flushing program appears adequate	
	1. 2.	VERALL SYSTEM APPRAISAL  Chemical monitoring due on source; annual perchlorate.  Recommend emergency generator for at least the water booster pressurizing pump	
J.		ttachments stem Record Report prepared by:	
		11/15/1	9
		Signature Date	_

I.

# **SYSTEM RECORD**

System Number <u>5304209</u> Name of System <u>Junction City School</u>

Date		Priority	Dead	Reported	Confirmed
Noted	Description of Defect or Hazard	Number	line	Corrected	Corrected
8-13-07	Tank: screen vent openings			8-15-07	1-20-11
8-13-07	Obtain certified T2, D1 Operators			8-24-07	8-24-07
8-13-07	Distribution system TTHM & HAA5 sampling due; can sample at kitchen sink-routine coliform sample site			11-12-07	11-12-07
8-13-07	Distribution system lead & copper sampling due: 5 sites			11-12-07	11-12-07
8-13-07	Recommend replacing brass valves for raw and finished turbidity sampling with resilient seated ball valves for ease of operation			7-1-05	7-1-05
8-13-07	Develop and submit for review Water Treatment Plant Operations Plan (overdue)	2		9-14-16	9-14-16
6-9-16	Once per year distribution system TTHM & HAA5 sampling due; sample at Teacher's Lounge	2	9-30-16	9-13-17	11/15/19
6-9-16	Distribution system lead & copper sampling due: 5 sites. Sample summer; June 1 through September 30	2	9-30-16	7-12-16	11/15/19
8-13-07 11-18-19	Recommend obtaining standby power system for water treatment and delivery system	R	R		
11-18-19	Update Emergency Disinfection Plan	2	1-15-19		

- Priority Number:

  1 = Immediate (1-2 days)

  2 = short term (1-2 months)

  3 = mid range (3-6 months)
- 4 = Longer term (multiple year, usually costly to correct) R = Recommended as a good Waterworks practice





# State Water Resources Control Board

Division of Drinking Water

November 18, 2019

Junction City School 52680 Red Hill Road Junction City, CA 96048

Attention:

Christine Camara, Principal

Subject:

Inspection of Junction City Elementary School Public Water System,

PWS No. 5304209, Trinity County

On October 24, 2019, Ian McFadden, from this office, met with Brett Holmes and conducted an inspection of the public water distribution facilities operated by Junction City Elementary School. Please find the enclosed Water System Record for your review and use.

During the inspection and subsequent file review, the following system deficiencies, issues, or concerns were noted:

- 1. Emergency Disinfection Plan: Please draft an Emergency Disinfection Plan (Template enclosed) which details how the system will chlorinate water if the regular chlorination systems fail. This plan can include putting a measured amount of chlorine solution directly into the storage tanks based on tank water volume.
- 2. Recommend Emergency Power Supply: During loss of electrical power to the School water pressure and supply is almost immediately lost. This office recommends that you obtain an emergency electrical generator to power your water treatment and supply facility.

If you have any questions about this letter, please contact lan McFadden at (530) 224-4868 or me at (530) 224-4875.

