



North Coast Resource Partnership  
**DISADVANTAGED COMMUNITY & TRIBAL**

Needs Assessment Survey & Interview  
Summary

**May 2019**

# Table of Contents

INTRODUCTION .....	1
SURVEY & INTERVIEW TOPICS .....	1
SECTION 1: DISADVANTAGED NON-TRIBAL WATER & WASTEWATER SERVICE PROVIDERS.....	2
IDENTIFICATION OF COMMUNITY WATER/WASTEWATER SYSTEMS.....	2
SURVEY & INTERVIEW EFFORT.....	3
SURVEY RESPONSE RATE.....	4
SURVEY & INTERVIEW RESULTS .....	5
RESPONSES TO KEY SURVEY QUESTIONS .....	21
RESPONSES TO KEY INTERVIEW QUESTIONS .....	23
NEXT STEPS .....	27
SECTION 2. TRIBAL WATER & WASTEWATER SERVICE PROVIDERS.....	28
IDENTIFICATION OF COMMUNITY WATER/WASTEWATER SYSTEMS.....	28
SURVEY EFFORT .....	29
RESPONSE RATE .....	29
SURVEY RESULTS.....	29
NEXT STEPS .....	40
SECTION 3. SURVEY-DERIVED TECHNICAL ASSISTANCE.....	41
Appendix A. Types of Water Suppliers & Wastewater Treatment Providers & Applicable Regulations....	45
Appendix B. Water Supply & Wastewater Needs Assessment Survey & Interview Questions .....	49
Appendix C. Non-Respondent Statistics .....	51
Appendix D. Respondent Comments Grouped by Subject .....	61
Appendix E. Technical Assistance & Trainings In-depth Responses .....	87
Appendix F. Tribal Water Supply & Wastewater Needs Assessment Survey & Interview Questions .....	94
Appendix G. Tribal Survey Comments Grouped by Subject.....	100
Appendix H. Indian Health Service Sanitation Deficiency List for the North Coast .....	110
Appendix I. NCRP Technical Assistance Selection Process .....	113
Appendix J. NCRP Technical Assistance Rankings.....	1

## INTRODUCTION

The North Coast Resource Partnership (NCRP) was awarded funding from the Department of Water Resources (DWR) Integrated Regional Water Management Program through Proposition 1 to implement a Disadvantaged Community and Tribal Involvement Program. Part of this funding was used to survey water suppliers and wastewater treatment operators in economically disadvantaged communities in an effort to identify needs associated with the capacity and quality of service of small water supply and waste water services providers in the North Coast region. Goals of the survey are to engage small water and wastewater providers in economically disadvantaged communities in the regional water management planning process and facilitate/ increase their participation in the 2019 Proposition 1 funding round. A survey was circulated to all public water systems serving economically disadvantaged communities in the North Coast region, including Tribes, cities, special districts, and privately-owned water suppliers<sup>1</sup>. A special effort was made to obtain responses from the small systems and Tribes that did not participate in the [2014 NCRP System Needs Survey](#).

Concurrent with the survey efforts, in-depth interviews were conducted with Tribes and in specific Watershed Management Areas (WMAs) to drill down and investigate the on-the-ground experience of individuals in and out of the water industry. Key experts from within the following groups were sought for their professional experience as well as their connection to economically disadvantaged communities and Tribes: water providers, water-based recreation organizations, municipal departments, environmental nonprofits, family resource centers, senior centers, and emergency services personnel.

## SURVEY & INTERVIEW TOPICS

The survey and interviews were intended to provide useful information for continued successful regional water management planning. Major issues that affect local systems and needs were identified related to training, technical support, capacity-building, regulations, aging or failing infrastructure, the need for trained and certified staff, financing, planned projects, and level of familiarity with the NCRP. The following is a list of the general topics included in the survey and interview:

- General System Information
- Funding and Financing Information
- System Needs
- Regulatory Issues
- Climate Issues
- Flood issues
- Forest Health
- Community Issues
- Perceived Water Quality
- Familiarity with the NCRP

---

<sup>1</sup> Tribal entities were surveyed separately through a process designed to address the specific needs and culture of Tribal communities; findings from that effort were prepared separately.

## SECTION 1: DISADVANTAGED NON-TRIBAL WATER & WASTEWATER SERVICE PROVIDERS

### IDENTIFICATION OF COMMUNITY WATER/WASTEWATER SYSTEMS

Water and wastewater services within the North Coast are delivered by a wide variety of service providers ranging from publicly owned entities (e.g., cities, special districts, and public utilities) to private entities (homeowners' associations, mobile home park owners, and individuals or businesses). This survey effort included system operators that provide service to disadvantaged communities, which includes local agencies (cities and special districts), public utilities, mutual water associations (e.g., homeowners' and neighborhood associations) and individuals or companies doing business (typically an individual or family that owns a small water company or mobile home park) (*Figure 1*) (please see *Appendix A* for descriptions of water and wastewater system types found in the region and basic regulations governing them). Effort was made to reach all service providers serving economically disadvantaged communities in the region, with particular effort placed on outreach and securing survey responses from systems that did not participate in the 2014 water and wastewater provider survey.

#### TYPES OF PROVIDERS CONTACTED

##### PUBLIC ENTITIES

- Cities
- Special Districts
  - Independent Districts
    - Community Service Districts
    - County Water Districts
    - Municipal Utility/ Water Districts
    - Public Utility Districts
  - Dependent Districts
    - County Service Areas
    - County Waterworks Districts
    - Sanitation Districts

##### PRIVATE ENTITIES

- Homeowners' Associations
- Mutual water associations/ companies
- Investor-owned utilities
- Private businesses

A list of about 225 service providers was compiled at the beginning of the effort and outreach was conducted to make them all aware of the survey opportunity; during the outreach effort, some systems were removed from the list due to having gone out of business (trailer parks), consolidation with larger systems, or incorrect addresses (some of the systems initially reached out to did not serve disadvantaged communities; two were not located within the North Coast Region). The list was winnowed to 208 systems; one mobile home park was removed after the October 2017 Tubbs fire in Santa Rosa (Sonoma County) destroyed it and the owners publicly stated they were not going to rebuild, dropping the final outreach list to 207. Two systems found through an associated outreach effort in late 2018 boosted the final (2019) systems count for this outreach effort to 209 water supply and wastewater treatment systems (*Table 1*). Although effort was made to identify all "community water systems (those providing water to at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents, see *Appendix A*)" and wastewater providers serving economically disadvantaged communities, it is likely that there are water providers within the region and classified by the state as community water systems that this effort missed.

## SURVEY & INTERVIEW EFFORT

A concentrated effort was made to secure a survey response from all 207 known providers serving economically disadvantaged communities in the North Coast region. Survey data were gathered beginning in November 2017 using the on-line tool Survey Monkey, emailed PDFs, and phone interviews. Initial introductory emails were sent prior to November apprising contacts from the 2014 survey of the upcoming survey effort and verifying contact information. Information about how to access the survey was distributed via email, with telephone calls to contact those who didn't respond to email outreach or who did not have email addresses. Follow up emails and phone calls were initiated about 3 – 4 weeks after the survey mailing to encourage participation. A few systems were contacted through the U.S. Postal Service (USPS) and two surveys were sent and returned via USPS. A copy of the survey can be found in Appendix B. Water Supply & Wastewater Needs Assessment Survey & Interview Questions.

Concurrent with the survey efforts, Greenway Partners and Wanderhill Consulting conducted in-depth interviews in the Humboldt Bay, North Coast Rivers, and Trinity River WMAs to drill down and investigate the on-the-ground experience of individuals in and out of the water industry (*see Appendix B. Water Supply & Wastewater Needs Assessment Survey & Interview Questions*). Interviews were conducted through a multi-pronged engagement plan to make the process simple for the key experts. Prospective interviewees were initially engaged with an introductory email with a follow-up phone call to evaluate interest and schedule an interview. After the phone or in-person interview, follow-up was conducted via online engagement and print materials.

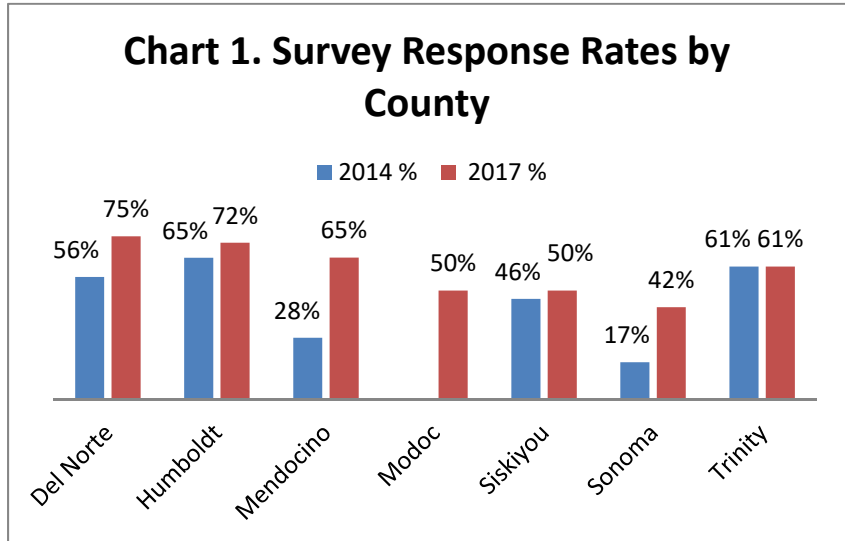
TABLE 1. NORTH COAST REGION WATER/WASTEWATER SYSTEMS THAT SERVE DISADVANTAGED COMMUNITIES - TYPES BY COUNTY									
System Type	Del Norte	Humboldt	Mendocino	Modoc	Siskiyou	Sonoma	Trinity	Total	% Total
Water Supply	13	26	30	1	13	46	15	144	69%
Wastewater Treatment	1	6	6		3	5	1	22	11%
Both	2	11	9	1	10	8	2	43	21%
<b>Total</b>	16	43	45	2	26	59	18	209	100%

Many water systems are small and governed by volunteer boards whose membership and leadership periodically changes. Tracking down current board members who felt that they were in a position to speak knowledgeably about their water system was challenging. Several groups took the invitation to the board for consideration and didn't respond further. Additionally, many individuals associated with small systems were tracked down on their personal email accounts and home phone numbers. In one case on a telephone call, introductory information was met with deep distrust and a hang up. This instance is indicative of the mistrust or suspicion with which some in the region view efforts to obtain information about a highly valued and highly regulated resource. Future efforts should consider including trusted local

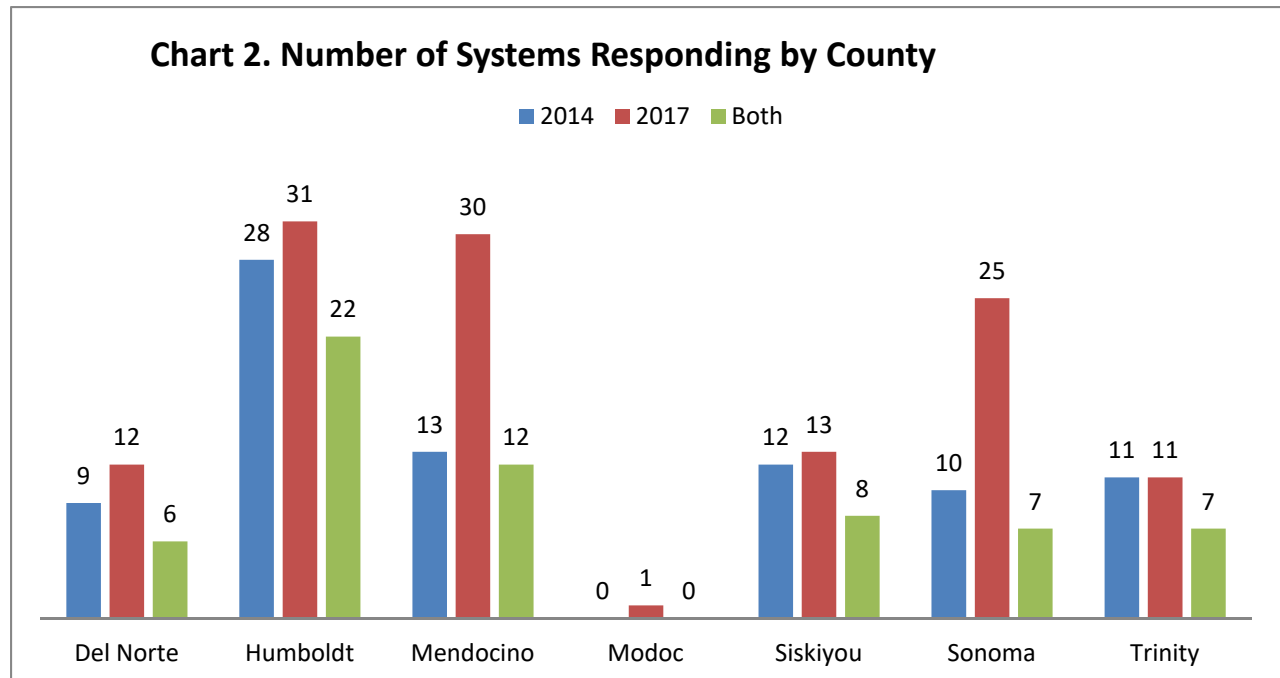
representatives to initiate contact and/ or introduce survey personnel to achieve greater participation.

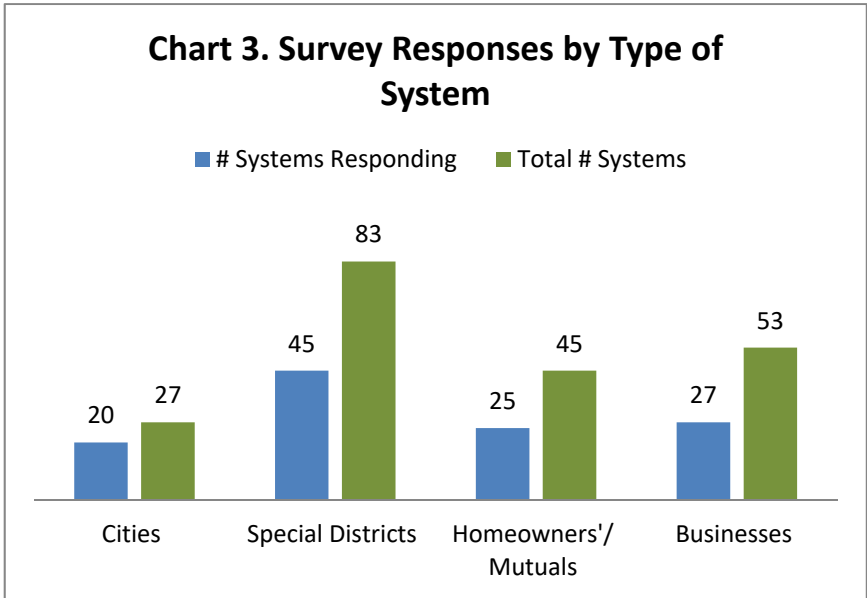
### SURVEY RESPONSE RATE

By April 19, 2019, 127 survey responses representing 115 systems had been submitted from a variety of service provider types, representing a 55% response rate. Humboldt County had the greatest number of survey responses, but in 2019, Del Norte County, at 75%, had the highest response rate (*Charts 1 and 2*). Humboldt County was next highest, with a 72% response rate and Trinity County was at 61%. Sonoma County trailed Humboldt and Mendocino County in response numbers and all other counties' response rates, with only 42% of Sonoma systems participating. This may have been due to recovery efforts associated with the Tubbs Fire, which occurred in October, 2017 about six weeks prior to survey dissemination, and impacted many Sonoma County water systems and residents. However, the 2014 Sonoma County response rate was only 17% and Mendocino County's 2014 response rate was only slightly greater than 1 in 4 systems.



Systems associated with city government had the highest response rate, with nearly 75% of cities participating in the survey (*Chart 3*). Special districts, homeowners' and mutual associations, and businesses all had nearly the same response rate – about one in two participated in the survey.





Of those who chose not to respond to the survey, a few explained why. A representative of a system who had previous experience with a similar regional process and was not impressed expressed dissatisfaction with the North Coast Resource Partnership for not mobilizing around the cannabis cultivation issue; they indicated that participation was unlikely.

Another system

representative requested their name be removed from the mailing list and it was; phone calls and subsequent emails to the organization general email (trying to obtain the correct contact person) resulted in hang ups and non-responses. A different system representative sent a lengthy email declining to participate in the survey and asking to be removed from the mailing list; some reasons for the refusal included no need for assistance, grievances with state regulations, and a mistrust of any organization offering assistance. Another two systems are in the process of consolidation and felt that no assistance was needed and that their responses wouldn't be of use, while another system manager said that they were caught up in the fire recovery process and wouldn't have time to take the survey. A different system declined to complete the survey because none of the staff with the technical expertise was willing to participate. These explanations of non-responses are significant in that at least some of the other non-responders likely felt the same, but did not take the time to articulate their reasoning. Further analysis of non-respondents is provided in *Appendix C. Non-respondent Statistics*.

**SURVEY & INTERVIEW RESULTS**

The survey was developed to provide as much flexibility as possible for operators to convey information about their systems in order to provide the most comprehensive “snapshot” of each system. In some cases, this did not lend itself well to data analysis. For instance, many questions allowed operators to provide multiple answers as well as include comments. In addition, many survey respondents did not answer all questions. As a result, it is difficult to analyze all responses using simple percentages.

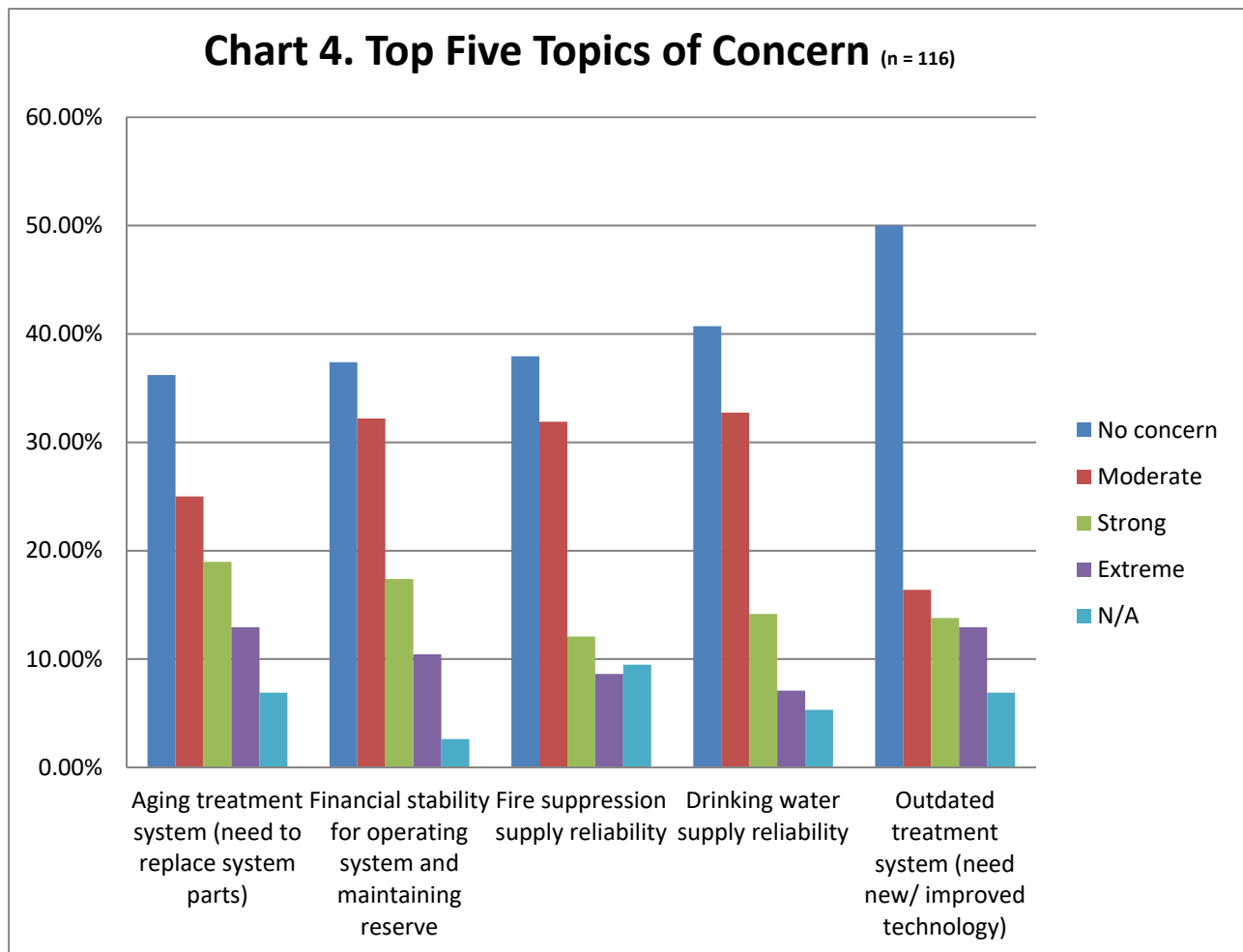
The interview results are even less qualitative and are often anecdotal or location-specific. Other responses, such as concern for poverty and homelessness or lack of qualified work force are issues applicable to both large and small communities throughout the state.

A brief analysis of survey and interview responses is provided below.

## Topics of Concern

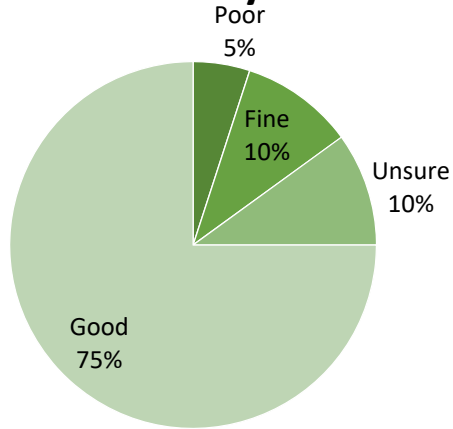
(possible responses were: no concern, moderate concern, strong concern, and extreme concern)

One hundred sixteen answered this question; it was skipped by eleven. The top five topics of concern were: an aging treatment system; financial stability; fire suppression supply reliability; drinking water supply reliability; and the need for new and improved technology. Of those feeling extreme concern, the aging systems and outdated treatment systems and financial stability were the primary concerns. Comments from survey respondents were wide ranging, however, there were a few commonalities (*Appendix D. Respondent Comments Grouped by Subject*). Most communities with concerns around aging systems that need replacement also indicated a need for assistance obtaining funding for the needed replacements. Many of the systems mentioned the need for new water mains, transmission lines, backflow valves and tanks. Needs for new technology include water meters and computer systems and associated technology. Financial stability was of concern mostly with respect to funding needed to implement repairs and upgrades. Other concerns included having a small customer base and not being able to raise rates enough to cover capital improvements or even emergencies. One respondent pointed out that systems that are in violation with water quality regulations often receive state funding to correct the violations, but that its system, which is not in violation, cannot secure state assistance.





**Chart 5. Perceived Drinking Water Quality - Humboldt Bay WMA** (n = 20)



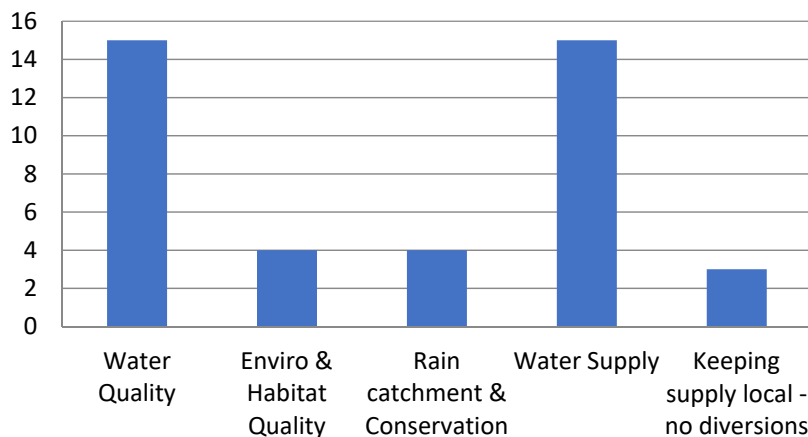
Although many regions across California report concerns about water quality, interview respondents in the Humboldt Bay Watershed Management Area reported high confidence in the quality of water available for use (Chart 5). Several even noted that they actively encourage visitors from other areas to drink water from the tap.

In contrast to the confidence in water quality, many have concerns about water infrastructure, specifically as it relates to wastewater. Water providers shared both specific challenges faced and upgrade projects in process. Additionally, numerous Key Experts whose expertise lay outside of technical water issues also noted awareness of areas with failing infrastructure and/or replacement projects. Top water

priorities shared by interviewees include water quality and supply, environment and habitat, rainwater catchment and conservation, and keeping existing water rights (Chart 6). The number one barrier for respondents is limited financial resources, although respondents note the following also negatively impact project viability: staff resources, willingness to collaborate amongst agencies, permitting, and public perception of project need.

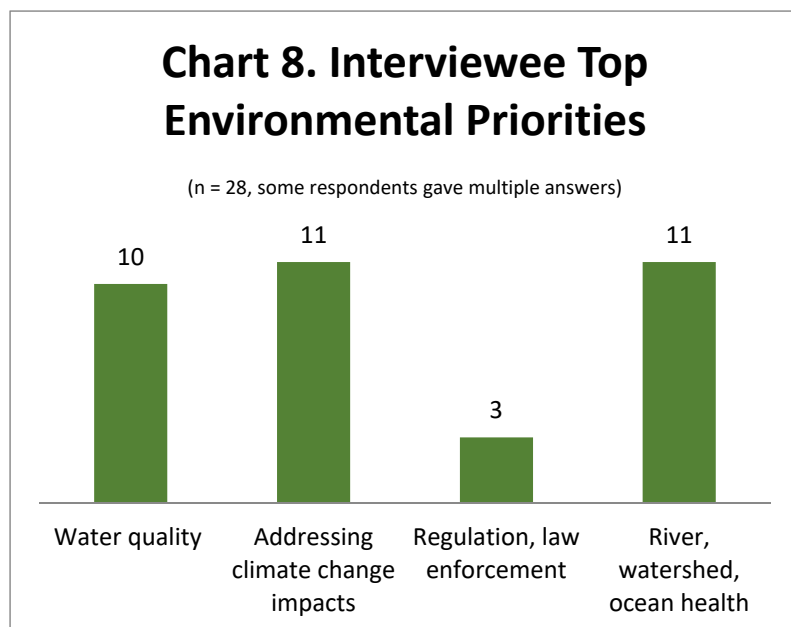
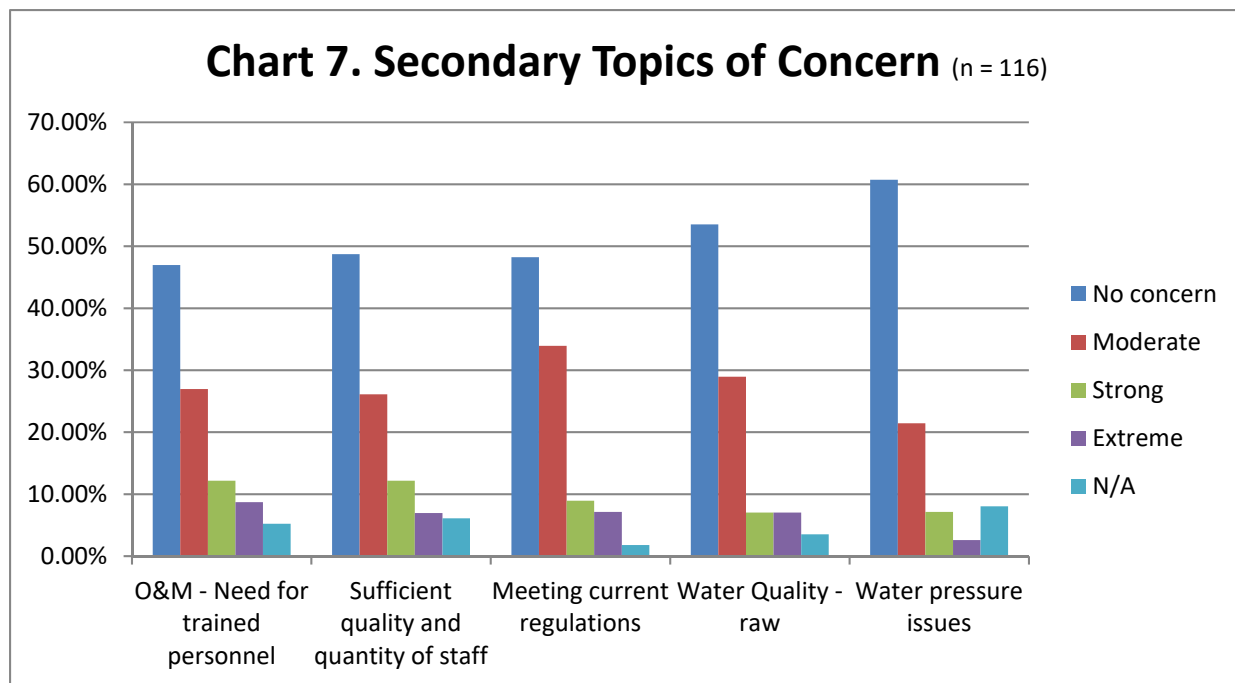
Secondary topics of concern in the survey were the need for trained personnel and sufficient quality and quantity of staff, meeting regulatory challenges, raw water quality, and water pressure issues. Some of the smaller systems indicated a need for the availability of 3<sup>rd</sup> party operators to fill in temporarily when there is a staffing need. Others indicated that finding and retaining qualified people in a rural area can be

**Chart 6. Interviewee Top Water Priorities** (n = 28)



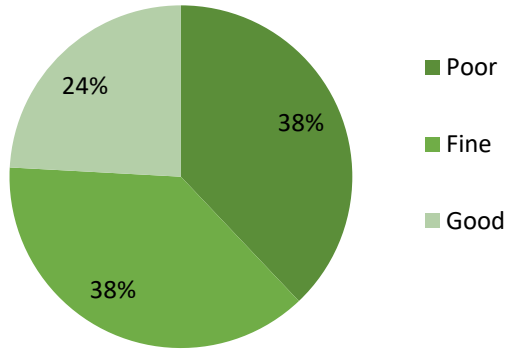
difficult. A couple of homeowner associations mentioned that all personnel are volunteers and that the number of water users willing to volunteer is not adequate. With respect to regulatory challenges, several respondents expressed frustration with state testing requirements and the associated costs. Specific contaminants of concern include E-coli, hexavalent chromium, iron, manganese, sulfur, calcium and chlorine disinfection by-

products. A couple of respondents would like to be kept informed of current and proposed regulations along with desiring “knowledge of other small private systems and their treatment systems and how they meet current and proposed regulations (*Appendix D. Respondent Comments Grouped by Subject*).” Respondents with concerns about water supply stated that reliability is an issue and additional water storage is being sought. One mentioned that water conservation “throws a wrench in things” because “it cuts down on revenues and complying with drought regulations.” Concerns with fire were varied; some were associated with water quality after a wildfire, while others were more concerned with fire suppression and loss of power during a fire event. A few systems have recurring problems with insufficient water pressure.



Key experts in the Trinity, North Coast Rivers, and Humboldt Bay WMAs provided a wide range of top environmental priorities (*Chart 8*) including water quality, addressing climate change impacts, assistance with regulation and greater law enforcement with respect to cannabis grows, and environmental health. Almost a quarter of the interviewees felt their forested lands were in good health, with 38% rating their forest as average and another 38% rating it poor.

**Chart 9. Perceived Health of Local Forest** (n = 29)

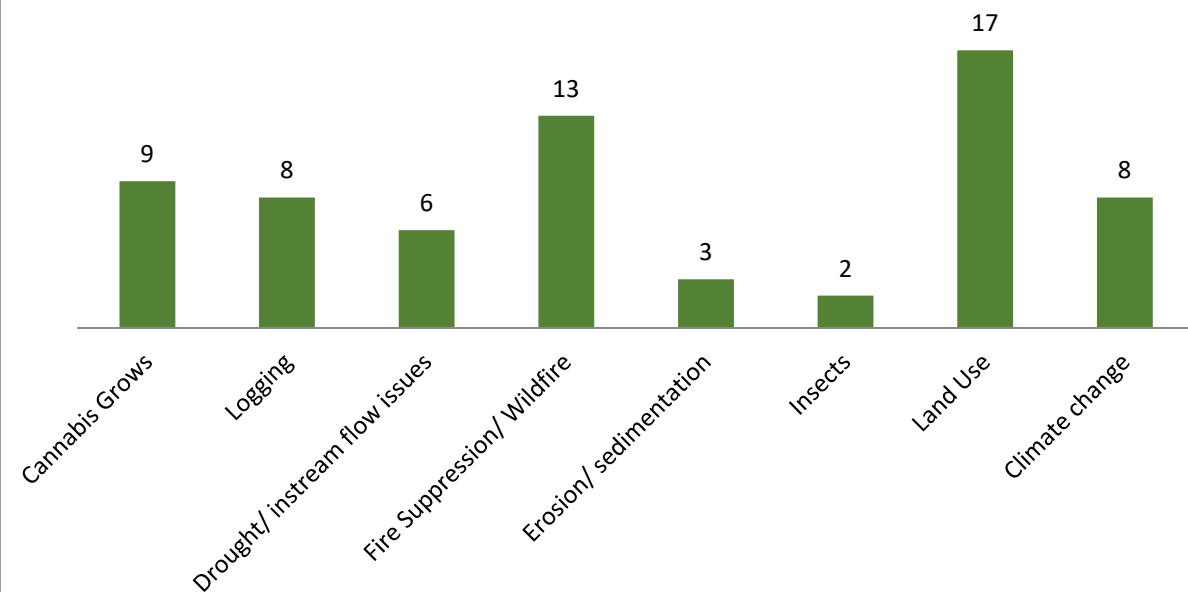


Many interviewees commented that their forest needs prescribed burns, undergrowth clearing, or other management measures to improve. There is a consensus that forest health in the Trinity River WMA is "poor", "not good", or "fair". Most respondents referenced the need to thin the forests due to "increased density", "fuel loading", and being "overgrown". Whether in answer to this question or at another point in the interview, all Trinity River WMA respondents discussed the increase of catastrophic wildfires, and most

made the connection between wildfire and the buildup of forest fuels. One interviewee said the repeat high severity fires are causing rapid conversion of forests from mixed conifer to early seral stands of shrub and hardwoods, resulting in displacement of species and negative impacts to water quality/quantity. Respondents noted a number of impacts to forest health: high temperature droughts, increasing temperatures, insects, disease, clearing for cannabis cultivation, legacy impacts from mining and logging that contribute to erosion, expansion of the WUI area, and fire suppression. Interviewees also discussed the legacy impacts of logging, including sedimentation from old roads and overgrown forests (Chart 10). Another interviewee described forest health in Trinity as poor but resilient due to complex biogeography and high biological diversity.

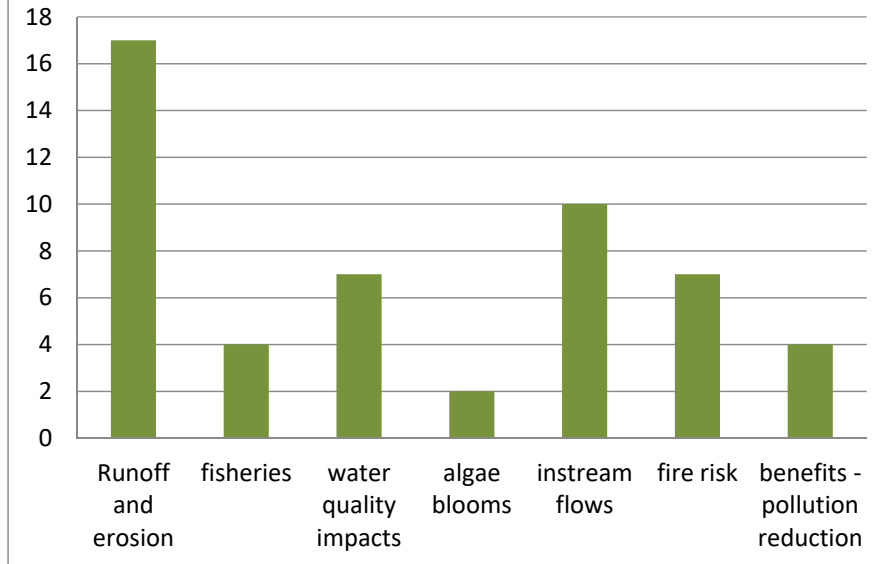
**Chart 10. Greatest Impacts to Forests**

(n=28, some respondents gave multiple answers)



## Chart 11. Impact of forest health on local watersheds

(n = 29, some respondents gave multiple answers)



Many of the interviewees detailed the complex relationship between forest and watershed dynamics when asked about the impacts of forest health on local watersheds. In summary, dense and overgrown forests are consuming vast amounts of water. When large-scale wildfires kill large swaths of trees, loss of water to evapotranspiration decreases, increasing water yields. Many noted that high severity wildfires have harmful impacts such as increased sedimentation and the potential to create

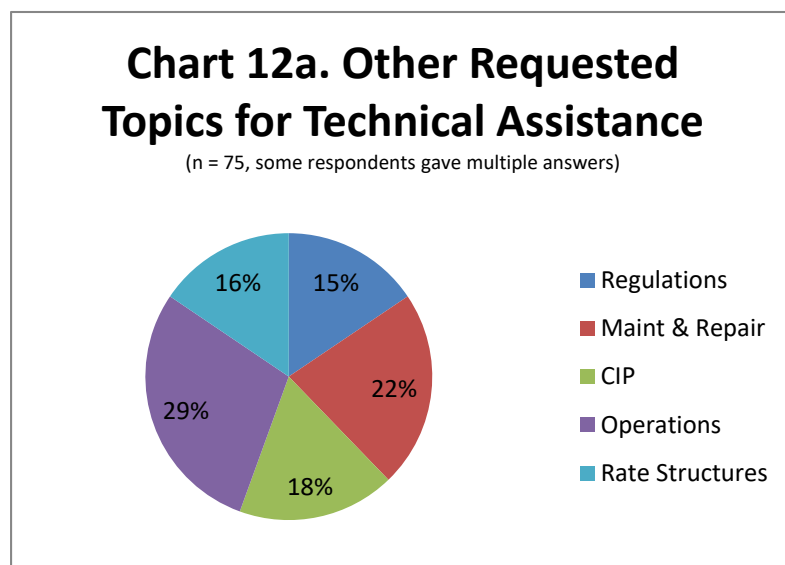
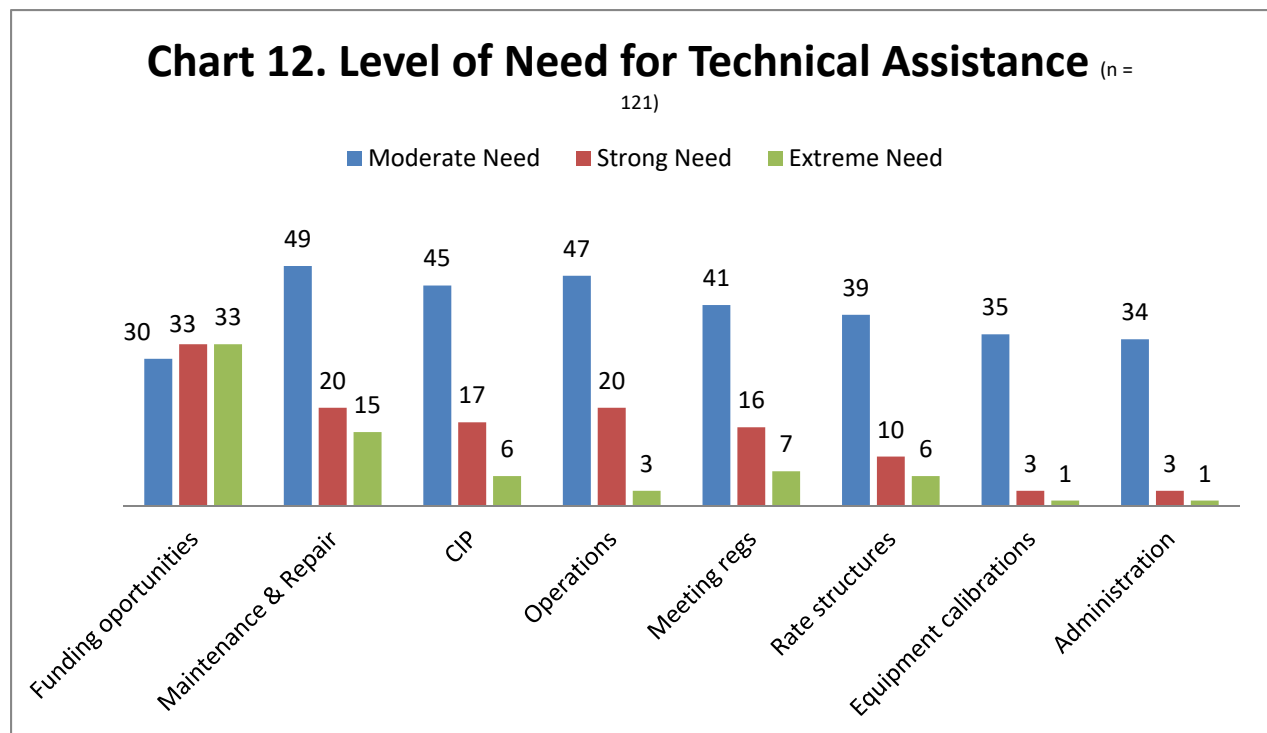
hydrophobic soil. One interviewee discussed the lack of healthy riparian vegetation along the Trinity River. In the North Coast Rivers and Humboldt Bay WMAs, many respondents linked forest health with watershed sedimentation, a result of road networks and wildfires. Some interviewees identified cannabis cultivation as a pollution source and supply stressor (*Chart 11*).

### Level of Need for Technical Assistance and Trainings

*(possible responses were: no need, moderate need, strong need, extreme need)*

One hundred twenty-one respondents answered this question; it was skipped by six. The greatest need was for assistance with funding opportunities such as grants and loans, with 28% of respondents indicating extreme need, another 28% indicating strong need, and 25% indicating moderate need (*Chart 12*). Approximately 17% of respondents indicated strong need for maintenance and repair and operations technical assistance. About 40% of respondents expressed moderate need for assistance with maintenance and repair, operations, and capital improvement planning, while about a third of respondents indicated moderate need for assistance with meeting regulations and rate structures. The greatest need for technical assistance was for obtaining funding and conducting maintenance and repair. Other needs expressed by respondents included assistance with design, system upgrades, and rate setting (*Appendix D. Respondent Comments Grouped by Subject*).

Respondents were asked to provide written detail for those topics on which they indicated “strong” or “extreme” need so the NCRP can adjust future opportunities, trainings, and workshops to meet stated needs. Seventy-five respondents gave more detailed feedback; first among these was the desire for funding assistance. While some respondents pointed out specific needs related to grants, such as “identifying and pursuing grant opportunities,” or “assistance with identifying federal funding opportunities,” most simply stated a need for help obtaining grant funds and often what is needed: “a new water tank and water main,” and “aging infrastructure will need updating,” or “need a generator and installation for the water treatment for power outages (see *Appendix E, Technical & Training Needs Comments*).”



Other requested topics were regulations, Capital Improvement Planning (CIP), operations, rate structures, and maintenance and repair (*Chart 12a*). Suggested training topics within these categories include: meeting regulatory requirements, repair/replace/permitting in coastal zone, design of infrastructure improvements, CIP planning and development, alternative energy systems, optimization of aeration and sludge removal, local rate studies, and stakeholder engagement.

## Trainings

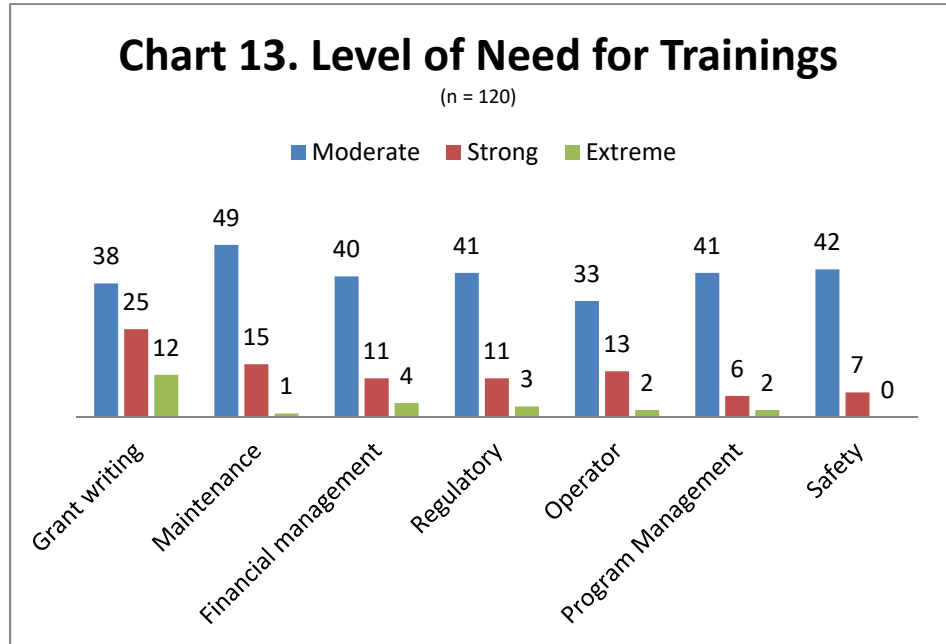
About a third of the 120 respondents indicated need for each type of training, with grant writing and maintenance training most desired (*Chart 13*).

Many respondents provided comments to this question (*Appendix E*).

There are varied needs, but commonalities exist. Several expressed interest in rate setting, finding grants and receiving assistance with grant

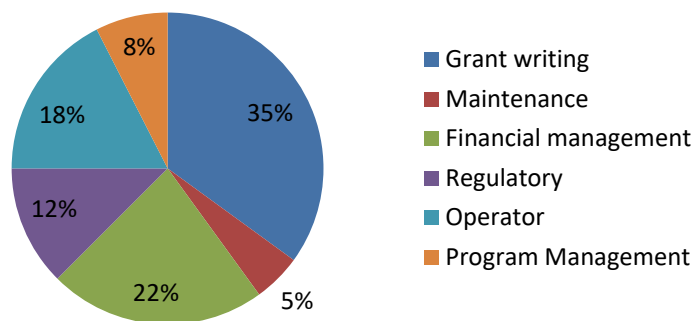
development. Others expressed interest in continuing education courses on technical subjects such as chemical constituents, rebuilding chemical feed pumps, cathodic protection, small water system engineering and many other subjects. Program management, financial management, capital improvement planning, and increasing volunteer participation (mutual) were also requested by multiple respondents. When respondents were further asked about other resources that would be helpful, they indicated a fairly strong need for asset management materials and templates (10) and budget and rate setting assistance (8). Additional needs were general management, billing templates, and finding/retaining general administrators to maintain institutional history (*Appendix D. Respondent Comments Grouped by Subject*).

Those who indicated strong or extreme need were asked to provide comments; 53 respondents did so (*Chart 13a*). Of these, grant writing and financial management training/ assistance were most often requested. Specific requests include: types of grants available, eligibility, application procedures, award/ scoring process, walking people through the grant requirements - both technical and non-technical, and a



## Chart 13a. Requested Training Topics

(n = 53)

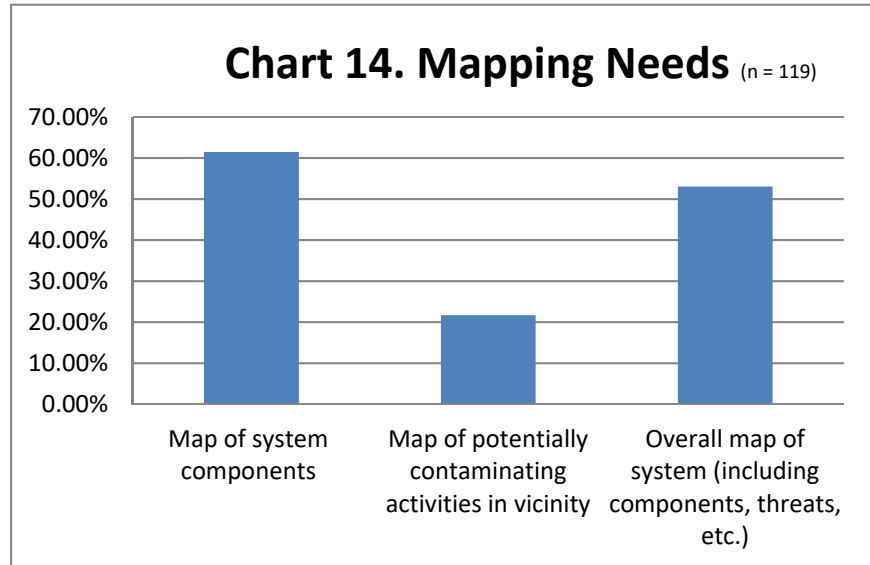


variety of financial topics, such as budgeting and rate setting and resource acquisition and planning. Other suggested topics include: local distribution and treatment operator certification classes, licensing certificates, and cross training techniques (*Appendix E*).

## Mapping

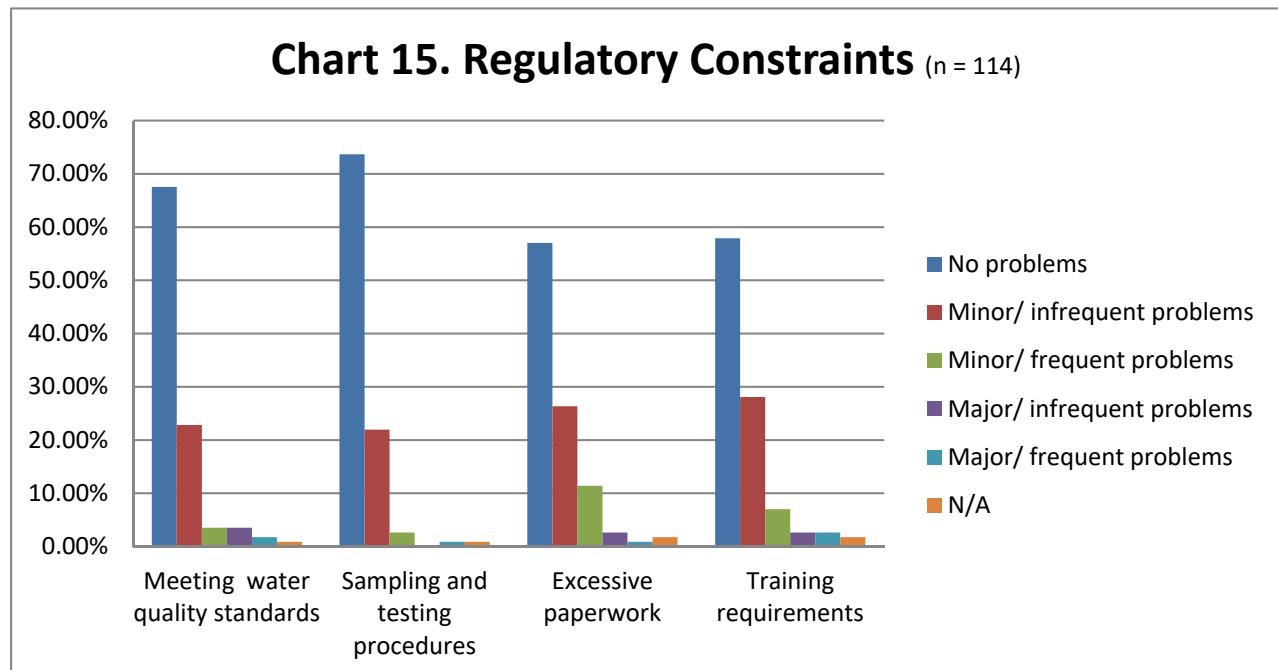
About 70% of 119 respondents indicated their system components are not accurately mapped using GPS. Of these respondents, about 60% would like a map of system components while about half would like an overall map that shows components, threats, and other salient features (Chart 13). A couple of respondents indicated that they are attending mapping workshops to develop their

own maps; others stated that the small size of their system makes mapping unnecessary. Other respondents pointed out that accurate mapping would improve disaster planning and responses to main line breaks, while another would like to obtain possible connections points to a nearby city's main line. Still other respondents indicated that they are working with sketches and schematics or maps developed decades ago (Appendix D. Respondent Comments Grouped by Subject).



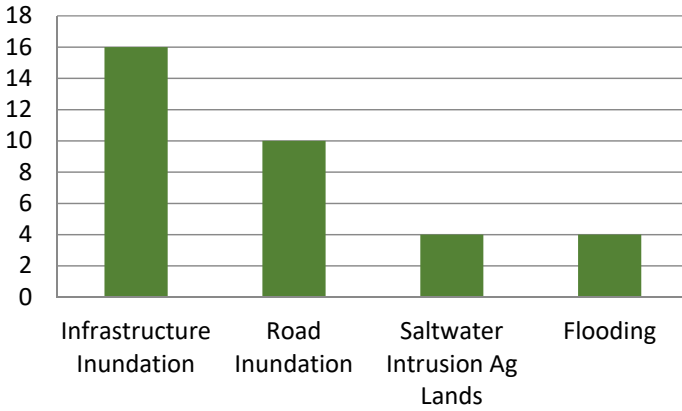
## Regulatory Constraints

Most of the 114 respondents to this question indicated that they had no problems or minor/ infrequent problems with any regulatory constraints (Chart 15). Comments associated with regulatory constraints are discussed above (Topics of Concern) and are available in Appendix D.



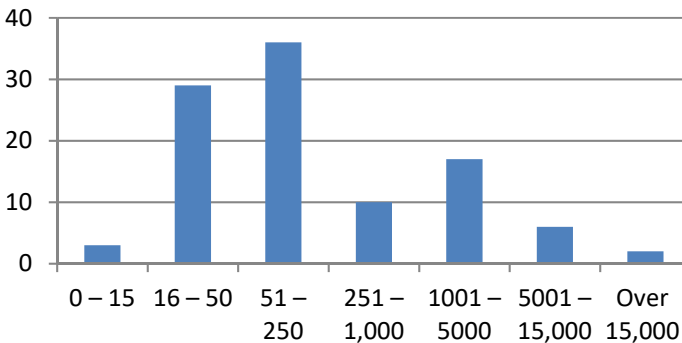
**Chart 16. Expected SLR and seawater intrusion impacts**

(Note: Total > 20, some respondents gave multiple answers)



Many interviewees feel vulnerable to sea level rise, particularly those in Mendocino, and named a variety of possible impacts: coastal bluff erosion, inundation of private wells and ag lands, infrastructure damage (especially roadways), salt water intrusion (*Chart 16*). Most respondents noted a future negative impact from sea level rise, particularly in low-lying areas. Respondents in Humboldt Bay predicted those most affected would be agriculture (especially livestock) and waterfront commercial and industrial enterprises.

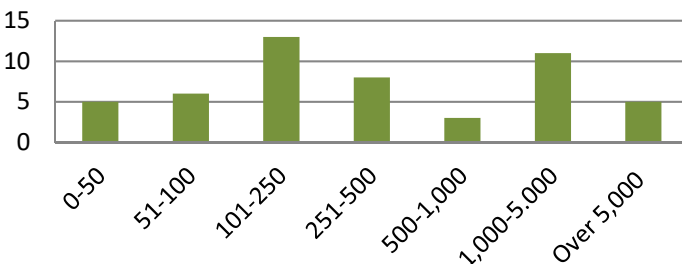
**Chart 17. Number of Hookups - Water Supply**



**Number of Hookups**

Out of 98 respondents that identified as water suppliers, over 60% have between 16 and 250 hookups, indicating that most of the water suppliers for economically disadvantaged communities in the North Coast are small (*Chart 17*). Of the 22 respondents who identified as wastewater treatment providers, there is more even spread, but over half of these also serve communities with 250 or less hookups (*Chart 18*). The greater proportion of larger wastewater treatment providers is reflective of the fact that many of the small water systems near cities that use well water are connected to city services for wastewater.

**Chart 18. Number of Hookups - Wastewater Treatment**



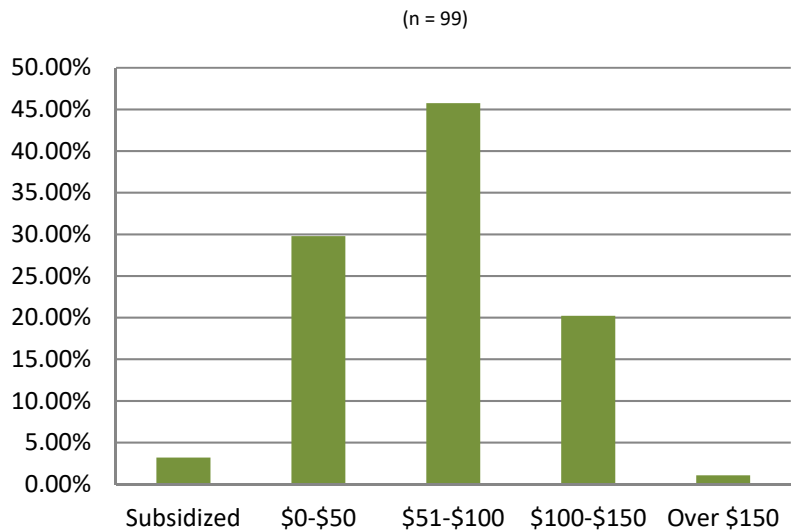


## Rate Structure and Average Monthly Bill

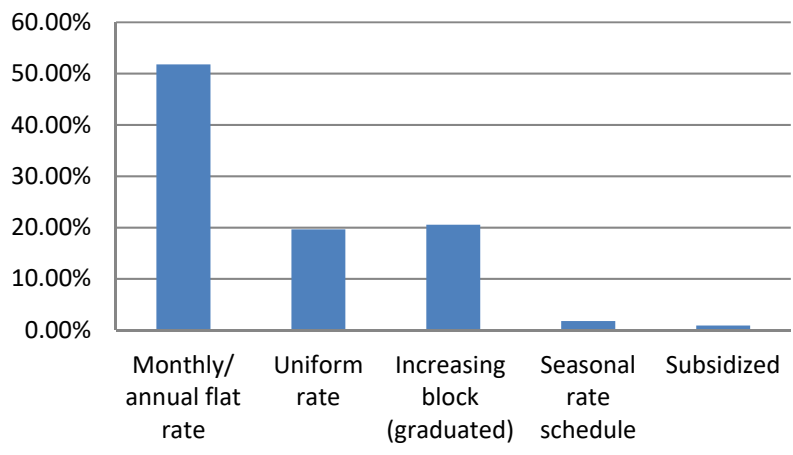
Most water and / or sewer bills in the North Coast are less than one hundred dollars per month, with only about 21% greater than \$100. Less than 5% of respondents reported average monthly bills greater than \$150 (*Chart 19*).

Nearly all trailer parks and smaller water suppliers, many of which have unmetered hookups, charge a monthly or annual flat rate, which is in many cases folded into rental rates (*Appendix D*). Graduated rates are generally used by cities and smaller communities where there is a dedicated water agency supplying residences.

### Chart 19. Average Monthly Bill



### Chart 20. Rate Structure (n = 112)



Explanation of terms – (from *Setting Small Drinking Water System Rates for a Sustainable Future*, U.S. Environmental Protection Agency, January 2006)

**Uniform Rate Schedule.** A rate structure under which customers pay a single charge per unit of water. For example, customers may pay \$2 per thousand gallons. The cost per thousand gallons remains constant even if usage changes. A uniform rate may be combined with a fixed fee so customers would pay a fixed monthly fee plus a charge per unit of water purchased

**Monthly/ Annual Flat Rate.** Rate structure under which all customers pay a set fee (monthly, quarterly, etc.) for water service that is not tied to the amount of water used.

**Seasonal Rate Schedule.** A rate that varies depending on the time of the year. Seasonal rates can be used in conjunction with any rate structure, including flat rates and uniform, decreasing, or increasing block rates.

**Increasing Block (Graduated) Rate Schedule.** Rate structure under which the price of water per unit (block) increases as the amount used increases. Blocks are set according to consumption, encouraging conservation.

## **Emergency Response and Capital Improvement Planning**

Most of the water and wastewater systems in the North Coast have an Emergency Response Plan, with only about 25% of respondents (n= 28/112) saying that they don't have one or are unsure whether they have one or not.

About half of the respondents indicated that their system has a capital improvement plan (n = 51/111), with nearly half indicating they don't (n = 51/111), while about 10% (N = 9/111) were not sure whether their system had a capital improvement plan or not. This uncertainty may be due to technical people with no managerial/ administrative knowledge participating in the survey for many of the smaller systems. The lack of Capital Improvement Plans may also be a reason for the fairly strong desire among respondents for financial management training, with over 40% indicating a strong or moderate need for such trainings.

## **Resource Sharing**

About 35% of 109 respondents indicated that sharing resources with neighboring or nearby systems would help address needs for specialized tools, equipment, qualified operators, or system management. Slightly more indicated that this would not be useful, while about 20% weren't sure. Many of the systems indicated that they currently share resources or technical staff with other facilities. For example, one water treatment operator serves many small coastal systems. Others assist or receive assistance from a neighboring system. Of those who do not think sharing resources would be beneficial, several commented that they are too far away from other systems for it to be practicable (*Appendix D. Respondent Comments Grouped by Subject*). In response to the query about resources to share, over half of the 103 respondents replied that they do not have specialized tools, equipment, or other resources to share through partnerships. About one quarter of respondents indicated that they do have resources to share, while another 20% were uncertain. The list of items that respondents indicated they are willing to share with other systems is impressive: qualified operators, backhoe and other tools, CCTV for sewer/ pipe videoing, fleet equipment, operators, generators, system repair tools, storage tanks, vector trucks, water level indicator tools, waterline leak detection and waterline location equipment, and technical expertise were some of the items offered for sharing. Some respondents indicated that they already assist smaller entities or have service contracts or MOUs for sharing specialized equipment (*Appendix D*). These responses indicate that there is a need in the North Coast for sharing equipment, tools, operators, and technical expertise, and that there are many individuals and agencies willing to do so. The NCRP, through its website, conferences, workshops, and other mechanisms, is uniquely positioned to facilitate the expansion of existing efforts.

### Climate Change

The interviews included questions about community climate change preparedness and resiliency. In inland Trinity WMA, vulnerabilities of concern were associated with reduced snowpack and increased water scarcity, catastrophic wildfires, increased severity of droughts and flooding, loss of plant and animal species, and threats to vulnerable human populations. Coastal North Coast Rivers and Humboldt Bay WMAs, however, focused mostly on water scarcity, sea level rise, and

flooding due to intense storm events (Chart 21). Respondents also mentioned wildfire, tsunamis, earthquakes, climate migrants, species shifts, and ocean acidification.

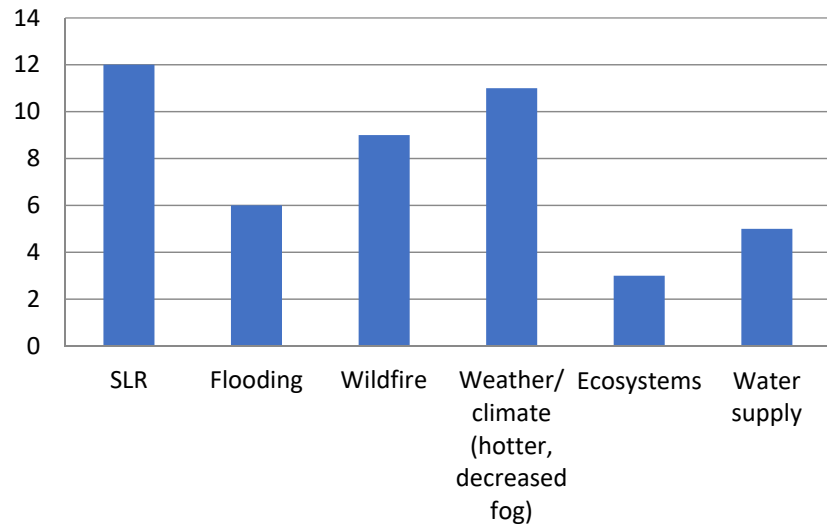
### Other Community Challenges

Other challenges faced by interviewees' communities were many and varied. Many interviewees reiterated financial need, while over half indicated a need for job training and employment. Industry and economy were also topics of concern, with the cannabis industry presenting a concern to some respondents, and an opportunity to others. When asked what gaps exist for their communities with respect to disaster

preparedness, some common themes emerged. The most common had come up elsewhere in the interviews – North Coast communities are very remote, and if they lose roads during an emergency event, it will be very difficult to provide adequate relief services, from first response to backup electricity generation. Some interviewees felt that better communication to the public and between agencies would be beneficial to public

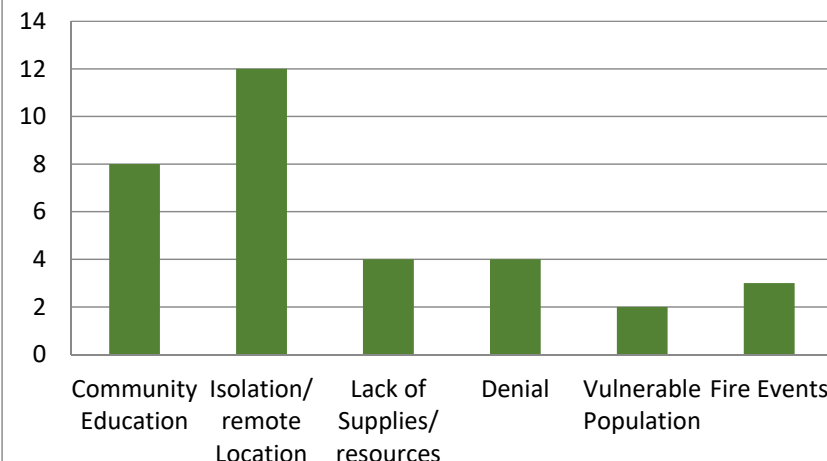
### Chart 21. Community Vulnerability to Climate Change

(n = 29, some respondents gave multiple answers)



### Chart 22. Gaps in Natural Disaster Preparedness

(n = 25, some respondents gave multiple answers)



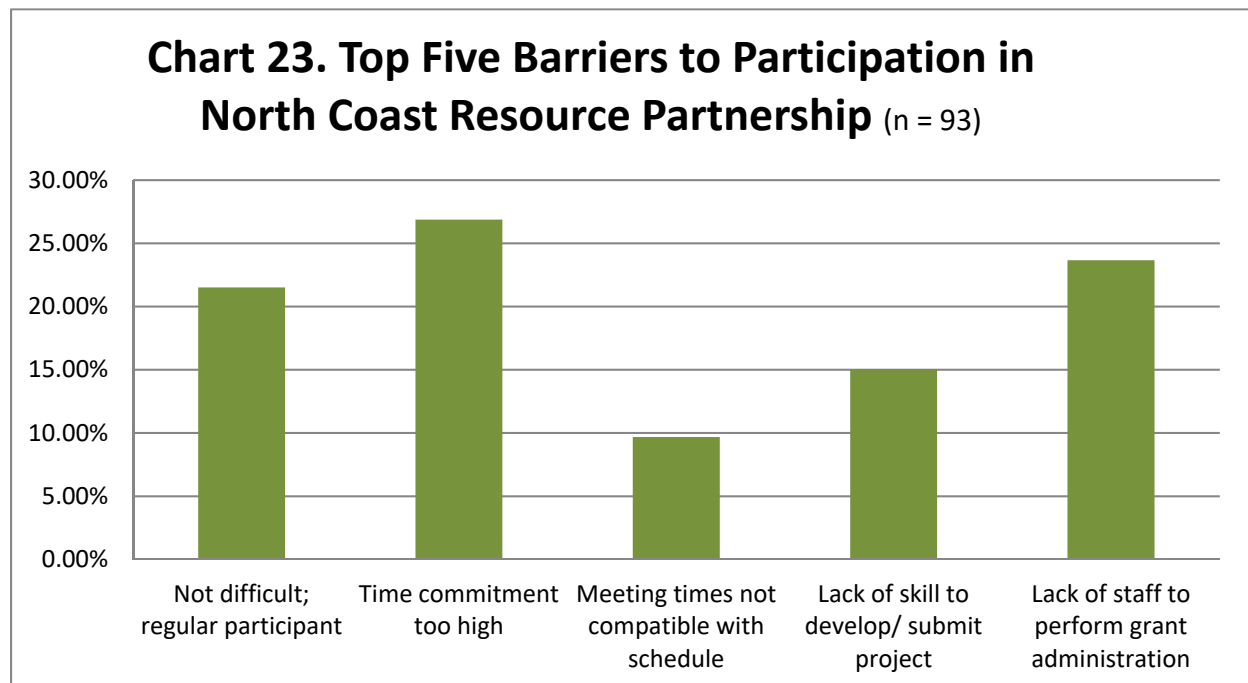
awareness and event preparedness. There is a lack of redundancy of services – for example, internet providers that can effectively cut communication off for many who rely on cell phones for communication. Several respondents noted that risks are known, but preparedness is not a high priority for many residents. One respondent noted that many live alone, which could present a danger in the face of a natural disaster. Another reported wanting to know who should be checked up on in a neighborhood during or after a natural disaster. In Trinity County, every interviewee spoke about wildfire. According to one respondent, communities in Trinity cannot afford to deal with the impacts of fire so those impacts become deferred maintenance; there is a need to change emergency management systems so they’re no longer relying on declared disasters to perform maintenance.

**Participation in NCRP**

A little more than 20% of survey respondents are regular participants with the NCRP, while slightly more found the time commitment too high and lack staff to perform grant administration even if they receive financial assistance through the Integrated Regional Water Management program. Another 15% stated that they lack the in-house skill to develop or submit grant applications and 10% stated that NCRP meeting times are not compatible with their schedule (Chart 24). Several respondents were previously completely unaware of the North Coast Resource Partnership (Appendix D. Respondent Comments Grouped by Subject). Of the interviewees, about half were knowledgeable about the NCRP and about half weren’t.

**Final Comments**

Final comments (27) were on many subjects (Appendix D). Some respondents reiterated their disadvantaged status, others stated partnerships with other systems. Several others requested any assistance, advice, or information that might help them. A couple people stated that a focus on smaller, rural systems is vital to helping them while others reiterated their need for technical assistance with grant writing and administrative trainings. Some others thanked the NCRP for reaching out and for classes conducted in Fortuna.



## Survey Respondents by County

### Del Norte:

Big Rock CSD  
Butte Court Mobile Home Park  
City of Crescent City  
Del Norte County CSA  
Gasquet CSD  
Hunter Valley Valley CSD  
Jedsmith Homeowners Association  
Las Palmas Mobile Home Park  
Pine Grove Trailer Park  
Redwood Park CSD  
Reservation Ranch  
West Park Properties

### Humboldt:

Beach Creek Mobile Home Park  
Big Lagoon CSD  
Big Lagoon Park Water Co.  
Briceland CSD  
City of Arcata  
City of Blue Lake  
City of Eureka  
City of Fortuna  
City of Rio Dell  
Fieldbrook Glendale CSD  
Humboldt CSD  
Humboldt County RCD  
Humboldt County RID # 1, Shelter Cove POTW  
Jacoby Creek CSD  
Loleta CSD  
Manila CSD  
McKinleyville CSD  
Midway RV Park  
Miranda CSD  
Myers Flat MWS, Inc.  
Orleans CSD  
Orleans MWC  
Palomino Estates MWC  
Redcrest Water Works  
Seawood Estates Mutual Water  
Westhaven CSD  
Weott CSD  
Willow Creek CSD

### Mendocino:

Albion Mutual Water Co  
Calpella CWD  
Caspar South Service Co  
City of Fort Bragg  
City of Ukiah  
City of Willits

Covelo CSD  
Fort Bragg Municipal Improvement District  
Hills Ranch MWC  
Holly Ranch Village  
Hopland PUD  
Laytonville CWD  
Meadow Estates Mutual  
Mendocino City C.S.D.  
North Gualala Water Company  
Pine Mountain Mutual Water Company  
Point Cabrillo Highlands  
Point of View MWC  
Redwood Valley CSD  
River Estates MWC  
Round Valley County Water District  
Seafair Road and Water Company  
Shorelands Road & Water Company  
Surfwood MWC  
Willow CWD  
Woods, The  
Woodside RV Park & Campground

### Modoc:

State Line RV Park

### Siskiyou:

Cal Ore Trail Mobile Estates  
Callahan Water District  
City of Dorris  
City of Tulelake  
City of Weed  
City of Yreka  
Grenada SD  
Lake Shastina CSD  
Montair Subdivision Homeowners Association  
Sawyers Bar County Water District  
Shasta View Heights Owners Association  
County Service Area #5/ Carrick  
Tennant CSD

### Sonoma:

Geyserville Sanitation Zone  
Huckleberry MWC  
Cazadero Water Company, Inc.  
City of Cloverdale  
City of Cotati  
City of Healdsburg

City of Rohnert Park  
City of Sebastopol  
City of Santa Rosa  
Mobile Home Estates  
Mountain View Mobile Estates, LLC  
Redwood Heights Water Association  
Russian River CSD  
Six Acres Water Company  
Sonoma County MWC  
Sonoma County Water Agency  
South Cloverdale Water Company  
Sunset Park Community  
Sweetwater Springs CWD – Guerneville  
Sweetwater Springs CWD – Monte Rio  
West Water Company  
Yulupa MWC

### Trinity:

Burnt Ranch Estates M.W.C.  
Covington Mill MWC – Division B  
Indian Creek Trailer Park  
Lewiston CSD  
Lewiston Park MWC  
Rush Creek MWS  
Seymour's MWS  
Treasure Creek Woods MWAC  
Trinity County WW District #1  
Trinity Knolls MWC  
Weaverville CSD

## Key Expert Interviewees

Interviewee Name	Organization	Position
<b>Trinity River WMA</b>		
Kevin Held	Trinity River Restoration Program	Project Manager
Donna Rupp	Trinity County RCD	Project Coordinator
Nick Goulette	The Watershed Center	Executive Director
Wes Scribner	Weaverville Community Services District	General Manager
Mark Lancaster; Sandra Perez	Five Counties Salmonid Conservation Program	Program Director; Program Manager
<b>North Coast Rivers WMA</b>		
Anna Halligan	Trout Unlimited	North Coast Coho Project Director
Patty Madigan	Mendocino RCD	Project Manager
Laurel Marcus	CA Land Stewardship Institute	Executive Director
Heidi Kunstal, Rosanna Bower	Del Norte County	Director of Community Development Department; Assistant County Engineer
Doug Kern	Mendocino Land Trust	Director of Conservation
Kathleen Morgan	Gualala River Watershed Council	Executive Director
April Newlander; Tasha McKee	Sanctuary Forest	Executive Director; Water Program Director
Nacole Sutterfield; Jon Olson	City of Crescent City	Engineering Project Manager/Public Works; Public Works Director
<b>Humboldt Bay WMA</b>		
Mark Weller & Heidi Benzonelli	Westside Community Improvement Association	Dep. Director and President
Hillarie Beyer	McKinleyville Family Resource Center	Executive Director
Brian Olson	Eureka Community Resource Center	Resource Coordinator
Joyce Hayes	Humboldt Senior Resource	Executive Director
Esther Hutton	Manila Community Resource Center	Executive Director
Jennifer Kalt	Humboldt Baykeeper	Executive Director
Susan Seaman	Arcata Economic Development Corporation	Program Director
Amanda Mager	City of Blue Lake	City Manager
Justin McDonald	Arcata Fire District	Fire Chief
Greg Orsini	McKinleyville Community Services District	General Manager
Valen Castellano	Big Lagoon CSD	Board Member
Melissa Kraemer	CA Coastal Commission	Supervising Analyst
Becky Price Hall	City of Trinidad	Grant and Project Coordinator
Chris Drop	Manila CSD	General Manager
Aldaron Laird	Trinity Associates	Owner
Larry Glass	North Coast Environmental Center	Executive Director
John Friedenbach	Humboldt Bay Municipal Water District	Manager
Sean Robertson	Humboldt Bay Fire District	Fire Chief
Andrew Slack	Save the Redwoods League	Forest Fellow
Larry Oetker	Humboldt Bay Harbor, Recreation and Conservation District	Executive Director

## RESPONSES TO KEY SURVEY QUESTIONS

<b>Question 22:</b>	
<b>Does your system have paid staff? Check all of the following that apply</b>	
No water operator	6
Level 1 (T1/ D1)	42
Level 2 (T2/ D2)	50
Level 3 (T3/ D3)	28
Water operator without certification	7
Consultant	22
Administrative	44
Management	47
Other, please specify	41

Many of the respondents who chose “other” stated that they use contractors. For the smallest districts and mutual water associations, it is common for Board Members or shareholders to have a significant role in operating the system.

<b>Question 7:</b>	
<b>What services do you provide? Choose all that apply.</b>	
Water treatment and supply	98
Domestic water distribution	92
Irrigation water distribution	17
Wastewater collection	49
Wastewater treatment	41
Wastewater reuse	16
Storm drainage	24
Watershed restoration	7
Other	8

Those who chose “other” added the following categories: local Hazard Mitigation Planning, fire hydrant maintenance, Capital Improvement Programs, consulting for other Special Districts, electric power, fire/rescue services, parks and recreation, airport, street lights, groundwater management, and water conservation.

<b>Question 30:</b> <b>Are your current rates sufficient for building capital improvement funds and covering operating and maintenance costs</b>	
Yes	54
No	46
Don't know	10

<b>Question 31:</b> <b>If you answered no to the previous question, do you have the means to determine adequate rates for maintaining and improving your system?</b>	
N/A	19
Yes	29
No	16
Don't know	12

As discussed above, many respondents indicated a need for technical assistance or requested training opportunities focused on capital improvement planning and rate setting.

<b>Question 36: Is your agency currently working with outside agencies on improvement plans or projects?</b>	
State Water Resources Control Board/ NCRWQCB	36
Rural Community Assistance Corporation (RCAC)	13
California Rural Water Association	11
California Department of Public Health	8
Local County	9
Other local government	7
Redwood Water Resources Network	1
US EPA	1
Wine County Water Works	1
Other	54

Of those who chose other, several identified the California Department of Water Resources IRWM grants, Cal EPA, California Department of Housing and Community Development, private consultants, USDA, and Trout Unlimited



## RESPONSES TO KEY INTERVIEW QUESTIONS

**Describe the state of local water infrastructure (wastewater treatment, dams, pump stations, storage, etc.)?**

*Humboldt Bay Watershed Management Area (WMA):* many interviewees are aware that infrastructure is "old," "outdated," or "aging." Eureka was named by 2 participants as a specific location of concern. McKinleyville, as a region being developed more recently, was noted as an area with strong infrastructure; 2 respondents noted the work of McKinleyville Community Services District in response to other questions. The specific type of infrastructure concern most noted was wastewater treatment (8).

*North Coast Rivers WMA:* Many people are served off of private wells or via surface water diversions, and those systems are not well monitored. The City of Fort Bragg's water system is in need of retrofitting and expansion, Mattole lacks municipal water, Crescent City's wastewater treatment plant, collections systems, and main water source are in need of maintenance. Gualala's wastewater treatment plant is in good condition.

*Trinity River WMA:* Interviewees cited various needs for improvement throughout Trinity. One of the three water treatment facilities, and 20% of the water distribution pipeline, are in need of repair. Community Service Districts (CSD) serve half the population of Trinity, and the other half on private systems are not well monitored. Water quality would improve if the sewage system was expanded to include those creekside neighborhoods on septic.

**Are you aware of any particularly effective and/or innovative projects being implemented to deal with local water issues? Please describe the projects and who is managing them.**

*Humboldt Bay WMA:*

- Bacteria Testing - Humboldt County Environmental Health
- Big Lagoon Watershed Acquisition – Big Lagoon CSD
- Big Lagoon Well Acquisition – Bid Lagoon CSD
- Blue Lake CIP Update – City of Blue Lake
- DWR Flood Planning – Arcata Fire District
- Elk River Restoration – RCAA Natural Resources division
- Humboldt Sewer Extension Assessment (Fairhaven – Samoa) – County of Humboldt
- Jacoby Creek Wetland Restoration – City of Arcata?
- Janes Creek Flooding Mitigation – City of Arcata? (2)
- Luffenholtz Creek Capacity Assessment – City of Trinidad
- Martin Slough Flood/SLR Mitigation – City of Eureka (2)
- McKinleyville Infrastructure Expansion – Chris Drop
- Powers Creek Restoration – Trees Foundation
- Reconnect for long-term water supply-Humboldt Bay Watershed Management District
- Samoa Wastewater Treatment Plant – DANCO (private company) (2)
- Sea Level Rise Plan – City of Arcata

- Septic/Stormwater Management-City of Trinidad (3)

*North Coast Rivers WMA:*

- Storage and forbearance projects in Mattole, Navarro, and possibly Outlet Creek near Willits
- Sanctuary Forest is planning for the development of Mattole's emergency water storage for use by the community and during fire.
- Sanctuary Forest is restoring natural groundwater levels and flows by adding log weirs to streams.
- Salmon Restoration Federation conducting stream restoration in the South Fork Eel.
- Recycling Ukiah's wastewater for use as irrigation water.
- Joint project between Trout Unlimited, The Nature Conservancy, and Mendocino RCD to enhance flow on the Navarro River.
- Joint project between CA Land Stewardship Institute and NRCS to develop off-stream ponds to reduce number of stream diversions.

*Trinity River WMA:*

- Watershed Center's subsidized and voluntary water conservation and storage program in Browns Creek watershed (modeled after Mattole program).
- Trinity RCD is working with Weaverville CSD to improve the diversions on West Weaver Creek to conserve more water.
- 5Cs has partnered with Trinity County on storm water collection and water quality in Weaverville - a small project that could be the stepping stone for Weaverville to start addressing these issues and demonstrating their effectiveness to landowners and politicians.
- Yreka Creek storm water retention floodway restoration project.

**What are the greatest impacts to forests in your region?**

*Humboldt WMA:* Respondents largely noted logging's legacy and illegal cannabis grows- particularly water diversion, clearcutting, and grading. Some respondents also noted the impact of forest fires, both a perceived lack of prevention and impacts of suppression efforts.

*North Coast Rivers WMA:* Respondents noted a variety of impacts to forest health: fire suppression, high severity fires, lack of staffing and resources for proper management, and new road building in remote areas for agricultural purposes. The majority of the interviewees discussed the legacy impacts of logging, including sedimentation from old roads and overgrown forests.

*Trinity WMA:* Respondents noted a number of impacts to forest health: high temperature droughts, increasing temperatures, insects, disease, clearing for cannabis cultivation, legacy impacts from mining and logging that contribute to erosion, expansion of the WUI area, and fire suppression. All but one listed fire (large-scale high severity wildfires).

## What are the barriers to addressing priority environmental issues?

### *North Coast Rivers WMA:*

- Lack of sustained, programmatic funding as opposed to project-specific funding
- Permitting barriers
- Landowner consent/stakeholder consensus
- Educating the public as to the need

### *Trinity River WMA:*

- Lack of funding
- Lack of monitoring
- Public's fear of government and regulations
- Political and social unrest
- People's aversion to change
- Science skeptics
- Existence of mining tailings
- Outdated forest plans for federal lands that don't include more recent science on fire ecology and management
- Insufficient federal funding and framework for managing illegal cannabis cultivation

## How is cannabis cultivation impacting your community?

*Humboldt Bay WMA:* Respondents seem split on the impacts of cannabis cultivation in the community. For example, many point to the years of illegal cultivation and the cannabis industry's lack of participation tax payment, etc. Conversely, many point out that there has been an economic downturn following legalization due to the high cost of permitting and regulatory compliance. Still other respondents suggest that money from illegal cultivation has increasingly taken money out of the region.

**Negative Impact Notes:** Cannabis cultivation impacts families and neighborhoods by maintaining a culture of secrecy and exposing children and families to raids (legal and criminal) or limiting the perceived ability to reach out for law enforcement help (domestic violence, etc); the boom and bust cycle of timber and fishing is being repeated with cannabis (currently in a bust); regulated more than any other agriculture (such as wine); regulatory and enforcement appear mismatched (limited enforcement); no financial assistance to comply with regulations, risking a return to the black market; "mom and pops" shutting down as large operations enter the market; grow houses raise housing costs

**Negative Water Impact Notes:** environmental damage from grows; watershed impacts; small land conversion efforts combine to create larger impacts; limited enforcement of the regulations designed to keep waterways safe; illicit materials end up at wwtp

**Positive Impact Notes:** props up other industries (cannabis, restaurants); when enforced,

regulation is good for waterways; a reduction in home grows and home hash labs past 2-4 years, making emergency response safer for emergency personnel; new industry could help diversify economy; was a major cash inflow; many applications in the works, so many going legal while fees benefit municipalities; communities who exclude all ag (Big Lagoon) have not seen a change; some more distant communities (Manila) have seen a decrease in supporting activities (trimming) as the need to seek areas with limited law enforcement has also decreased.

*North Coast Rivers WMA:* Answers ranged depending on location. Some discussed the impact of illegal water diversions by unpermitted growers, contamination, sensitive habitat degradation, illegal dumping, hostile environment, etc. Others spoke to the boost the industry previously provided the economy, now shifting due to legalization. Many recognize that the industry is in transition and are waiting to see who and how it shakes out.

*Trinity River WMA:* Across the board, interviewees spoke to the negative impacts of cannabis in Trinity County, particularly the untold effects of illicit grows on federal land. According to one respondent, there are an estimated 4000 grows throughout the county, and only 500 permits. Impacts mentioned include: dewatering streams, harmful chemical fertilizers and pesticides in the waterways, forest clearing and land grading, discarded trash in natural areas, and heightened social unrest.

Information for this section and interview information throughout this report was obtained in part from:

Greenway. 2018. Key Expert Interview Preliminary Review of Responses. 17 pages.

Wanderhill Consulting. 2019. North Coast Resource Partnership Pilot Interviews: Synthesis of Responses in the Trinity River & North Coast Rivers Watershed Management Areas. 14 pages.

## **NEXT STEPS**

Based on the summary and analysis provided above, the following needs have been identified:

- Assistance with identifying funding opportunities and preparing grant applications;
- Assistance with securing funding for design and implementation of replacing or upgrading aging infrastructure;
- Assistance with general water and wastewater system infrastructure operations, maintenance and repair (in the form of trainings and technical assistance);
- Assistance and support for emergency services interdepartmental communications with intent to evaluate development of inter-agency and inter-departmental communications models for climate adaptation, mitigation, and other planning subjects of universal concern;
- Support to remain informed about and comply with state drinking water standards ;
- Support to develop and maintain maps of water and wastewater systems;
- Trainings, especially for smaller systems, with respect to financial stability, and;
- Community Networking: reach out to systems, especially those who have indicated a need, to inform them of existing resources developed during the last outreach effort such as the Community Networking Directory: A contacts database that was developed to allow providers in the region to reach out to similar entities for advice and assistance.

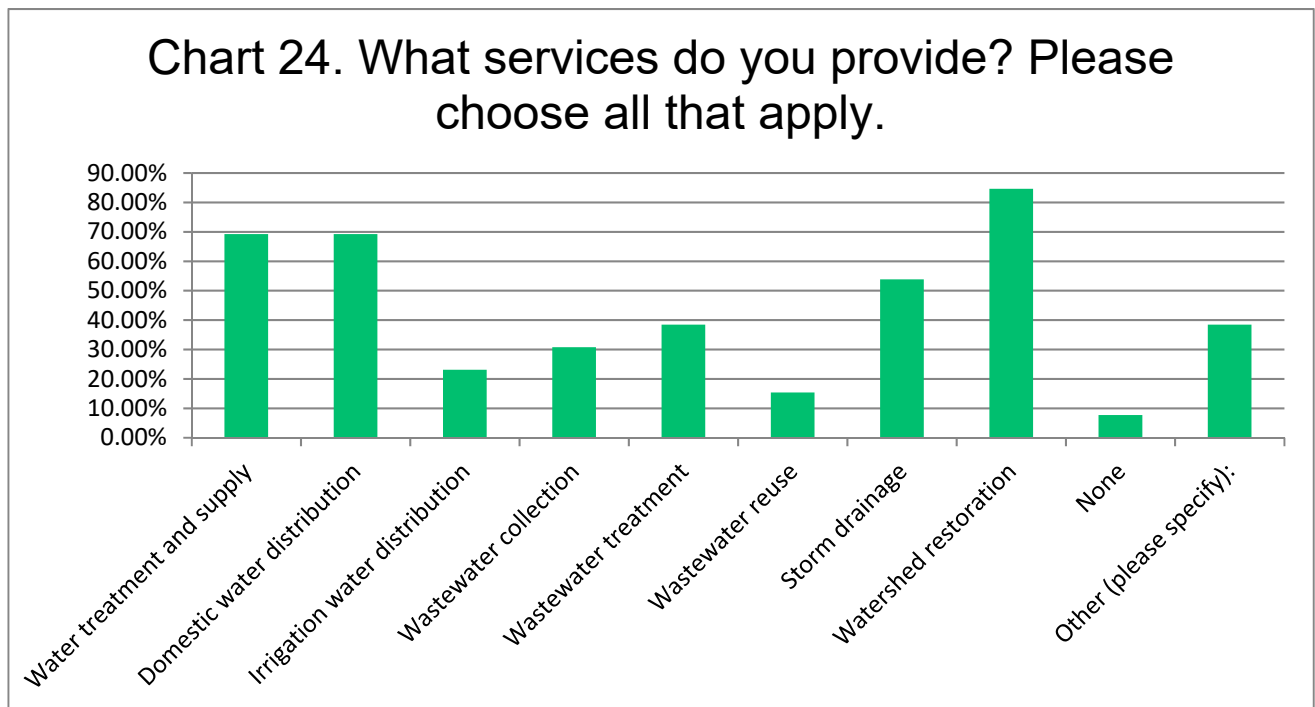
## SECTION 2. TRIBAL WATER & WASTEWATER SERVICE PROVIDERS

### IDENTIFICATION OF COMMUNITY WATER/WASTEWATER SYSTEMS

Water and wastewater services within the North Coast are delivered by a wide variety of service providers ranging from publicly owned entities (e.g., Tribes, cities, special districts, and public utilities) to private entities (homeowners’ associations, mobile home park owners, and individuals or businesses). The Tribal survey effort included Tribal water system operators that provide service to Tribes, Tribal environmental directors and other staff familiar with the water-related issues that the Tribe face. An effort was made to reach all Tribes in the region, with particular effort placed on outreach and securing survey responses from Tribes that did not participate in the 2014 water and wastewater provider survey.