Barry S. Sutter, P.E., Klamath District Engineer

Division of Drinking Water

STATE WATER RESOURCES CONTROL BOARD

Cc: via email, Brett Holmes, Water System Operator HMZBrett@gmail.com

Enclosures (2): Water System Record, EDP Template

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

# **SYSTEM RECORD**

Name of System	Junction City School	System Number	5304209	
•		•		

Date		Priority	Dead	Reported	Confirmed
Noted	Description of Defect or Hazard	Number	line	Corrected	Corrected
8-13-07	Tank: screen vent openings			8-15-07	1-20-11
8-13-07	Obtain certified T2, D1 Operators	<b></b>		8-24-07	8-24-07
8-13-07	Distribution system TTHM & HAA5 sampling due; can sample at kitchen sink-routine coliform sample site	<del></del>		11-12-07	11-12-07
8-13-07	Distribution system lead & copper sampling due: 5 sites	<b></b>		11-12-07	11-12-07
8-13-07	Recommend replacing brass valves for raw and finished turbidity sampling with resilient seated ball valves for ease of operation		, <del></del>	7-1-05	7-1-05
8-13-07	Develop and submit for review Water Treatment Plant Operations Plan (overdue)	2		9-14-16	9-14-16
6-9-16	Once per year distribution system TTHM & HAA5 sampling due; sample at Teacher's Lounge	2	9-30-16	9-13-17	11/15/19
6-9-16	Distribution system lead & copper sampling due: 5 sites. Sample summer; June 1 through September 30	2	9-30-16	7-12-16	11/15/19
8-13-07 11-18-19	Recommend obtaining standby power system for water treatment and delivery system	R	R		
11-18-19	Update Emergency Disinfection Plan	2	1-15-19		

- Priority Number:

  1 = Immediate (1-2 days)

  2 = short term (1-2 months)

  3 = mid range (3-6 months)

  4 = Longer term (multiple year, usually costly to correct)

  R = Recommended as a good Waterworks practice

# **EMERGENCY DISINFECTION PLAN**

Name of System: Junction City School

System Number: 5304209

In the event the disinfection system has failed to operate or is injecting too little disinfectant, the following plan of action will be taken to correct the problem or situation. The plan should address the availability of a spare chlorinator, manual feeding of chlorine until the problem is resolved, more frequent chlorine residual monitoring, and other necessary actions.

# The Division must be notified within 24 hours of this occurrence:

Case 1. Chilomile residua	al into the system is less tha		
			-
			*•
Case 2: Chlorine residua	al into the system is comple	tely absent:	
Case 2: Chlorine residua	al into the system is comple	tely absent:	
Case 2: Chlorine residua	al into the system is comple	etely absent:	
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Case 2: Chlorine residua			
Case 2: Chlorine residua			
Case 2: Chlorine residua			

Note: This plan is to be posted at the filtration plant and is to be reviewed and updated annually.

Attachment: Table showing amount of hypochlorite to achieve a 1 mg/l chlorine dosage in water storage tank.

Amount of sodium hypochlorite for a dosage of 1 mg/l

Choose the correct amount based on the strength of the hypochlorite you are using and the amount of water to be treated.

	12.5% Hypochlorite		
Tank Volume (gallons)	Cups	Ounces	Gallons
500	1/16	0.5	
1,000	1/8	1	
2,000	1/4	2	
3,000	1/2	4	
4,000	5/8	5	
5,000	3/4	6	
10,000	1-3/8	11	0.08
20,000	2-5/8	21	0.17
30,000	4	32	0.25
40,000	5-3/8	43	0.33
50,000	6-5/8	53	0.42
100,000		107	0.83

Note: If the water has a higher than normal chlorine demand (such as waters with high iron or manganese, hydrogen sulfide or color), additional dosage may be required.

#### NOTICE OF EXEMPTION

**To:** Office of Planning and Research **From:** Junction City Elementary School District

P.O. Box 3044, Room 113 430 Red Hill Road Sacramento, CA 95812-3044 Junction City, CA 96048

Fax (916) 323-3018

Project Title: Junction City ESD Water Filtration and Treatment System Upgrade

**Project Location - Specific:** The project site is accessed from Red Hill Road. The approximate latitude and longitude are 40°44′02.5″N and 123°03′34.6″W, respectively.

Project Location - City: Junction City, CA Project Location - County: Trinity County

**Description of Nature, Purpose, and Beneficiaries of Project:** 

Please refer to the attached Exhibit "A"

Name of Public Agency Approving Project: Junction City Elementary School District

Name of Person or Agency Carrying Out Project: Junction City Elementary School District

# **Exempt Status:**

**15269 (b)** - Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare.

**15282 (k)** - The installation of new pipeline or maintenance, repair, restoration, removal or demolition of an existing pipeline as set forth in Section 21080.21 of the Public Resources Code, as long as the project does not exceed one mile in length.