The Tribal Engagement Coordinator maintains a contact list of 33 North Coast Tribes. At the beginning of the Needs Assessment process we updated this contact list and contacted each Tribe to provide information about the survey opportunity. During the outreach effort, some systems were removed from the list because they are not located within the North Coast Region. The list of those Tribes with systems eligible for DACTI project support or with projects that may be eligible for IRWM project funding was winnowed to 30 Tribes.

At the time of this report, approximately half of the 30 targeted North Coast Tribes have completed this survey and NCRP Tribal program staff is conducting follow-up calls to identify the best way to address their identified needs through the IRWM DACTI program, the IRWM implementation Prop.1 grant program or other funding options. We are continuing to reach the remaining Tribes to conduct a survey as the first step to receive DACTI program support. A copy of the survey and follow-up interview questions can be found in Appendix F. Tribal Water Supply & Wastewater Needs Assessment Survey & Interview Questions.



## **SURVEY EFFORT**

A concentrated effort was made to secure a survey response from all Tribes in the North Coast region. Survey data were gathered beginning in November 2018 using the on-line tool Survey Monkey, emailed PDFs, and phone interviews. Initial introductory emails were sent prior to November to inform Tribes who completed a survey in 2014 survey of the upcoming survey effort and verify their contact information. Information about how to access the survey was distributed via email, with telephone calls to contact those who didn't respond to email outreach or who did not have email addresses. Follow up emails and phone calls were initiated about 3 – 4 weeks after the survey mailing to encourage participation.

Many of the Tribes are remote and small, governed by Tribal councils and staff leadership that periodically changes. Tracking down current leadership or water management staff who felt that they were in a position to speak knowledgeably about their water system was challenging. North Coast Resource Partnership Tribal Representatives were included in our outreach efforts to initiate contact and/ or introduce survey personnel to provide information about the DACTI program, and achieve greater participation.

## **RESPONSE RATE**

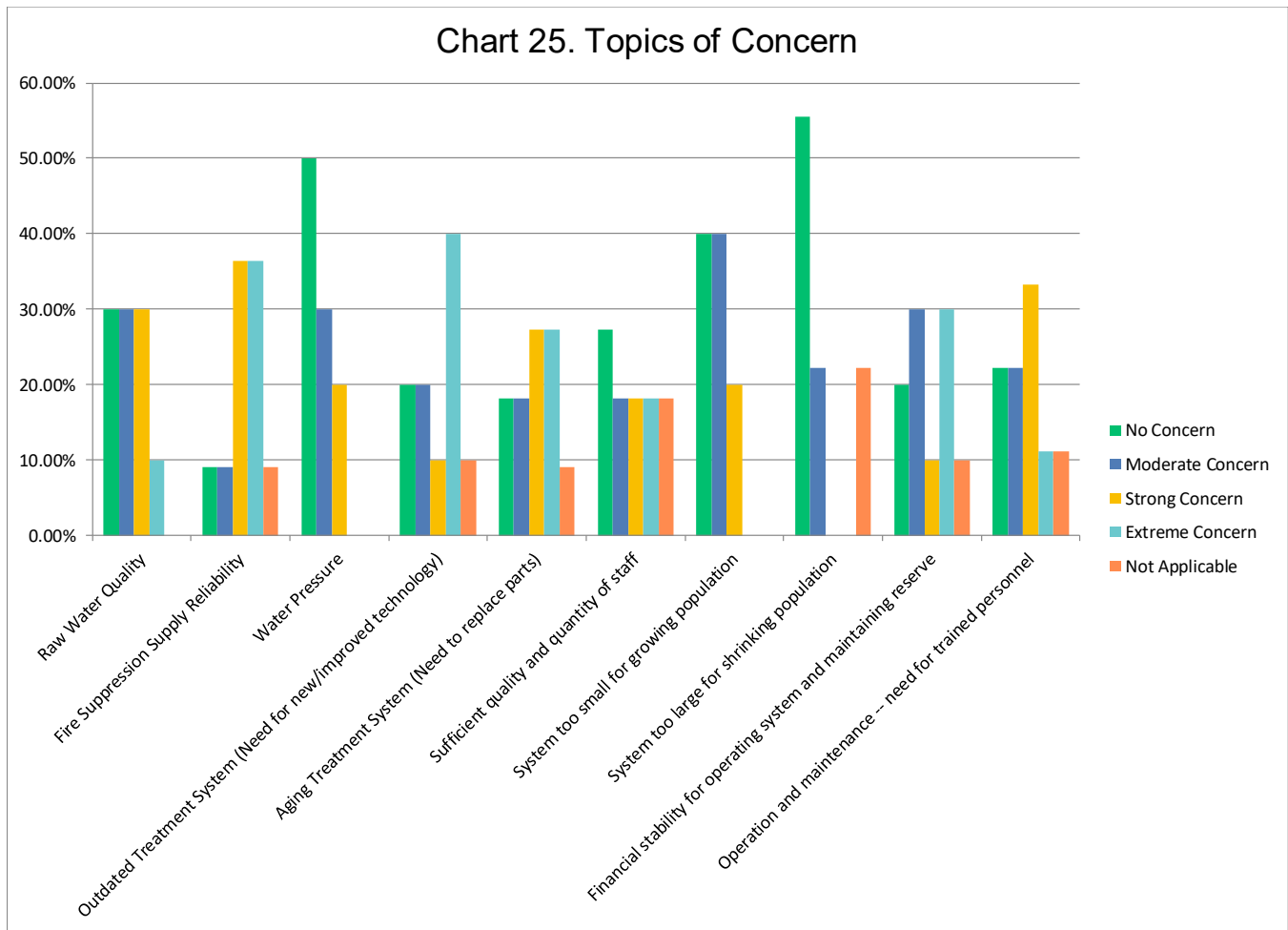
By February 2019, 16 survey responses had been submitted, representing a 48% response rate. Four responses were from the North Region, 5 in the Central Region and 7 responded in the South Region.

## **SURVEY RESULTS**

The survey was developed to provide as much flexibility as possible for respondents to convey information about their systems in order to provide the most comprehensive “snapshot” of each system. In some cases, this did not lend itself well to data analysis. For instance, many questions allowed operators to provide multiple answers as well as to include comments. In addition, many survey respondents did not answer all questions. As a result, it is difficult to analyze all responses using simple percentages. A brief analysis of each set of questions is provided below. Tribal staff is following up with each responding Tribe individually to capture what the survey could not and to ask follow-up interview questions.

### **Topics of Concern**

Thirteen Tribal respondents answered this question; it was skipped by three. The top five topics of concern were: an aging treatment system; financial stability; fire suppression supply reliability; drinking water supply reliability; and sufficient quality and quantity of staff. Of those feeling extreme concern the primary concerns were aging systems, outdated treatment systems and fire suppression supply reliability. Comments from survey respondents were wide ranging, however, there were a few commonalities (*Appendix G. Tribal Survey Comments Grouped by Subject*). Tribes cited aging systems that need replacement coupled with the associated need for assistance obtaining funding for the needed replacements. Many of the Tribal respondents also mentioned the need for new water mains, transmission lines, and backflow valves and tanks. Many respondents with concern around their systems stated that funding assistance is a major issue.



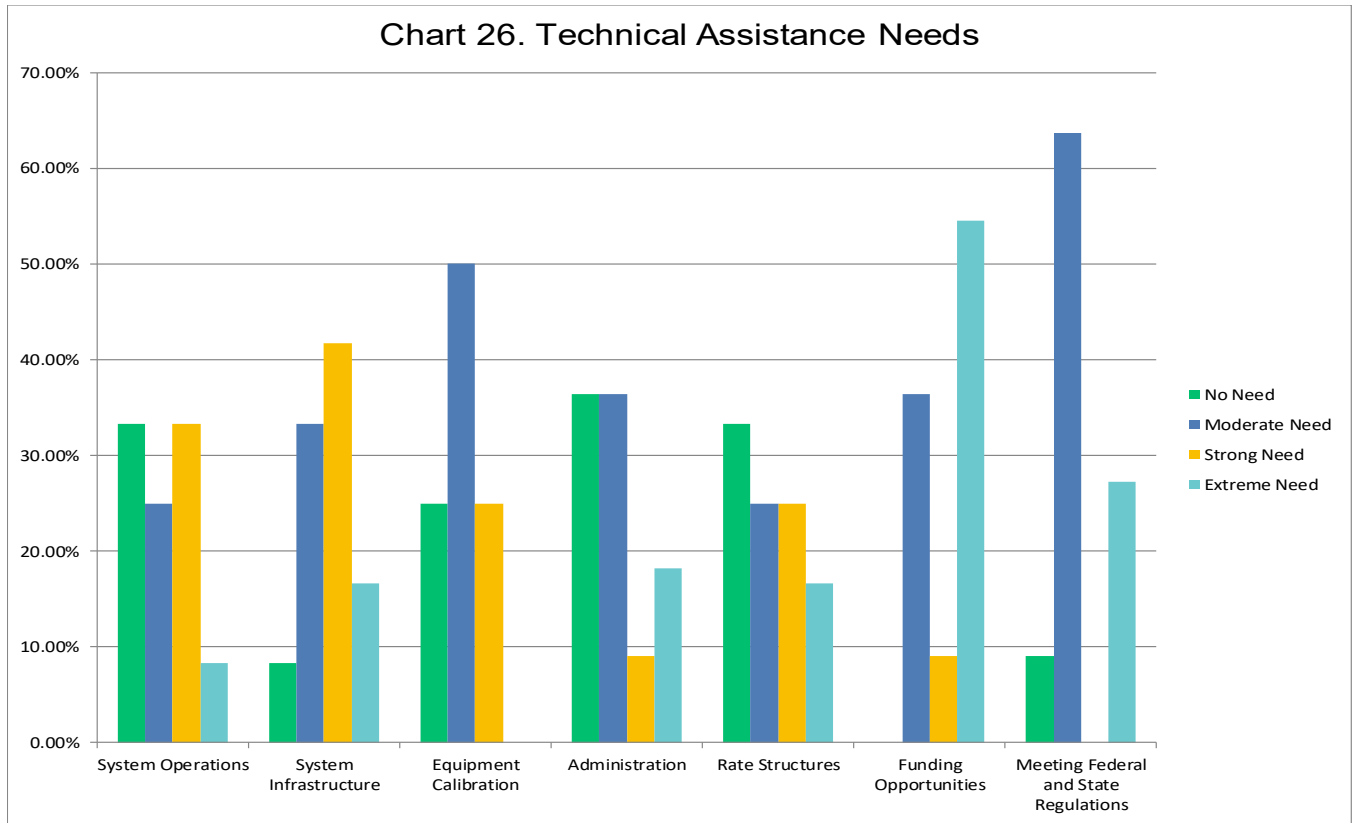
Secondary topics of concern were the need for trained operation and maintenance personnel, raw water quality, system too small for growing population and water pressure issues. Most of the systems indicated a need for certified operators. Others indicated that finding and retaining qualified people in a rural area can be difficult. Concerns with fire were varied; some were associated with water quality after a wildfire, while others were more concerned with fire suppression and loss of power during a fire event. A few systems have recurring problems with insufficient water pressure and/or the size of fittings.

**Level of Need for Technical Assistance**

Thirteen respondents answered this question; it was skipped by three. The greatest need was for assistance with funding opportunities such as grants and loans, with 55% of respondents indicating extreme need (*Chart 26*). About 42% of respondents expressed strong need for assistance with system infrastructure along with 33% for system operations. Other strong concerns were for equipment calibration and rate structures. Moderate needs were meeting federal and state regulations, equipment calibration, administration, and funding opportunities.

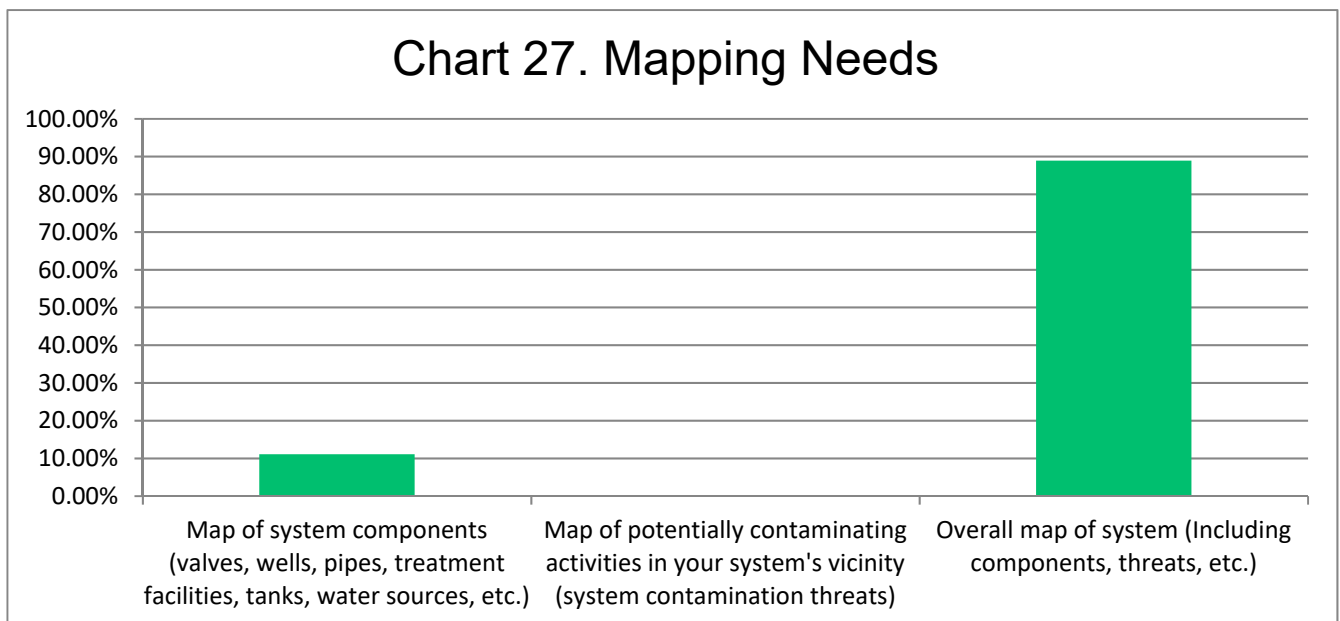
The greatest need for technical assistance was for obtaining funding and conducting maintenance and repair. Other needs expressed by respondents included assistance with design, system upgrades, and rate setting (*Appendix G. Tribal Survey Comments Grouped by Subject*).





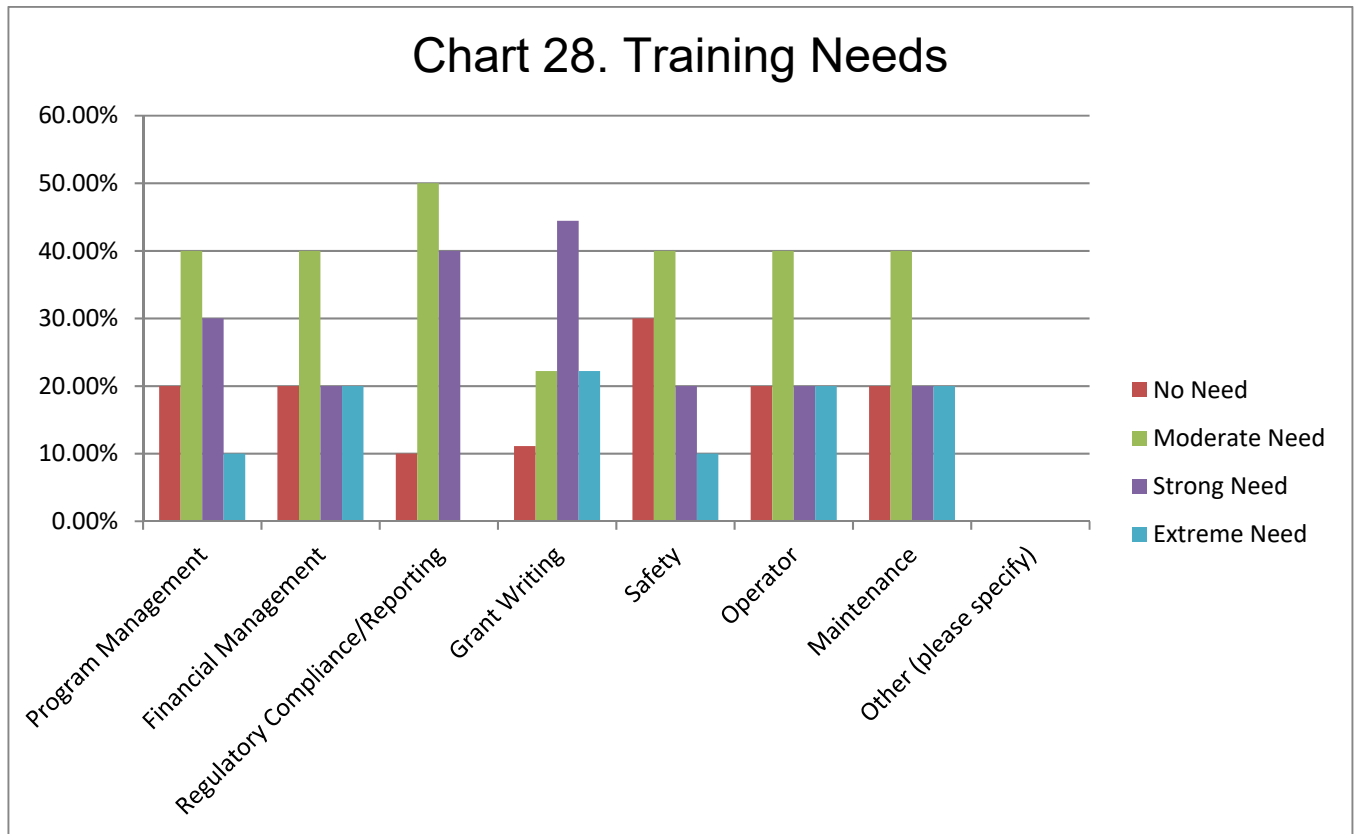
### Mapping

About 72% of the 15 respondents stated that their system components are not accurately mapped using GPS. Of these respondents, about 89% would like an overall map that shows components and threats while about 11% would like a map of system components (*Chart 27*). A couple of Tribal respondents indicated that they are working with sketches and schematics or maps developed decades ago (*Appendix G. Tribal Survey Comments Grouped by Subject*).



**Training**

About 10 respondents indicated need for each type of training, with grant writing, operator and maintenance training most desired (Chart 28). Many respondents provided comments to this question (Appendix G. Tribal Survey Comments Grouped by Subject). Program management, financial management and capital improvement planning were also requested by multiple respondents. The following were specific comments regarding the types of trainings that would be most useful:



**Comments:**

“Need funding for capital improvements. Training for Utility District and Tribal Council board members on the inherent challenges to operating and maintaining a small utility. Always need help/ Tech Assistance securing grant funding for capital improvements.”

“Training of the operators onsite would be a big help. Financial management of both facilities is a must.”

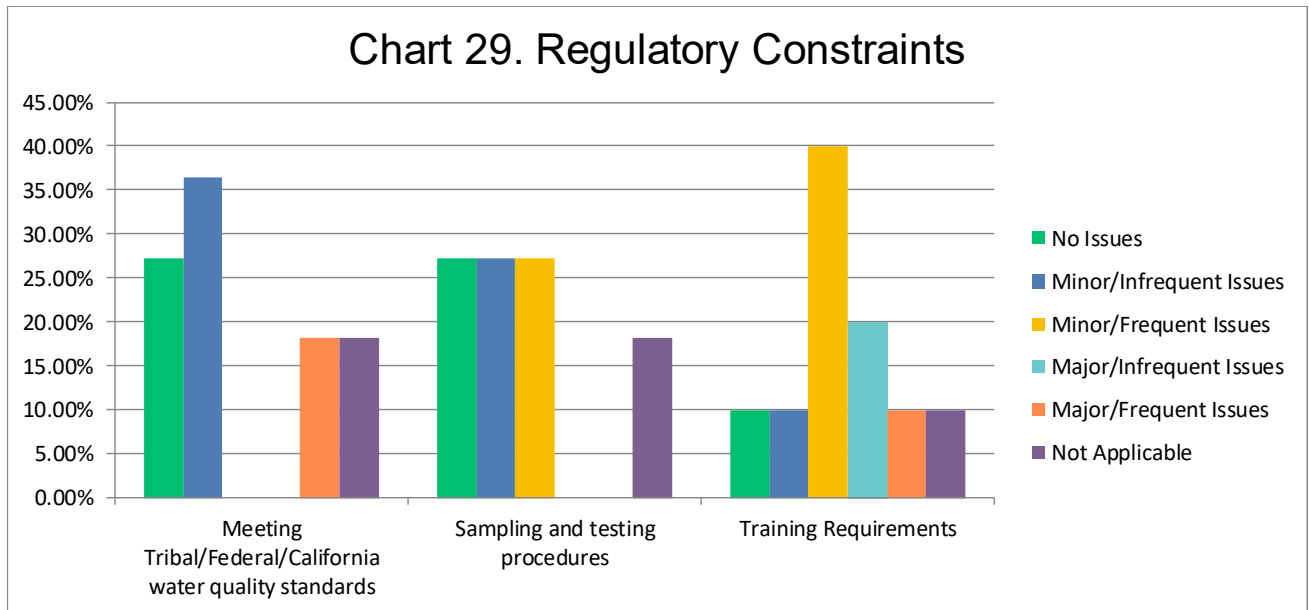
“Opportunities for consistent and updated training courses provided locally [or within 200 miles] would greatly benefit Sherwood Valley Rancheria's Water Operator and coordinating staff to build Tribal Capacity.”

“Grant writing for watershed restoration. Training for maintenance personnel in safety, operations, maintenance of individual wells/treatment systems, septic tanks.”

“The most helpful "training" we receive is from RCAC and is one on one, on-site this is what needs to be done and this is how you do it.”

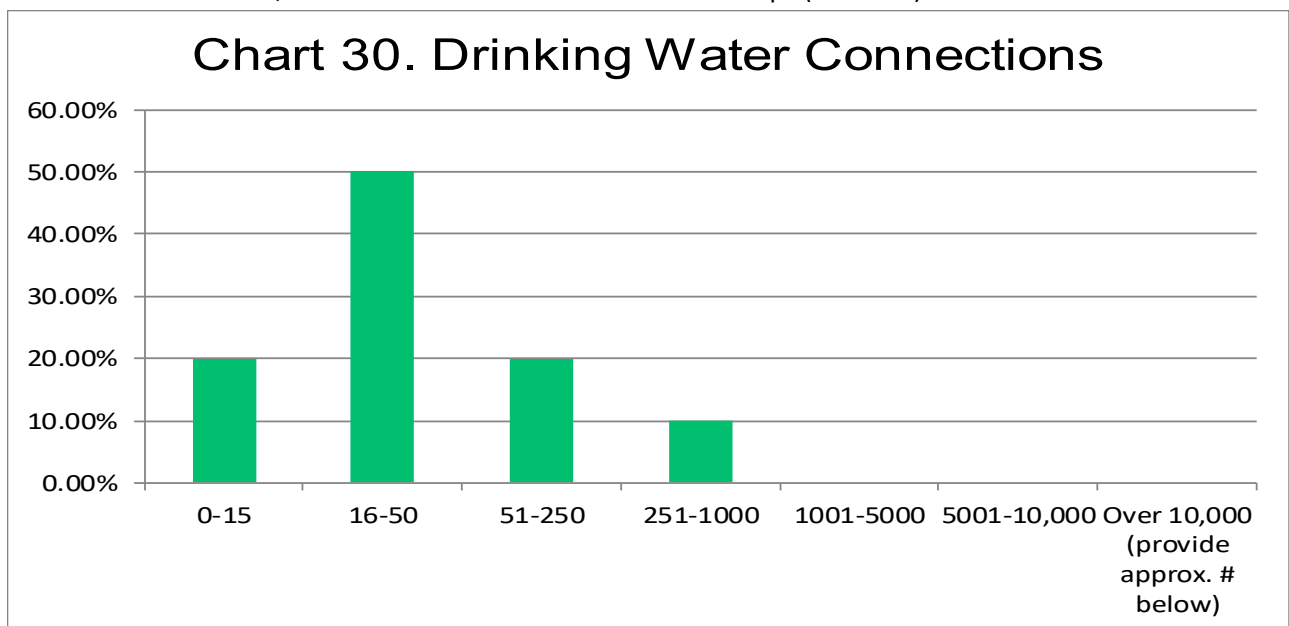
**Regulatory Constraints**

Most of the respondents to this question indicated that they had no problems or minor/ infrequent problems with any regulatory constraints with the exception of S. (Chart 29) Comments associated with regulatory constraints are available in Appendix G. Tribal Survey Comments Grouped by Subject. Most Tribal-operated systems on Tribal land are regulated by the Federal government.

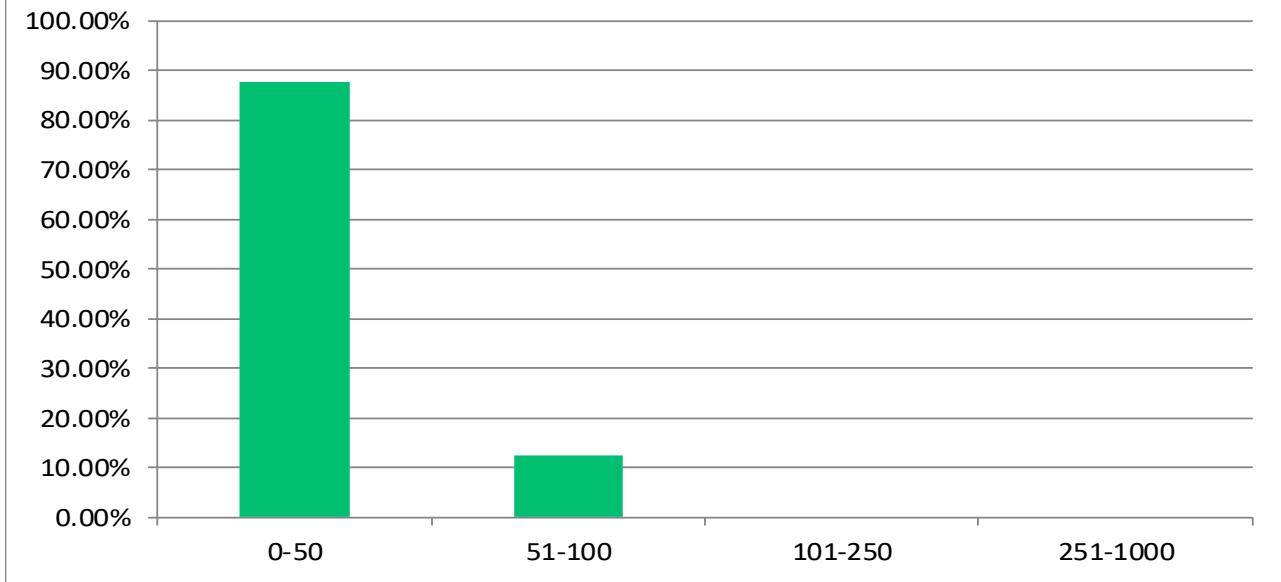


**Number of Hookups**

Over 40% of the respondents have between 16 and 50 hookups, indicating that most of the Tribal communities in the North Coast are small (Chart 30). Of respondents who identified that they provide wastewater treatment, over 80% of these have 50 or less hookups (Chart 31).



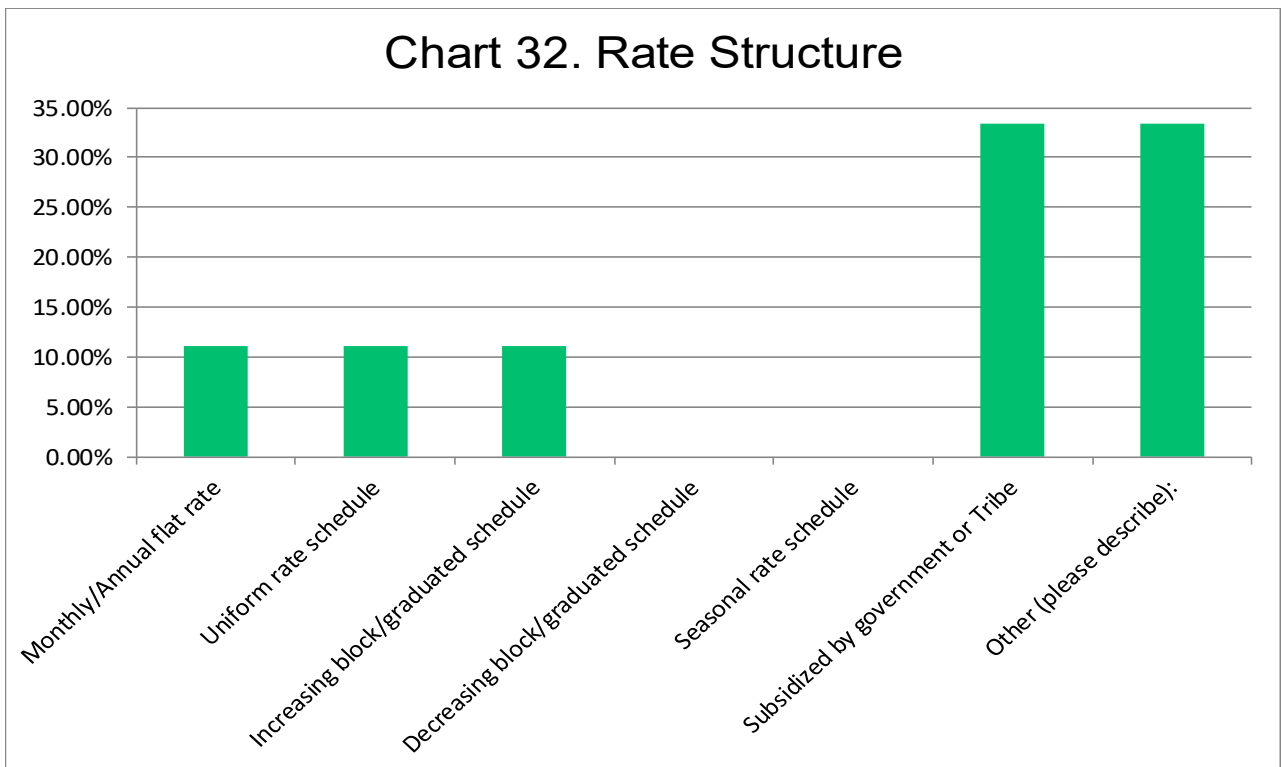
### Chart 31. Wastewater Connections



#### Rate Structure and Average Monthly Bill

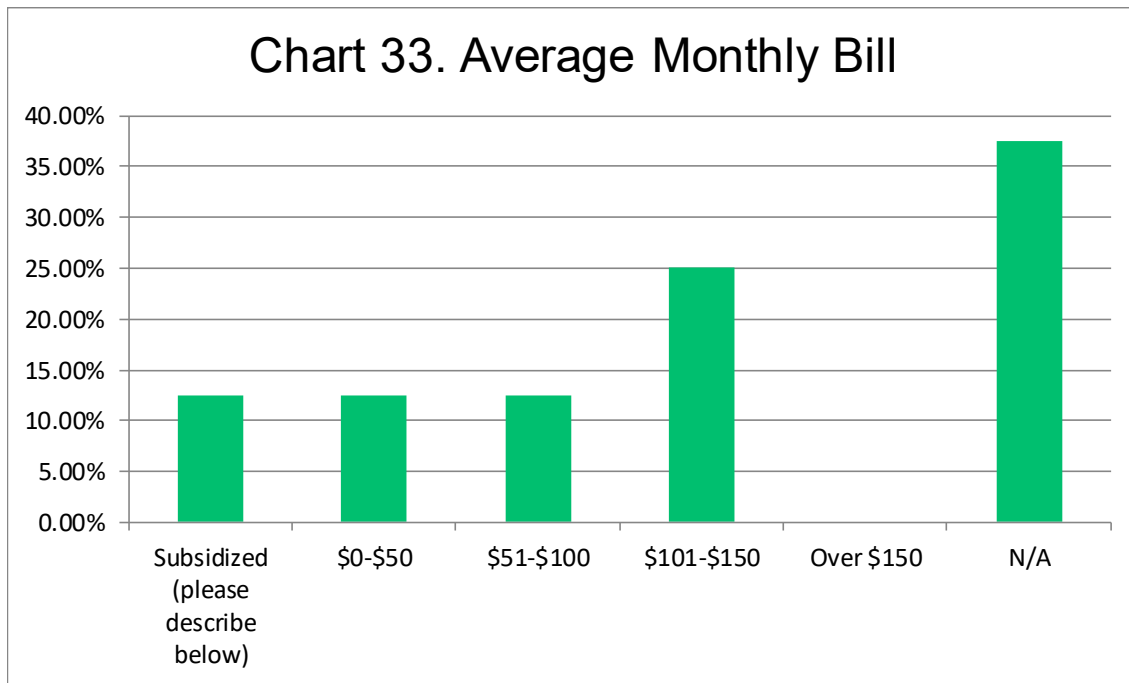
Most Tribal respondents indicated that water rate costs are normally subsidized by the Tribe or other federal funding sources (*Chart 32*). Respondents indicated that they purchase water from another water provider and allow them to charge their Tribal members, and others with overage fees built into their rate structure<sup>2</sup> (see comments, *Appendix G. Tribal Survey Comments Grouped by Subject*).

### Chart 32. Rate Structure



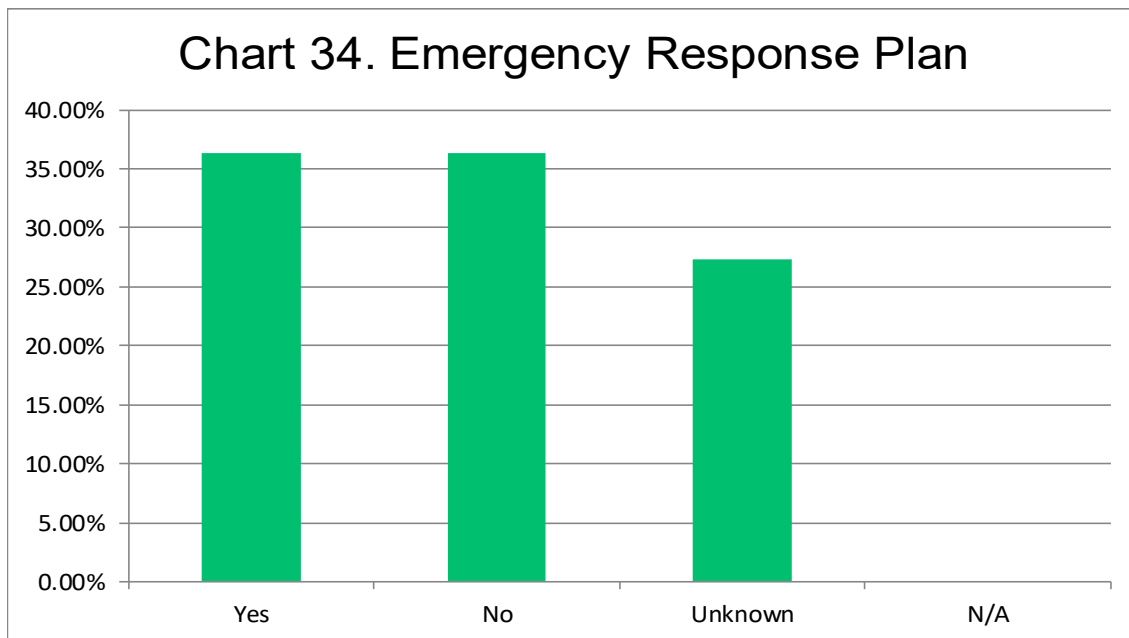
<sup>2</sup> For an explanation of rate structure terms, please see page 16.

Most of the respondents did not bill for water, so the question was not applicable. Over 20% of respondents reported average monthly bills greater than \$101.00 (Chart 33).

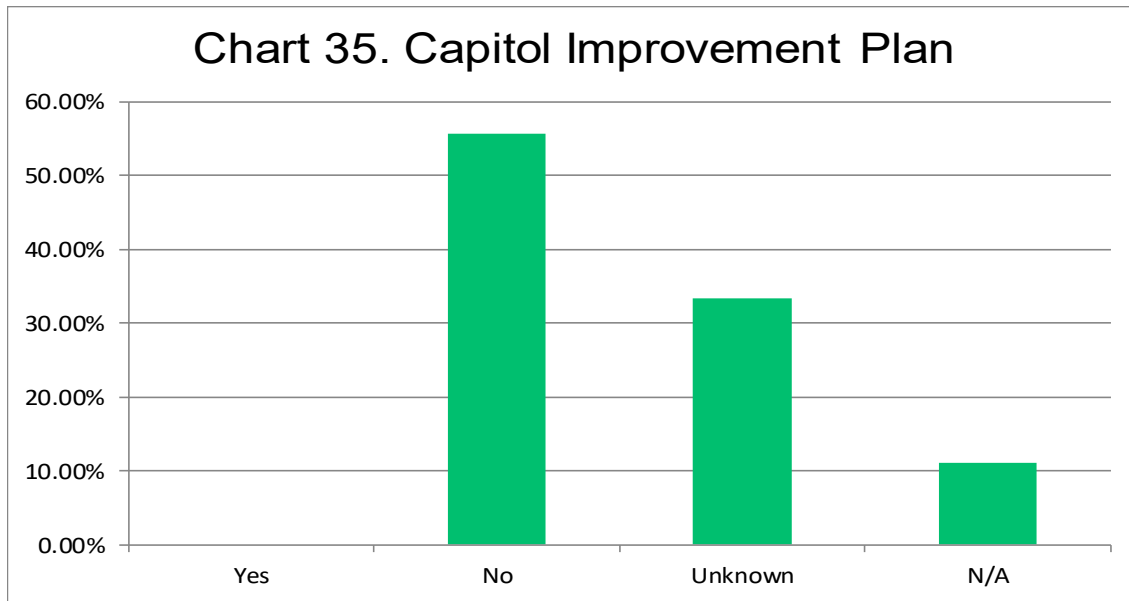


**Emergency Response and Capital Improvement Planning**

Most of the respondents indicated they did have an Emergency Response Plan and an almost equal number of respondents did not. Only about 25% of respondents said that they were unsure whether they have one or not (Chart 34). This may be an opportunity in our follow-up questions to evaluate if the respondents who did not know have an ERP from their Tribe or surrounding municipality. This is an opportunity for increased communication about existing, or upcoming ERP development with Tribal leadership, staff and Tribal members.

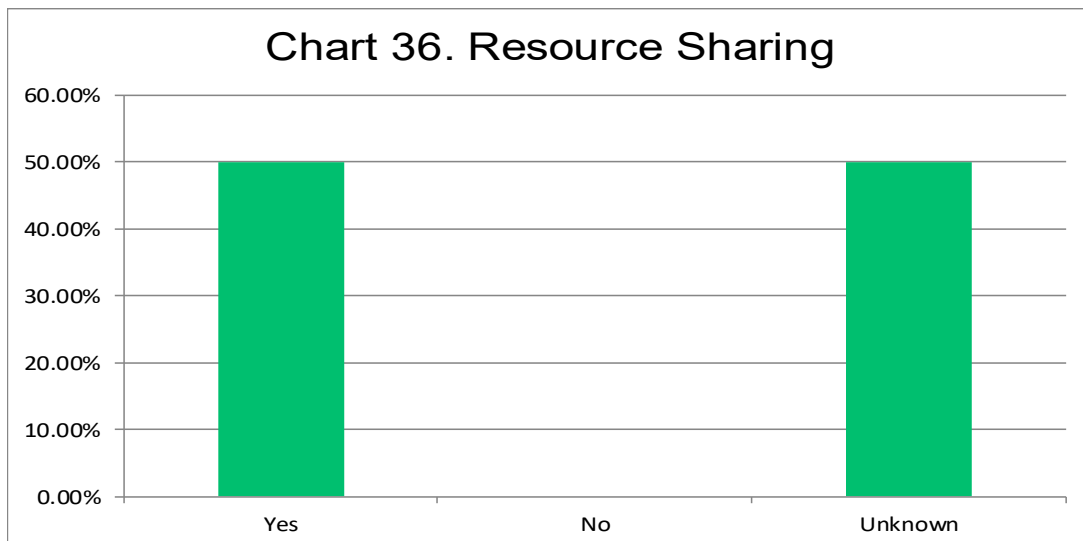


Over half of the respondents indicated that their system does not have a capital improvement plan, while about 35% were not sure whether their system had a capital improvement plan or not (*Chart 35*). This uncertainty may be due to who took the survey. For many of the smaller systems the technical people may not have had the managerial/ administrative knowledge and we will need to ask additional questions of staff.



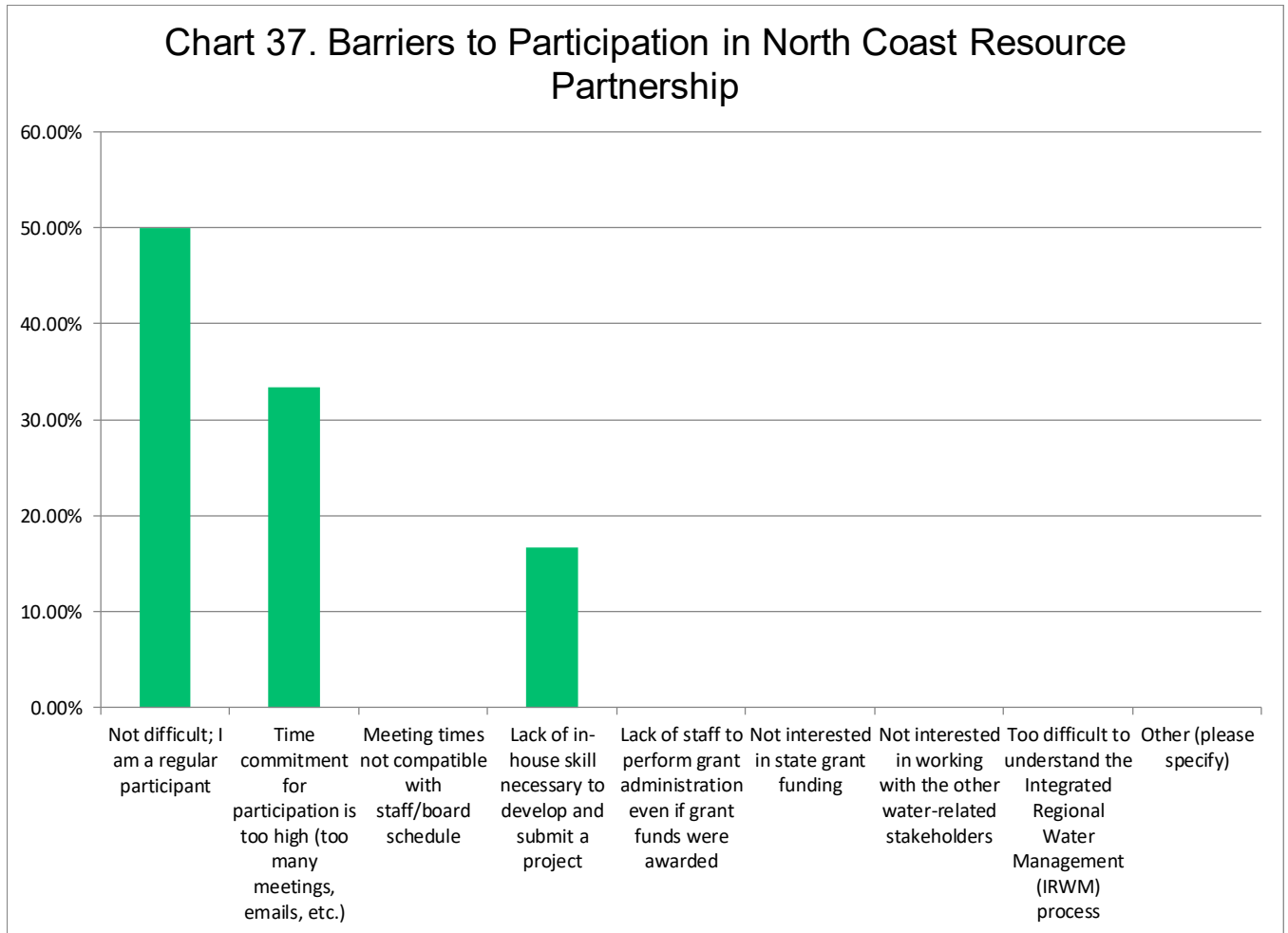
**Resource Sharing**

Nearly 50% of respondents indicated that sharing resources with neighboring or nearby systems would help address needs for specialized tools, equipment, qualified operators, or system management. Another 50% weren't sure. Some of the systems indicated that they currently share resources or technical staff with other facilities. For example, one water treatment operator serves many small systems. Others assist or receive assistance from a neighboring system. Of those who do not think sharing resources would be beneficial, several commented that they are too far away from other systems for it to be practicable (*Appendix G. Tribal Survey Comments Grouped by Subject*). In response to the query about resources to share, one respondent replied that they do have specialized tools, equipment, or other resources to share through partnerships.