**15282(m)** – Minor alterations to utilities made for the purposes of complying with Sections 116410 and 116415 of the Health and Safety Code as set forth in Section 21080.26 of the Public Resources Code.

**Reasons why project is exempt:** Please refer to the attached Exhibit "A"

**Lead Agency Contact Person:** Christine Camara, JCESD Superintendent

Jeff Morris, Trinity County Office of Education, Facilities Analyst

**Area Code Telephone Extension:** *Ms. Camara (530) 623 - 6381* 

Mr. Morris (530) 355-9880

Signature: Title: Facilities Fiscal Analyst, TCOE

**Date:** October 12, 2021

# EXHIBIT "A" JUNCTION CITY ELEMENTARY SCHOOL DISTRICT WELL REPLACEMENT PROJECT

#### PROJECT DESCRIPTION

Junction City Elementary School (JCESD) currently has 75 students and 19 staff members on site on any given school day. Special events can add up to 449 people on campus using the facilities. Junction City ESD well system was installed circa 1990 and recently updated (2019).

Due to the nature of the Trinity River influenced water source, the current JCESD well site provides adequate water quantity but the quality needs additional filtration and treatment to ensure it is potable for consumption.

The current filtration and treatment system is approaching 30 years of age, which poses increasing risk for imminent failure. Additionally, there is currently no backup power source for the system, further posing a risk to this essential community facility, which also serves as a Red Cross / Community Center during wildfires and other emergency events.

This project will upgrade the current system while also providing a propane fueled generator power backup to ensure consistent operation during emergency events.

It is expected that this upgraded system will serve JCESD well into the future.

#### LOCATION

The Project site is located at Junction City Elementary School's campus at 430 Red Hill Road, Junction City, CA 96048. The project site is accessed from Red Hill Road. The approximate latitude and longitude are 40°44'02.5"N and 123°03'34.6"W, respectively.

#### REASONS FOR PROJECT EXEMPTION

CEQA allows certain government actions to proceed without further CEQA review if that type of action has been previously determined not to have a significant impact on the environment. Actions defined in a Categorical Exemption may be subject to further environmental review in the case of extraordinary circumstances under exemptions under CEQA. (14 CCR § 15061(b); 14 CCR § 15300.2.)

CEQA Guidelines Section 15300 identifies that Section 21084 of the State of California Public Resources Code requires that the CEQA Guidelines "include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA."

In response to that mandate, the Secretary for Resources has found that various classes of projects "do not have a significant effect on the environment and therefore are declared to be categorically exempt from the requirement for the preparation of environmental documents."

Review of the 32 classes has led to a determination that the proposed Project would be categorically exempt under three classes – Emergency Repairs, Replacement or Reconstruction, and Minor Alterations to Utilities. For each class, discussion of applicable "examples" sited in the CEQA Guidelines is provided explaining why the proposed project is Categorically Exempt under CEQA.

## 15269. Emergency Repairs

**15269(b)** states that an exemption may be granted due to "Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare."

The proposed project will remedy a situation that will soon impact essential public health, safety and welfare, specifically of Junction City Elementary School students and staff.

# 15282. Replacement or Reconstruction

**15282 (k)** states that an exemption may be granted in the case of "The installation of new pipeline or maintenance, repair, restoration, removal or demolition of an existing pipeline as set forth in Section 21080.21 of the Public Resources Code, as long as the project does not exceed one mile inlength."

The proposed project will almost exclusively consist of the installation of new water filtration and treatment facilities that will include additional maintenance, repair, restoration and removal or demolition of an existing facilities servicing Junction City Elementary School to ensure services to meet the capacity at or just above the existing use.

#### 15282. Minor Alterations to Utilities

**15282(m)** states that an exemption may be granted for "Minor alterations to utilities made for the purposes of complying with Sections 116410 and 116415 of the Health and Safety Code as set forth in Section 21080.26 of the Public Resources Code."

From a system standpoint, this is a minor alteration to the schools existing infrastructure.