**Participation in NCRP**

About 40% of respondents are regular participants with the NCRP, while the rest found the time commitment too high or lack the in-house skill necessary to develop and manage grants. (Chart 37). (Appendix G. Tribal Survey Comments Grouped by Subject Tribal engagement staff is working to provide support for Tribal participation by addressing these barriers to participation. In particular, the Tribal DACTI program is dedicating staff and resources for small underrepresented Tribes in 2019.



**Final Comments**

Two respondents provided final comments; one was a suggestion to provide a transcript after completion of the survey and the other reported that a local school district is in dire need of assistance.

## Survey Respondents by Region

### North:

Karuk Tribe  
 Tolowa Dee-ni' Nation  
 Yurok Tribe

### South:

Potter Valley Tribe  
 Redwood Valley Rancheria  
 Pinoleville Pomo Nation  
 Guidiville Rancheria  
 Dry Creek Rancheria  
 Kashia Tribe  
 Yokayo

### Central:

Blue Lake  
 Cahto  
 Wiyot  
 Sherwood Valley Band of Pomo

## Responses to Key Questions

<b>Question 22:</b>	
<b>Does your system have paid staff? Check all of the following that apply</b>	
No water operator	2
Level 1 (T1/ D1)	4
Level 2 (T2/ D2)	1
Level 3 (T3/ D3)	2
Water operator without certification	1
Consultant	3
Administrative	3
Management	2
Other, please specify	4
No answer	4

Respondents who chose "other" stated that they use Indian Health Service or use an outside contractor.

<b>Question 7:</b>	
<b>What services do you provide? Choose all that apply.</b>	
Water treatment and supply	8
Domestic water distribution	7
Irrigation water distribution	2
Wastewater collection	4
Wastewater treatment	5
Wastewater reuse	2
Storm drainage	6
Watershed restoration	10
Other	1
No answer	4

Those who chose "other" added the following categories: public health testing of traditional resources and wetland studies.



<b>Question 30:</b> <b>Are your current rates sufficient for building capital improvement funds and covering operating and maintenance costs</b>	
Yes	0
No	5
Don't know	1
No answer	4

<b>Question 31:</b> <b>If you answered no to the previous question, do you have the means to determine adequate rates for maintaining and improving your system?</b>	
N/A	2
Yes	2
No	2
Don't know	1
No answer	5

As discussed above, many respondents indicated a need for technical assistance or requested training opportunities focused on capital improvement planning and rate setting.

<b>Question 36: Is your agency currently working with outside agencies on improvement plans or projects?</b>	
State Water Resources Control Board/ NCRWQCB	2
Rural Community Assistance Corporation (RCAC)	4
California Department of Water Resources	1
Local County	1
Bureau of Indian Affairs	3
US EPA	5
Bureau of Reclamation	1
Other	3

Of those who chose other, the California Indian Environmental Alliance, Bureau of Reclamation, Indian Health Service and US Department of Agriculture were identified.

## **NEXT STEPS**

Based on the summary and analysis provided above, the following needs have been identified:

- Assistance with identifying funding opportunities and preparing grant applications, including the need for technical assistance to prepare applicants for implementation ready proposals;
- Assistance with securing funding and navigating the process of replacing or upgrading aging infrastructure;
- Assistance with general water and wastewater system infrastructure operations, maintenance and repair (in the form of trainings and technical assistance);
- Support to remain informed about and comply with state drinking water standards;
- Support to develop and maintain maps of water and wastewater systems;
- Trainings, especially for smaller systems, with respect to financial stability; and
- Community Networking to reach out to systems, especially those who have indicated a need, to inform them of existing resources developed during the last outreach effort such as the Community Networking Directory: A contacts database that was developed to allow providers in the region to reach out to similar entities for advice and assistance.

Each Tribe who completed a Needs Assessment will have an opportunity to discuss their assessment and recommendations, and to move their needs into either support in technical assistance or capacity-building through the DACTI Program, prepare for a Round 2 Prop.1 Implementation application or to prepare an application through another other funding mechanism.

### **SECTION 3. SURVEY-DERIVED TECHNICAL ASSISTANCE**

Based on the water and wastewater treatment needs survey, NCRP staff compiled a list of water and wastewater system providers in the North Coast region in need of technical assistance. The data from the NCRP Needs Assessment was compiled into a database for analysis, screening and prioritization using the evaluation criteria outlined in the NCRP Technical Assistance Selection Process approved by the NCRP Policy Review Panel in January 2018. (*Appendix I, NCRP Technical Assistance Selection Process and Appendix J, Technical Assistance Rankings*). Technical Assistance for North Coast Tribes will be selected through a subsequent process led by the North Coast Tribal Representatives and the Tribal Engagement Coordinator, CIEA.

The NCRP Technical Assistance Selection Process evaluation criteria included economic status (only systems in or serving areas considered disadvantaged by the state were considered), Drinking Water State Revolving Fund criteria for public health need, Clean Water State Revolving Fund criteria for public health and water quality, implementation readiness, and sustainability criteria, including infill development, existence of capital and asset management plans, climate change planning, protection of environmental or agricultural resources, and presence of project in one or more regional environmental management plans. DWR IRWM Program Statewide Goals were also factored into the prioritization process, including drought readiness, ecosystem protection and restoration, expansion of water storage capacity, improvement of groundwater management and increased flood protection.

The resulting list of water and wastewater system providers in the region was reviewed with the NCRWQCB and Division of Drinking Water District Offices 01, 03 and 18 to ensure that systems were good candidates for assistance based on state experience and knowledge. When the preliminary ranking was developed and DWR and NCRWQCB had added their input, additional adjustments were made based on system responsiveness to outreach, whether systems were currently receiving planning or construction funds from other sources, whether systems had previously received NCRP assistance, and whether projects were consolidations, which increase regional self-reliance. Once the final adjusted points were developed, each project was ranked based on their score within each NCRP member county.

The top candidates included the first and second ranked system from each County followed by a few of the remaining overall highest scoring systems. These were provided to the NCRP Proposition 1 DACTI Ad Hoc Committee for review and input. The ad hoc committee met on December 5, 2018 and approved the following list of 21 disadvantaged community entities to receive engineering technical assistance. To date, of the 21 projects offered technical assistance, 14 were ready to make use of the offered services and 9 entities submitted project proposals for consideration during the NCRP Proposition 1 IRWM Project solicitation. Eight projects were selected by the NCRP Technical Peer Review Committee and approved by the Policy Review Panel as Priority Projects selected for inclusion in the regional NCRP 2019 Proposition 1 IRWM Grant to be submitted to the Department of Water Resources in the summer of 2019. The following table lists the Round 1 systems offered technical assistance; whether the recipient was interested in the assistance and under contract; and brief notes about the status of the project.

NCRP DISADVANTAGED COMMUNITY TECHNICAL ASSISTANCE RECIPIENTS 2019			
SYSTEM NAME	Tech Assist Contracted	Assistance Desired	Notes
JEDSMITH HOMEOWNERS ASSN.	Yes	Yes	Contracted scope expected to be completed by end of May.
JOURNEY'S END MOBILE HOME PARK	No	Possibly	In conceptual design stage & already working with site engineer. Check in during Round 2.
BRICELAND C.S.D.	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted; selected as Priority Project.
WILLITS, CITY OF (WATER)	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted; selected as Priority Project.
SALYER HEIGHTS W.S., INC	No	Unlikely	Has applied for a planning grant to address all system issues. No sense of urgency to utilize this TA opportunity.
TREASURE CREEK WOODS MWC	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted.
SHASTA VIEW HEIGHTS OWNERS ASSOCIATION	Yes	Yes	Contracted scope expected to be completed by end of August.
NEWELL COUNTY WATER DISTRICT	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted; selected as Priority Project.
SONOMA COUNTY MUTUAL WATER CO	Yes	Yes	Contracted scope expected to be completed by end of August.
ALDERPOINT COUNTY WATER	Yes	Yes	Contracted scope expected to be completed by end of May.
REDWOOD VALLEY COUNTY WATER DISTRICT	No	Possibly	Check to see if they have permanent manager by Round 2 and are better positioned for technical assistance.
GASQUET CSD	Yes	Yes	Contracted scope expected to be completed by end of August.
CITY OF DORRIS	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted. Needs continued technical assistance
CITY OF BLUE LAKE	No	Possibly	Not ready in 2019. Check in during Round 2.
LAKE SHASTINA	No	Possibly	Not ready in 2019. Check in during Round 2.

NCRP DISADVANTAGED COMMUNITY TECHNICAL ASSISTANCE RECIPIENTS 2019			
SYSTEM NAME	Tech Assist Contracted	Assistance Desired	Notes
DEL NORTE COUNTY CSA	No	Possibly	Some technical assistance provided. NCRP 2019 application submitted. NCRP 2019 application submitted; selected as Priority Project. GHD to follow up to see if an equivalent stormwater resource plan can be developed as technical assistance this summer.
COVELO CSD	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted; selected as Priority Project.
HOPLAND PUBLIC UTILITY DISTRICT	Yes	Yes	Contracted scope expected to be completed by end of August.
WEAVERVILLE SD	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted; selected as Priority Project.
NEWELL COUNTY WATER DISTRICT	Yes	Yes	Contracted scope expected to be completed by end of May. NCRP 2019 application submitted; selected as Priority Project. Needs continued technical assistance.
CLOVERDALE	No	Possibly	Not ready in 2019. Check in during Round 2.

# Appendix A.

## Types of Water Suppliers and Wastewater Treatment Providers and Applicable Regulations

## Appendix A. Types of Water Suppliers & Wastewater Treatment Providers & Applicable Regulations

### Provider Types

**Cities:** Cities in California commonly provide a range of services to their residents, including water and wastewater service. The Government Code gives cities the authority to secure various rights and property suitable and proper to supply water for the use of the city and its inhabitants (Government Code 38730), as well as to construct, establish, and maintain drains and sewers (Government Code 38900). City water and wastewater systems are regulated by the state and rates and charges are established by the city council pursuant to state law.

**Special Districts:** Special districts are local agencies that are established pursuant to state law to provide one or more services within their boundaries. District governing boards are often independently elected by the registered voters within the district (some are elected by property owners and are considered landowner-voter districts). Community Services Districts (CSDs – authorized by Section 61000 of the Government Code) are the most common example of an independent special district that provides water or wastewater services in the North Coast region. CSDs can also provide a wide range of other services such as fire protection, parks and recreation, and street lighting.

There are many other types of independent special districts that are allowed to provide water and wastewater services in California, including County Water Districts (Water Code Section 30000, the reference to “County” in the name does not indicate that this district type is related to a county board of supervisors), Sanitation Districts (Health and Safety Code Section 2400), Public Utility Districts (Public Utilities Code 15501), and Municipal Utility Districts (Public Utilities Code 11501). Like cities, special districts that provide water and wastewater systems are regulated by the State and rates and charges are established by the governing board of the district pursuant to state law.

Some special districts are considered “dependent” districts and are governed by either a city council, or, more typically, a county board of supervisors. Examples of dependent districts that provide water and wastewater service include County Service Areas (CSAs - Government Code Section 25210), or County Waterworks Districts (Water Code Section 55000) which are governed by a county board of supervisors. Sonoma County utilizes CSAs to provide water service in the western part of that county through CSA 41 (Fitch Mountain, Freestone, Jenner, and Salmon Creek).

**Mutual Water Associations/Companies:** A mutual water association or company is a private (usually non-profit) association created for the purpose of providing water to its shareholders or members. Companies organized for mutual purposes are generally not subject to regulation by the California Public Utilities Commission (CPUC) unless the company delivers water for profit to persons other than shareholders. Mutual water association/companies are often formed as part of a land subdivision to provide for the maintenance and operation of the water system serving the area, and shares in the corporation are conveyed as part of each deed.

In California, there is no specific statute under which mutual water associations or companies (“Mutuals”) are formed or governed. Mutuals are most commonly formed as general

## *Appendix A. Types of Water Suppliers and Wastewater Treatment Operators*

corporations (Corporations Code Section 100) or as non-profit mutual benefit corporations (Corporations Code Section 7110), although other structures are sometimes used for tax or other reasons. Like cities and special districts that provide water and wastewater systems, Mutuals are typically regulated by the State. However, there are Mutuals that serve less than 15 service connections and are regulated by the County. Unlike cities and special districts, service charges for Mutuals are not established through a public process governed by the state constitution, laws, and legal precedent. Mutuals are required to operate “at cost” (which distinguishes them from regulated public utilities that can earn a return on investment). The cost of operations is typically distributed to users according to ownership shares in the system.

**Public Utilities:** A water company regulated by the CPUC is commonly referred to as an investor- owned utility (which can include utilities owned by one or more people). Public water system standards apply to investor-owned utilities that serve over 25 people for more than 60 days per year. In order to set rates or charges, investor-owned utilities petition the CPUC to seek a water rate increase to recover the full cost of the improvements plus a set rate of return on investment.

**Other:** In addition to the common water system organizational types described above, there are water systems operated by private companies including restaurants, hotels, retail, commercial, and industrial facilities as well as recreation vehicle parks and private campgrounds, camps, and retreats operated by organizations. “Other” systems, primarily water systems, may supply water to very small communities and not be officially organized as a legal entity at all.

### **System Regulations**

The U.S. EPA categorizes water systems that serve greater than 10,000 people as “large” and less than 3,300 people as “small.” Approximately 60 percent of the population of the Region resides within cities, 80 percent of whom live in cities with population greater than 10,000. Another approximately 20 percent of the Region lives within the boundaries of a special district that provides water service. Therefore, approximately 80 percent of the Region receives water service from a city or special district and 50 percent of the Region receives water from a city water system that serves 10,000 people or more.

**Public Water Systems.** The administration of the Drinking Water Program was transferred to the State Water Resources Control Board Division of Drinking Water from the California Department of Public Health (CDPH) in July 2014. This transfer sought to align the state’s drinking water and water quality programs in an integrated organizational structure to effectively protect both water quality and public health as it relates to water quality while meeting current needs and future demands for water supply. Source capacity, storage capacity, and distribution system standards are contained in the California Waterworks Standards, outlined in the California Code of Regulations (CCR), Title 22, Chapters 15 and 16, and administered by the Drinking Water Program.

Small public water systems are typically established in areas where there are no municipal



water systems and where the density of development necessitates common source and infrastructure. As indicated above, this survey focused on community water systems. The State of California's definition of a community water system is:

- Community Water System (C) is a public water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents. This category includes municipal water systems and mutual water associations.

Other types of water systems include:

- Non-Transient, Non-Community Water System (NTNC) is a public water system that is not a community system and that regularly serves at least the same 25 persons over six months of the year. Such systems are typically associated with schools, restaurants, or other businesses.
- Transient, Non-Community Water System (TNC) is a public water system that is not a community water system and does not regularly serve at least 25 of the same persons over six months per year. Transient systems include hotels, resorts, and campgrounds.

**State Small Water Systems.** Many counties regulate smaller water systems, which are defined as "State Small Water Systems". A State Small Water System is defined as a system that provides piped water to the public for human consumption and serves at least five, but not more than 14, service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year. State small water systems are also subject to California Waterworks Standards; however, this survey did not include State Small Water Systems.

**Wastewater Systems.** In almost all instances across the North Coast Region, wastewater collection and treatment systems are owned and operated by local agencies – either cities or special districts. There are some instances where wastewater systems were installed to serve a "company town" containing a lumber or paper mill and the wastewater system is owned and operated by the company. Over time, ownership of the utilities serving company towns has transitioned from private to public ownership as property begins to change hands.

Wastewater systems, often referred to as publicly owned treatment works (POTWs) must be operated to meet the requirements of the Federal Clean Water Act and the Porter-Cologne Water Quality Control Act (California Water Code, Division 7). Treatment and discharge requirements are contained in the National Pollutant Discharge Elimination System (NPDES) developed by the U.S. EPA and enforced in the North Coast Region by the North Coast Regional Water Quality Control Board (RWQCB). The RWQCB has adopted the North Coast Basin Plan, which provides specific guidance on how federal and state laws are applied in the region. The goal of the Basin Plan is to provide a definitive program of actions designed to preserve and enhance water quality and to protect beneficial uses of water in the North Coast Region. The initial plan was adopted in 1971 and has been amended numerous times as part of the triennial reviews; the most recent triennial review occurred in 2018.

All dischargers with average daily flows greater than 1,500 gallons per day must obtain a permit from the RWQCB. If the discharge is to a body of water, like a river, lake or ocean, then the permit falls under the NPDES. If the discharge is solely to land, then Waste Discharge Requirements

*Appendix A. Types of Water Suppliers and Wastewater Treatment Operators*

(WDRs) are issued. Unlike NPDES, which do not expire, WDRs are effective for five years, after which time they must be renewed. Due to staffing constraints and other issues, a permit renewal may be delayed and the existing permit will remain in effect until a new permit is adopted. The permit renewal process can take a year or more.

The type of wastewater treatment plant or process, and the volume of wastewater treated determine the minimum Grade level of certified operators required. There are five Classes of wastewater treatment plants and five equivalent Grades of wastewater treatment plant operator certification. For instance, a wastewater treatment plant with a Classification of “I” requires a Grade “I” operator and contains a “primary” treatment system (which removes some portion of the suspended solids and organic matter in a wastewater through sedimentation) and uses a conventional treatment pond and treats less than one million gallons per day. As biofiltration (filters using biomass or living material to capture and degrade wastewater) is used, treatment ponds are modified, or mechanical batch filtration is added, the Class of the treatment plant increases, as does the Grade of operator required (Table A1).

<b>Table A.1 Wastewater Treatment Plant Classification</b>		
<b>Class</b>	<b>Wastewater Treatment Process</b>	<b>Design Flow (millions of gallons)</b>
I	Primary treatment	1.0
	Conventional treatment ponds	All
II	Primary treatment	1.0 to 5.0
	Biofiltration	1.0 or less
	Modified treatment ponds	All
III	Primary treatment	5.0 to 20.0
	Biofiltration	1.0 to 10.0
	Activated sludge	5.0 or less
	Sequencing batch reactor	1.0 or less
	Tertiary treatment	1.0 or less
IV	Primary treatment	Greater than 20.0
	Biofiltration	10.0 to 30.0
	Activated sludge	5.0 to 20.0
	Sequencing batch reactor	1.0 to 10.0
	Tertiary treatment	1.0 to 10.0
V	Biofiltration	Greater than 30.0
	Activated sludge	Greater than 20.0
	Sequencing batch reactor	Greater than 10.0
	Tertiary treatment	Greater than 10.0

Note: The Chief Wastewater Treatment Plant Operator must have a Certificate showing a Grade Level equivalent to the Wastewater Treatment Plant Class in order to operate the plant.

# Appendix B.

## Water Supply & Wastewater Needs Assessment Survey & Interview Questions

### **Appendix B. Water Supply & Wastewater Needs Assessment Survey & Interview Questions**



## North Coast Water Supply and Wastewater Treatment Assessment 2017

### Agency Information

1. Organization Name:
2. Your Name:
3. Your position within the organization:
4. Mailing address:
5. Email address (please answer “none” if you don’t use email):
6. What type of organization do you represent? Please choose all applicable
 

<input type="checkbox"/> Local government	<input type="checkbox"/> Wastewater treatment
<input type="checkbox"/> Special district	<input type="checkbox"/> Tribal government
<input type="checkbox"/> Water supply	<input type="checkbox"/> Other, please state:
7. What services do you provide? Please choose all that apply.
 

<input type="checkbox"/> Water treatment and supply	<input type="checkbox"/> Wastewater reuse
<input type="checkbox"/> Domestic water distribution	<input type="checkbox"/> Storm drainage
<input type="checkbox"/> Irrigation water distribution	<input type="checkbox"/> Watershed restoration
<input type="checkbox"/> Wastewater collection	<input type="checkbox"/> Other, please state:
<input type="checkbox"/> Wastewater treatment	
8. What community or communities do you serve? Please provide the physical location.

### Technical Assistance and Training Needs

9. Please provide your agency’s *level of need* for the following types of **technical assistance**:

	<i>No need</i>	<i>Moderate need</i>	<i>Strong need</i>	<i>Extreme need</i>
System operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment calibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Funding opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting federal and state regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



For each topic that you indicated a "strong" or "extreme" need, please indicate the range of technical assistance needs, and provide as much detail as possible so that we can adjust future opportunities, trainings and workshops accordingly.

**10. Please provide your agency's level of need for the following types of trainings:**

	<i>No need</i>	<i>Moderate need</i>	<i>Strong need</i>	<i>Extreme need</i>
Program management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulatory compliance/ reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grant writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please state below:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For each topic that you indicated a "strong" or "extreme" need, please indicate the range of training needs, and provide as much detail as possible so that we can adjust future opportunities, trainings and workshops accordingly.

**11. Are your system components accurately mapped using GPS?**

- Yes
- No

**12. If you answered no to the preceding question, what types of assistance would be useful to meet your mapping needs?**

- Map of system components (valves, wells, pipes, treatment facilities, tanks, water sources, etc.)
- Map of potentially contaminating activities in your system's vicinity (system contamination threats)
- Overall map of system (including components, threats, etc.)
- Other, please state and briefly describe:



**13.** Are there **additional resources** (such as budget, rate setting, recordkeeping, or asset management templates; legal or technical reference materials; etc.) that would be useful for your system/ staff

- Yes, please describe:
- No

**Challenges**

**14.** Please indicate the **level of concern for your system** on the following topics

	<i>No concern</i>	<i>Moderate concern</i>	<i>Strong concern</i>	<i>Extreme concern</i>	<i>Not applicable</i>
Raw water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water supply reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire suppression supply reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdated treatment system (need for new/improved technology)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aging treatment system (need to replace parts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient quality and quantity of staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System too small for growing population	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System too large for shrinking population	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial stability for operating system and maintaining reserve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operation and maintenance – need for trained personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please state below:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**15.** Please indicate what resources or support would be most helpful in dealing with each issue that you ranked “moderate concern” or “extreme concern:”



## Regulatory Concerns

16. Are there any regulations (federal, state or local) with which your system is out of compliance?

- Yes, please describe:
- No
- Unknown

17. Please indicate how well your agency is able to meet the following regulatory constraints.

	No issues	Minor/ infrequent issues	Minor/ frequent issues	Major/ infrequent issues	Major/ frequent issues	Not applicable
Meeting CA/ federal water quality standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampling and testing procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Required paperwork and reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any others, please describe below	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Please **indicate what resources or support would be most helpful** in dealing with each issue that you ranked “Major/ infrequent” or “Major/frequent:”

19. Please provide more **detail regarding any regulatory challenges** your agency is currently experiencing:

## Agency Capacity

20. **Does your system have paid staff?** Choose all applicable

- No water operator
- Level 1
- Level2
- Level 3
- Water operator without “official” certification
- Consultant
- Administrative
- Management
- Other, please state:



**21. Who interprets your water quality results?** Choose all applicable

- No one
- Water operator
- Other staff/ board member
- Outside consultant
- Local/ state government staff
- Other, please state:

**22. Does your agency perform **arsenic removal** as part of the treatment process?**

- Yes, please describe the treatment process:
- No
- Don't know

**23. Is there anything other than arsenic that is **unusual or problematic about your water source(s)**? If yes, please briefly describe.**

- Yes, please briefly describe:
- No
- Don't know

**24. Wastewater treatment only: Approximately how many hook-ups do you have?**

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> 0-50      | <input type="checkbox"/> 1,001-5,000                         |
| <input type="checkbox"/> 51-100    | <input type="checkbox"/> 5,001-10,000                        |
| <input type="checkbox"/> 101-250   | <input type="checkbox"/> Over 10,000 (please estimate below) |
| <input type="checkbox"/> 251-1,000 | Comments:  |

**25. Water suppliers only: Approximately how many hook-ups do you have?**

- |                                      |  |
|--------------------------------------|--|
| <input type="checkbox"/> 0 – 15      | <input type="checkbox"/> 1001 – 5000                         |
| <input type="checkbox"/> 16 – 50     | <input type="checkbox"/> 5001 – 15,000                       |
| <input type="checkbox"/> 51 – 250    | <input type="checkbox"/> Over 15,000 (please estimate below) |
| <input type="checkbox"/> 251 – 1,000 | Comments:  |

**26. Does your system maintain a current **Emergency Response Plan**?**

- Yes, please provide date:
- No
- Don't know





## Financing

**27. Are your **current rates sufficient** for building capital improvement funds and covering operating and maintenance costs?**

- Yes
- No
- Don't know

**28. If you answered no to the previous question, **do you have the means to determine adequate rates** for maintaining and improving your system?**

- Yes
- No
- Don't know

**29. What is your **current rate structure**?**

- Monthly/ annual flat rate
- Uniform rate schedule
- Increasing block/graduated schedule
- Decreasing block/graduated schedule
- Seasonal rate schedule
- Subsidized by government or Tribe
- Other, please describe:

**30. What is your **approximate monthly average residential water and /or wastewater customer bill**? If you offer both water and wastewater services and the average bill varies by service, please provide information about this in the comment field.**

- Subsidized (please describe in comments)
- \$0-\$50
- \$51-\$100
- \$100-\$150
- Over \$150

Comments:

**31. Is your agency in need of financial assistance** such as grants, low interest loans, or loan restructuring? (Please use comment field to what your funding needs relate to. For example, current infrastructure needs, regulatory issues, cost of living, etc.)

- Yes
- No

Comments:

**32. Does your system have a **Capital Improvement Plan (IP)**?**

- Yes, please provide date of most current CIP:
- No
- Don't know

Comments:



## Partnerships

**33.** Is your agency **currently working with outside agencies** on improvement plans or projects? If so, please choose the agency from the list below and briefly describe the project in the comments section.

- California Rural Water Association (Cal Rural Water/ CRWA)
- Rural Community Assistance Corporation (RCAC)
- Redwood Water Resources Network (RWRN)
- State Water Resources Control Board (SWRCB)/ North Coast Regional Water Quality Control Board (NCRWQCB)
- California Department of Public Health (CDPH)
- Environmental Protection Agency (EPA)
- Wine Country Water Works
- Local County
- Other local government
- Other (please list below)

Comments:

**34. Would partnerships or sharing resources with neighboring or nearby systems help** you address your needs for specialized tools, equipment, qualified operators, or system management?

- Yes, please describe below.
- No
- Don't know

Comments:

**35.** Do you have any **specialized tools, equipment, or other resources that you could share** through partnerships?

- Yes, please describe below.
- No
- Don't know

Comments:

## NCRP and North Coast Integrated Regional Water Management Plan

**36.** Are you familiar with the North Coast Resource Partnership (NCRP)?

- Yes, I am familiar with the NCRP and its resources
- No, I am not familiar with the NCRP and its resources
- I would like additional information about the NCRP and resources (indicate specific requests below)

Comments:



**37.** Please select all **challenges or barriers to participation in the NCRP** that you or your staff face:

- Not difficult; I am a regular participant
- Time commitment for participation is too high (too many meetings, emails, etc.)
- Meeting times not compatible with staff/ board schedule
- Lack of in-house skill necessary to develop and submit a project
- Lack of staff to perform grant administration even if grant funds were awarded
- Not interested in state grant funding
- Not interested in working with the other water-related stakeholders
- Too difficult to understand the Integrated Regional Water Management (IRWM) process
- Other, please list below

Comments:

**38. Is there an additional staff or Board member we should also speak to** about your agency and its needs? Ideally, this would be someone in a different role than your own who can offer a different perspective on your system management and operations. If so, please provide contact information below.

Name:

Title/ role:

Phone:

Email:

**39.** Please add **any other comments or information** that you feel would be helpful to the NCRP to provide assistance to small and disadvantaged water and wastewater providers.

**Thank you very much for your participation. We look forward to working with you to improve and protect water quality and water supply for all residents of California's North Coast!**



North Coast Resource Partnership Disadvantaged Community Key Expert Interview

## Key Expert Details:

Interview date:

Interviewee Name:

Organization/Role:

## Organization Details

1. What kind of organization do you represent?

Community Group

Municipal Department

NGO/Non-Profit

Resource Conservation District

Other \_\_\_\_\_

2. What geographic area do you serve?

3. How many members do you serve?

4. Do you serve Tribal communities?

Yes

No

1. If yes, which communities do you serve?

5. Are you familiar with the North Coast Resource Partnership (NCRP)?

Yes

No

6. If not, would you like more information about this group and its available resources?

Yes

No

## Local Water Issues

1. Do all of the members of your community have access to adequate water?

Yes

No

*If no, what neighborhoods or areas lack access?*

*What factors keep community members from having access to water?*

2. Describe the quality of your drinking water?



North Coast Resource Partnership Disadvantaged Community Key Expert Interview

3. Are there known pollutants?
4. Describe the state of local water infrastructure (wastewater treatment, dams, pump stations, storage, etc.)?
5. Do you know if/how the water fees you pay contribute to infrastructure maintenance?

Yes

No

6. Do any areas of your community flood?

Yes

No

*If so, where? How often? Has the flooding increased over the years? What are the impacts?*

7. Are you aware of any projects being implemented to deal with local water issues? Please describe. Who is managing the project(s)?
8. What are your top water priorities? What project(s) would you implement to address it? What are the barriers to addressing your priority issues?

## Environmental Issues

1. How would you describe the health of your local forest?
2. What are the greatest impacts to the forests in your region?
3. How is forest health impacting local watersheds?
4. What are the greatest impacts to riparian and wetland habitats in your region?
5. How will your community be impacted by sea level rise and sea water intrusion?
6. What do you know about your community's vulnerability to climate change?
7. Do you know of any projects currently being implemented to deal with environmental issues in your region? Who is managing the project(s)?
8. What are your top environmental priorities? What project would you implement to address it? What are the barriers to addressing your priority issues?



North Coast Resource Partnership Disadvantaged Community Key Expert Interview

### Other Community Issues

	<b>What are the other challenges that your community is facing?</b>	
	Access to Capital/funding	
	Access to Technology	
	Access to Employment	
	Access to Healthcare	
	Access to Housing	
	Regulatory Constraints	
	Transportation	
	Recreational Opportunities	
	Local Industry	
	Cannabis	
	Planning and Preparedness	
	Wildfire	
	Other	

1. What factors make *[insert from above]* challenging for the community? ?

*Do you have any ideas about how to overcome those challenges?*

*Are you aware of any projects or programs currently in place to help?*

2. How is cannabis cultivation impacting your community?

3. What is your community’s vulnerability to natural disasters, including wildfire?

*What are the gaps to the community’s natural disaster preparedness?*

For more information about the North Coast Resource Partnership please see <http://www.northcoastresourcepartnership.org/>



## North Coast Resource Partnership Disadvantaged Community Key Expert Interview

### 4. What other issues are impacting disadvantaged communities?

*What is challenging about this issue?*

*Do you have any ideas about how to overcome those challenges?*

*Are you aware of any projects currently in place to help?*

## Closing

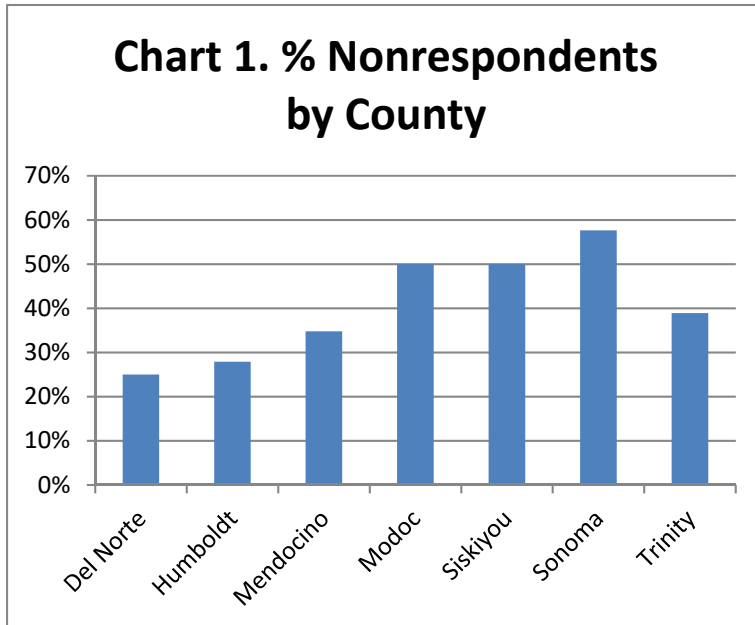
1. Are there any other organizations or individuals we should reach out to for an interview?
2. What are the key documents and reports for your region?
3. Would you or members of your community be interested in attending a workshop in the fall to further discuss these topics or the next NCRP quarterly meeting on October 19 to be held in Weaverville?

# Appendix C.

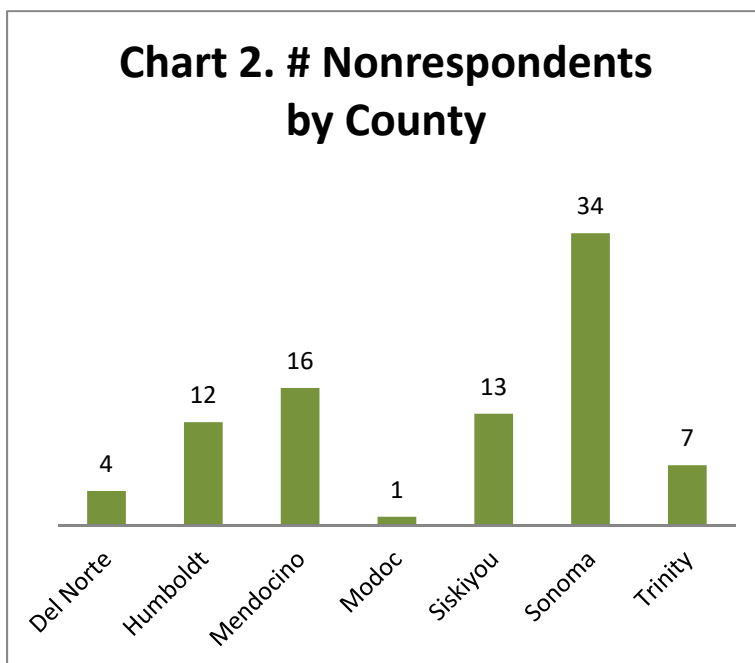
## Non-Respondent Statistics

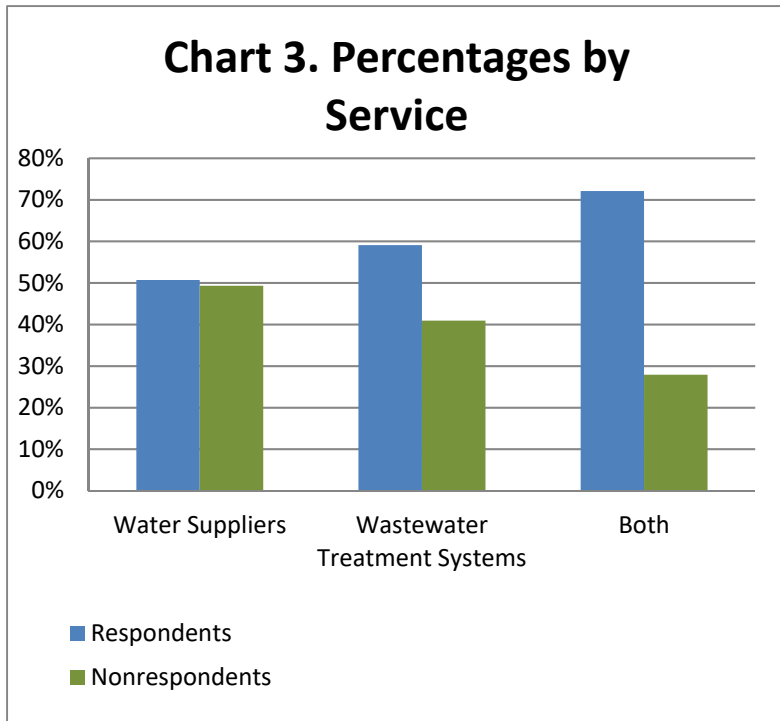


## Appendix C. Non-Respondent Statistics



As of April 2019, 91 of the identified water suppliers and wastewater treatment operators (44%) have not responded to the North Coast Economically Disadvantaged Community Water Supply and Wastewater Treatment Facility Water Needs Survey. These entities are distributed throughout the North Coast Region with Sonoma County having the highest percentage (58%) followed by Siskiyou and Modoc (50%) (Chart 1). Del Norte had the lowest nonresponse rate, with only 25% of its twelve facilities choosing not to respond. With only two water/ wastewater treatment providers, Modoc County has a fifty percent response rate; just one of its providers responded (Chart 2).

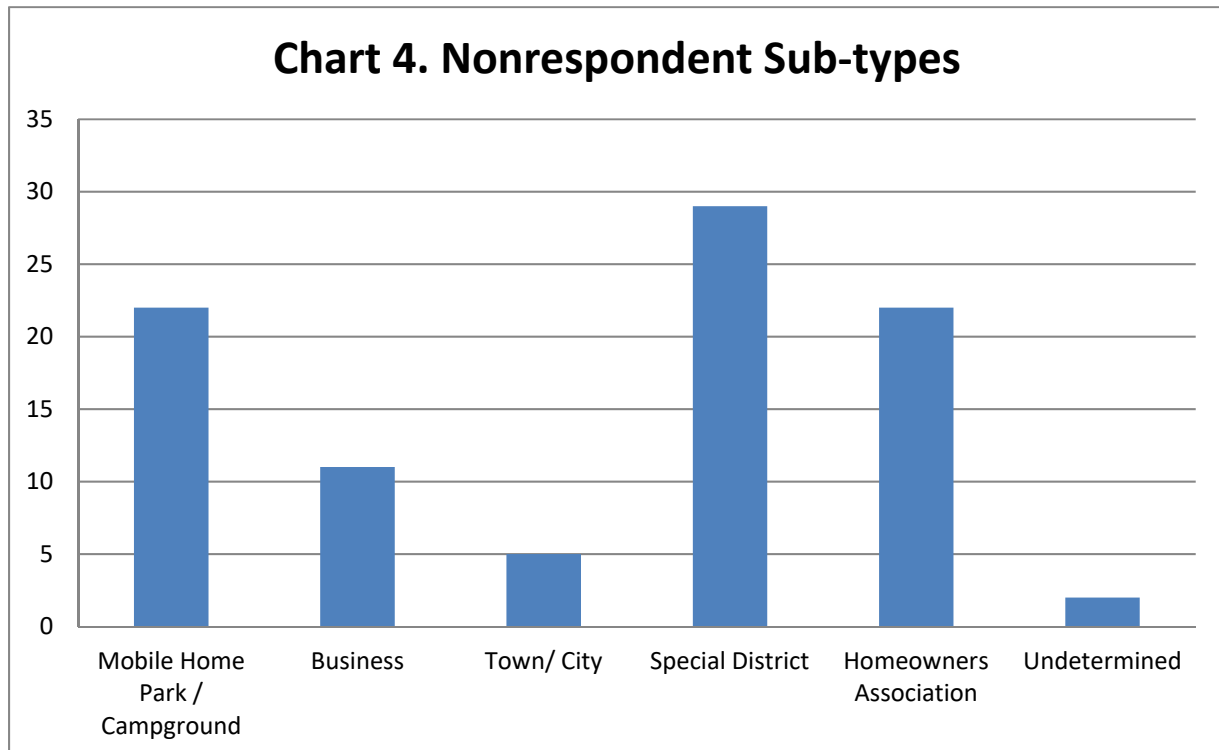


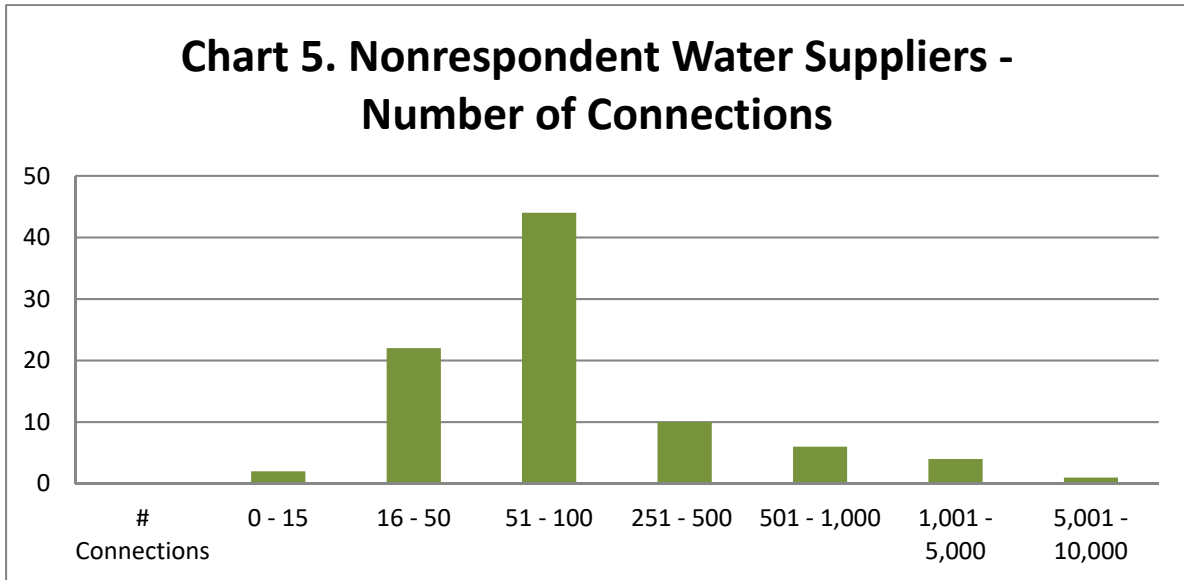


With respect to services provided, there are slightly more responders than non-responders for water suppliers and wastewater treatment systems. Systems that provide both water and wastewater services had a 72% response rate (Chart 3).

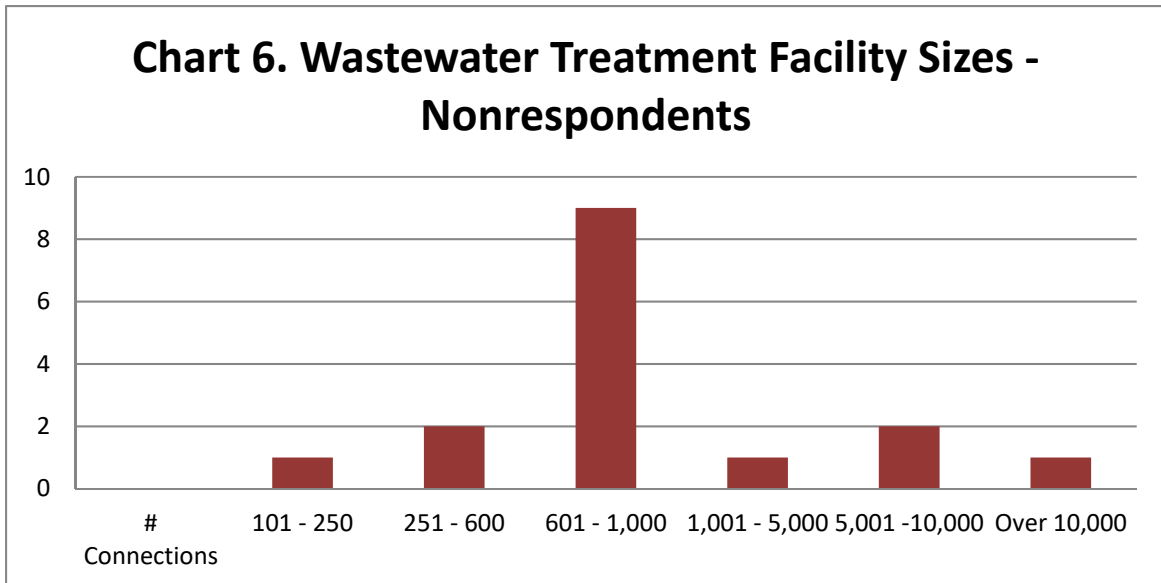
Mobile home parks, Special Districts, and Homeowners Associations each make up about one quarter of the non-respondents (Chart 4). A little over 10% are businesses, some of which have been family-

owned water suppliers for generations. Five non-respondents are cities or towns while the type of two of the non-respondents could not be determined with publicly available data.

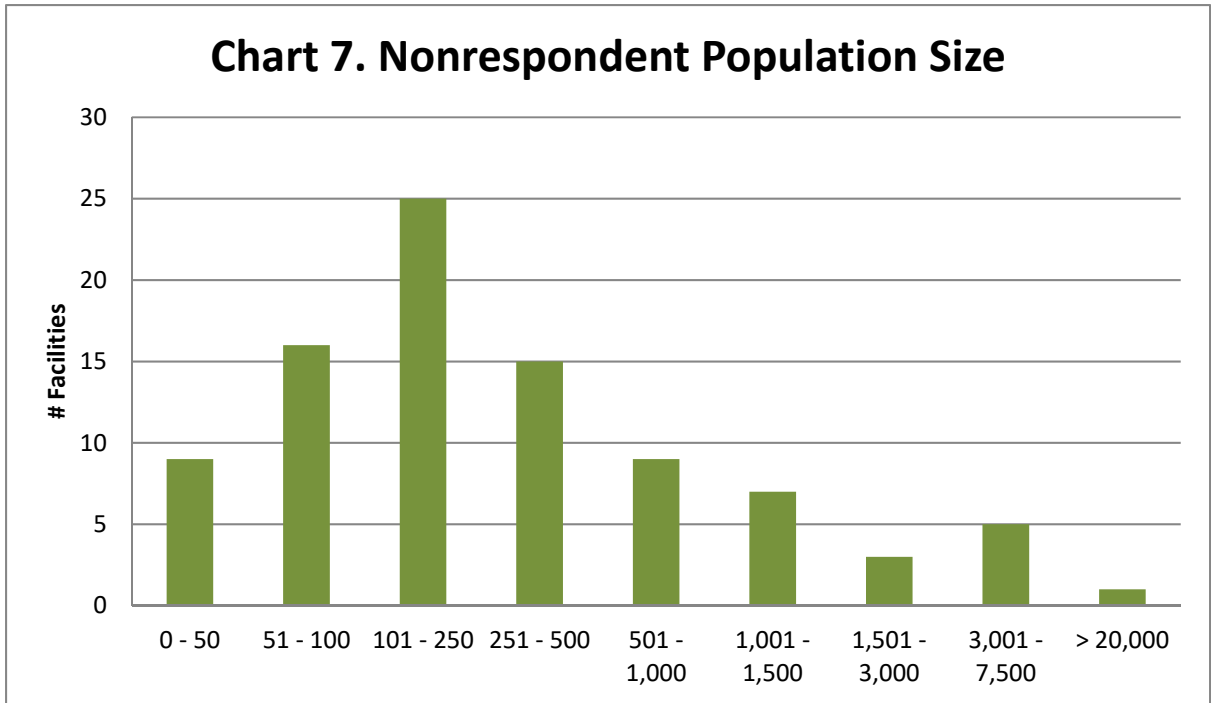




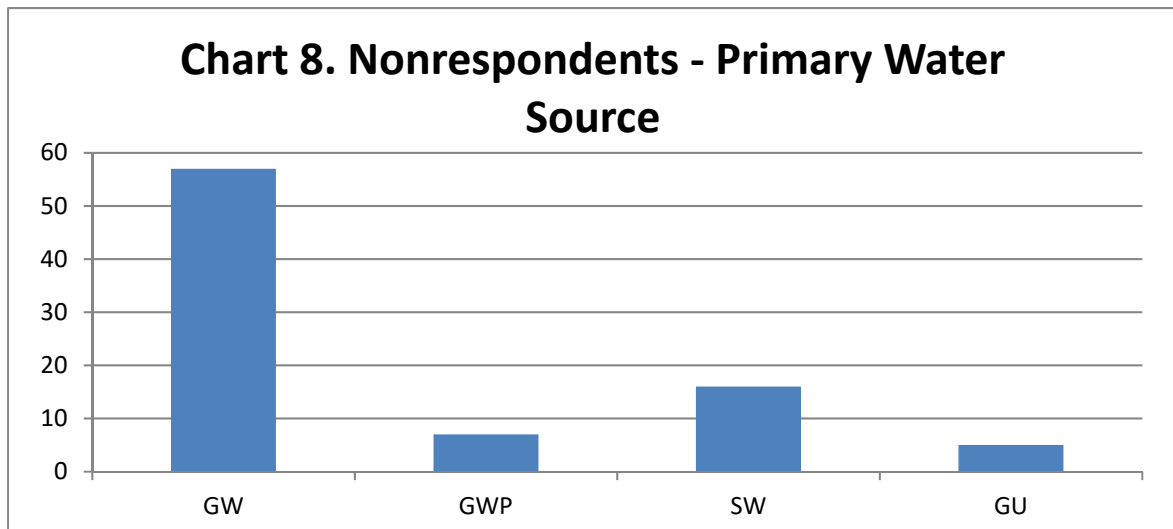
Of the nonresponding water suppliers, about forty-four service between 51 and 100 connections, while about twenty serve between 16 – 50 connections (Chart 5).



Over half of the non-responding wastewater treatment operators have between 601 – 1,000 connections, while the others ranged in size from serving between 101 – 250 connections, to over 10,000 connections (Chart 6).



Nearly three-quarters of the communities served by non-respondents have a population less than 1,000, with over a quarter having a population between 101 – 250 (Chart 7).



Most of the non-respondents rely on groundwater as their primary source, with about 15 using surface water and just a few purchasing groundwater or using groundwater under the influence of surface water (Chart 8).

2018/19 DISADVANTAGED COMMUNITY WATER NEEDS SURVEY NON-RESPONDENTS					
County	Organization	Water Source	SERVICES		
			Wastewater	Water Supply	Both
Del Norte	BERTSCH OCEANVIEW CSD	GWP		x	
Del Norte	HRC C.S.D.	GW		x	
Del Norte	KLAMATH C.S.D. (Del Norte Community Development)	GW			x
Del Norte	SMITH RIVER C.S.D.	GW		x	
Humboldt	ALDERPOINT COUNTY WATER	SW		x	
Humboldt	BENBOW W.C. - Del Oro Water Company	SW		x	
Humboldt	FERNDALE - DEL ORO WATER CO.	GW		x	
Humboldt	GARBERVILLE SANITARY DISTRICT	SW			x
Humboldt	MILL CREEK M.W.C.	GW		x	
Humboldt	MOONSTONE HEIGHTS MWA	GW		x	
Humboldt	ORICK C.S.D.	GW		x	
Humboldt	PALMER CREEK CSD	GW			x
Humboldt	PHILLIPSVILLE C.S.D.	SW		x	
Humboldt	REDWAY C.S.D.	SW			x
Humboldt	RIVERBEND MHP	GW		x	
Humboldt	RIVERSIDE CSD	GW		x	
County	Organization	Water Source	Wastewater	Water Supply	Both

Appendix C. Non-Respondent Statistics

<b>Humboldt</b>	Scotia CSD	SW			x
<b>Humboldt</b>	TRINIDAD, CITY OF	SW		x	
<b>Humboldt</b>	WADDINGTON W.W.	GW		x	
<b>Mendocino</b>	BIG RIVER VISTA MUTUAL WATER COMPANY	GW		x	
<b>Mendocino</b>	BRANSCOMB MWC	SW		x	
<b>Mendocino</b>	BROOKTRAILS TOWNSHIP CSD	SW			x
<b>Mendocino</b>	COVELO MOBILE HOME PARK	GW		x	
<b>Mendocino</b>	CREEKSIDE CABINS & RV RESORT	GW		x	
<b>Mendocino</b>	DOLPHIN ISLE MARINA	GW		x	
<b>Mendocino</b>	ELK COUNTY WATER DISTRICT	GU		x	
<b>Mendocino</b>	IRISH BEACH WATER DISTRICT	SW		x	
<b>Mendocino</b>	LAKE VIEW MUTUAL WATER CO.	GW		x	
<b>Mendocino</b>	LITTLE LAKE MOBILE HOME PARK	GW		x	
<b>Mendocino</b>	MILLVIEW COUNTY WATER DISTRICT	SW		x	
<b>Mendocino</b>	POINT ARENA WATER WORKS	GW		x	
<b>Mendocino</b>	POINT ARENA WWTP		x		
<b>Mendocino</b>	RIDGEWOOD WATER SYSTEM	GU		x	
<b>Mendocino</b>	UKIAH VALLEY SD		x		
<b>County</b>	<b>Organization</b>	<b>Water Source</b>	<b>Wastewater</b>	<b>Water Supply</b>	<b>Both</b>

Appendix C. Non-Respondent Statistics

<b>Mendocino</b>	WESTPORT COUNTY WATER DISTRICT	SW			X
<b>Mendocino</b>	WILDWOOD CAMPGROUND	GW		X	
<b>Modoc</b>	NEWELL COUNTY WATER DISTRICT	GW		X	
<b>Siskiyou</b>	CITY OF ETNA	SW			X
<b>Siskiyou</b>	COPCO LAKE MWC	GWP		X	
<b>Siskiyou</b>	COVE MOBILE VILLA	GW		X	
<b>Siskiyou</b>	FORT JONES, CITY OF	GW			X
<b>Siskiyou</b>	HAPPY CAMP C.S.D.	SW		X	
<b>Siskiyou</b>	HAPPY CAMP S.D.		X		
<b>Siskiyou</b>	HORNBROOK C.S.D.	GW			X
<b>Siskiyou</b>	JUNIPER CREEK ESTATES	GW		X	
<b>Siskiyou</b>	MACDOEL WATERWORKS	GW		X	
<b>Siskiyou</b>	MCCLLOUD C.S.D.	GW			X
<b>Siskiyou</b>	MONTAGUE, CITY OF	SW			
<b>Siskiyou</b>	OAK VALLEY ACRES P.O.A.	GW		X	
<b>Siskiyou</b>	SHADOW MOUNTAIN MHP	GW		X	
<b>Siskiyou</b>	SISKIYOU CO. ROLLING HILLS MWC	GW		X	
<b>Sonoma</b>	ARMSTRONG VALLEY-CAL WATER SERVICE (PUC)	GW		X	
<b>Sonoma</b>	HAWKINS WATER CO-CAL WATER SERVICE (PUC)	GW		X	
<b>County</b>	<b>Organization</b>	<b>Water Source</b>	<b>Wastewater</b>	<b>Water Supply</b>	<b>Both</b>

*Appendix C. Non-Respondent Statistics*

<b>Sonoma</b>	NOEL HEIGHTS-CAL WATER SERVICE (PUC)	GU	x
<b>Sonoma</b>	RANCHO DEL PARADISO-CAL WATER SVC (PUC)	GWP	x
<b>Sonoma</b>	AUSTIN CREEK MUTUAL (Springhill)	GU	x
<b>Sonoma</b>	BELMONT TERRACE MUTUAL WATER COMPANY	GW	x
<b>Sonoma</b>	BLUE SPRUCE MOBILE HOME PARK	GW	x
<b>Sonoma</b>	BODEGA WATER COMPANY	GU	x
<b>Sonoma</b>	CALIFORNIA-AMERICAN GEYSERVILLE (PUC)	GW	
<b>Sonoma</b>	CALIFORNIA-AMERICAN WATER LARKFIELD (PUC)	GW	x
<b>Sonoma</b>	DELORES LANE WATER SYSTEM	GW	x
<b>Sonoma</b>	EL CRYSTAL MOBILE HOME PARK	GW	x
<b>Sonoma</b>	EL PORTAL MOBILE ESTATES	GW	x
<b>Sonoma</b>	GRATON CSD		x
<b>Sonoma</b>	HEIGHTS MUTUAL WATER COMPANY	GW	x
<b>Sonoma</b>	MAGIC MOUNTAIN MUTUAL WATER COMPANY	GW	x



Appendix C. Non-Respondent Statistics

County	Organization	Water Source	Wastewater	Water Supply	Both
Sonoma	MICHELE MUTUAL WATER COMPANY	GW		x	
Sonoma	NORTH STAR MOBILE HOME PARK	GW		x	
Sonoma	PINE HILL TERRACE MOBILE HOME PARK	GW		x	
Sonoma	PLAZA MOBILE HOME PARK	GW		x	
Sonoma	RAINS CREEK WATER DISTRICT	GW		x	
Sonoma	RINCON VALLEY MOBILE ESTATES	GW		x	
Sonoma	ROSELAND MOBILE HOME PARK	GW		x	
Sonoma	RUSSIAN RIVER MUTUAL WATER CO.	GW		x	
Sonoma	SANTA ROSA MOBILE ESTATES	GW		x	
Sonoma	SHAMROCK MOBILE HOME PARK	GW			
Sonoma	SONOMA COUNTY CSA 41-SALMON CREEK	SW		x	
Sonoma	SOUTH PARK COUNTY SANITATION DISTRICT		x		
Sonoma	VALLEY FORD WATER ASSOCIATION	GW		x	
Sonoma	WAYSIDE GARDENS MOBILE HOME PARK	GW		x	

Appendix C. Non-Respondent Statistics

County	Organization	Water Source	Wastewater	Water Supply	Both
Sonoma	WESTERN MOBILE HOME PARK	GW		x	
Sonoma	WILLOWSIDE MUTUAL WATER COMPANY	GW		x	
Sonoma	WINDSOR, TOWN OF	GW			x
Trinity	BUCKTAIL MUTUAL WATER COMPANY	GW		x	
Trinity	PINE COVE RV PARK	GW		x	
Trinity	SALYER HEIGHTS W.S., INC	SW		x	
Trinity	SALYER MUTUAL WC (Formerly Riverview AC)	SW		x	
Trinity	TRINITY CENTER M.W.C. .	SW		x	
Trinity	TRINITY VILLAGE MUTUAL WATER CO.	SW		x	
Trinity	WEAVERVILLE S.D.		x		
<p>Water Source Key: GW: ground water; GWP: purchased groundwater; GU: groundwater under direct influence of surface water; SW: surface water</p>					

# Appendix D.

## Respondent Comments Grouped by Subject

### **Appendix D. Respondent Comments Grouped by Subject**

*NCRP Needs Assessment Summary 2018/19 - Appendices*

## *Appendix D. Respondent Comments Grouped by Subject*

### **Infrastructure - aging**

- Aging infrastructure at our Sewer Plant
- Aging system, former owners used agricultural tubing, last year, about 100 feet replaced with PVC.
- Currently operating with HomeSpring filter system. HomeSpring no longer manufactures replacement parts so eventually filters will have to be replaced.
- Distribution system - extreme concern
- Funding for aging water lines in the city that need replaced.
- Funding for replacement of aging distribution system
- Infrastructure replacement (aging pipes) is our biggest need and focus of the capital improvement program.
- Main concerns are with the physical stuff - new pipes in the ground and water meters,
- Maintenance and repair - extreme need due to necessary improvements to bring the system up to current codes and standards to accommodate the rebuilding efforts after and since Redwood Complex Fire.
- Old system has started showing signs of wear.
- Old system, not sure how long it can last. Have had to replace some of the valve sect.
- Our distribution system is outdated and several areas of the system are undersized and in need of immediate repair;
- Our main in the street is old red brick pipe that has gone beyond its shelf-life and all supply lines from street to homes is old black plastic pipe that is brittle, cracking, and failing.
- Our main treatment plant is in need of significant updating. We have a couple of pressure reducing Valves feeding pressure zones in need of replacement
- Our system is 25 years old, with some parts estimated at being almost 100 years old. Some of our fire hydrants are tied into our potable water system and need to be separated. They are also not spread throughout the town. Our ordinances have not been updated since 1992 and do not reflect current practices, although we are starting to update them. Our distribution system is a mixed bag of poly pipe and metal pipe. We often have to ration water during the late summer when our spring flow diminishes. We do not have a secondary source of water if something happened to the spring.
- Our system is 50 years old. Our wells are shallow ( 20 and 27 feet deep). Our pipes are asbestos. We have no storage. The state is pushing us to improve our system.
- Pipe replacement and infrastructure - funding opportunities
- Pumphouse system just completely rebuilt, but location of water lines and water lines need replacement
- Replace water storage equipment i.e. water tank.
- Replacement piping and valve additions
- System in good shape, doesn't require much but needs new tank.
- System infrastructure maintenance and repair: the current transmission and distribution systems are old and in the case of the transmission system was patch-worked together using myriad materials such that it consists of numerous pipe sizes and materials. Additionally, the source water diversions are in need of improvements to screen and reduce the amount of NOM that end up in the transmission system as well as our pressure filters at the water treatment plant. The distribution system has less variety of pipe sizes and materials, but still has some variation. More importantly with regard to the distribution system, some (many?) of the valves need to be replaced since they do not fully function as they should (this is

## *Appendix D. Respondent Comments Grouped by Subject*

- especially frustrating with regards to valves intended to function as isolation valves that do not seat correctly and therefore do not completely stop water flow.
- System was built in 1979; aeration/sludge handling
  - The district is approaching, sometime in the next few years, the need to replace our ocean outfall system. It is estimated that replacement construction will cost in excess of \$2,000,000. We will need to explore grant funding opportunities and rate structure changes in order to accomplish this needed upgrade to our waste disposal system.
  - The existing infrastructure for the transmission system is quite old. Most of it is the original system put in when the district was formed in the 1960's. The piping consists of several materials and sizes. The Distribution System, while newer, has sections that are old and showing signs of beginning to fail or are failing, requiring (some) extensive repairs. The treatment plant, though functioning is not functioning at full capacity and extra maintenance is therefore required, as is excessive backwashes which in turn puts greater demand on treated water for those backwashes. Automation, remote log-in/monitoring capabilities, either fresh filter media or new approach to filtration could be useful.
  - The system is currently replacing its 100,000-gallon Redwood water storage tank with a 200,000-gallon bolted steel tank via a FEMA grant, State DWR IRWMP grant (Proposition 84, Round 2), and a pending State DWSRF grant in the total amount of \$3.2 million. Increased water storage is required to adequately serve a redevelopment project that merges a National Park with a State Park (both of which were annexed into the system's jurisdiction in 2010). In addition, the south face of Hiouchi Mountain is threatening to slide through about one-third of Hiouchi, given at least a Magnitude 5.5 earthquake, and public safety/health are of great concern. The aforementioned tank replacement project is therefore also designed to stabilize the mountain. Construction begins in April of 2018. On December 15, 2017, FEMA Region IX approved Hiouchi's Hazard Mitigation Plan that articulates a number of potential disasters, including the impending Cascadia Event. This planning project was successfully undertaken via FEMA grant DR-4240.
  - The system is old and needs a new water tank and water main
  - The water distribution system is need of replacement.
  - Transit pipe is aging 50 + years old and we are replacing in areas with lots of trees
  - Treatment facility upgrades are needed are an ongoing concern.
  - Water piping is over 50 years old and some sections still in gray pipe. All home sites need back flow devices added.
  - Water treatment plant is aging needs to be updated. Building that the treatment plant is in needs to be updated as well.
  - We are going to need a new storage tank in the near future (about 40,000-50,000 gallons), and we will need a low interest loan or a grant.
  - We have an aging water distribution infrastructure that could us some updating.
  - We need a complete maintenance and calibration of the treatment plant.
  - We need financial help for replacing old pipe and in purchasing and installing backflow valves.

### **Infrastructure - technology**

- At some point we will need to add meters to our system.
- None of the homes have water meters.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Infrastructure - technology**

- State Department of Health Services would like to see 30 psi through out the system. Houses close to water tank do not have that and have separate pressure systems at each house. Regulations are constantly changing and sometimes it is hard to keep up. Have good relationship with State Regulators.
- We are concerned that our New Water treatment Facility is already obsolete. We have been advised to install what we have by the state only to be told immediately after that it is no longer being manufactured and parts will become impossible to get in the near future.
- We are in need of currently technology and a backup computer system if the primary fails
- We need a generator and installation for the water treatment for power outages.
- We need a new computer program system with current electronics. Currently running on non-supported windows xp.

### **Funding Needs**

- 1. Funding for infrastructure improvements. 2. Funding for upgrading system to provide increased fire protection.
- A grant and low interest loan to rebuild our system and/or relocate it where suitable area exists for storage.
- AGING AND FAILING INFRASTRUCTURE. THE SYSTEM IS OVER 70 YEARS OLD AND NEEDS A MINIMUM OF NEW PIPING THROUGHOUT.
- Aging infrastructure
- Aging infrastructure can't be replaced without financial resources.
- Aging water treatment system and pipes.and sewer lift stations are starting to fail with secondary pumps
- Although we have been saving in reserve money for failed equipment we have nowhere near the amount we need to replace our tank and pump house. We need a combination of grant money, low interest loans and money from our reserve.
- Always looking for grants - have about \$10,000,000 on Prop 1 stuff going on right now. Unfunded = water supply study, pipeline assessment, distribution system upgrades
- Assistance with identifying federal funding opportunities
- Capital improvements, infrastructure, emergency funds, replacing filter media, upgrading treatment facilities, upgrading catchment/collection/diversion sites from source water. Equipment necessary for proper O&M of sewer collection system. There may be more, but that's what I can come up with at the moment.
- Current infrastructure needs
- Currently we are working on some planning grants for the water and sewer systems. We will need funding based on those grants when complete.
- Due to current infrastructure needs, we are always in need of grants, loans, etc.
- failing infrastructure replacement
- Financial assistance for engineering, purchase, and installation of new system
- Financial assistance is needed to finance repairs to the equipment shed and to replace a number of meter stops and meters.
- For pipe replacement when that comes up
- Funding capital improvement plan
- Funding capital projects like additional water storage tanks, WWTP capital replacements/improvements.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Funding Needs**

- Funding for consolidation or funding for filtration of existing and new wells (propose one new well)
- Funding for replacement of aging distribution system
- Funding is the primary concern related to extreme concerns with O&M staff being difficult to attract due to cost of living in the area.
- Funding support is what we need for our CIP.
- Funding to provide additional storage for shareholders.
- Funding.
- Funds for operator training and certification, funds for distribution upgrading, road repair and upkeep
- GRANT FUNDING
- Grant funding for new chlorinating system along with new monitoring tech. Budgeting for capital outlay and rate structure to maintain system.
- Grant funds. We're currently in a planning mode for (2) Prop 1 projects
- Grant money
- Grants
- Grants - they tend to do bonds over loans, have done bond restructuring, may not need additional assistance with that, but certainly grants.
- Grants for fire suppression in out buildings.
- Grants for Infrastructure Needs (Replacing Distribution Lines)
- Grants for infrastructure repairs and improvements
- Grants for more water storage
- Grants for myriad projects.
- Grants for pipe replacement and backflow valves would be helpful. we currently have no long term debt.
- Grants for water tank replacement and/or an additional pump site
- Grants only for current infrastructure needs.
- Grants, loans, assistance to assure financial checks and balances.
- Grants/Funding. We need to keep our Treatment facility up to date with equipment we can depend on.
- Honestly, I am not sure what resources would be most helpful. I hate to say it, but I am not even sure what sort of resources or assistance to ask for to help sometimes. The need for more capital and/or liquid assets with which to address problems and attract qualified hires perhaps?
- In general. We need a generator and installation for the water treatment for power outages. We need a new computer program system with current electronics. Currently running on non-supported windows xp. We need a complete maintenance and calibration of the treatment plant.
- In process of wastewater planning of new WWTP w/ winter NPDES and summer WDR.
- IN THE PROCESS OF PROCURRING GRANTS, FOR ENGINEERING AND TECHNICAL ASSISTANCE AND HELP WITH RATE/STRUCTURE STUDIES
- Infrastructure improvements
- Infrastructure needs
- Infrastructure rebuild.
- Infrastructure repair and replacement; treatment plant modernization

## *Appendix D. Respondent Comments Grouped by Subject*

### **Funding Needs**

- Infrastructure upgrade and replacement.
- Infrastructure.
- It is always important to look for grants to offset capital expenses and to reevaluate current debt service.
- Last grant we obtained was through Homeland Security/ County Emergency Management for a 20 kW generator in 2013 that efficiently provides system wide emergency power in case of short and prolonged power outages.
- We and our sister system have been very proactive in securing IRWM, DWSRF, CWSRF, and Proposition 1 funding for capital improvements. Still need to replace water distribution system.
- Matching grants for acquiring and installing an emergency communications system that includes a multifrequency repeater radio
- Maybe - we need a new 150K gallon water tank; approximate cost is \$200,000
- Moderate repairs of collection system needed
- More financial opportunities for Disadvantaged communities.
- Need funding for water meters and elevated storage tank
- Need funding to complete requirements for implementation of SWRCB CWSRF & DWSRF capital improvement projects.
- Need funding to replace whole system at same time instead of piecemeal.
- Need to fund changes demanded by waterboard staff such as filtration and Registered Civil Engineer fees, well changes and well expert costs.
- Only if treat Hexavalent Chromium or consolidate into Crescent City in the future.
- Our biggest need right now, by far is funding/ financial
- Our immediate concern is to obtain funding to replace water storage equipment i.e. water tank.
- Our water treatment plant is over 50 years old and in need of renovations, upgrades, and improvements
- Planning and project based grant funding would help.
- We need matching grants for infrastructure improvements. We are handicapped with an Insufficient revenue stream.
- Possible grant money to replace HomeSpring filter system.
- Providing an adequate capital reserve to replace critical infrastructure IF and WHEN needed (i.e. our 30,000 gallon storage tank is most critical and largest capital needed; we can handle pump and treatment replacements routinely unless "catastrophic" event wiped out our treatment, control, pressure tank building)
- Replacement storage tank.
- The district is approaching, sometime in the next few years, the need to replace our ocean outfall system. It is estimated that replacement construction will cost in excess of \$2,000,000. We will need to explore grant funding opportunities and rate structure changes in order to accomplish this needed upgrade to our waste disposal system.
- The water distribution system is need of replacement. Funding sources are needed for this work.
- These needs are dependent upon the area.
- Treatment plant reconstruction
- UPGRADE PRESENT SYSTEM TO MEET REGULATIONS AND BE IN COMPLIANCE WITH REGULATIONS.



## *Appendix D. Respondent Comments Grouped by Subject*

### **Funding Needs**

- We are a severely disadvantaged community. We have received several grants including two IRWM grants and one DWSRF grant. We are now looking for funding to replace our water distribution system (installed by the Bureau of Reclamation in 1958).
- We are always looking for money upgrade our systems
- We are currently doing a bond for \$1.8 million for next year's CIP, but we will need help beyond that.
- We are going to need a new storage tank in the near future (about 40,000-50,000 gallons), and we will need a low interest loan or a grant.
- We are in the process of attaining a grant for sewer system replacement
- We are most interested in grants for our rate payers. Reservoir planning & construction, source exploration (well drilling) and infrastructure (fire flow upgrades, generators and generator sheds).
- We are not in need yet only because of an unusual influx of cash from a new hookup. If the current trend keeps going we will need financial help soon. Also our system is over 50 years old and will need major work soon.
- We could always use more money to upgrade systems but currently the systems are working within "current regulations". We have technical expertise to deal with issues as they arise but always looking to keep systems current.
- We have a long list of water and wastewater infrastructure that is in our CIP and beyond.
- We have a Prop 1 Planning Grant in effect and the Construction Grant in progress to upgrade our infrastructure.
- We may need a small loan for our wastewater project.
- We need financial help for replacing old pipe and in purchasing and installing backflow valves.
- We need funding for sewer lift station and well house upgrades.
- WE NEED MORE FUNDING FOR REQUIRED REGULATIONS AND TESTING.
- We will take all of the help we can get!
- With a small customer base, and an aging infrastructure we need to secure grants. It seems that Districts that are in violation receive funding to correct the violations, but a District like ours, that is not in violation, cannot secure the State money needed to put in new pipes, etc. This is NOT a technical assistant need. This is a \$\$\$\$ need.

### **Financial stability**

- Available money tends to be the leading issue hindering our ability to deal with the issues.
- Capital improvement plan- it has recently come to my attention that the district does not have a functioning capital improvement plan. Given the age of the system and some of the other issues I am aware of, a capital improvement plan seems to be of great importance if the district is to maintain and improve system performance. I have zero experience in creating CIPs yet I need to be integral in one's creation. Help would be extremely appreciated.
- Financial stability for small systems into the future
- Financial stability is a burden for disadvantaged communities
- Financial Stability: Like many of the small districts, this system is not rolling in money and doesn't have the ability to be able to address all the issues that arise in the course of operations. We can't afford to purchase every tool that would be beneficial and helpful to operators. The district would not be able to afford to cover a major disaster or failure of part of the system let alone all of the system-certainly not out of pocket anyway.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Financial stability**

- Majority of revenues derived from cannabis production, an industry in the initial stages of regulated legalization.
- Our rate base is finite and cannot support substantial infrastructure improvements
- To replace aging infrastructure, rate increases would have to be far more than community can pay. Community already pays some of the highest rates in California.
- We need to determine the most reasonable amount to keep in our CIP.
- With a small customer base, and an aging infrastructure we need to secure grants. It seems that Districts that are in violation receive funding to correct the violations, but a District like ours, that is not in violation, cannot secure the State money needed to put in new pipes, etc. This is NOT a technical assistant need. This is a \$\$\$\$ need.
- With only 19 households contributing and changing regs. and in need of infrastructure improvements, our needs far exceed our assets with all of our homes on fixed incomes.

### **Regulatory**

- Areas of strong and extreme concern are related to failure to meet disinfection by-product standards.
- Collaboration with nearby systems on possible treatment for Hexavalent Chromium as well as possible system consolidation with Crescent City.
- Completely unequal application of regulations. Our City was forced by state to upgrade plant, build new disposal system and now orders about I&I issues. Millions of dollars of ratepayer money - we have the highest rates in the region. There are no municipal users of water downstream of us, yet there is a major industrial and residential polluter upstream of us and State is anemic and ineffective with them. This has been going on for decades. Another similar jurisdiction in the region on another watershed is allowed to percolate industrial and residential wastewater above the largest municipal water intakes in the region. Regulators on the verge of retirement seem to put off the big problems and focus on easy targets and organizations who want to comply, like my organization.
- Contaminant monitoring
- Customer base is too small for the wastewater treatment system to operate and maintain in accordance with regulatory requirements.
- It seems to me that the county and state are requiring more and more testing.
- It's difficult to comply with statewide blanket regulations/ standards
- Knowledge of other small private systems and their treatment systems and how they meet current and proposed regulations would be beneficial.
- Our wastewater plant struggles to meet current WQ regulations for some constituents.
- Printed copies of new regulations would be helpful. We try to keep up.
- Regulations and financial stability are always a concern but we are not looking for outside support.
- Regulations are always increasing and the testing is a major cost for us.
- Regulatory "guidance" re: CIP
- Science and technology allows for greater levels of testing - sophistication of tech is increasing regulatory burden on operator
- Support in understanding need for new regs of State Water Resources Control Board.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Regulatory**

- We are concerned that our New Water treatment Facility is already obsolete. We have been advised to install what we have by the state only to be told immediately after that it is no longer being manufactured and parts will become impossible to get in the near future.
- WE NEED MORE FUNDING FOR REQUIRED REGULATIONS AND TESTING.
- We need to know the current CA State requirements and if we are meeting these.

### **Staffing**

- A list of service providers for third party operation of the parks' water systems would be helpful. Onsite staff works at the moment, but there is always concern that onsite staff will quit and the park will be left without a reliable onsite operator.
- Access to certified operators if the need arises
- Access to resumes and salary requirements for trained operators who are seeking employment and promotional opportunities.
- For the people who are a part of the system to become active and volunteer time to be a part of the water district. Most here want good clean water at a low rate - "I'll call you if I don't have water but don't bother me and I thank you for working for free and keeping the rates low."
- In small rural water systems like ours, it is always a challenge to find qualified people to manage such systems. We currently have good people in all the necessary positions to operate our system, but over time, the need for qualified operators can become a problem.
- Keeping trained staff is always difficult.
- LOCAL PARTICIPATION.
- Need for trained operators in our rural area. Need for law change regarding eligible experience hours for operator certification qualifications.
- Number of qualified staff to perform required system maintenance.
- Operations and Maintenance: the system has only one full-time operator. There are two part time positions that are filled essentially to assist that employee. Of the two, only one really has the knowledge and skill set to be of all that much help. Trying to hire and retain qualified operators (and/or maintenance crew) given the limited hours and wages that can be offered is difficult to put it mildly. Having additional, qualified staff to help with some of the projects, repairs, replacement of components, would be seriously helpful and appreciated by our sole operator.
- Staffing a small system like ours at the appropriate water and wastewater certification levels is always a concern.
- Succession Planning
- The system is struggling to meet required system maintenance needs due to staffing levels.
- There is only one person doing maintenance.
- We are a small (37 hookups) water system, with mostly retired residents and only 14 year round connections. It is very hard to get anyone onboard to help with the water system.
- We don't often have Treatment Plant Operator Jobs available, but when we do, we don't always get high quality applicants.
- We have a part time operator and no back up
- We have no staff, only volunteers!

## *Appendix D. Respondent Comments Grouped by Subject*

### **Water Quality**

- Arsenic was a problem with prior source, but since the new WTP was constructed, it's not a problem.
- Chromium 6
- Chromium6 exceedence.
- City has to treat for smell problem
- Coliform and e coli according to the LT2 sampling. Some possible pesticides from marijuana growers up stream.\*\* We do not detect any of these after water is through the treatment plant.
- Excessive storage, some customer complaints about water quality
- High rainfall turbidity
- Individual property owners receive their water from privately owned wells. The district has responsibility to monitor and control the amount of water extracted by each property owner.
- Intermittent E-coli and coliform positive testing results
- Iron and manganese.
- Iron bacteria cause aesthetic water quality issues when our groundwater well is in operation. System performs frequent flushing to alleviate color & staining issues.
- Manganese and Iron removal is part of our treatment process. Recently we had to negotiate treatment and operational processes with the Division of Drinking Water regarding a well field that becomes inundated when the Russian River floods.
- Occasional issues with non maintained leach fields in sources watersheds
- Occasional turbidity at times of high rainfall
- Only low pH which we use NaOH treatment for
- PCE contamination
- Strong sulfur odor
- Surface water has very high levels of dissolved organic carbon during rainy weather, and we are on the north coast, hence the DBP issues.
- Treated water quality - problems with keeping a neutral pH - tends to go basic; standby well with not-great water quality
- Turbidity, especially seasonally, is a frustrating issue at times but that is about it and that is not unusual around here.
- Water board staff thinks the water is corrosive but that is questionable.
- We have had issues in the past with Disinfection Byproducts, and we have just recently been questioned about the presence of pesticides and fertilizers in the water due to Cannibals grows.
- We use surface water/shallow wells so sometimes we have biological contamination
- Well water high in calcium
- Wells - people complain about the taste, but not much you can do.
- With water supply wells, there is a taste and odor issue with sulfur and manganese - about 5 - 10% of water use - during April -October when there's high demand. Water from wholesale supplier - no issues primary or secondary. Well issues only secondary.

### **Water Supply**

- Drought effects the quantity of water available some years
- Deeper Wells

## *Appendix D. Respondent Comments Grouped by Subject*

### **Water Supply**

- Expanding water storage to meet current peak use and fire suppression needs in the coastal zone, adjacent to Caltrans, poor access to current storage.
- Funding to provide additional storage for shareholders.
- Have 300,000 gallons of storage with 100,000 gallons of use per month which leaves them with 200,000 extra gallons per month - ish. Was built for use with fire department, is tied in with whole system has to be kept fresh - need to put bigger line up one road, working on that.
- Increased water supply
- Increased water supply is an ongoing concern.
- Inspector came out and decided functioning system needs to increase capacity - state. The current capacity is 6500 gallons - wants to double it.
- Potter Valley project is being relicensed, which will affect water flows through the Russian River, which may impact system.
- Reliability of Russian River flows as the populations of Sonoma and Mendocino Counties increase
- State imposed moratorium on new water connections due to lack of adequate water supply
- Too large storage tanks for size of community
- Water conservation throws a wrench in things - it cuts down on revenues and complying with drought regulations
- Water supply during drought is a strong concern and rationing has been implemented

### **Fire Issues**

- A large forest fire in the water shed of source could led to serious water quality issues.
- Fire suppression - doing water modelling and studies
- Funding to fire sprinkler out buildings.
- Strong concern about fire suppression in pockets where there's low density residential. Longer term - concern about financial stability due to fire recovery
- With recent fires, we lost power for over a week once and for 3 days next. PG&E should have prioritized us as there were power supply corridors that were not burned so we could have water for fire suppression and drinking.

### **Water Pressure**

- Had water pressure issues, had old pressure tank, just finished replacing it last week, so will see with feedback if pressure has improved.
- Water pressure - most of system is downhill from tanks, but two areas are above tanks, and when fire trucks are taking water, one road loses water pressure; system has too much capacity and population is stable
- WATER PRESSURE CAN BE VERY LOW OR EVEN NOT EXISTENT.
- We have a couple of pressure reducing valves feeding pressure zones in need of replacement and we also have some areas of our system with very low pressure and require customers to boost pressure to their homes
- We have a single source for water supply and about 1/8 of our system has lower pressure than we would like.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Technical Assistance**

- A review of our pumping system at the creek infiltration galleries and preliminary design for upgrades if necessary.
- Calibration of equipment
- Capital improvement plan- it has recently come to my attention that the district does not have a functioning capital improvement plan. Given the age of the system and some of the other issues I am aware of, a capital improvement plan seems to be of great importance if the district is to maintain and improve system performance. I have zero experience in creating CIPs yet I need to be integral in one's creation. Help would be extremely appreciated.
- Expert technical assistance with meeting regulatory constraints (we have already worked on the issue quite a bit)
- Grant writing
- Guidance with administration, operation, and maintenance of the facilities is always an ongoing need
- Having someone to help with Grant writing for improvements to our aging system would be nice
- Help in getting financial resources for much needed infrastructure update
- I believe that assistance from experts may be helpful in identifying the means to raise capital in order to be able to operate with the ability to purchase tools, upgrade equipment, pay for further training of staff etc, etc, etc.-if indeed there is a way to achieve this.
- Infrastructure mapping and assessment Robust GIS survey and model of all infrastructure
- Planning/design/engineering to replace our aging pipes and to aid in development of a secondary water source.
- Rate setting is an issue.
- System would benefit from technical assistance relating to alternative energy systems; capital improvement planning, infrastructure assessment and grant/loan resource acquisition
- Want rate setting

### **Mapping**

- Could follow up here in a few months - but mapping is pretty comprehensive
- GPS locations of most components complete. Still need unifying software to pull the data together as well as integration to customer account software.
- Have schematics, not GPS - the property is 42 acres
- Have wastewater collection map. Need comprehensive water line map. Have 1976 set of maps and more recent improvement maps.
- In process of doing the work, and will develop over time as components are replaced and accurately mapped
- No assistance - our system is mapped with CAD and works just fine
- Not as worried about contaminants with this system
- Not needed at this time
- Not unless it's a state requirement
- Old system, need help with GPS mapping
- Our individual meters are tracked by GPS however I do not know if we have mapping for our entire system.
- Our system is quite small serving only 17 domiciles. We do not need a GPS to find the well and tank.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Mapping**

- Possible connection points to City Water Mains.
- RCAC prepared a GPS map for us but it is not quite accurate and could use more detail. I am planning to attend the Google Earth mapping workshop offered on Nov 29th by RCAC.
- Specific details of mapped items (pipe sizes, valve types, dates installed, etc)
- The system is in need of system wide mapping utilizing GIS technology. We have started the process of mapping improvements but lack the resources to complete a system wide assessment. The data derived from a system wide GIS map will be invaluable for long term planning for capital improvements, staffing and disaster planning and response. This is a critical need.
- The system and all of its components is fully mapped using Google Earth. Need assistance in identifying location of existing and closed wells in the area that impact our water supply.
- The system is contained within a GIS but all features may not have been GPS'd
- To my knowledge, there has been no GIS mapping done for the district. I am, however, signed up for a workshop through RWCA in June that is focusing on GIS mapping.
- Unknown how this would apply.
- Unknown whether system is mapped using GPS
- Very small private system. No need for mapping
- We are working on inputting our system to GIS to provide additional detail at locations. This will provide a quicker response to main line breaks.
- We currently have only a sketch of our facilities locations (not to scale).
- We have an online automated map. It needs truthing and detailing so that what's in the map is accurate and complete.
- We have an overall map of facilities but we have not added details based on operating experience such as precise locations of all valving.
- We have to map all our pipes and valves, identifying any lead valves etc. this has to be done next year. We don't have the money it will take to do this.

### **Training**

- Applying for grants and grant writing expertise
- Budgeting, rate setting structure, licensing certificates and safety training are all needed in our organization.
- Capital improvement plan- it has recently come to my attention that the district does not have a functioning capital improvement plan. Given the age of the system and some of the other issues I am aware of, a capital improvement plan seems to be of great importance if the district is to maintain and improve system performance. I have zero experience in creating CIPs yet I need to be integral in one's creation. Help would be extremely appreciated.
- Capital improvement planning - strong need due to lack of water supply and a service connection moratorium prevents the adequate collection of capital improvement reserves to support changing capital improvement needs.
- Capitol reserve
- Community street lighting standards and regulations.
- Consolidation with neighboring system (five respondents)
- Contact hours for our operators
- Do not know how to apply for grants. Need professional maintenance periodically on treatment plant

## *Appendix D. Respondent Comments Grouped by Subject*

### **Training**

- Due to many upgrades we have determined our need for program management training as necessary for cross training. Regulatory training for water and wastewater is always necessary due to the changing regulatory landscape. Accessing grants without have to utilize outside consultants is important and we have little expertise. Operator training in our area is minimal.
- Federal funded project management
- Financial management and planning for the future are major concern for small systems.
- Financial management for mutual companies
- Funding opportunities - extreme need due to lack of available revenues to support necessary infrastructure maintenance, repair and capital improvements.
- IN THE PROCESS OF PROCURRING GRANTS, FOR ENGINEERING, TECHNICAL ASSISTANCE AND RATE STRUCTURE STUDY.
- Grant monies
- Grant writing - that's something our operator doesn't want to do, so if we could help, he'd be very supportive.
- Grant writing is critical, and sometimes, especially for state funding, the grant requirements can be daunting and overwhelming (all the requirements, both technical and non-technical)
- I am one of five board members and do not represent some of the other board members' opinions
- If the state keeps hammering us with expensive testing we will go broke
- If we were to obtain any future Grants for improvement, we would need assistance with this. Last time our District Engineer Helped with this issue and it was truly a blessing.
- In need of a new rate structure. Also dealing with issues of ADU construction and loss of the ability to collect capacity charges.
- Keeping abreast of new regulatory requirements. Ability to successfully apply for available grant funding opportunities for Capital Improvement Plan implementation.
- LOCAL PARTICIPATION AND FINANCIAL SUPPORT
- Looking at ways to optimize aeration and sludge removal/management
- Maintenance and repair - extreme need due to necessary improvements to bring the system up to current codes and standards to accommodate the rebuilding efforts after and since Redwood Complex Fire.
- Maintenance and upkeep have been the areas that tend to lack funding and planning to complete existing needs within our system.
- More training for current personnel and a focus in the schools to inform students that this profession exists and fulfilling the basic educational needs for people interested in this career would be advantageous.
- Need a grant to fund repairs to main distribution
- Need a new policy manual for CSD to administer the water and wastewater facilities.
- Need for legal guidance and audits
- Need to be made aware of funding opportunities for private water systems that will help in meeting the ongoing federal and state regulations/testing
- Need to continue to develop the technical documents to describe City maintained systems and develop grant applications
- Need to develop an incremental CIP to address distribution and treatment needs; limited CIP funding and small rate base; meeting DDW requirements



## *Appendix D. Respondent Comments Grouped by Subject*

### **Training**

- One of our major problems is that most people don't care enough to get involved, and the ones who do have to go to work. This is a volunteer position. I see seminars all the time scheduled by the state in Sacramento and elsewhere....Like I have time for that.
- Operations (improved water conservation strategy, rate structure changes, water rights changes, alternative energy options, etc.) - strong need due to lack of reliable water rights and inability to build capital reserves for improved or increased infrastructure.
- Operator Certification training in our area
- Outside funding will be needed to meet future needs.
- Planning for major increase in maintenance expenses.
- Problem with existing trainings is that they are geared to municipalities.
- Program management - water consultant available to answer questions, do surveys, maint director T1 certified, needs trainings for him, get them accomplished through RCAC, rate setting when meters installed.
- Qualified rate study and rate setting professionals.
- Rate setting is an issue.
- Rate structure for maintenance and repair
- Rate structures - strong need due to lack of adequate rate studies throughout the area's water districts.
- Rate study to restructure overall rates and fees of five districts consolidating into one
- Repair/Replace/Permitting in the coastal zone. Planning and Design considerations. BMPs.
- Resource acquisition and planning through grants and loan programs; local training for operator certifications and trainings on regular maintenance skill building
- Sebastopol will be seeking a RFP for a Water and Wastewater rate study within the next fiscal budget. Local Distribution and Treatment certification classes would be helpful with operator training.
- Small water system engineering, testing strategies, maintenance planning and operations
- Software and training for financial management and for tracking accounts receivable and accounts payable
- Specialized trainings like cathodic protection, water audits. operator trainings certification review.
- Specific grant and funding opportunities for water storage projects, alternative energy and property procurement for wastewater reclamation.
- Support in updating our local limits and sewer use ordinance to support our pretreatment program as it relates to new cannabis laws
- System could use technical assistance in completing its TMF, particularly identifying existing and closed wells located in the area where we source our water. Assistance is also needed in updating our Wellhead Protection Program
- System would benefit from technical assistance relating to alternative energy systems; capital improvement planning, infrastructure assessment and grant/loan resource acquisition
- Technical info on treatment methods for hexavalent chromium
- The district is under a service contract with another water district and is not currently responsible for training staff. If this changes in the future, there will be a need.
- THE LOCAL BOARD MEMBERS HAVE NO PARTICULAR EXPERTISE IN TECHNICAL OR FINANCIAL MATTERS. HERE WE COULD USE HELP AND ADVICE.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Training**

- The system has an "on call" relationship with consultants for assistance pursuant to engineering services, hazard mitigation planning, grant writing, and maintenance. The system relies upon matching grants to pay for GHD's help.
- There is a lack of training opportunities locally.
- Training - have comprehensive Emergency Preparedness Plan, would like training more specific just to water system.
- Training always needed for new staff who is replacing more experienced staff in a variety of areas. Safety training topics often needed to stay current and keep new staff trained.
- Training would be useful that addresses the types of grants that are available, eligibility, application procedures, and how grants are awarded (ie how grants are scored).
- We could benefit from Grant Writing training to put us in a better position to be awarded money when the opportunities are presented.
- We could use assistance in writing a grant for a new storage tank. We currently have two tanks: one is steel, which was installed when our new treatment plant was built, and one with a vinyl liner that is well over twenty years old.
- We don't have grant writers available or knowledge of how to write a grant.
- We have an extreme need for training in compliance with the wide variety of one size fits all unnecessary regulations imposed by the State. We also have an extreme need for elected officials to be trained to ask those agencies that actually operate water and wastewater systems what those agencies need to do their job better rather than relying on input from their campaign donors and faux science to craft unnecessary regulations and expand state bureaucracies that cost local agencies time and resources to comply for no customer benefit.
- We have an obsolete water treatment system that we had been told to install by the state with a grant, only to be told immediately after installation that the system is now obsolete and no longer made by the manufacturer
- We have been under a noncompliance order for 5 years. We need a new well, filtration, and supply tanks to meet 4 log requirements.
- We have farmed out grant writing, operator and most maintenance (replied "no need" for any trainings)
- We have no one in our assoc. who wants to be an operator. We need to contact and contract with another outside operator. We need assistance with pipe and valve replacement.
- We have no one with experience in grant writing. We need help if we ever expect to improve our system.
- We have no staff to pursue or apply for grants or low interest financing
- We need funding for maintenance and improvements to our aging system;
- We need help designing and implementing infrastructure improvements
- We need help finding and applying for financial help
- We need help in finding grant opportunities for our rate payers and help in applying for them as we are an investor owned water company
- We need to get trained in cross-connection control. We also need to get training in turbidity and how to test for it
- We need to get trained in cross-connection control. We also need to get training in turbidity and how to test for it.
- We use volunteer Board Members to oversee our system. We have a continuing need for training in board responsibilities, basic water system operation and general regulatory compliance.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Training**

- Would be great to have more operator classes on the coast; class on rebuilding chemical feed pumps; class on chemical constituents, properties, need for testing and sources of contamination - what produces each type of contaminant?
- Would like meter installation for at least knowledge purposes
- Writing Grants to receive money for replacing equipment.

### **Additional Resources** (list included: budget, rate setting, recordkeeping, or asset management templates; legal or technical reference materials, etc.)

- All ideas and examples are welcome
- All of the above as long as it's in an Excel spreadsheet and not a canned program like Quickbooks. We want to be able to make modifications as needed.
- All of the above, especially budgeting, rate setting, recordkeeping.
- All of the above.
- Always interested in asset management
- Any and all templates are appreciated to improve what we currently have.
- Asset management materials
- Asset management templates
- Asset management templates
- Asset management templates
- Asset Management templates could be helpful. We have begun discussions about implementing better Asset Management tracking.
- Asset management templates, financial resources
- Budget and rate setting
- Budget and rate setting are a focal point right now. Due to rising costs our system is due for a rate increase.
- Capital Improvement Planning and Assessment
- Class in excel
- Finding long time administrators. The current board is good for about two more years. No one else in the community seems to want to take it on.
- I am sure that there are. I imagine that there are likely resources that I am not even aware of that would be helpful. I strive to always learn and grow as an operator. To think that at some point I have no need to continue to learn or grow seems conceited and foolish.
- I don't think we know how to set up asset management for the system.
- I think we are good in these areas but maybe I'm optimistically biased.
- I'm not sure. In some ways, I think our system is not aware of bigger and/or better possibilities.
- Most likely yes, unsure of specific needs
- NOT AT THIS TIME, BUT WILL LIKELY CHANGE AS WE MOVE TO UPDATING SYSTEM
- Online access to all suggested topics would be helpful.
- ORDINARILY WE CANNOT AFFORD AN AUDIT OR LEGAL ADVICE.
- Our water and waste water systems are funded by annual dues. There are no meters so no rate setting or record keeping.
- Potentially, we have many asset management tools and different departments and communication between those different tools is problematic.

## *Appendix D. Respondent Comments Grouped by Subject*

**Additional Resources** (list included: budget, rate setting, recordkeeping, or asset management templates; legal or technical reference materials, etc.)

- Rate setting
- Rate setting and prop 218 would be extremely helpful along with recording keeping to make sure maintenance and safety are documented.
- Rate setting for members who exceed the monthly allocation of 7500gal per household
- Rate setting resources. Asset management templates (CIP in particular) would be useful.
- Rates and Budget are set by a volunteer Board, input on new industry standards and administrative approaches will be helpful. However our greatest need is to improve our distribution system.
- Reference materials such as a billing template would be of help.
- reports to water boards and CPUC
- Templates always appreciated
- Water and wastewater rate study.
- We are trying to locate 6 copies of The Water Board Bible. Worksheets for budget and rate setting would be VERY helpful.
- We could benefit from asset management software/training
- We have an accurate GIS system but training with regard to asset management and developing an asset management program would be useful.
- We have one office employee and one manager - it isn't enough to manage everything.
- Yes & No. We currently use a Management Company to bill, record keep etc. We are in the process of interviewing new Management Companies, and I wonder if we would not be better off to handle all this with the proper training in house among the 18 property owners.
- Yes per previous comments. General training in operating all aspects of a community water system is needed, and we do take advantage of training opportunities.

### **Rate Structure**

- Annual assessments set by Board one year in advance; special assessments on top IF needed (Only one in past 18 years); Misc. income from excessive water use penalties (5 cents per gallon for every gallon over avg. 200 gpd based on monthly meter readings; no exceptions)
- Annual fee
- Annual flat rate with additional charge for exceeding preset amount of usage
- CPUC authorized rate structure based on expected expenses and revenues. Usage based with two tiers and fixed charges in combination.
- CPUC regulated
- Don't charge for water, have sewage fee for each home, standard monthly fee.
- Each home owner pays a baseline fee of \$300.00 a month. Then there is a 4 tier rate schedule for water use over the baseline amount of gallons per month.
- Equivalent single-family dwelling (ESD)
- Flat Rate + Variable Usage Rate
- Flat rate based on meter size with variable usage rates
- Flat rate with "per unit" water usage charge and water conservation rate increases determined by water conservation stage.
- For residential, there is a sewer base (amount of water in winter), Tier 2 is over and above that. For irrigation, Tier 1 is amount of water needed for landscape considering area and evapotranspiration, 125% of that rate is 2nd tier Flat rate for industry

## *Appendix D. Respondent Comments Grouped by Subject*

### **Rate Structure**

- Free water
- In addition we charge by usage as a percentage of the volume costs.
- Determining the rate is one thing. Collecting it is another. I suppose we are no different than any other community in that we have both wealthy and poor.
- Included in rent
- Included in rent, water is not charged a separate rate, but rents increase as water production costs increase.
- Metered, based on City rates
- Monthly metered water and sewer rates.
- No water charge; supply included with space rental for mobile homes.
- Overage charge if people go over 7,500 gallons per month, otherwise flat rate
- Per month of usage
- Sewer is flat rate. Water is flat rate plus \$/cf
- Some metered and some flat
- There is a base charge and a volume charge, monthly.
- There is a monthly base rate that comes with a given volume of water that is included with the base rate. If usage exceeds this volume there is a standard charge for each volume of overage (or excessive use) unit. The overage unit is 150 cubic feet. So, for each 150 ft<sup>3</sup> feet of water beyond the base rate allotment, a standard charge per unit is added to the monthly base rate. Hopefully that made sense.
- Tiered for water use
- Trailer park residents are not metered...water use included in space rental.
- Uniform rate and then volume charges
- Use based, billed monthly
- Water and Sewer are included as part of the Monthly Rental rate Per Space. There is currently no breakdown for what portion of the Monthly rate is for those utilities.
- Water: monthly fee + uniform volume rate wastewater: annual fee based on use type
- We do bimonthly billing for water use charges and a base (flat) charge. We also have an annual assessment on the County tax bill. The current rates are not adequate but we have a plan to make them adequate; it may not be sufficient though. We monitor results annually.
- We do not have rates. This is a small, private system serving owner and employees.

### **NCRP Comments**

- City has limited staff; we did submit one project but at the time it was not funded.
- Concerns/challenges with sustainability/state continuing funding of IRWM programs; our wastewater projects do not have collaborations with other entities and are not attractive projects for the IRWM Program. The wastewater projects we submitted did not get funded.
- DON'T KNOW ABOUT NCRP
- Everyone is independent and autonomous anyway - north of Village of Mendocino, and only one other person on that aquifer. Their well hasn't run out of water - seem to be autonomous currently.
- Fill me in and we will see how involved we want to be.
- Great program that has already funded improvements in this community.
- Hire outside to help with projects

## *Appendix D. Respondent Comments Grouped by Subject*

### **NCRP Comments**

- It appears that we are not a sufficiently disadvantaged community to get your limited funding from past experience.
- I am a member of the TPRC
- I am a new general manager. I am still learning about the NCRP.
- I am not sure what is involved in participating with NCRP. We are open to the idea of participation.
- I am only minimally familiar with NCRP; I have looked at website
- I confess complete ignorance of the requirements for participation or of the resources offered by the organization. That would by far be the largest barrier to being able (or interested) to participate. If I don't know then I don't know and if I don't know then I can't participate.
- I do not know much about your org.
- I have no good excuses for not participating. My initial reluctance was (and is) based on a belief that it's a pay to play organization and that our concerns were not high on the list of priorities of the organization. That is, we would pay money to participate but not get any returns, in terms of grants for our projects.
- I have not personally participated but I believe our Agency does I am new to the Agency and not sure of our commitment to the IRWM process.
- I know that not too long ago the general manager for the district procured grant funding through the NCRP but personally, I know very little about the organization and/ or the resources that they offer.
- I'm aware of NCRP but not familiar.
- Information regarding what role NCRP plays in assisting water companies in securing TA and financial assistance.
- Involved off and on, no regular participation.
- Just haven't taken the opportunity to learn the organization and their resources available. Busy with competing work demands.
- Lack of knowledge of details re: activities doesn't permit my answering accurately/intelligently
- Need to learn more about and see what kind of resource it might be.
- No idea what it is
- Not able to travel distances usually required to attend meetings.
- Not currently involved with NCRP
- Not familiar with the group.
- Not really interested, because we have such a small part time staff, don't really have time for meetings etc.
- Not really sure
- Not sure what it entails. Time is precious.
- Our District has a contract with an engineering firm who suggests projects that may qualify for state/federal funding.
- Our remote location is also a problem for regular meetings/events
- Please provide general information about NCRP
- Projects performed on an as needed basis. Have not had issues integrating our needs into the planning, grant, and construction process.
- Since I am not sure what it is, I am unable to articulate barriers.

## *Appendix D. Respondent Comments Grouped by Subject*

### **NCRP Comments**

- Some of our board members are not interested in state grant funding (sad but true). Some of us are interested.
- The biggest challenge we face is having man hrs. to put into grant writing etc. with everyone working fulltime jobs and not all owners live here
- The City participates via the local Watershed Association
- Travel distance to meetings would be biggest challenge because of time constraints. Participation would depend on what is offered and whether it is worth the travel time.
- Water operator resides in SF Bay Area.
- We are not familiar with NCRP and its resources
- We are unfamiliar with NCRP
- We are very remote and traveling for meetings, etc is highly time consuming.
- We can try
- We do not know much about NCRP.
- We have participated in one or two workshops but do not receive much updated information.

### **Sharing Resources - Need**

- City does not have any nearby systems as we are only water/sewer district in Valley except an irrigation district. As far as I know they do not sell potable water.
- Coastal systems are sharing treatment operator and her resources (tools): waterline leak detection and waterline location
- Collaborate regarding methods of HC treatment and/or city consolidation.
- Consultant works for several systems in the area - don't know of any nearby, there are just scattered residences and the county airport - not close to schools, not sure how this would apply.
- Cooperative effort to obtain approved drinking water locally.
- Currently share operators with Palmer Creek CSD, Hydesville CSD, Scotia CSD. Contract with Fortuna wastewater for lab services.
- Dechlorination equipment for hydrant testing, mobile generator of sufficient size to run well pump.
- Depending: pending local real estate developments may open up some opportunities for economies of scale.
- Distance precludes this possibility
- Emergency repairs
- How do you "share resources" under 218? Nice idea but leads to more administrative overhead. Neighboring entities either want nothing to do with your organization or they constantly need your help.
- System is not located locally or in close proximity to any other water systems
- I think that we would be open to participating in some aspects. Note that we now, in essence, "share" our operating staff since same Certified operators work for/manage over 20 other small systems on the coast.
- It would help to have someone local to check on the system
- It's always helpful to share recourses during equipment failures.
- Knowing the needs and resources of nearby systems would be helpful.

## *Appendix D. Respondent Comments Grouped by Subject*

### **Sharing Resources - Need**

- This system already relies upon another system to provide proper level of water certification to operate WTP. Both rely upon a consultant to provide proper level of wastewater certification.
- May be a good question for operators.
- Maybe
- Most of the small local drinking water providers use the same operator. We have an operator that only runs our system so we have fast response to issues.
- Neighboring system has no contamination in water source. We are under their sphere of influence.
- Our current operator is employed full time by a nearby municipality. We could benefit from sharing specialized equipment.
- Possibly - Director of Public Works is working on emergency response where they can share operators or equipment with nearby communities that would want to join their network
- Possibly - we have contracts in place for qualified operators, tools, equipment and system management
- Possibly needed when wastewater is built
- Pretty sure they are in the same boat we are in.
- We have an existing network. One of three pledges that must be taken by prospective members is that of mutual assistance.
- Share operator, who has 22 water systems; waterline leak detection and waterline location
- Sharing trained personnel is desirable.
- Specifically, regional biosolid management makes sense.
- TECHNICAL SUPPORT.
- The City uses CaWARN system to share equipment and technicians during emergencies. A similar system for non-emergency assistance would be helpful.
- There is a plan to extend a water main on hwy 299 from Douglas City. Water would be provided by local supplier. Having access to that would solve the majority of our problems. I hear it is in the works but when??? If and when it does happen we would need assistance with retrofitting our distribution system.
- They do
- We already do - contract with another system
- We already share with Garberville and other surrounding Districts.
- We are doing that now and things are beginning to get worse.
- We are in the process of consolidation to form one utility district. I feel all the small systems in our rural county should be consolidated or have a JPA agreement to share costs such as operators, insurance, provide better salaries and benefits to employees and other cost savings.
- We do share resources with our neighbors and we are open to further extending the network
- We have a MOU for sharing specialized equipment with neighboring agencies.
- We have an informal mutual aid agreement with the city, but it is very minimal. We are Also a member of CAL WARN.
- We have considered selling to a PUC
- We have contacted our nearest neighboring system and they are not interested in joining together.
- We have formed a JPA to share resources like these among ourselves.



## *Appendix D. Respondent Comments Grouped by Subject*

### **Sharing Resources - Need**

- WE SHARE THE SAME OPERATOR/SYSTEM MANAGEMENT WITH another system. NOT SURE WHAT OTHER OPTIONS WOULD BE AVAILABLE.
- When I was Water Master for our System, I investigated the possibility of creating partnerships with all of the small rural systems in our area, but found that due to discrepancies in the type of water retrieval, distribution, and treatment, this was not feasible for our area.
- Yes for sharing specialized equipment & tools and emergency operations.
- YES, FOR EMERGENCY SITUATIONS OR SPECIALIZED SYSTEM NEEDS.

### **Resources to Share**

- A qualified operator if assistance is needed for a short term project, or repairs, or for brainstorming/consulting to address issues, concerns, or problems.
- A question for the water operators in a few months.
- Admin, Billing, Pumper truck.
- Backhoe and other tools
- CCTV for sewer videoing and a Vac Con
- City has fleet equipment, operators, generators and other tools they would be willing to share.
- Distribution system repair tools and equipment, small generator, chlorine
- Emergency repairs
- Every entity has something they can share. Do we have the time and resources to develop an agreement that covers all aspects of sharing?
- Maybe some knowledge or experience. No tools or equipment.
- Storage tanks
- The majority of times we have problems, the tool most used is a shovel and a digging bar.
- Vac trucks, line cameras, sludge composting mixer.
- Vactor Truck
- Various water distribution management tools, equipment, leak detection, and certified advisory services.
- Water and wastewater operators, existing ordinances, limited specialized equipment
- Water level indicator tool
- Waterline leak detection and waterline location
- We already do this through service contracts
- We do minor part sharing with a local MWC, but nothing formal
- We do share with local small special districts but because of our isolation and limited specialty equipment we do not share out of the county.
- We have a MOU for sharing specialized equipment with neighboring agencies.
- We have existing agreements with other Agency's for mutual aid.
- We have resources and emergency access to fresh water during times of disaster and are willing to consider providing water for transport out of the district's jurisdiction on a case by case basis.
- We have technical expertise in many areas that could possibly be of use to other Water Systems in the area.

#### *Appendix D. Respondent Comments Grouped by Subject*

- We might have equipment that could be shared. For example, we have a leak correlator that is underutilized. The problem with that would be loaning out our trained operators.
- We routinely share equipment and personnel with other smaller communities. Typically for limited periods of time or in urgency situations.

#### **Other comments**

- All operations are performed through a service contract with another system.
- We are considered a disadvantaged water system. This survey was completed by our Board of Directors with assistance from its Water Master.
- Any advice and help would be very appreciated
- Any assistance or information would be greatly appreciated.
- Bottom line is he's a sole proprietor, doesn't make much money off of it, but would like funding to redo it. Been toying with an idea of creating a big pond - another well put in to fill it, possible use for fire suppression.
- We are both registered engineers with a lot of experience dealing with State and Federal Agencies. We are also very familiar with the local water and wastewater systems. We are continually looking for money to keep rates down but do not need technical assistance.
- FIELD OPERATIVE TO MEET WITH AND ADVISE US.
- Focus on smaller systems is key to helping this entity.
- I don't know about your organization (I've been in the volunteer water management job 6 months). We are not a disadvantaged provider, but can always use training for new personnel.
- In the past, projects for wastewater treatment systems have not ranked high enough to receive IRWM funding, even though they are serving DACs. Wastewater treatment projects don't include a broad array of partners and the projects are not particularly compelling in a competitive environment.
- More available outside operators who could lend their coverage to us little guys!
- More information to rural towns
- Need help searching for funding for system upgrades to become "compliant"
- Need to know if this portion of our community has disadvantaged income level.
- No other ideas.
- Provide technical assistance for grant funding.
- Really could benefit from administrative training of mid-level staff.
- Remain compliant with all federal, state, and county regulations and ensure that you have at least three years of competent audits if you hope to receive grants for your projects.
- Small projects in small districts are very capital intensive due to full scale regulatory planning and bid processes. Permitting and funding processes are insensitive to seasonal nature of bidding and construction.
- State imposed moratorium on new water connections due to lack of adequate water supply
- Thank you -
- Thanks for reaching out. We are a relatively small water district but not so small that we qualify for grants. We have needs but not extreme needs or emergency situations that require immediate help or someone stepping in to take over our problems. .
- We always operate in the best interests of low income residents, try to keep costs down, open to resources and programs that would improve quality of life and water resources for residents.

*Appendix D. Respondent Comments Grouped by Subject*

- We have appreciated the classes in Fortuna which both Board members and Staff have been able to attend.
- Whatever help or direction you can give us will be greatly appreciated.

# Appendix E. Technical Assistance & Trainings In-depth Responses

## Appendix E. Technical Assistance & Trainings In-depth Responses

### Technical Assistance

Respondents who indicated an “extreme” or “strong” need for technical assistance in a given subject were asked to explain their response. Categorized responses are provided in their entirety below.

#### Funding

We need help writing the scope of work for a feasibility study, figuring the budget for the study, and finding a grant funding source.

Five Creeks in the Round Valley Watershed (to the Eel River) require restoration projects

Just need to know what opportunities there are for grants. We are aware of most loan opportunities but are always looking for grants.

We have no staff to pursue or apply for grants or low interest financing.

Extreme need due to lack of available revenues to support necessary infrastructure maintenance, repair and capital improvements.

Primarily with identifying and pursuing grant opportunities.

Always looking for grant opportunities for this disadvantaged community system

Finding grant opportunities and learning how to better fund wastewater and water infrastructure repairs/upgrades.

Help applying for grants.

need a new water tank and water main

aging infrastructure will need updating

aging system, former owners used agricultural tubing, last year, about 100 feet replaced with pvc. mostly need funding to replace water lines, can't afford to do it all at once and funding for meters and an extra storage tank

In general. We need a generator and installation for the water treatment for power outages. We need a new computer program system with current electronics. Currently running on non supported windows xp. We need a complete maintenance and calibration of the treatment plant.

Tech Assistance for grants on the extreme need for water/sewer and capital improvements.

The district is approaching, sometime in the next few years, the need to replace our ocean outfall system. It is estimated that replacement construction will cost in excess of \$2,000,000. We will need to explore grant funding opportunities and rate structure changes in order to accomplish this needed upgrade to our waste disposal system.

GCSO IS IN THE PROCESS OF PROCURING GRANTS, FOR ENGINEERING AND TECHNICAL ASSISTANCE

Assistance with identifying federal funding opportunities

Grant Monies

Grant writing assistance

system in good shape, doesn't require much but needs new tank.

There is nothing left of the water system. Given it will require a complete rebuild, it would seem this constitutes a "strong" need.

Funding is the biggest need. The entire system is very old and prone to leaks, failure, sub standard pressure.

Currently do not have water meters. Existing elevated redwood storage tank has failed and been removed.

We are currently using inadequate 2 - 5K poly tanks until we can get funding

*Appendix E. Technical Assistance & Trainings In-depth Responses*

WE KNOW WE NEED TO UPGRADE OUR SYSTEM AND NEED TO FIND FUNDING SOURCES. MOST LIKELY NEED TO FIND GRANTS AS IT IS A SMALL WATER COMPANY

With a small customer base, and an aging infrastructure we need to secure grants. It seems that Districts that are in violation receive funding to correct the violations, but a District like ours, that is not in violation, cannot secure the State money needed to put in new pipes, etc. This is NOT a technical assistant need. This is a \$\$\$\$ need.

Our water system is 30 years old and many items need replacing. The most expensive being our water tank and pump house need to be replaced (\$350K - \$400K) We have been putting money in reserve for several years however we don't have anything close to the funds needed. The 18 property owners need help by grant, low interest rate loans etc.

need funding for improvements

Since we are considered a disadvantaged community, rate structures are not adequate to cover capital needs. Funding opportunities are required to address system infrastructure operations, maintenance and repair.

Need funding to complete requirements for implementation of SWRCB CWSRF & DWSRF capital improvement projects.

grant/loan resource acquisition

Always looking for grant funding.

We need help in finding grant opportunities for our rate payers and help in applying for them as we are an investor owned water company

Grant funding

Specific grant and funding opportunities for water storage projects, alternative energy and property procurement for wastewater reclamation.

identification of available funding programs and assistance with funding process

Help with finding money that is available for upgrades and repairs.

Need to be made aware of funding opportunities for private water systems that will help in meeting the ongoing federal and state regulations/testing.

AMWC is interested in learning about grant funding, particularly for what purposes grants are available, how to apply, how grants are scored. etc.

50+ year old distribution network for 128 residences; out of date water treatment plant;

Need to fund changes demanded by waterboard staff such as filtration and Registered Civil Engineer fees, well changes and well expert costs.

The water distribution system is need of replacement. Funding sources are needed for this work.

Consolidation with neighboring water system to provide non-contaminated "ground" water. Need help funding consolidation.

Applying for funding opportunities requires a great amount of administrative staff time -- if the District is not going to pay someone to complete the grant applications. There are only two full-time administrative staff positions, one of whom can work on grant applications while taking care of the normal day-to-day functions. So, grant applications are a cumbersome, yet necessary process

our system is 25 years old, with some parts estimated at being almost 100 years old. Some of our fire hydrants are tied into our potable water system and need to be separated. They are also not spread throughout the town. Our ordinances have not been updated since 1992 and do not reflect current practices, although we are starting to update them. Our distribution system is a mixed bag of poly pipe and metal pipe. We often have to ration water during the late summer when our spring flow diminishes. We do not have a secondary source of water if something happened to the spring. Trout Unlimited has applied for a planning grant for us, but the outcome is not certain.

we need financial help for replacing old pipe and in purchasing and installing backflow valves.

## *Appendix E. Technical Assistance & Trainings In-depth Responses*

The District's ocean outfall is at the end of its useful life. MCCSD is looking for grant opportunities to help fund the replacement of this critical component in the District's infrastructure.

Funding is key to us improving our system.

WE NEED TO UPDATE, REFURBISH, MODERNIZE AND AUTOMATE OUR WATER SYSTEM.

develop grant applications.

We have an aging water distribution infrastructure that could use some updating.

### **Regulatory**

We need to be current on new regulations so we can comply with them and learn to set up both annual and CIP budgets.

meeting regulatory requirements is always a strong need)

Continuing need for training in general regulatory compliance

Support in updating our local limits and sewer use ordinance to support our pretreatment program as it relates to new cannabis laws.

meeting DDW requirements

Our wastewater plant struggles to meet current WQ regulations for some constituents.

Repair/Replace/Permitting in the coastal zone.

### **System infrastructure - Maintenance & Repair**

Old infrastructure is showing signs of not keeping up with ongoing needs.

System infrastructure maintenance and repair: the current transmission and distribution systems are old and in the case of the transmission system was patch-worked together using myriad materials such that it consists of numerous pipe sizes and materials. Additionally, the source water diversions are in need of improvements to screen and reduce the amount of NOM that end up in the transmission system as well as our pressure filters at the water treatment plant. The distribution system has less variety of pipe sizes and materials, but still has some variation. More importantly with regard to the distribution system, some (many?) of the valves need to be replaced since they do not fully function as they should (this is especially frustrating with regards to valves intended to function as isolation valves that do not seat correctly and therefore do not completely stop water flow.

Extreme Need due to necessary improvements to bring the system up to current codes and standards to accommodate the rebuilding efforts after and since Redwood Complex Fire.

Our main in the street is old red brick pipe that has gone beyond its shelf-life and all supply lines from street to homes is old black plastic pipe that is brittle, cracking, and failing. None of the homes have water meters.

aging system, former owners used agricultural tubing, last year, about 100 feet replaced with pvc. mostly need funding to replace water lines, can't afford to do it all at once and funding for meters and an extra storage tank

Infrastructure mapping and assessment Robust GIS survey and model of all infrastructure

We need help designing and implementing infrastructure improvements. We have a very old system and don't have the resources to do needed replacement. We need financial help.

Infrastructure assessment

Design for the interconnection and water meters

At some point we will need to add meters to our system.

**CIP**

We need to figure out low income based charges and long term CIP so we can stay within state and federal regulations and conserve water.

Capital improvement plan- it has recently come to my attention that the district does not have a functioning capital improvement plan. Given the age of the system and some of the other issues I am aware of, a capital improvement plan seems to be of great importance if the district is to maintain and improve system performance. I have zero experience in creating CIPs yet I need to be integral in ones creation. Help would be extremely appreciated.

Strong need due to lack of water supply and a service connection moratorium prevents the adequate collection of capital improvement reserves to support changing capital improvement needs.

Software and training for financial management and for tracking accounts receivable and accounts payable

CIP development

CIP planning

low interest financing options for implementation of Capital Improvement Plan.

need to develop an incremental CIP to address distribution and treatment needs; limited CIP funding and small rate base;

**System infrastructure - Operations**

The City of Sebastopol Public Works Department is struggling to meet he required system maintenance needs due to staffing levels.

(improved water conservation strategy, rate structure changes, water rights changes, alternative energy options, etc.) -Strong need due to lack of reliable water rights and inability to build capital reserves for improved or increased infrastructure.

Small water system engineering, testing strategies, maintenance planning and operations.

Training and certifications for our water/sewer personnel

Guidance with administration, operation, and maintenance of the facilities is always an ongoing need.

Alternative energy systems

Solar systems (small sanitation zone)

Ways to optimize aeration and sludge removal/ management

Continuing need for training in basic water system operation

AMWC could use technical assistance in completing its TMF, particularly identifying existing and closed wells located in the area where we source our water. Assistance is also needed in updating our Wellhead Protection Program.

We need to get trained in cross-connection control. We also need to get training in turbidity and how to test for it.

Planning and Design considerations. BMPs.

Need to continue to develop the technical documents to describe City maintained systems

**Rate structures**

Strong need due to lack of adequate rate studies throughout the area's water districts.

need to increase rates



## *Appendix E. Technical Assistance & Trainings In-depth Responses*

Full process on getting our rate structure set for current and future needs without going thru Prop 218 each time.

There is currently no rate structure in place each member pays a yearly fee.

In need of a new rate structure. Also dealing with issues of ADU construction and loss of the ability to collect capacity charges.

The Special District recently received a technical assistance grant from the SWRCB to utilize RCAC experts for its rate structure development.

Rate study to restructure overall rates and fees of five districts consolidating into one.

### **No staff**

One of our major problems is that most people don't care enough to get involved, and the ones who do have to go to work. This is a volunteer position. I see seminars all the time scheduled by the state in Sacramento and elsewhere....Like I have time for that.

Continuing need for training in board responsibilities

### **Trainings**

Respondents who indicated an “extreme” or “strong” need for trainings and workshops in a given subject were asked to explain their response. Categorized responses are provided in their entirety below.

#### **Grant writing**

We could benefit from Grant Writing training to put us in a better position to be awarded money when the opportunities are presented.

need a grant to fund repairs to main distribution

Do not know how to apply for grants

GCSO IS IN THE PROCESS OF PROCURING GRANTS, FOR ENGINEERING, TECHNICAL ASSISTANCE AND RATE STRUCTURE STUDY.

If we were to obtain any future Grants for improvement, we would need assistance with this. Last time our District Engineer Helped with this issue and it was truly a blessing.

Grant monies

Ability to successfully apply for available grant funding opportunities for Capital Improvement Plan implementation.

Accessing grants without have to utilize outside consultants is important and we have little expertise.

Training would be useful that addresses the types of grants that are available, eligibility, application procedures, and how grants are awarded (ie how grants are scored).

Applying for grants and grant writing expertise

Grant writing is critical, and sometimes, especially for state funding, the grant requirements can be daunting and overwhelming (all the requirements, both technical and non-technical)

We don't have grant writers available or knowledge of how to write a grant.

We could use assistance in writing a grant for a new storage tank. We currently have two tanks: one steel which was installed when our new treatment plant was built, and one with a vinyl liner that is well over twenty years old.

## *Appendix E. Technical Assistance & Trainings In-depth Responses*

We have no one with experience in grant writing. We need help if we ever expect to improve our system.

### **Financial**

learn to set up both annual and CIP budgets.

Sebastopol will be seeking a RFP for a Water and Wastewater rate study within the next fiscal budget

Financial management and planning for the future are major concern for small systems.

Budgeting, rate setting structure,

Planning for major increase in maintenance expenses.

outside funding will be needed to meet future needs.

We need help finding and applying for financial help

Resource acquisition and planning through grants and loan programs

THE LOCAL BOARD MEMBERS HAVE NO PARTICULAR EXPERTISE IN TECHNICAL OR FINANCIAL MATTERS

### **Regulatory**

We need to be current on new regulations so we can comply with them

We have been under a non compliance order for 5 years. We need a new well, filtration, and supply tanks to meet 4 log requirements.

Keeping abreast of new regulatory requirements

Regulatory training for water and wastewater is always necessary due to the changing regulatory landscape.

We have an extreme need for training in compliance with the wide variety of one size fits all unnecessary regulations imposed by the State.

### **Operator**

Local Distribution and Treatment certification classes would be helpful with operator training

Need professional maintenance periodically on treatment plant

licensing certificates and safety training are all needed in our organization

Need a new policy manual for CSD to administer the water and wastewater facilities.

local training for operator certifications and trainings on regular maintenance skill building

We need assistance with pipe and valve replacement.

Training always needed for new staff who are replacing more experienced staff in a variety of areas. Safety training topics often needed to stay current and keep new staff trained.

*Appendix E. Technical Assistance & Trainings In-depth Responses*

**Program Management**

Federal funded project management

planning to complete existing needs within our system.

Due to many upgrades we have determined our need for program management training as necessary for cross training.

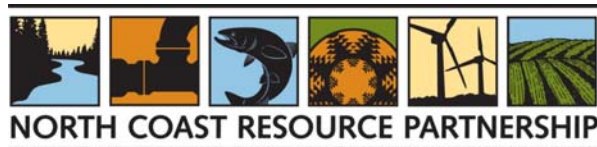
**Maintenance**

Maintenance and upkeep have been the areas that tend to lack funding

We need funding for maintenance and improvements to our aging system;

# Appendix F. Tribal Water Supply & Wastewater Needs Assessment Survey & Interview Questions

## **Appendix F. Tribal Water Supply & Wastewater Needs Assessment Survey & Interview Questions**



## Tribal Water Supply and Wastewater Treatment Assessment 2018

### Tribal Information

1. Organization Name: [Click here to enter text.](#)
2. Your Name: [Click here to enter text.](#)
3. Your position within the organization: Choose Job Title  
Comments: [Click here to enter text.](#)
4. Mailing address: [Click here to enter text.](#)
5. Email address (please answer "none" if you don't use email): [Click here to enter text.](#)
6. What services do you provide? Please choose all that apply.
  - Water treatment and supply
  - Domestic water distribution
  - Irrigation water distribution
  - Wastewater collection
  - Wastewater treatment
  - Wastewater reuse
  - Storm drainage
  - Watershed restoration
  - Other, please state: [Click here to enter text.](#)
7. What community or communities do you serve? Please provide the physical location. [Click here to enter text.](#)
8. Have you imposed any water use restrictions on your customers for any reason? If Yes, please explain [Click here to enter text.](#)
9. Is your system currently under water use restrictions? [Click here to enter text.](#)
10. Has the system conducted an asset inventory in which assets were identified, quantified (number of units, linear feet, etc.), and described as to age, condition and replacement cost? [Click here to enter text.](#)
11. Does the system have adequate tools to conduct routine and emergency repairs? [Click here to enter text.](#)
12. Have you ever had trouble meeting demand during summer months, periods of drought or during peak demand periods? [Click here to enter text.](#)
13. Do you treat any of your ground water sources in order to meet a primary or secondary drinking water standard? List any treatments (e.g., iron, manganese, fluoridation). [Click here to enter text.](#)
14. Does your treatment facility meet the current requirements for surface water treatment? [Click here to enter text.](#)
15. Does your water system have an emergency or supplemental water supply available, such as an inter-tie with a neighboring system, or a second source? If yes, identify the supplemental source. [Click here to enter text.](#)
16. Does your system have a source water protection plan or wellhead protection plan? [Click here to enter text.](#)



17. Have all deficiencies on your system’s last Sanitary Survey been corrected? [Click here to enter text.](#)
18. Does your water system have accurate maps or as-built drawings and adequate system documentation of the complete transmission, storage and other distribution components? [Click here to enter text.](#)
19. Does your water system have an active cross-connection control program? [Click here to enter text.](#)
20. Does your system experience routine failures (e.g., leaks, low pressure, main breaks)? [Click here to enter text.](#)
21. Are all users (residential customers, businesses, public facilities etc.) on the water system metered? [Click here to enter text.](#)
22. Does your water system have a water meter replacement program in place to keep water meters operating effectively? [Click here to enter text.](#)
23. Does your water system have an active plan for flushing water mains and dead-end lines in the distribution system? [Click here to enter text.](#)

### Technical Assistance and Training Needs

24. Please provide your Tribe’s *level of need* for the following types of technical assistance (indicate in Question 25 whether this is for water, wastewater or both):

	<i>No need</i>	<i>Moderate need</i>	<i>Strong need</i>	<i>Extreme need</i>
System operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment calibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Funding opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meeting federal and state regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. For each topic that you indicated a "strong" or "extreme" need, please indicate the range of technical assistance needs, and provide as much detail as possible so that we can adjust future opportunities, trainings and workshops accordingly. [Click here to enter text.](#)
26. Please provide your Tribe’s *level of need* for the following types of trainings (indicate in Question 26 whether this is for water, wastewater or both):



	<i>No need</i>	<i>Moderate need</i>	<i>Strong need</i>	<i>Extreme need</i>
Program management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulatory compliance/ reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grant writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please state: <a href="#">Click here to enter text.</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**27.** For each topic that you indicated a "strong" or "extreme" need, please indicate the range of training needs, and provide as much detail as possible so that we can adjust future opportunities, trainings and workshops accordingly. [Click here to enter text.](#)

**28.** Are your water and wastewater system components accurately mapped using GPS?

Yes

No

Comments: [Click here to enter text.](#)

**29.** If you answered no to the preceding question, what types of assistance would be useful to meet your mapping needs?

Map of system components (valves, wells, pipes, treatment facilities, tanks, water sources, etc.)

Map of potentially contaminating activities in your system's vicinity (system contamination threats)

Overall map of system (including components, threats, etc.)

Other, please state and briefly describe: [Click here to enter text.](#)



**30.** Are there additional resources (such as budget, rate setting, recordkeeping, or asset management templates; legal or technical reference materials; etc.) that would be useful for your system/ staff

- Yes (please describe below)
- No
- Comments: [Click here to enter text.](#)

**Challenges**

**31.** Please indicate the level of concern for your system on the following topics

	<i>No concern</i>	<i>Moderate concern</i>	<i>Strong concern</i>	<i>Extreme concern</i>	<i>Not applicable</i>
Raw water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinking water supply reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire suppression supply reliability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdated treatment system (need for new/improved technology)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aging treatment system (need to replace parts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient quality and quantity of staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System too small for growing population	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
System too large for shrinking population	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial stability for operating system and maintaining reserve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operation and maintenance – need for trained personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, please state: <a href="#">Click here to enter text.</a>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**32.** Please indicate what resources or support would be most helpful in dealing with each issue that you ranked “moderate concern” or “extreme concern:” [Click here to enter text.](#)

**Regulatory Concerns**

**33.** Are there any regulations (Tribal, federal, state or local) with which your system is out of compliance?

- Yes, please describe in comments





No

Unknown

Comments: [Click here to enter text.](#)

**34.** Please indicate how well your Tribe is able to meet the following regulatory constraints (indicate in the comments whether this is for water, wastewater or both):

	No issues	Minor/ infrequent issues	Minor/ frequent issues	Major/ infrequent issues	Major/ frequent issues	Not applicable
Meeting Tribal/Federal/California water quality standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampling and testing procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Required paperwork and reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any others, please describe below	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: [Click here to enter text.](#)

**35.** Please indicate what resources or support would be most helpful in dealing with each issue that you ranked “Major/ infrequent” or “Major/frequent:” [Click here to enter text.](#)

**36.** Please provide more detail regarding any regulatory challenges the Tribe is currently experiencing: [Click here to enter text.](#)

### Tribal Capacity

**37.** Does your system have paid staff (indicate whether this is for water, wastewater or both)?

Choose all applicable

No water operator

Consultant

Level 1

Administrative

Level 2

Management

Level 3

Other, please state: [Click here to enter text.](#)

Water operator without “official” certification

**38.** Who interprets your water quality results? Choose all applicable

No one



- Water operator
- Other staff/ board member
- Outside consultant
- Local/ state government staff
- Other, please state:

Comments: [Click here to enter text.](#)

**39.** Does the Tribe perform arsenic removal as part of the treatment process?

- Yes, please describe the treatment process: [Click here to enter text.](#)
- No
- Don't know

**40.** Is there anything other than arsenic that is unusual or problematic about your water source(s)?

If yes, please briefly describe.

- Yes, please briefly describe: [Click here to enter text.](#)
- No
- Don't know

**41.** Wastewater treatment only: Approximately how many hook-ups do you have?

- 0-50
  - 51-100
  - 101-250
  - 251-1,000
  - 1,001-5,000
  - 5,001-10,000
  - Over 10,000 (please estimate below)
- Comments: [Click here to enter text.](#)

**42.** Water suppliers only: Approximately how many hook-ups do you have?

- 0 – 15
  - 16 – 50
  - 51 – 250
  - 251 – 1,000
  - 1001 – 5000
  - 5001 – 15,000
  - Over 15,000 (please estimate below)
- Comments [Click here to enter text.](#)

**43.** Does your system maintain a current Emergency Response Plan?

- Yes, please provide date: [Click here to enter text.](#)
- No
- Don't know

**44.** What type of governance best describes your water system? [Click here to enter text.](#)

**45.** Does the board or council hold regularly scheduled, publicly announced meetings? [Click here to enter text.](#)

**46.** What type of ownership best describes your water system? [Click here to enter text.](#)

**47.** Does your system have organizational charts and job descriptions for all positions (including policy makers, elected officials, employees and volunteer positions) that describe the roles and reporting relationships of key water system personnel? [Click here to enter text.](#)



48. Are policy makers and managers (e.g., board or council members, general manager) provided with orientation and systematic training in their duties and responsibilities? [Click here to enter text.](#)
49. Does the water system's management periodically assess source and system capacity to meet water demand requirements? [Click here to enter text.](#)
50. Does your system have a water conservation plan? [Click here to enter text.](#)
51. Does your water system provide systematic training for operators and other employees in order to enable them to maintain their skills? [Click here to enter text.](#)
52. Does your system make available to customers its adopted rules and regulations? [Click here to enter text.](#)
53. Does your system prepare and distribute the Consumer Confidence Report on time annually? Please explain any omissions. [Click here to enter text.](#)
54. Has your system adopted formal policies on:
- a. customer deposits and payments;
  - b. collections;
  - c. water rates;
  - d. connection charges;
  - e. customer complaints;
  - f. prospective customers with excessive requirements for water main extensions for connecting new customers?
- Yes, has policies on all relevant above categories
- Not applicable - no customers
- Actively working on it, but not complete
- Policies are in place but not actively practiced
- No
- [Click here to enter text.](#)

## Financing

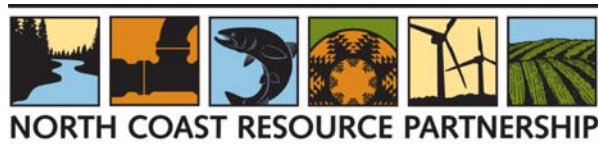
55. Does the water system have processes, policies, or written procedures for:
- a)  restricting the use and expenditure of funds to
  - b) approved purposes;
  - c) restricting the transfer of reserves to other accounts;
  - d) the purchase of goods or services; and
  - e) internal fiscal controls (e.g., more than one signature on checks, regular reconciliation of bank accounts, division of tasks and responsibilities between two or more people in the finance and accounting function)
- Yes, has policies on all relevant above categories
- Not applicable - no customers
- Actively working on it, but not complete



- Policies are in place but not actively practiced
- No

[Click here to enter text.](#)

56. Does the system's board/council or other owner receive written expense and revenue reports from system bookkeeping personnel at each routinely scheduled meeting? [Click here to enter text.](#)
57. Does the system's board/council or other owner review bank deposit statements? [Click here to enter text.](#)
58. Are water system financial records and transactions audited regularly or as required by state law by an independent auditor (e.g., CPA or peer group)? [Click here to enter text.](#)
59. Does the system's policy making body or other owner prepare and adopt an annual budget? [Click here to enter text.](#)
60. If the water system owner operates other utilities or services, does the annual budget separate revenue and expense accounts for each utility/service? [Click here to enter text.](#)
61. Does the annual budget include sub-accounts for operating and maintenance expenses, such as salaries, chemicals, repairs, supplies, power, and telephone, by line item? [Click here to enter text.](#)
62. Does the Tribe have a separate bank account for the water system? [Click here to enter text.](#)
63. Does your system have a multi-year budget projection that addresses future expenses and compensates for inflation? [Click here to enter text.](#)
64. Does your water system's current rate structure produce enough income to cover current expenses (operations and maintenance) and all necessary reserves? [Click here to enter text.](#)
65. Are your current rates sufficient for building capital improvement funds and covering operating and maintenance costs?
- Yes
  - No
  - Don't know
66. If you answered no to the previous question, do you have the means to determine adequate rates for maintaining and improving your system?
- Yes
  - No
  - Don't know
67. What is your current rate structure?
- |  |  |
|--|--|
| <input type="checkbox"/> Monthly/ annual flat rate           | <input type="checkbox"/> Seasonal rate schedule  |
| <input type="checkbox"/> Uniform rate schedule               | <input type="checkbox"/> Subsidized by government or Tribe                                 |
| <input type="checkbox"/> Increasing block/graduated schedule | <input type="checkbox"/> Other, please describe: <a href="#">Click here to enter text.</a> |
| <input type="checkbox"/> Decreasing block/graduated schedule |  |



## Tribal Water Supply and Wastewater Treatment Assessment 2018

**68.** What is your approximate monthly average residential water and /or wastewater customer bill?

If you offer both water and wastewater services and the average bill varies by service, please provide information about this in the comment field.

Subsidized (please describe in comments)

\$0-\$50

\$51-\$100

\$100-\$150

Over \$150

Comments: [Click here to enter text.](#)

**69.** Is the Tribe in need of financial assistance such as grants, low interest loans, or loan restructuring? (Please use comment field to what your funding needs relate to. For example, current infrastructure needs, regulatory issues, cost of living, etc.)

Yes

No

Comments: [Click here to enter text.](#)

**70.** Does your system have a Capital Improvement Plan (IP)?

Yes, please provide date of most current CIP: [Click here to enter text.](#)

No

Don't know

Comments: [Click here to enter text.](#)

### Partnerships

**71.** Is the Tribe currently working with outside agencies on improvement plans or projects? If so, please choose the agency from the list below and briefly describe the project in the comments section.

California Rural Water Association (Cal Rural Water/ CRWA)

Rural Community Assistance Corporation (RCAC)

State Water Resources Control Board (SWRCB)/ North Coast Regional Water Quality Control Board (NCRWQCB)

California Department of Public Health (CDPH)

Environmental Protection Agency (EPA)

Indian Health Service (IHS)

Local County

Other local government

Other (please list below)

Comments: [Click here to enter text.](#)



**72.** Would partnerships or sharing resources with neighboring or nearby systems help you address your needs for specialized tools, equipment, qualified operators, or system management?

Yes, please describe below.

No

Don't know

Comments: [Click here to enter text.](#)

**73.** Do you have any specialized tools, equipment, or other resources that you could share through partnerships?

Yes, please describe below.

No

Don't know

Comments: [Click here to enter text.](#)

### **Fire Preparedness**

**74.** Has your community been impacted by recent wildfires?

Yes, please describe below.

No

Don't know

Comments: [Click here to enter text.](#)

**75.** Does your community need fire preparedness assistance?

Yes, please describe below.

No

Don't know

Comments: [Click here to enter text.](#)

**76.** Do you have an adequate supply of water for fire suppression?

Yes, please describe below.

No

Don't know

Comments: [Click here to enter text.](#)

**77.** Would you be interested in funding for fire preparedness projects?

Yes, please describe below.

No

Don't know

Comments: [Click here to enter text.](#)

### **NCRP and North Coast Integrated Regional Water Management Plan**



**78.** Are you familiar with the North Coast Resource Partnership (NCRP)?

- Yes, I am familiar with the NCRP and its resources
- No, I am not familiar with the NCRP and its resources
- I would like additional information about the NCRP and resources (indicate specific requests below)

Comments: [Click here to enter text.](#)

**79.** Please select all challenges or barriers to participation in the NCRP that you or your staff face:

- Not difficult; I am a regular participant
- Time commitment for participation is too high (too many meetings, emails, etc.)
- Meeting times not compatible with staff/ board schedule
- Lack of in-house skill necessary to develop and submit a project
- Lack of staff to perform grant administration even if grant funds were awarded
- Not interested in state grant funding
- Not interested in working with the other water-related stakeholders
- Too difficult to understand the Integrated Regional Water Management (IRWM) process
- Other, please list below

Comments: [Click here to enter text.](#)

**80.** Is there an additional staff or Board member we should also speak to about the Tribe and its needs? Ideally, this would be someone in a different role than your own who can offer a different perspective on your system management and operations. If so, please provide contact information below.

Name: [Click here to enter text.](#)

Title/ role: [Click here to enter text.](#)

Phone: [Click here to enter text.](#)

Email: [Click here to enter text.](#)

**81.** Please add any other comments or information that you feel would be helpful to the NCRP to provide assistance to small and disadvantaged water and wastewater providers. [Click here to enter text.](#)

**82.** Is weather information helpful for the management and operation of your system? If you answer yes, we will contact you in the coming weeks with some questions about the types of weather data, information and technical assistance we may be able to provide.

- Yes, contact me about weather information and technical assistance!
- No, thank you.

**Thank you very much for your participation. We look forward to working with you and the Tribe to improve and protect your water quality!**

**NCRP Tribal Interview Questions**

The following are the list of follow-up questions that we have asked of respondents who completed the Tribal NCRP 2018-2019 Needs Assessment:

- 1) Does the Tribe have any new staff persons to add to our NCRP contact list/or to interview to identify needs?
- 2) We had first reviewed the Needs Assessments initiated in 2014 and asked those who only partially completed it to instead complete the relevant questions in our new 2018 version of our Needs Assessment. For those who completed a portion or the entire assessment we shared their 2014 responses and asked if they had updates to it.
- 3) It was important to identify if they provide water to their community or a wider community, if they skipped that question we did ask in interview.
- 4) For those that indicated that they do not have a Source Water Protection Plan we asked if one is in development, and if not we recommended that they work towards having one in place. If their water source is a city, and/or a water district regulated by the state, we asked if those entities had a SWPP, or if they know.
- 5) We asked if their water source is secure and if they have a secondary source if their source is disrupted? Is the secondary source independent of the first?
- 6) We asked if their community has had any boil water notices in the last few years? Frequency? Last episode?
- 7) For those that do not have a water conservation plan, we asked are you interested in developing one and do you need support?
- 8) We asked if they completed an inventory, or did another entity like RCAC complete one?
- 9) For those that indicated that there were fire suppression and/or supply concerns we asked for more details.
- 10) Would a water rates setting primer, a workshop and/or water board development training be useful? Or is there a support mechanism that can be created for low income communities who cannot pay rates?
- 11) Would an operations and maintenance manual template be useful?
- 12) In each case where the respondent stated that training was needed, we further asked if they had a staff person identified to receive that training?



*Appendix F. Tribal Water Supply & Wastewater Needs Assessment Survey & Interview Questions*

- 13) Where tools were need we asked what tools are you in need of? We asked if they would be interested in a regional tool lending library?
- 14) What funding opportunities do they take advantage of for drinking water and waste water?
- 15) Would they be interested in a financial management training course and if so on the project, department or Tribal level? At what level of detail for what quantity of work?
- 16) Water Operator Training? Do you have funding for this staff, and/or enough work for a full time water operator and if not would you be interested in sharing one with other Tribes in your region? When repairs are needed who do you call? Which contractors in your area would you recommend?
- 17) Would you be interested in a source point identification course?
- 18) What kinds of Technical assistance is particularly needed when they had checked off operations, infrastructure, equipment, fundraising, program management, administration

What is needed when they checked mapping – do they need to have their water and/or wastewater system mapped? Or do they want staff training? Regional shared staff?

- 19) If the septic is backing up what is the reason? Is it because of high groundwater or their Tribal lands being on a floodplain and without adjacent non flooding lands? Would they be interested in being part of a pilot?
- 20) What needs specifically are needed regarding “weather”?
- 21) When they say “imposed water restrictions during low flows” we reviewed the historical and recent source(s) they indicated and discussed changes in water availability in quantity and quality.
- 22) What kinds of information about NCRP would be most useful in addition to the FAQ?
- 23) There was an implementation funding workshops like those completed in February (did you go? If not why not? We have an orientation can be provided to staff and council, we can come out and do that in coordination with a meeting and/or site visit to review your needs and find out how the program can assist.
- 24) What specific “Regulatory” support is needed? Is it meeting state and/or federal

- regulations? Which of them specifically?
- 25) Do you anticipate growth and a potential increase in use?
- 26) Do you need support with grant writing? IRWM proposal and/or grant writing in general? Do you have a person designated to receive this Training?
- 27) We noted that operations and maintenance (O&M) was a reoccurring need, we asked for more details do they have difficulty keeping their O&M staff? Is this a part time position? Where do their operators go to after working for them, is it lack of hours, low pay, lack of funding in their budget? Do you have a backup operator trained and available should you need them? Do you need training and/or do you need certification update trainings? Is there an O&M record keeping setup ad training needed?
- 28) We asked for details on the barriers that they previously encountered when trying to address their water system, water quality etc.
- 29) Have there been any courses or workshops that you attended that you can recommend? What additional courses would you like to be available? Were there courses that you wanted to attend but were only available outside of your region?
- 30) We reviewed any projects that they have on the Indian Health Services (IHS) Sanitary Deficiency List (SDS) list and asked they if they know of the status of their project, for example are any projects on the SDS list in process, or have they identified funding outside of IHS. We met with IHS to find out what barriers or steps are needed in order to have the Tribes' project move to be initiated, or what needs to be completed in order to get their project on that list elevated. We are working to provide any assistance the DACTI program can provided and/or identify any other funding sources to provide funding to address these interim activities.
- 31) We discussed with them what major problems were identified in their needs assessment or in conversation that may be pilot or an IRWM implementation project. We asked for them to identify their biggest concerns out of what they identified. When warranted we have or are in the process of scheduling a site visit to include a person who can evaluate the expected and/or known issue(s).
- 32) What other Tribal or non-Tribal organizations in their region serve their community and do they have water needs? Do they have contact with that organization? The Elementary school is in need. We asked for details before calling the school to find out more, and see if we can assist through the DACTI program, by submitting an IRWM implementation project, or another funding source.

*Appendix F. Tribal Water Supply & Wastewater Needs Assessment Survey & Interview Questions*

33) What support do you need in order to submit an IRWM project through the NCRP?

Follow-up questions to find out what NCRP issues with reporting and monitoring requirements are and then, once the PSP was released has this issue been resolved?

# Appendix G.

## Tribal Survey Comments Grouped by Subject

## **Appendix G. Tribal Survey Comments Grouped by Subject**

### **Imposed Water Conservation**

- Water conservation measures during drought periods. Our drought contingency plan requires conservation measures by regulating base allocations and has tiered water pricing beyond those allocations.
- Water at PPN is provided by Mill Valley Water
- PLEASE DO NOT WASTE WATER DUE TO DROUGHT
- Under California Drought, incidents when Tribal Members over-use water supply and production.
- We have had limits on well capacity due to drought at 2 locations.
- drought restrictions water usage on # in household - current single cap per household with payment for overages
- currently the 4 public water systems upriver are on a boil water notice; placing community and Tribal members at risk of associated health impacts for more than 6 months
- During low flow we have imposed alternate days and timing for domestic irrigation.

### **Current Restrictions**

- Seasonal abundance from surface water system – Winter
- Sherwood's "Eastside" parcel has been experiencing mechanical and programming issues. AdEdge a contracted company who installed the system originally, did not install the system correctly delivering a unfinished product. The company was contacted in conjunction with Indian Health Services (IHS) to negotiate a business agreement on replacing the system correctly.
- Source system is under a moratorium

### **Asset Inventory**

- RCAC conducted an asset inventory of the Utility District in 2013 as part of IHS Tribal Utility Capacity and Sustainability Initiative
- 35 homes, 4 office building
- currently tied into a public water system and have yet to determine future water needs
- Yes, but it was conducted in 2012 and it was never completed; RCAC lead the assessment but was not able to complete it.
- Overview in our Environmental Assessment of Tribal Lands; due for updates in the next 2 years.
- Assessment is not complete but primary information is in place.

### **Tools**

- need funding
- Some but not enough to address current infrastructure demands.
- We contract out for those services.

## *Appendix G. Tribal Survey Comments Grouped by Subject*

- Sherwood Valley Rancheria does have access to tools to conduct routine repairs, but doesn't have the tools to equipment for major repairs.
- We do minor repairs, meter replacement, etc. but contract out any major repairs
- For last several years, improper records were kept and currently due to staffing turn-over and departure of certified operators many components of operating a PWS are uncertain.
- Being a small district with limited revenue options, we do have an extensive inventory of spare parts and specialty tools.

### **Trouble Meeting Demand**

- We came very close this past summer. The creek was the lowest we've seen it.
- In 2015, the community's sole source of domestic water failed due to extreme drought conditions.
- The particular drinking water system on the "Eastside" parcel has one small well pump. Problems of marijuana cultivation and customer over-usage exceeds the well's production rates in the dry season. Recently (2017)
- Water use above capacity of wells
- High demand, aging distribution and required by-pass flows for fish which we take very seriously. Not just as a legal obligation but culturally as well.

### **Treat Sources for Primary/Secondary Drinking Standards**

- disinfectant, soda ash (corrosion control)
- chlorine & fluoride
- Iron and Manganese. Chlorine for disinfection.
- Disinfection
- Sherwood's drinking water system on the "Eastside" parcel the system treats for: iron, manganese. "Old Sherwood Rancheria" operates on a natural spring and only requires chlorine hand-dosing for treatment.
- 1 property has an ozone treatment unit for manganese & bacteria. Not well maintained.
- Chlorine
- ash and chorline

### **Meet Requirements for Surface Water Treatment**

- does not use surface water
- We have no public water systems; all properties have less than 25 residences.
- consectutive system. We do not treat on-site.

### **Emergency Supply**

- City of Blue Lake, Humboldt Municipal Water District
- The well for Tish Non Village is inter-connected to the well on Bear River Dr.

## *Appendix G. Tribal Survey Comments Grouped by Subject*

- ukiah water district
- Some properties have more than 1 well; they are not necessarily operational
- RVCWD has an inter-tie with other small districts
- Not the surface water systems

### **Technical Assistance Needs**

- Wastewater and public works
- All responses apply to potable water (there is no wastewater system here). Need funding for metering, and other infrastructure improvements
- Aging Infrastructure - The Utility's wastewater lift station has malfunctioned on multiple occasions over multiple years. We are currently working with I.H.S. to prepare a P.E.R. so we can solicit grant funding to replace this infrastructure. Administration – Given the current revenue discrepancies, it has been difficult to fill leadership positions with dedicated / qualified persons to direct decision making. Rate Structures – Developing suitable rate structures that support Utility administration is unrealistic given the inherent income levels within the Rancheria (disadvantaged community). Funding Opportunities – The Utility District always needs help with identifying and applying for relevant funding opportunities.
- We are in development of a water system and are in need of funding and technical assistance to complete all aspects
- Our rates for water are very low. They need to be increased over time. It is trying to get the Tribal membership to buy into the raising the rates. Need more information on different funding sources to make improvements and upgrades to both drinking water and wastewater plants.
- Waste Water treatment system repairs and upgrades to current technology. Need for as built studies to determine drinking water and waste water infrastructure repair requirements
- Sherwood Valley Rancheria is always in need of funding opportunities to better maintain/or expand our drinking water systems. The "Eastside" parcel has both a drinking water system and waste water system. Technical Assistance (TA) would greatly benefit Sherwood on the managerial side.
- Not sure of the training & personnel involved in maintenance of water & wastewater facilities. All tribal residences are single or multiple family homes; no PWS or community sewage treatment facilities
- The primary need is staffing for operation and maintenance of the waste water treatment system and for repair and maintenance for both systems. Limited users cannot support maintenance of the systems.
- we are trying to provide operator trainings to our members to give local empowerment of their drinking water back to the community and still meet federal requirements
- Comprehensive survey of existing distribution needs and needed

## *Appendix G. Tribal Survey Comments Grouped by Subject*

upgrades or replacement (mainlines, valves etc) Funding opportunities to implement planned treatment plant move and upgrades and in the immediate term replacement of aging/leaking redwood tank. Funding to meet state and federal regulations planning, engineering design and environmental documentation (NEPA/CEQA).

### **Training Needs**

- Knowing how to look for and write grants. I don't think you can learn too much about finance, safety and maintenance.
- Need funding for capital improvements. Training for Utility District and Tribal Council board members on the inherent challenges to operating and maintaining a small utility. Always need help/ Tech Assistance securing grant funding for capital improvements.
- Training of the operators onsite would be a big help. Financial management of both facilities is a must.
- Opportunities for consistent and updated training courses provided locally [or within 200 miles] would greatly benefit Sherwood Valley Rancheria's Water Operator and coordinating staff to build Tribal Capacity.
- Grant writing for watershed restoration Training for maintenance personnel in safety, operations, maintenance of individual wells/treatment systems, septic tanks
- The most helpful "training" we receive is from RCAC and is one on one , on-site this is what needs to done and this is how you do it.

### **Mapping Needs**

- Also, overallmap of system
- Assistance and training on developing our own GIS maps; we have the software in the Tribal Environmental Office

### **Additional Resources Needed**

- Rate setting, manual templates and legal or tech materials
- All of the above.
- Basic templates for rate setting, record-keeping, and overall management tools would be beneficial for consistency and quantitative data.
- Watershed level management options for the drinking water system's source waters. A major problem exists for heavy turbidity and sedimentation during the winter rains and we want to know feasibility of 'check dams' and natural sediment pools to help alleviate the problem before the waters enter the intake pools. Other management options that we have talked about incorporating are cultural burning and replanting riparian areas with native plants.

### **Issues of Concern**

- Locate a stronger water supply
- need storage for fire suppression, as community grows water needs will



## *Appendix G. Tribal Survey Comments Grouped by Subject*

- also grow and may need additional water source
- Supply - We need a secondary water supply. Fire suppression – Need more raw water storage. Aging Treatment system – The Utility’s wastewater lift station continues to malfunction during the winter. Staff – The Utility has struggled to fund and find a suitable back-up operator. System size – The Utility is servicing at maximum capacity with no room (logistically) to expand. Financial stability – Aging infrastructure and frequent extreme weather events have exasperated the Utility’s financial stability.
- training in starting/operating a water system
- Training of the staff that operate both wastewater and drinking water plants. Being able to set the proper water rates.
- Funding sources and grant writing
- further pressure testing of onsite hydrogens
- Sherwood's "Eastside" parcel is expanding residential capacity, the drinking system was originally scaled for 20 homes. During the dry season the system has problems with well pump recovery, with the pressure differentials it's a moderate concern for Sherwood because another water source needs to be developed. Funding opportunities would help off-set the Tribe's spending. On Sherwood's "Old Sherwood Rancheria" parcel, we're currently in the planning stage of expanding the drinking system with a <=1,000 ft. well. Training personnel in operation and maintenance would establish a foundation for staff.
- Funding for fire suppression, raw water quality Planning & construction of wastewater facilities at recreational facilities (campgrounds)
- finding funding and actually preparing grant applications.
- We are trying to develop a community and tribal departmental wide watershed management at the 'creek-level' scale with first priority watersheds those that supply public drinking water systems source water. However, it is expected that this would be an intergated management plan with multiple objectives across ecosystem resources. The first need is to lower turbidity and sedimentation before it enters the drinking water infrastructure at the intake pool and we need engineering/riparian restoration feasibility studies on possibility of installing multiple 'check-dams' to make natural sedimentation and reservoir pools prior to the intakes.
- With limited and aged storage, during fire emergency demand out paces input. Funding for treatment plant upgrade relocation and install. Replace existing redwood tank in the interim is critical. Did I say "funding"?

### **Regulatory Compliance**

- Operator Certification
- 4 of 6 public water systems on the Reservation are on Boil Water Notices.

### **Regulatory Resources**

- Training opportunities are out of area and overnight. This inhibits

## *Appendix G. Tribal Survey Comments Grouped by Subject*

Sherwood's staff from participating because of the large travelling distances.

- Training for maintenance personnel, both
- Funding for system upgrades.

### **Regulatory Challenges**

- Sherwood is currently experiencing reprimanding issues with the Sanitary Deficiency Survey (SDS) checklist provided by Federal EPA. The issues with the SDS are costs "fines" and education "know how" to re-mediate it.
- No pressing issues since there are no PWS or central WW systems; but individual systems need better monitoring & maintenance
- Sovereign enforcement on Reservation of environmental ordinances and protecting Tribal water rights of waters entering Reservation- currently from adjacent Cannabis grow operations and failing, private septic systems

### **Paid Staff**

- A company checks & maintains 1 ozone system
- We have certified water operator but don't do any treatment. Waste Water is Orenco system and no operators are available in the local area.
- Work with United Indian Health

### **Water Quality Interpreter**

- Water Quality Specialist
- Our EPA Water Quality Specialist
- Tribal Environmental Office
- Water Resources Coordinator
- Yurok Tribe Environmental Program Staff

### **Arsenic Testing**

- however, more extensive sampling should be done as environmental sampling indicates that we are in an area with naturally occurring pockets

### **Water Source Issues**

- Supply subject to seasonal flows (surface water)
- barium and enterococci in Ackerman Creek
- Manganese/iron from acidic water; iron slime problems at some locations; occasional coliform hits from surface water
- Variable conductivity between source waters

### **Water System Governance**

- tribal department
- The operator runs daily operation of the plant. Larger decisions are governed by the Utility District Board.
- Tribal

## *Appendix G. Tribal Survey Comments Grouped by Subject*

- county water system
- Tribal
- Tribal Council oversight; Tribal Environmental Office advisory & recommendations
- This is a consecutive system. The Utility Board reviews, monitors and makes decisions and recommendations regarding both water and wastewater.
- State regulated system. Homeowners oversee water costs.
- Tribal
- Tribal Council and Water Resource Manager
- Community Services Board

### **Consumer Confidence Reports**

- Have to fight with RVCWD to get their reports on time

### **Policies**

- All in place except for "f".

### **System Board Finance Reporting**

- The first board meeting will occur on Jan 25th, 2019

### **Current Rate Structure**

- currently purchase water through City of Blue Lake and are metered and charged through them
- monthly flat rate per household with tiered charges for overages
- As the power bill for the community well and other costs associated with the community water system comes in, the members pay as much as possible. This does not include all members getting service, so it puts the burden onto the members who do pay. They meet monthly to discuss the costs.

### **Monthly Costs**

- \$35 wastewater \$45 water up to 10,000 gal.
- There are different structures and availability of types of meters across the Reservation- all have a subsidized lower rate for elders, some are flat rate, and some are by usage.

### **Financial Needs**

- We need \$ to make system wide improvements to improve service and health and safety.
- Storage for water system
- Current infrastructure needs
- Need assessment of needs, planning for additional wastewater facilities, funding for installation
- current infrastructure

### **Agency Assistance**

- Indian Health Service
- other Tribes
- I.H.S.
- Working under a BOR Water Smart grant for development of a Smart Water Grid
- Indian Health Services (IHS) is another agency the Tribe works with. They're the engineers that are partaking in a expansion project for one of our drinking water systems.
- We have an environmental GAP grant from USEPA, which funds capacity building in this area. We also have limited funds from BIA Water Resources program for water testing, training, and GIS mapping
- USDA on replacement of storage tank, IHS on system repairs to stop intrusion into ww system and replacement of improperly installed curtain drain. RCAC well sounding, meter replacement and other issues
- Mendocino County, California Indian Environmental Alliance
- United Indian Health

### **Partnership Needs**

- There are other local small systems that have operators and tools that can help during emergencies.
- tools, equipment, supplies all the above
- If the local districts would join to form a single district the moratorium could be lifted. They have been trying but some don't want to join.

### **Equipment Sharing**

- People and some equipment
- GIS software

### **Wildfires**

- Wildfire smoke creating hazardous ambient air conditions
- We have only been impacted by wildfires surrounding our immediate community which has impacted the quality of the air.
- Not directly, but Citizens living closer to the fires have been affected.
- short term evacuation
- No properties were directly burned from the last 2 wildfires; they came within 100 yards to 1/4 mile from several properties. Only smoke and air quality issues to deal with. Wildfire is definitely a major concern for the future
- We lost three houses on the new rez and 3 on the old rez in the October 17 fire. Fire burned across the entire rancheria so some damage to wastewater lids, valves, fencing. No structural damage to the storage tank. Worked with IHS for repair/replacement of well and pump and three septic systems on the old Rancheria. Still working on watershed damage from fire and storms.
- The River Fire started about two miles south of the community. The

## *Appendix G. Tribal Survey Comments Grouped by Subject*

- members had to evacuate for a significant amount of time.
- local fires have destroyed electrical power poles and disrupted electricity which has in turn impacted treatment plants, respite centers, and private homes
- Mainly smoke impacts the last two or so years. Lack of fuel treatments and prescribed fire ( large scale) impacts all levels of the community.

### **Fire Preparedness**

- Our community is located in a redwood mixed conifer forest that has been mismanaged for a long time. Fire danger is the #1 threat to our community safety.
- Training on how to support Tribal Citizens if in need of assistance
- Getting assistance in Emergency Response Planning and training would greatly benefit Sherwood and it's staff.
- See above
- The members are concerned with the fire fuels on the property and would like to seek assistance for fuels reduction.
- Funding for fuel treatments and prescribed fire including planning dollars.

### **Challenges/Barriers to NCRP Participation**

- Staff that was our representative recently quit and has not been replaced
- most of the NCRP grants require excessive reporting, monitoring and follow-up, which can sometimes outweigh the benefits

### **Additional Comments**

- This survey should provide a transcript after completion; this would be valuable for our records and as a deliverable for our GAP grant.
- One of our local school districts (Junction Elementary) is in dire need of assistance.

**Appendix H.**  
**Indian Health Service**  
**Sanitation Deficiency System List**  
**for the North Coast**

## Appendix H. Indian Health Service Sanitation Deficiency List for the North Coast

### Indian Health Service Sanitation Deficiency (SDS) List for the North Coast

#### STARS

#### SDS ONE-LINE LISTING — DRAFT

Project	Project Name	Pri.	DL	Score	Homes	Total Contributi ons	Project Cost (Eligible)
CA12393-0401	Karuk Orleans CSD Water Treatment System	1	3	77	223	2,001,900	593,500
CA12392-1501	ARCATA Scattered Sites 2019	2	4	74	19	0	653,700
CA12354-2901	HOOPA Bald Hill Pumping Improvements	6	3	69	28	0	224,300
CA23404-0201	Ukiah Field Office Existing Home Scattered Water and Sewer	8	4	68	8	0	255,379
CA12353-3501	YUROK Upriver Treatment Improvements	10	2	66	76	5,492	269,108
CA45492-0202	Pit River MC Supplemental Well Project Funding and Back-Up Power	11	3	66	17	0	286,200
CA12353-3601	YUROK Upriver Distribution Improvements	12	2	63	76	15,554	762,146
CA47815-7002	Karuk Happy Camp Water System Upgrades - Phase 2	17	3	59	507	440,100	159,700
CA12354-3601	HOOPA Water Meter Replacement	21	2	58	872	131,253	321,004
CA12354-1102	HOOPA Tanks Ph2 Agency Field	23	3	57	1093	270,020	1,080,080
CA49505-0501	Stewarts Point Lift Station Replacement	26	3	56	18	8,000	560,000
CA23405-0103	Round Valley Hopper Lane Sewer Phase III	27	3	55	8	0	327,400
CA08332-1401	RESIGHINI Water Improvements	30	2	54	25	1,000	214,000
CA12354-1103	HOOPA Tanks Ph3 Campbell Field	33	3	53	1093	145,680	582,720
CA08333-0501	Tolowa Dee-ni' Nation Water Main Loop	35	2	52	101	304,500	254,800
CA08360-1301	YUROK Klamath Tank	36	3	51	61	194,901	733,199
CA47815-7003	Karuk Happy Camp Booster Station Rehabilitation	38	2	51	127	78,100	46,700
CA12356-0901	Wiyot Tribe Water Storage Tank Rehabilitation	40	2	51	39	22,600	203,100
CA12393-0601	Karuk Orleans MWC Water Treatment Improvements	42	3	49	35	976,600	447,600
CA12354-1104	HOOPA Tanks Ph4 Norton/Hostler Fields	44	3	49	1093	281,540	1,126,160
CA08333-0701	Tolowa Dee-ni' Nation Water Supply Improvements	48	2	48	101	285,400	238,800
CA12354-0503	HOOPA Sewer Phase 2	50	3	46	431	1,598,460	9,057,940
CA12354-2001	HOOPA Emergency Water Supply	56	2	45	927	68,500	630,000
CA47815-9002	Karuk Happy Camp Water Storage	57	2	45	507	1,321,800	479,700
CA23402-0801	Hopland Main Waterline Crossing Improvements	60	2	44	72	101,596	129,304
CA49505-0401	Stewarts Pt Water	61	2	44	16	1,600	169,000
CA12515-0901*	Trinidad Cher-ae Heights Water Storage	63	1	44	31	0	556,500
CA12354-0502	HOOPA Sewer Phase 1	64	3	43	426	1,306,600	11,759,400

Appendix H. Indian Health Service Sanitation Deficiency System List for the North Coast

CA12354-0504	HOOPA Sewer Phase 3	65	2	43	219	731,670	4,146,130
CA12354-1901	HOOPA Campbell Field Water Improvements	67	2	43	48	0	74,700
CA12354-0701	HOOPA Transfer Station Modifications	69	2	42	1106	156,400	625,600
CA12354-0505	HOOPA Septage Facility	70	3	41	1026	218,560	874,240
CA47815-0801	Karuk Happy Camp Wastewater Treatment System	71	2	41	532	120,800	32,900
CA47815-5002	Karuk Happy Camp WW Sewer-Ph 2	72	2	41	532	123,200	33,500
CA12393-0301	Karuk Orleans CSD Water Main Rehabilitation	73	2	41	223	20,400	6,200
CA23404-0102	Manchester Rancheria Water Distribution Improvements	75	2	40	22	0	357,000
CA12356-0701	Wiyot Wastewater System Improvements	76	2	40	39	76,000	682,000
CA12354-2701	HOOPA JMWTP Intake Replacement	81	3	38	1026	488,040	1,952,160
CA23405-2001	Round Valley-Agency Water Storage Tank	82	2	37	30	0	640,800
CA23214-2601	Redwood Valley-Redwood Drive Manhole Replacement	83	2	37	31	0	26,200
CA12353-0904	YUROK Septage Facility	84	2	36	356	0	1,154,900
CA12373-0501	YUROK Ke'Pel Well	88	3	35	20	5,100	466,000
CA08332-1501*	RESIGHINI Wastewater System	90	3	34	23	0	1,227,000
CA12354-3201	HOOPA Water Storage Improvements	92	3	34	1026	708,480	2,833,920
CA23214-2901	Redwood Valley-Water Storage Tank	97	2	32	31	0	624,100
CA12355-0101*	Bear River Rohnerville - Old Rancheria Water	111	2	20	8	89,600	149,300
CA23201-0100*	Coyote Valley Sewer Improvement	112	3	17	35	0	3,277,500
CA12392-1201*	YUROK Weitchpec Community Wastewater System	113	3	17	32	0	1,339,300
CA23405-0135*	Round Valley-Piner-WRWW Water Intertie	115	2	12	5	0	529,200
CA23405-3801*	Round Valley-Hopper Lane Water Main Extension	116	2	12	16	0	1,223,300
CA08364-0301*	YUROK Klamath Glen Wastewater System	118	2	11	197	771,341	3,765,959
CA23406-0401*	Sherwood Valley (old) - Water Main	122	2	9	11	0	424,000
CA12515-0204*	Trinidad Cher-ae Heights Wastewater Improvements	123	2	9	29	397,300	1,523,100
CA08360-1101*	YUROK Klamath Water Main Replacement	127	2	8	55	330,372	1,242,828
CA23405-0307*	Round Valley - Agency Sewer & Feas Study	128	2	8	23	0	743,300
CA47815-1001*	Karuk Happy Camp-3 Individ. Water	131	2	4	3	0	270,100
CA08360-0801*	YUROK Klamath Sewer Main Replacement	132	2	4	60	341,136	1,142,064
CA23402-0603*	Hopland Sewer Improv Phase 3	133	2	1	4	0	201,200
CA47817-0601*	Karuk Somes Bar - 2 Individ. Homes Water	134	2	0	11	398,400	88,500

*\*(after project number) indicates infeasible projects*

**BOLD rows** indicate projects without homes



# Appendix I.

## NCRP Technical Assistance Selection Process

## **Appendix I. NCRP Technical Assistance Selection Process**

# NORTH COAST RESOURCE PARTNERSHIP ROUND 1 TECHNICAL ASSISTANCE SELECTION PROCESS

**GHD** | 718 Third Street Eureka California

NCRP Proposition 1 Ad Hoc Committee

NCRP Tribal Proposition 1 Ad Hoc Committee

January 2018



## Table of Contents

1.	Introduction	1
1.1	Goals and Objectives	1
1.2	Technical Assistance Funding Targets	2
1.3	General Priorities for Technical Assistance	3
1.4	Funding Available	3
2.	Process for Identification of Potential Entities to Receive Technical Assistance	3
3.	Process for Ranking and Selection of Entities to Receive Technical Assistance	4
3.1	Guidelines for Technical Assistance Scoring and Selection	5
3.1.1	Threshold and General Evaluation Criteria	5
3.1.2	Technical Assistance Selection Criteria	6

## Appendix

<b>Appendix A</b>	<b>Technical Assistance Ranking Criteria</b>
<b>Appendix B</b>	<b>NCRP Tribal Technical Assistance Round 1 Selection Process</b>
<b>Appendix C</b>	<b>NCRP Technical Assistance Scoring Criteria Definitions</b>



## 1. Introduction

The North Coast Resource Partnership (NCRP) was awarded a grant from the Department of Water Resources, Proposition 1 Integrated Regional Water Management Grant Program to support North Coast Tribes and economically disadvantaged communities (DAC) throughout the *North Coast Region through the NCRP Outreach & Involvement: Tribal Engagement & Economic Opportunity for Disadvantaged Communities (DACTI) Program*. The contract agreement was finalized in April 2017 between the Department of Water Resources and Humboldt County, the NCRP Contract Administrator. The agreement terminates in April 2020.

In 2016, the NCRP Proposition 1 Ad Hoc Committee was formed to direct staff in development of the NCRP Proposition 1 IRWM Disadvantaged Community Outreach and Involvement program per the IRWM Guidelines. The NCRP Tribal Proposition 1 Ad Hoc Committee was formed in April 2017 to direct California Indian Environmental Alliance (CIEA) staff in development of Tribal elements of the NCRP Proposition 1 IRWM Disadvantaged Community Outreach and Involvement program per the agreement between CIEA and Humboldt County.

West Coast Watershed (WCW) and the NCRP Tribal Coordinator, CIEA under contract with Humboldt County will act as the hubs for all needs assessment outreach and technical assistance work. WCW will work with disadvantaged communities in the North Coast but will not focus on Tribal communities specifically.

Technical Assistance for North Coast Tribes will be selected through a subsequent process led by the North Coast Tribal Representatives and the Tribal Engagement Coordinator, CIEA. Tribal projects will be forwarded to the NCRP Tribal Representatives Proposition 1 Ad Hoc Sub-committee for a separate selection process. The Tribal NCRP Round 1 Technical Assistance Selection Process document is located in Appendix B of this document. For more information about Tribal selection please contact the Tribal Engagement Coordinator.

This document outlines the process for selection of entities to receive technical assistance in one of several rounds of technical assistance to be provided by the NCRP.

### 1.1 Goals and Objectives

The goals and objectives of this effort support the overall goals and objectives of the NCRP listed below. In particular, the technical assistance included in this project will focus on Goal 2: Economic Vitality and Goal 4: Beneficial Uses of Water.

#### **Goal 1: Intraregional Cooperation & Adaptive Management**

- Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation
- Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation



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

#### **Goal 2: Economic Vitality**

- Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing
- Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

#### **Goal 3: Ecosystem Conservation and Enhancement**

- Objective 6 - Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity
- Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

#### **Goal 4: Beneficial Uses of Water**

- Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, cultural, and recreational uses while minimizing impacts to sensitive resources
- Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities
- Objective 10 - Protect groundwater resources from over-drafting and contamination

#### **Goal 5: Climate Adaptation & Energy Independence**

- Objective 11 - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health
- Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

#### **Goal 6: Public Safety**

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

### **1.2 Technical Assistance Funding Targets**

The NCRP anticipates more than one round of technical assistance to be provided as part of the overall DACTI program. The first allocation of technical assistance will focus primarily on water and wastewater providers based on the NCRP Needs Assessments conducted in 2014 and 2017 as data is available.

The NCRP is developing a separate strategy to outreach to economically disadvantaged communities, Tribes, and other organizations responsible for watershed management, stormwater, and other ecosystem functions. If a project of this type is identified during this first technical assistance round, it may be included, but these types of projects are not the focus of this first allocation of technical assistance.



### **1.3 General Priorities for Technical Assistance**

The first allocation of technical assistance will be focused on entities with a project that are nearly ready to apply for the first round of NCRP IRWMP Proposition 1 Implementation funding, anticipated in spring of 2018. In these cases, technical assistance will support application development and or minor project development assistance. Additionally, this process will identify communities that may not be ready to apply for implementation funding in 2018, but need technical assistance to develop a project for the second round of DWR IRWMP funding anticipated in 2020. This process will also identify communities that need assistance with capacity building including technical training, financial management, capital improvement planning, and other non-project technical assistance.

### **1.4 Funding Available**

A specific funding amount from the overall DACTI program was not set for this first round of technical assistance. Funding will be made available based on relevant need and timing constraints related to the NCRP IRWMP Proposition 1 Implementation Round 1 funding solicitation. Budget will be saved for future technical assistance efforts and trainings. The typical technical assistance budget for this round is anticipated to be in the range \$5,000 to \$15,000 per entity.

## **2. Process for Identification of Potential Entities to Receive Technical Assistance**

The process to identify entities benefiting from an infusion of technical assistance provided by the NCRP is a mixture of qualitative and quantitative data. The sources of data to be used to identify technical assistance targets are presented below. Tribal entities identified as needing assistance through any of the following sources will be integrated into the Tribal process outlined in Appendix B.

- 2014 NCRP Water and Wastewater Survey needs assessment
- 2017 NCRP Water and Wastewater Survey needs assessment
- SWRCB Division of Drinking Water Violation Notices (2012 – 2017)
- RWQCB Violation Notices (2012 – 2017)
- Outreach to Regional Board Permitting Agencies
- Outreach to Division of Drinking Water, including water system consolidation staff
- 2014 DAC Model Projects
- Outreach to existing SWRCB technical assistance providers to identify gaps in current assistance
- Outreach to systems impacted by wildfires
- Sanitation Deficiency Systems List from Indian Health Service (IHS) for Tribes
- United States Environmental Protection Agency (USEPA) Violation Notices, Needs Assessments, TA providers



The 2014 and 2017 Needs Assessment survey will be used first to identify those systems that may need technical assistance based on survey responses. Next, systems with violation notices from the SWRCB Division of Drinking Water or the North Coast Regional Water Quality Control Board (NCRWQCB), or USEPA (for federally-regulated systems), will be identified as potential recipients. The project team will follow up as necessary with the SWRCB Division of Drinking Water, NCRWQCB and USEPA staff to determine the status of violations and if there are any other systems not identified that may need assistance.

Pending the timing of the DWR IRWMP Proposition 1 Implementation funding solicitation, data from the 2017 NCRP Needs Assessment collected through January [or February] 2018 will be used to determine the first allocation of technical assistance. Those systems that are not able to complete the Needs Assessment by the end of January [or February] will be considered for assistance in the next round of technical assistance allocation.

In addition, project staff will follow up with those entities who received technical assistance for development of model projects as part of the 2014 NCRP Water & Wastewater Service Provider Outreach & Support Program, who meet the threshold criteria described below to determine if assistance is still necessary, especially with application preparation for identified implementation projects.

The SWRCB has their own technical assistance program to assist entities on multiple systems and project related topics. Currently, approximately 40 entities are receiving assistance in the North Coast Region. Technical Assistance is being provided primarily by the Rural Community Assistance Corporation (RCAC) and California Rural Water Association (CRWA). The Project Team will follow up with RCAC and CRWA to determine if there are technical assistance gaps that additional NCRP technical assistance could fill to support project implementation.

Lastly, while it is anticipated that most systems impacted by wildfire will receive state and federal assistance to repair damages, these systems were identified as possibly vulnerable in some disadvantaged communities. Outreach to these systems will be made to determine whether impacts by wildfire have contributed to meeting the threshold criteria described below and the need for technical assistance.

### **3. Process for Ranking and Selection of Entities to Receive Technical Assistance**

Once potential targets for technical assistance are identified, the project team will apply the technical assistance selection criteria presented below to rank the needs and develop a list of potential technical assistance recipients. Outreach to the top ranked entities will be completed to ensure assistance is still needed. A ranked list of recommended technical assistance projects will be developed for review and approval by the NCRP Proposition 1 Ad Hoc Committee for disadvantaged communities. Tribal technical assistance projects will be forwarded to the NCRP Tribal Representatives Proposition 1 Ad Hoc Subcommittee for a separate selection process (see Appendix B). The Ad Hoc committees and/or the support team may outreach directly to potential entities during the review process to request additional information as needed.



### **3.1 Guidelines for Technical Assistance Scoring and Selection**

#### **3.1.1 Threshold and General Evaluation Criteria**

This section presents threshold criteria that will be used for the selection technical assistance.

##### Eligible Technical Assistance Recipients

Eligible technical assistance recipients include the following:

- Publicly-owned community water and wastewater systems (ie., counties, cities and districts)
- Privately-owned non-profit community water and wastewater systems (ie., non-profit mutual water companies)
- Non-profit or publicly-owned non-community water and wastewater systems (ie., public school districts)
- Tribal-owned water and wastewater systems

##### Economically Disadvantaged and Distressed Communities

Technical assistance is targeted at assisting economically disadvantaged communities (DAC) as well as economically distressed areas (EDA) as described below.

- Economically Disadvantaged Community (DAC): A community with an annual median household income (MHI) that is less than 80% of the statewide annual median household income.
- Severely Economically Disadvantaged Community (SDAC): A community with an annual household income that is less than 60% of the statewide MHI.
- Economically Distressed Area: A community with a population of 20,000 persons or less, a rural county, or a reasonably isolated and divisible segment of a larger area where the segment of the population is 20,000 persons or less, with an MHI that is less than 85 percent of the statewide median household income, and with one or more of the following conditions: (1) Financial hardship; (2) Unemployment rate at least 2 percent higher than the statewide average; (3) Low population density.

Technical Assistance will be provided exclusively to DACs, SDAC, EDAs with some preference give to SDACs. Tribal communities will be provided Technical Assistance through a separate process. The Department of Water Resources (DWR) website mapping tool for DAC and EDA will be the basis for this determination. The DWR web mapping is based on US Census American Community Survey (ACS) 5-Year Data: 2010 – 2014, which reflects a statewide Median Household Income of \$61,489 and hence calculated DAC and SDAC thresholds of \$49,191 and \$36,893, respectively and a threshold of \$52,266 for EDAs.

##### Regional Representation





While not a threshold criteria, the NCRP's Proposition 1 Ad Hoc and Tribal Ad Hoc Committees will make every effort to ensure geographic representation by providing technical assistance to communities from each of the seven counties and Tribal districts.

#### Meaningful Outcomes

While also not a threshold requirement, the project team will evaluate if the available budget for technical assistance will result in a meaningful outcome for the service provider.

#### **3.1.2 Technical Assistance Selection Criteria**

Generally, the technical assistance needs will be evaluated in accordance with the criteria outlined in the table below. Future allocations of technical assistance and future versions of the selection criteria will include items specific to watershed and ecosystem projects. The sources of data that will be used for ranking of technical assistance needs include the following:

- 2014 NCRP Water and Wastewater Survey Needs Assessment
- 2017 NCRP Water and Wastewater Survey Needs Assessment
- DWSRF Policy prioritization categories based on health risk
- CWSRF Policy prioritization categories based on public health, water quality, and sustainability
- NCRP Policies & Guidelines
- DWR IRWM Program Guidelines
- Tribal specific criteria



## Appendix A

### Technical Assistance Ranking Criteria



### Technical Assistance Ranking Criteria

EVALUATION CRITERIA	SCORING DESCRIPTION	POINTS
Threshold Eligibility Criteria Is the community a DAC, SDAC or EDA	Yes/no (If no, not eligible for technical assistance)	N/A
Threshold Eligibility Criteria Is the community an eligible recipient as defined above?	Yes/no (If no, not eligible for technical assistance)	N/A
Drinking Water State Revolving Fund Criteria for Public Health Need	<ul style="list-style-type: none"> <li>• Category A - Immediate Health Risk (10 points)</li> <li>• Category B - Untreated or At-Risk Sources (9 points)</li> <li>• Category C - Compliance or Shortage Problems (7 points)</li> <li>• Category D - Inadequate Reliability (5 points)</li> <li>• Category E - Secondary Risks (3 points)</li> <li>• Category F - Other Projects (1 points)</li> </ul>	0-10
Clean Water State Revolving Fund Criteria for Public Health/ Water Quality	<ul style="list-style-type: none"> <li>• Class A - Public Health Problems (10 points)</li> <li>• Class B - Pollution of Impaired Water Bodies (8 points)</li> <li>• Class C - Compliance with requirements or Water Recycling Projects (5 points)</li> <li>• Class D - Projects Serving as Preventative Measures (3 points)</li> <li>• Class E - Other Projects (1 point)</li> </ul>	0-10
Implementation Readiness	<ul style="list-style-type: none"> <li>• Community with project ready for implementation funding needing application assistance for NCRP IRWMP Prop 1 Round 1 Implementation Funding (6 points)</li> <li>• Community in needed of planning/ design assistance to be prepared for NCRP IRWMP Prop 1 Round 2 Implementation Funding (4 points)</li> <li>• Community in need of technical, managerial or financial assistance to improve capacity to develop and implement projects (2 points)</li> </ul>	0-6 points



EVALUATION CRITERIA	SCORING DESCRIPTION	POINTS
Sustainability	<ul style="list-style-type: none"> <li>• The project supports infill development or results in the reuse or redevelopment of land in an area presently served by transit, streets, water, sewer, and other essential services. (3 points)</li> <li>• The applicant maintains a capital improvement plan, an asset management plan, or has performed a full-cost pricing analysis, or the project incorporates climate change adaptation.(3 points)</li> <li>• The project protects environmental or agricultural resources such as farm, range and forest lands; wetlands and wildlife habitats; recreational lands such as parks, trails, and greenbelts; or landscapes with locally unique features or areas identified by the state as deserving special protection. (3 points)</li> <li>• The project is cited in one or more regional environmental management plans. (3 points)</li> <li>• The project incorporates wastewater or storm water/urban runoff recycling, water conservation, energy conservation, low impact development, or reduced use of other vital resources (3 points)</li> <li>• The project uses low-impact treatment for lower lifecycle operating costs through reduced energy, chemical, or other inputs. (3 points)</li> </ul>	<p>0-10 points</p> <p>Can incorporate multiple benefits up to a maximum score of 10 points</p>
DWR IRWM Program Statewide Goals	<ul style="list-style-type: none"> <li>• Make Conservation a California Way of Life (1 point)</li> <li>• Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government (1 point)</li> <li>• Protect and Restore Important Ecosystems (1 point)</li> <li>• Manage and Prepare for Dry Periods (1 point)</li> <li>• Expand Water Storage Capacity and Improve Groundwater Management Increase Flood Protection(1 point)</li> </ul>	<p>0-5 points</p>



## Appendix B

### NCRP Tribal

### Technical Assistance Round 1 Selection Process



# NORTH COAST RESOURCE PARTNERSHIP ROUND 1 TRIBAL TECHNICAL ASSISTANCE SELECTION PROCESS

## Table of Contents

1.	Introduction	1
1.1	Goals and Objectives	1
1.2	Technical Assistance Funding Targets	2
1.3	General Priorities for Technical Assistance	2
1.4	Funding Available	2
2.	Process for Identification of Potential Entities to Receive Technical Assistance	3
3.	Process for Ranking and Selection of Entities to Receive Technical Assistance	4
3.1	Guidelines for Technical Assistance Scoring and Selection	4
3.1.1	Threshold and General Evaluation Criteria	4
3.1.2	Technical Assistance Selection Criteria	5



## 1. Introduction

The North Coast Resource Partnership (NCRP) was awarded a grant from the Department of Water Resources, Proposition 1 Integrated Regional Water Management Grant Program to support North Coast Tribes and economically disadvantaged communities (DAC) throughout the North Coast Region through the NCRP Outreach & Involvement: Tribal Engagement & Economic Opportunity for Disadvantaged Communities (DACTI) Program. One component of the program is to provide technical assistance to communities in the region. This document outlines the process for selection of Tribes to receive technical assistance in one of several rounds of technical assistance to be provided by the NCRP. Technical Assistance for North Coast Tribes will be led by the North Coast Tribal Representatives and the Tribal Engagement Coordinator, California Indian Environmental Alliance (CIEA). Tribal projects will be forwarded to the NCRP Tribal Representatives *ad hoc* committee for a separate selection process. For more information about Tribal selection please contact the Tribal Engagement Coordinator.

### 1.1 Goals and Objectives

The goals and objectives of this effort support the overall goals and objectives of the NCRP listed below.

#### **Goal 1: Intraregional Cooperation & Adaptive Management**

- Objective 1 - Respect local autonomy and local knowledge in Plan and project development and implementation
- Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation
- Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans

#### **Goal 2: Economic Vitality**

- Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing
- Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas

#### **Goal 3: Ecosystem Conservation and Enhancement**

- Objective 6 - Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity
- Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes

#### **Goal 4: Beneficial Uses of Water**



- Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, cultural, and recreational uses while minimizing impacts to sensitive resources
- Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities
- Objective 10 - Protect groundwater resources from over-drafting and contamination

#### **Goal 5: Climate Adaptation & Energy Independence**

- Objective 11 - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health
- Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation

#### **Goal 6: Public Safety**

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

### **1.2 Technical Assistance Funding Targets**

The NCRP anticipates more than one round of technical assistance to be provided as part of the overall DACTI program. The first allocation of technical assistance will focus primarily on water and wastewater providers based on the NCRP Needs Assessments conducted in 2014 and 2017 as data is available.

The NCRP is developing a separate strategy to outreach to economically disadvantaged communities, Tribes, and other organizations responsible for watershed management, stormwater, and other ecosystem functions. If a project of this type is identified during this first technical assistance round, it may be included, but these types of projects are not the focus of this first allocation of technical assistance.

### **1.3 General Priorities for Technical Assistance**

The first allocation of technical assistance will be focused on Tribal communities with a project that can be made ready to apply for implementation funding, may need additional capacity building and needing application and/or minor project development assistance to be able to apply for the first round of NCRP IRWMP Proposition 1 Implementation funding, anticipated in spring of 2018. Additionally, this process will identify communities that may not be ready to apply for implementation funding in 2018, but need technical assistance to develop a project and/or capacity for the second round of DWR IRWMP funding anticipated in 2020. Capacity building includes technical training, financial management, capital improvement planning, and other non-project technical assistance.

### **1.4 Funding Available**

A set funding amount from the overall DACTI program was not set for this first round of technical assistance. Funding made available will be based on relevant need and timing constraints related to the NCRP IRWMP Proposition 1 Implementation Round 1 funding solicitation. Budget will be saved for future





technical assistance efforts and trainings. The typical technical assistance budget for this round is anticipated to be in the range \$5,000 to \$15,000 per Tribe.

## 2. **Process for Identification of Potential Entities to Receive Technical Assistance**

The process to identify entities benefiting from an infusion of technical assistance provided by the NCRP is a mixture of qualitative and quantitative data. The sources of data to be used to identify technical assistance targets are presented below.

- Indian Health Service (IHS) Sanitation Deficiency System List (SDS)
- US Environmental Protection Agency Region Office of Drinking Water
- 2014 NCRP Water and Wastewater Survey needs assessment
- 2017 NCRP Water and Wastewater Survey needs assessment
- SWRCB Division of Drinking Water Violation Notices (2012 – 2017)
- RWQCB Violation Notices (2012 – 2017)
- 2014 DAC Model Projects
- Outreach to existing SWRCB technical assistance providers to identify gaps in current assistance
- Outreach to systems impacted by wildfires

The 2014 and 2017 Needs Assessment survey and IHS SDS List will be used first to identify those systems that may need technical assistance based on survey responses. Next systems with violation notices from the USEPA Office of Drinking Water for federally-regulated systems or the SWRCB for state-regulated systems, will be identified as potential recipients. The project team will follow up as necessary with the US EPA, IHS and SWRCB staff to determine the status of violations and if there are any other systems not identified that may need assistance.

Pending the timing of the DWR IRWMP Proposition 1 Implementation funding solicitation, data from the 2017 NCRP Needs Assessment collected through January 2018 will be used to determine the first allocation of technical assistance. Those systems that are not able to complete the Needs Assessment by the end of February will be considered for assistance in the next round of technical assistance allocation.

The Project Team will follow up with those Tribes who received technical assistance for development of model projects as part of the 2014 NCRP Water & Wastewater Service Provider Outreach & Support Program, who meet the threshold criteria described below to determine if assistance is still necessary, especially with application preparation for identified implementation projects.

The SWRCB has their own technical assistance program to assist Tribes. Technical Assistance is being provided primarily by the Rural Community Assistance Corporation (RCAC) and California Rural Water Association (CRWA). The Project Team will follow up with RCAC and CRWA to determine if there are



technical assistance gaps that additional NCRP technical assistance could fill to support project implementation.

Lastly, while it is anticipated that most systems impacted by wildfire will receive state and federal assistance to repair damages, these systems were identified as possibly vulnerable in some disadvantaged communities. Outreach to these systems will be made to determine whether impacts by wildfire have contributed to meeting the threshold criteria described below and the need for technical assistance.

### **3. Process for Ranking and Selection of Entities to Receive Technical Assistance**

Once potential Tribes for technical assistance are identified, the project team will apply the technical assistance selection criteria presented below to rank the needs and develop a list of potential technical assistance recipients. Outreach to the top ranked Tribes will be completed to ensure assistance is still needed. A ranked list of recommended assistance projects will be developed for review and approval by the NCRP Tribal Representatives and Tribal Engagement Coordinator, CIEA. The project team may outreach directly to potential Tribes during the review process to request additional information as needed.

#### **3.1 Guidelines for Technical Assistance Scoring and Selection**

##### **3.1.1 Threshold and General Evaluation Criteria**

This section presents threshold criteria that will be used for the selection technical assistance.

##### Eligible Technical Assistance Recipients

Eligible technical assistance recipients include the following:

- Tribal-owned water and wastewater systems

##### Economically Disadvantaged and Distressed Communities

Technical assistance is targeted at assisting economically disadvantaged communities (DAC) as well as economically distressed areas (EDA) as described below.

- Economically Disadvantaged Community (DAC): A community with an annual median household income (MHI) that is less than 80% of the statewide annual median household income.
- Severely Economically Disadvantaged Community (SDAC): A community with an annual household income that is less than 60% of the statewide MHI.
- Economically Distressed Area: A community with a population of 20,000 persons or less, a rural county, or a reasonably isolated and divisible segment of a larger area where the segment of the population is 20,000 persons or less, with an MHI that is less than 85 percent



of the statewide median household income, and with one or more of the following conditions: (1) Financial hardship; (2) Unemployment rate at least 2 percent higher than the statewide average; (3) Low population density.

Technical Assistance will be provided exclusively to DACs, SDAC, and EDAs , with some preference give to SDACs. The Department of Water Resources (DWR) website mapping tool for DAC and EDA will be the basis for this determination. The DWR web mapping is based on US Census American Community Survey (ACS) 5-Year Data: 2010 – 2014, which reflects a statewide Median Household Income of \$61,489 and hence calculated DAC and SDAC thresholds of \$49,191 and \$36,893, respectively and a threshold of \$52,266 for EDAs. If a Tribe has income data which they would like to utilize to assist in determining its eligibility as a DAC, SDAC and EDA.

#### Regional Representation

While not a threshold criteria, every effort will be made to ensure geographic representation by providing technical assistance to communities from each of the three Tribal districts.

#### **3.1.2 Technical Assistance Selection Criteria**

Generally, the technical assistance needs will be evaluated in accordance with the criteria outlined in the table below. Future allocations of technical assistance and future versions of the selection criteria will include items specific to watershed and ecosystem projects. The sources of data that will be used for ranking of technical assistance needs include the following:

- US Environmental Protection Agency (EPA)
- Indian Health Service (IHS)
- 2014 NCRP Water and Wastewater Survey Needs Assessment
- 2017 NCRP Water and Wastewater Survey Needs Assessment
- DWSRF Policy prioritization categories based on health risk
- CWSRF Policy prioritization categories based on public health, water quality, and sustainability
- NCRP Policies & Guidelines
- DWR IRWM Program Guidelines



Table 1 NCRP Tribal Technical Assistance Ranking Criteria

Evaluation Criteria	Scoring Description	Points
Threshold Eligibility Criteria Is the community a DAC, SDAC or EDA	Yes/no (If no, not eligible for technical assistance)	N/A
Threshold Eligibility Criteria Is the community an eligible recipient as defined above?	Yes/no (If no, not eligible for technical assistance)	N/A
Drinking Water State Revolving Fund Criteria for Public Health Need	<ul style="list-style-type: none"> <li>● Category A - Immediate Health Risk (10 points)</li> <li>● Category B - Untreated or At-Risk Sources (9 points)</li> <li>● Category C - Compliance or Shortage Problems (7 points)</li> <li>● Category D - Inadequate Reliability (5 points)</li> <li>● Category E - Secondary Risks (3 points)</li> <li>● Category F - Other Projects (1 points)</li> </ul>	0-10
Clean Water State Revolving Fund Criteria for Public Health/ Water Quality	<ul style="list-style-type: none"> <li>● Class A - Public Health Problems (10 points)</li> <li>● Class B - Pollution of Impaired Water Bodies (8 points)</li> <li>● Class C - Compliance with requirements or Water Recycling Projects (5 points)</li> <li>● Class D - Projects Serving as Preventative Measures (3 points)</li> <li>● Class E - Other Projects (1 point)</li> </ul>	0-10
Implementation Readiness	<ul style="list-style-type: none"> <li>● Community with project ready for implementation funding needing application assistance for NCRP IRWMP Prop 1 Round 1 Implementation Funding (6 points)</li> <li>● Community in needed of planning/ design assistance to be prepared for NCRP IRWMP Prop 1 Round 2 Implementation Funding (4 points)</li> <li>● Community in need of technical, managerial or financial assistance to improve capacity to develop and implement projects (2 points)</li> </ul>	0-6 points
Sustainability	<ul style="list-style-type: none"> <li>● The project supports infill development or results in the reuse or redevelopment of land in an area presently served by transit, streets, water, sewer, and other essential services. (3 points)</li> <li>● The applicant maintains a capital improvement plan, an asset management plan, or has performed a full-cost</li> </ul>	0-10 points  Can incorporate multiple benefits up



	<p>pricing analysis, or the project incorporates climate change adaptation.(3 points)</p> <ul style="list-style-type: none"> <li>● The project protects environmental or agricultural resources such as farm, range and forest lands; wetlands and wildlife habitats; recreational lands such as parks, trails, and greenbelts; or landscapes with locally unique features or areas identified by the state as deserving special protection. (3 points)</li> <li>● The project is cited in one or more regional environmental management plans. (3 points)</li> <li>● The project incorporates wastewater or storm water/urban runoff recycling, water conservation, energy conservation, low impact development, or reduced use of other vital resources (3 points)</li> <li>● The project uses low-impact treatment for lower lifecycle operating costs through reduced energy, chemical, or other inputs. (3 points)</li> </ul>	<p>to a maximum score of 10 points</p>
<p>DWR IRWM Program Statewide Goals</p>	<ul style="list-style-type: none"> <li>● Make Conservation a California Way of Life (1 point)</li> <li>● Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government (1 point)</li> <li>● Protect and Restore Important Ecosystems (1 point)</li> <li>● Manage and Prepare for Dry Periods (1 point)</li> <li>● Expand Water Storage Capacity and Improve Groundwater Management Increase Flood Protection(1 point)</li> </ul>	<p>0-5 points</p>



## Appendix C

### NCRP Technical Assistance Scoring Criteria Definitions



## **NCRP TECHNICAL ASSISTANCE SCORING CRITERIA DEFINITIONS**

### **State Water Resources Control Board - Drinking Water State Revolving Fund Policy Priority System**

To the maximum extent practicable, priority will be given to projects which: 1) address the most serious risk to human health, 2) are necessary to ensure compliance with the requirements of the Safe Drinking Water Act, and 3) assist systems most in need on a per household basis. Projects are ranked by the categories established below to achieve these objectives. These criteria are taken directly from the “Policy for implementing the Drinking Water State Revolving Fund” prepared by the State Water Resources Control Board, effective January 1, 2015.

#### **CATEGORIES**

##### **Category A - Immediate Health Risk**

- Documented waterborne disease outbreaks attributable to the water system.
- Water systems under a court order to correct SDWA violations or to correct water outage problems.
- Total coliform Maximum Contaminant Level (MCL) violations attributable to active sources contaminated with coliform bacteria (fecal, E. coli, or total coliform).
- Severe domestic water supply outage(s) posing an imminent threat to public health and safety.
- The distribution of water containing nitrates/nitrites or perchlorate in excess of the Maximum Contaminant Level (MCL).

##### **Category B - Untreated or At-Risk Sources**

- Surface water or GWUDI sources that are untreated, not filtered, or have other filtration treatment deficiencies that violate federal or state regulations.
- Non-GWUDI groundwater sources that are contaminated with fecal coliform or E. coli and are inadequately treated.
- Uncovered distribution reservoirs.

##### **Category C - Compliance or Shortage Problems**

- Water quantity problems caused by source capacity, or water delivery capability that is insufficient to meet existing demand.



- The distribution of water containing chemical or radiological contamination in violation of a state or federal primary drinking water standard (other than nitrate/nitrite or perchlorate).
- Total Coliform Rule violations for reasons other than source contamination.

#### **Category D - Inadequate Reliability**

- Non-metered service connections, or defective water meters.
- CWSs, and PWSs owned by public schools, with a single source and no backup supply.
- Distribution reservoirs with non-rigid covers in active use.
- Disinfection facilities that lack needed reliability features, such as chlorine analyzers or alarms.
- Disinfection deficiencies that violate Waterworks Standards.

#### **Category E - Secondary Risks**

- The distribution of water that exceeds secondary drinking water standards.
- The distribution of water in excess of a published chemical notification level.
- The distribution of water which has exceeded a primary drinking water standard in one or more samples, but has not violated a running average standard.
- A standby groundwater source that exceeds a primary drinking water standard.
- Deficiencies that violate Waterworks Standards (other than those already covered above).

#### **Category F - Other Projects**

Deficiencies attributable to the water system that address present or prevent future violations of health-based standards (other than those already covered above).

#### **CONSOLIDATION CRITERIA**

“Consolidation” means a project that involves the restructuring of two or more public water systems into a single public water system.





## **State Water Resources Control Board - Clean Water State Revolving Fund Policy Priority System**

The State Water Resources Control Board uses a priority class to aid in ranking projects for funding which was incorporated into the NCRP technical assistance selection process. Additionally, sustainability criteria were also taken from the Clean Water State Revolving Funds "Policy for implementing the Clean Water State Revolving Fund" prepared by the State Water Resources Control Board, amended February 1, 2015.

### **PRIORITY CLASSES**

#### **Class A - Public Health Problems**

- POTW projects or other projects required to alleviate public health problems where the County Board of Supervisors, City Council, or the County Health Officer has certified that a health problem exists, and where a State or Regional Water Board has (1) adopted a prohibition for elimination of discharges and such prohibition has been approved by the State Water Board, (2) approved a local moratorium prohibiting the construction of new systems, or (3) adopted a cease and desist order; or
- Nonpoint source, storm water drainage pollution, and estuary enhancement projects required to comply with prohibitions, postings, limitations, or warnings that have been imposed by responsible health authorities, and where the State or Regional Water Board has concurred with the findings of the health authority and has established a time schedule for correction or elimination of the threat to public health.

#### **Class B - Pollution of Impaired Water Bodies**

Projects to address impairments of CWA 303(d) listed water bodies.

#### **Class C - Compliance with requirements or Water Recycling Projects**

- Projects necessary to comply with WDRs or other regulatory requirements formally imposed by the State Water Board or Regional Water Board, or projects necessary for correction of threatened violations of existing or proposed WDRs; or
- Projects that provide for treatment and delivery of municipal wastewater or groundwater contaminated due to human activity, for uses that will offset or augment state and local water supplies or projects that are necessary to meet state policy regarding recycled water.

#### **Class D - Projects Serving as Preventative Measures Against Additional**

Water Quality Degradation for Impaired or Unimpaired Water Bodies Projects to control discharges to impaired or unimpaired waters, where correction of such discharges may, or may not, be required through formally adopted WDRs. This class includes projects to provide additional wastewater treatment capacity.

#### **Class E - Other Projects**



## SUSTAINABILITY CRITERIA

A project that supports or incorporates one or more of the following sustainability goals receives one priority point for each area addressed:

- The project supports infill development or results in the reuse or redevelopment of land in an area presently served by transit, streets, water, sewer, and other essential services.
- The applicant maintains a capital improvement plan, an asset management plan, or has performed a full-cost pricing analysis, or the project incorporates climate change adaptation.
- The project protects environmental or agricultural resources such as farm, range and forest lands; wetlands and wildlife habitats; recreational lands such as parks, trails, and greenbelts; or landscapes with locally unique features or areas identified by the state as deserving special protection.
- The project is cited in one or more regional environmental management plans.
- The project incorporates wastewater or storm water/urban runoff recycling, water conservation, energy conservation, low impact development, or reduced use of other vital resources
- The project uses low-impact treatment for lower lifecycle operating costs through reduced energy, chemical, or other inputs.

## Department of Water Resources Integrated Water Management State Water Resources Control Board - Clean Water State Revolving Fund Policy Priority System

ACTION	DESCRIPTION	APPLICABILITY
1. Make Conservation a California Way of Life	<ul style="list-style-type: none"> <li>• Building on current water conservation efforts and promoting the innovation of new systems for increased water conservation.</li> <li>• Expand agricultural and urban water conservation and efficiency to exceed SB-X7-7 targets</li> </ul>	Applicable NCRP DAC Projects
2. Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government	<ul style="list-style-type: none"> <li>• Ensure water security at the local level, where individual government efforts integrate into one combined regional commitment where the sum becomes greater than any single piece.</li> <li>• Support and expand funding for Integrated Water Management planning and projects</li> <li>• Improve land use and water alignment</li> <li>• Provide assistance to disadvantaged communities</li> <li>• Encourage State focus on projects with multiple benefits</li> <li>• Increase the use of recycled water</li> </ul>	Applicable NCRP DAC Projects



ACTION	DESCRIPTION	APPLICABILITY
3. Achieve the Co-Equal Goals for the Delta	<ul style="list-style-type: none"> <li>• This action is directed towards State and federal agencies; however, consideration will be afforded to eligible local or regional projects that also support achieving the co-equal goals providing a more reliable water supply for California and to protect, restore, and enhance the Delta ecosystem.</li> </ul>	Not Applicable
4. Protect and Restore Important Ecosystems	<ul style="list-style-type: none"> <li>• Continue protecting and restoring the resiliency of our ecosystems to support fish and wildlife populations, improve water quality, and restore natural system functions.</li> <li>• Restore key mountain meadow habitat</li> <li>• Manage headwaters for multiple benefits</li> <li>• Protect key habitat of the Salton Sea through local partnership (NA)</li> <li>• Restore coastal watersheds</li> <li>• Continue restoration efforts in the Lake Tahoe Basin (not applicable)</li> <li>• Continue restoration efforts in the Klamath Basin</li> <li>• Water for wetlands and waterfowl</li> <li>• Eliminate barriers to fish migration</li> <li>• Assess fish passage at large dams</li> <li>• Enhance water flows in stream systems statewide</li> </ul>	Applicable NCRP DAC Projects
5. Manage and Prepare for Dry Periods	<ul style="list-style-type: none"> <li>• Effectively manage water resources through all hydrologic conditions to reduce impacts of shortages and lessen costs of state response actions. Secure more reliable water supplies and consequently improve drought preparedness and make California’s water system more resilient.</li> <li>• Revise operations to respond to extreme conditions</li> <li>• Encourage healthy soils</li> </ul>	Applicable NCRP DAC Projects
6. Expand Water Storage Capacity and Improve Groundwater Management	<ul style="list-style-type: none"> <li>• Increase water storage for widespread public and environmental benefits, especially in increasingly dry years and better manage our groundwater to reduce overdraft.</li> <li>• Provide essential data to enable Sustainable Groundwater Management</li> <li>• Support funding partnerships for storage projects</li> <li>• Improve Sustainable Groundwater Management</li> <li>• Support distributed groundwater storage</li> <li>• Increase statewide groundwater recharge</li> <li>• Accelerate clean-up of contaminated groundwater and prevent future contamination</li> </ul>	Applicable NCRP DAC Projects



ACTION	DESCRIPTION	APPLICABILITY
7. Provide Safe Water for	<ul style="list-style-type: none"> <li>• Provide all Californians the right to safe, clean, affordable and accessible water adequate for human consumption, cooking, and sanitary purposes.</li> <li>• Consolidate water quality programs</li> <li>• Provide funding assistance for vulnerable communities</li> <li>• Manage the supply status of community water systems</li> <li>• Additionally, as required by Water Code §10545, in areas that have nitrate, arsenic, perchlorate, or hexavalent chromium contamination, consideration will be given to grant proposals that included projects that help address the impacts caused by nitrate, arsenic, perchlorate, or hexavalent chromium contamination, including projects that provide safe drinking water to small disadvantaged communities.</li> </ul>	Redundant to other criteria – not used for NCRP DAC Projects
8. Increase Flood Protection	<ul style="list-style-type: none"> <li>• Collaboratively plan for integrated flood and water management systems, and implement flood projects that protect public safety, increase water supply reliability, conserve farmlands, and restore ecosystems.</li> <li>• Improve access to emergency funds</li> <li>• Better coordinate flood response operations</li> <li>• Prioritize funding to reduce flood risk and improve flood response</li> <li>• Encourage flood projects that plan for climate change and multiple benefits</li> </ul>	Applicable NCRP DAC Projects
9. Increase Operational and Regulatory Efficiency	<ul style="list-style-type: none"> <li>• This action is directed towards State and federal agencies; however, consideration will be afforded to eligible local or regional projects that also support increased operational of the State Water Project or Central Valley Project.</li> </ul>	Not Applicable
10. Identify Sustainable and Integrated Financing Opportunities	<ul style="list-style-type: none"> <li>• This action is directed towards State agencies and the legislature.</li> </ul>	Not Applicable

# Appendix J.

## NCRP Technical Assistance Rankings

## Appendix J. NCRP Technical Assistance Rankings

November 2018

To: North Coast Resource Partnership Proposition 1 DACTI Program Ad Hoc Committee Ref. No.: 11146311

---

From: Rebecca Crow, PE and Hannah Stewart, PE Tel: 707-267-2244

---

cc: Katherine Gledhill, West Coast Watershed

---

**Subject: Ranked List of Eligible Water and Wastewater Systems for NCRP IRWMP Technical Assistance**

---

### 4. Introduction

Over the past several months, GHD has worked with West Coast Watershed to compile a list of water and wastewater system providers in the North Coast region that are in need of technical assistance, and ranked the systems according to level of need for technical assistance. The evaluation criteria for this ranking was as outlined in the North Coast Resource Partnership (NCRP) Technical Assistance Round 1 Selection Process Draft Document, January 2018 and is summarized for reference below. This memo presents a summary of the scoring for technical assistance followed by a summary of the final recommended providers to receive technical assistance under this round of funding provided by the NCRP.

Technical Assistance for North Coast Tribes will be selected through a subsequent process led by the North Coast Tribal Representatives and the Tribal Engagement Coordinator, CIEA.

### 5. Summary of Technical Assistance Ranking Process

This section is divided into the initial technical assistance evaluation criteria as presented in the January 2018 Draft Selection Process Document and supplemental evaluation criteria that were applied to projects.

#### 5.1 Initial Technical Assistance Evaluation Criteria

The primary technical scoring evaluation criteria and comments on how the criteria were applied during the ranking process is provided in **Table 5.1**. The application of evaluation criteria is further described in Section 5.2. Once the initial evaluation criteria were applied, supplemental criteria for evaluation were added to reflect existing levels of need based on input from regulators, existing funding application in process and executed, and consolidations which are described in Section 5.3.

**Table 5.1 Technical Assistance Evaluation Scoring Criteria**

EVALUATION CRITERIA	SCORING DESCRIPTION	POINTS	CRITERIA SCORING NOTES
<p>Threshold Eligibility Criteria</p> <p>Is the community a DAC, SDAC or EDA</p>	<p>Yes/no (If no, not eligible for technical assistance)</p> <p>DAC = Disadvantaged Community (Median Household Income [MHI] less than 80% of the statewide MHI)</p> <p>SDAC = Severely Disadvantaged Community (MHI less than 60% of the statewide MHI)</p> <p>EDA = Economically Distressed Area (MHI less than 85% of Statewide MHI in a community of 20,000 or less that also has (1) Financial hardship; (2) Unemployment rate at least 2 percent higher than the statewide average; (3) Low population density)</p>	<p>N/A</p>	<p>Based on the NCRP developed merged GIS layers for DAC, SDAC and EDA. Actual service area polygons were not available for many systems, the system main address was used for this analysis.</p>
<p>Threshold Eligibility Criteria</p> <p>Is the community an eligible recipient as defined in the scoring description?</p>	<p>Yes/no (If no, not eligible for technical assistance)</p> <ul style="list-style-type: none"> <li>• Publicly-owned community water and wastewater systems (ie., counties, cities and districts)</li> <li>• Privately-owned non-profit community water and wastewater systems (ie., non-profit mutual water companies)</li> <li>• Non-profit or publicly-owned non-community water and wastewater systems (ie., public school districts)</li> </ul>	<p>N/A</p>	<p>The differentiation of private non-profit systems from private for profit systems was difficult to make. The notes below describe sources used to make the determination. However in some cases the not for profit status was unknown and will need to be verified.</p>

**Table 5.1 Technical Assistance Evaluation Scoring Criteria**

EVALUATION CRITERIA	SCORING DESCRIPTION	POINTS	CRITERIA SCORING NOTES
Drinking Water State Revolving Fund Criteria for Public Health Need	<ul style="list-style-type: none"> <li>• Category A - Immediate Health Risk (10 points)</li> <li>• Category B - Untreated or At-Risk Sources (9 points)</li> <li>• Category C - Compliance or Shortage Problems (7 points)</li> <li>• Category D - Inadequate Reliability (5 points)</li> <li>• Category E - Secondary Risks (3 points)</li> <li>• Category F - Other Projects (1 points)</li> </ul>	0-10	Scoring was based on State Water Resources Control Board violations list for the last 5 years. Additional scoring details on adjustments are provided below.
Clean Water State Revolving Fund Criteria for Public Health/ Water Quality	<ul style="list-style-type: none"> <li>• Class A - Public Health Problems (10 points)</li> <li>• Class B - Pollution of Impaired Water Bodies (8 points)</li> <li>• Class C - Compliance with requirements or Water Recycling Projects (5 points)</li> <li>• Class D - Projects Serving as Preventative Measures (3 points)</li> <li>• Class E - Other Projects (1 point)</li> </ul>	0-10	Scoring was based on Regional Water Quality Control Board violations list for the last 5 years. Additional scoring details on adjustments are provided below.
Implementation Readiness	<ol style="list-style-type: none"> <li>1. Community with project ready for implementation funding needing application assistance for NCRP IRWMP Prop 1 Round 1 Implementation Funding (6 points)</li> <li>2. Community in needed of planning/ design assistance to be prepared for NCRP IRWMP Prop 1 Round 2 Implementation Funding (4 points)</li> <li>3. Community in need of technical, managerial or financial assistance to improve capacity to develop and implement projects (2 points)</li> </ol>	0-6 points	1-3. At a minimum every system that noted they have need in one or more technical assistance category received 2 points.
Sustainability	<ol style="list-style-type: none"> <li>4. The project supports infill development or results in the reuse or redevelopment of land in an area presently served by transit, streets, water, sewer, and other essential services. (3 points)</li> </ol>	0-10 points  Can incorporate multiple	4. No projects ended up receiving points for infill, survey responses were search for potential notes on redevelopment. This could apply to wildfire affected systems, but point were not assigned in this round.



**Table 5.1 Technical Assistance Evaluation Scoring Criteria**

EVALUATION CRITERIA	SCORING DESCRIPTION	POINTS	CRITERIA SCORING NOTES
	5. The applicant maintains a capital improvement plan, an asset management plan, or has performed a full-cost pricing analysis, or the project incorporates climate change adaptation.(3 points)	benefits up to a maximum score of 10 points	5. If the system indicated they had a capital improvement plan (CIP) in the survey notes or DDW or RWQCB indicated they had a CIP, the system received these points.
	6. The project protects environmental or agricultural resources such as farm, range and forest lands; wetlands and wildlife habitats; recreational lands such as parks, trails, and greenbelts; or landscapes with locally unique features or areas identified by the state as deserving special protection. (3 points)		6. No water or wastewater projects ended up receiving points for environmental protection.
	7. The project is cited in one or more regional environmental management plans. (3 points)		7. No projects ended up receiving points for inclusion in environmental plans, as this was not a direct survey question.
	8. The project incorporates wastewater or storm water/urban runoff recycling, water conservation, energy conservation, low impact development, or reduced use of other vital resources (3 points)		8. Points were awarded if survey responses included discussion of these categories as a potential project.
	The project uses low-impact treatment for lower lifecycle operating costs through reduced energy, chemical, or other inputs. (3 points)		This criteria was very similar to No. 8 and due to limited information in the survey responses, benefits from this category were considered captured in No. 8 above.
DWR IRWM Program Statewide Goals	9. Make Conservation a California Way of Life (1 point)	0-5 points	9. System was given a point if their survey comments mentioned they had leaking pipes, and project included distribution system improvements, if project included metering an unmetered system, or if the project included conservation of drinking water, the system received a point here.

Table 5.1 Technical Assistance Evaluation Scoring Criteria

EVALUATION CRITERIA	SCORING DESCRIPTION	POINTS	CRITERIA SCORING NOTES
	10. Increase Regional Self-Reliance and Integrated Water Management Across All Levels of Government (1 point)		10. System was given a point if their survey indicated they were currently relying on other systems or sources for water/ww. Point earned here for consolidation projects as well.
	11. Protect and Restore Important Ecosystems (1 point)		11. System was given a point if their survey noted that they were interested in addressing inflow and infiltration into the sewer system. No other clear ecosystem benefits were identified and scored.
	12. Manage and Prepare for Dry Periods (1 point)		12. System was given a point if their survey noted they were trying to implement water conservation techniques or needed additional water storage. Given a point if project is water system consolidation
	13. Expand Water Storage Capacity and Improve Groundwater Management Increase Flood Protection(1 point)		13. System was given a point if the project included new or expanded storage or if the project could beneficially influence groundwater management.

## **5.2 Application of Initial Technical Assistance Evaluation Criteria**

Using the above evaluation criteria, GHD took the following steps to compile the proposed technical assistance list based on the following ranking process:

1. Combined the survey results and the system lists from the 2014 and 2018 Needs Assessment Surveys.
2. Added information on North Coast Regional Water Quality Control Board (NCRWQCB) and Division of Drinking Water (DDW) violations systems received between 2013 and 2018.
3. Removed tribal systems, as they are being evaluated under a separate process.
4. Verified that the systems on the list are considered a Disadvantaged Community (DAC), Severely Disadvantaged Community (SDAC) and/or are located within an Economically Distressed Area (EDA). (Those systems that were not a DAC, SDAC or within an EDA were removed from the list for technical assistance.) It is important to note that the methodology for evaluating economic status for this technical assistance process differs from the methodology used by the Department of Water Resources (DWR). The NCRP merged the SDAC, DAC and EDA layers between census designated places, census tracts and census block groups. This results in more entities being included as economically disadvantaged/distressed than directly using the DWR data, which would exclude some census designated places as being disadvantaged/ distressed. The process for evaluating economic status also only used the system primary address for the determination not, the service area, so there may be cases where a portion of the service area is not economically disadvantaged/ distressed. Prior to recommending a provider for technical assistance, the DAC/ EDA status for some providers was checked against the DWR data to verify the community status was at least 50% DAC/EDA.
5. Added a separate entry for systems that provide both water service and wastewater service, so that they could be ranked separately for technical assistance.
6. Assigned points to systems based on standard survey response, using the criteria scoring presented above.
7. Assigned points based on State Water Resources Control Board (SWRCB) Drinking Water violations over the last five years. Violations for improper monitoring which did not result in water quality violations did not receive points. Point were also adjusted based on input from the DDW if violations had been addressed. If new violations were noted by the Division of Drinking water, they were verified on the Safe Drinking Water Information System Drinking Water Website. If water quality violations were documented points were given to the system.
8. Assigned points based on NCRWQCB violations over the last five years. Several violations did not receive points, as the violation was not related to operation of the wastewater treatment plant or collection system.
9. Reviewed survey comments for information on a potential project ideas for each system and added a potential project column including information for those systems that appeared to have a specific project in mind.
10. Used <https://businesssearch.sos.ca.gov/> and removed systems listed as "Domestic Stock", which indicated the system was privately owned.

## *Appendix J. NCRP Technical Assistance Rankings*

11. Reviewed the list of wastewater service providers with the North Coast Regional Water Quality Control Board (NCRWQCB). Received verbal comments from NCRWQCB about systems that would be good candidates for technical assistance. A written copy of the NCRWQCB comments was provided back to the NCRWQCB for review and no revisions were requested. In general the NCRWQCB good candidate comments reflected systems with compliance issues that could be helped with the amount of funds the NCRP had available per project and those systems that have not historically asked for assistance, but could use support.
12. Reviewed the list of water service providers with the Division of Drinking Water District Offices 01, 03 and 18. Received comments from Division of Drinking Water Districts. Edits were made to the technical assistance ranking to reflect changes in on-going violation status, consolidation projects, as well as the entities readiness for assistance.

### **5.3 Supplemental Technical Assistance Evaluation Criteria**

Once the preliminary ranking was developed and input received from the NCRWQCB and Division of Drinking Water Districts, additional point adjustments were made as follows:

- Responsiveness: In the experience of the technical review team and regulatory agencies, responsiveness is key to technical assistance being effective and for making progress on addressing system issues. System were given one additional point for responding to the 2014 survey and one point for responding to the 2018 survey.
- Currently receiving funding assistance: Entities that are currently receiving planning or construction funds from DWSRF/CWSRF program, were considered in less need of technical assistance as compliance work was being conducted and an adjustment of minus five points was made.
- Currently in process for funding assistance: Entities that show as in process on a DWSRF/CWSRF Application according to the SWRCB, were considered in process on some technical assistance and adjustment of minus two points was made.
- Entity previously received NCRP funding for a similar project: For example City of Crescent City, City of Eureka previously received proposition 50 wastewater funds from the NCRP and three points were subtracted.
- RWQCB input: Those systems identified by the NCRWQCB as benefitting from Technical Assistance were given an additional five points.
- DDW input: Those systems identified by the DDW as benefitting from Technical Assistance were given an additional five points.
- Consolidation Projects: Project that involves consolidation of two or more systems were given an additional two points. Consolidation project already received points for increasing regional self-reliance and managing and preparing for dry periods. However as consolidation projects were determined to be a key project type that could benefit smaller systems additional points were awarded.

Once the final adjusted points were developed each of the projects was ranked based on their score within each county. Projects that received the same score within the same county were given the same rank. The technical

assistance list was then reviewed and the top candidates in each county were selected for potential technical assistance.

## 6. Summary of Results

Based on the evaluations presented above, the top candidates including the first and second ranked system from each County followed by a few of the remaining overall highest scoring systems are provided for the evaluated water systems (**Table 6.1**) and wastewater systems (

Table 6.2 Top Ranked Wastewater Systems for IRWMP Technical Assistance

). Water providers are evaluated first, followed by wastewater systems. **Attachment A** to this memo presents the full ranking of all water and wastewater systems that were included in the technical assistance evaluation. This same information is shown in graphical form in **Figure 1**. This graphic shows all providers and indicates technical assistance need by size of dot, as indication in the legend. **Attachment B** to this memo provides the same information broken out into water and wastewater system, ranked by score within each county. Both **Attachment A** and **Attachment B** exclude those systems that were not considered DAC or EDA and also exclude Tribal Systems which are being evaluated separately.

Appendix J. NCRP Technical Assistance Rankings

**Table 6.1 Top Ranked Water Systems for IRWMP Technical Assistance**

System Name	County	Survey(s) Completed		County Rank	Total Points	Ranking Justification	Potential Project
		2014	2018				
Jedsmith Homeowners Assn.	Del Norte	Y	Y	1	25	Identified as a good candidate by District 1. E. coli contaminated well. They are requesting consolidation project.	Consolidation with Hussey Ranch Corporation CSD
Journey's End Mobile Home Park <sup>1</sup>	Sonoma	Y	Y	1	22	Identified as a good candidate by District 18 (assuming they are rebuilding low-income housing).Park uninhabitable and well contaminated after 2017 fire.	Consolidation with City of Santa Rosa
Briceland C.S.D.	Humboldt	N	Y	1	20	Insufficient water storage. Need additional hydrants throughout town. Existing 42,000 gal storage tank with wood roof in need of replacing.	Multiple project opportunities: add water storage; add hydrants; new storage tank
Willits, City Of (Water)	Mendocino	N	Y	1	20	Identified as a good candidate by District 3. Multiple violations for exceedance of disinfection byproduct MCL.	Project to address disinfection byproduct
Salyer Heights W.S., Inc	Trinity	Y	N	1	19	Identified as a good candidate by District 1. Violations for turbidity issues. Need new filters, tanks, distribution system and test well.	Many project opportunities: new filters, tanks, distribution system, test well
Treasure Creek Woods Mwc	Trinity	Y	Y	1	19	Identified as a good candidate by District 1. Needs meters. Needs storage. Test wells do not meet waterworks standards.	Many project opportunities: meter installations, storage tank, test well
Shasta View Heights Owners Association <sup>2</sup>	Siskiyou	Y	Y	1	17	District 1 identified as a good candidate. Consolidation study/intertie with Yreka. Distribution system main replacement. All homes need backflow prevention devices.	Many project opportunities: consolidation with Yreka, distribution system improvements

**Table 6.1 Top Ranked Water Systems for IRWMP Technical Assistance**

System Name	County	Survey(s) Completed		County Rank	Total Points	Ranking Justification	Potential Project
		2014	2018				
Newell County Water District (Water)	Modoc	N	N	1	2	Existing well/pump does not have sufficient capacity for the demand of the distribution system.	Groundwater well improvements
Sonoma County Mutual Water Company	Sonoma	N	Y	2	19	Identified as a good candidate by District 18. System needs full surface water treatment.	Surface water treatment
Alderpoint County Water	Humboldt	Y	N	2	18	Identified as a good candidate by District 1. Needs capacity building, including additional treatment and storage. Asbestos cement piping.	Additional treatment/storage. Distribution system main replacements
Redwood Valley County Water District	Mendocino	Y	N	2	15	District 3 identified as a good candidate. Many homes within the District were destroyed in the fire, so they have lost customers and therefore revenue.	Evaluation of sustainable path forward for operations with current reduced revenue and demand.
Big Rock C.S.D.	Del Norte	Y	Y	2	14	Aging and outdated treatment and distribution system infrastructure in need of upgrades and replacements	Treatment system upgrades, distribution system replacements.
Gasquet C.S.D.	Del Norte	N	Y	2	14	District 1 identified as a good candidate. Aging treatment and distribution system in need of updates and replacements- 48 year old redwood tank that is leaking	Storage tank replacement
Dorris, City Of (Water)	Siskiyou	Y	Y	2	13	Identified as a good candidate by District 1. Needs funding for meters for commercial service lines.	Installing new meters

**Table 6.1 Top Ranked Water Systems for IRWMP Technical Assistance**

System Name	County	Survey(s) Completed		County Rank	Total Points	Ranking Justification	Potential Project
		2014	2018				
Valley Ford Water Association	Sonoma	Y	N	3	18	Identified as a good candidate by District 18. Nitrate and E. coli in water	Biological cultural report for plan to connect to new well.
Yulupa Mutual Water Company	Sonoma	Y	Y	4	17	Inadequate storage due to failure of old tank. System includes unmetered connections	New water meters, possible new water tank
South Cloverdale Water Company	Sonoma	N	Y	4	17	District 18 identified as a good candidate. Unreliable water source - insufficient capacity during drought 2014.	Consolidation study/intertie with City of Cloverdale.
Indian Creek Trailer Park (Water)	Trinity	Y	Y	3	16	District 1 identified as a good candidate. In need of generator and new infiltration gallery.	Consolidation study/intertie with Weaverville CSD or new infiltration gallery
Magic Mountain Mutual Water Company	Sonoma	N	N	6	15	District 18 identified as a good candidate. E.coli MCL violation. In need of 4-log virus inactivation treatment upgrades	Upgrade treatment to meet 4-log virus inactivation.
Weaverville C.S.D.	Trinity	Y	Y	4	14	District 1 identified as a good candidate. In need of new clarifiers	Treatment plant upgrade-clarifiers
West Water Company (Puc)	Sonoma	Y	Y	7	14	District 18 identified as a good candidate. Need new water tank and water main.	New water tank and water main replacement project

Notes:

1. Journey’s End Mobile Home Park – currently getting help from Burbank Housing and based on conversations with District 18, this project may not be ready to go for this round of funding.
2. Shasta View Heights Association – should simultaneously consider other potential consolidations with Yreka, including Juniper Creek Estates and Cove Mobile Villas, which were both also identified good candidates by District 1.



**Table 6.2 Top Ranked Wastewater Systems for IRWMP Technical Assistance**

System Name	County	Survey(s) Completed		County Rank	Total Points	Ranking Justification	Potential Project
		2014	2018				
Blue Lake, City Of (Wastewater)	Humboldt	Y	Y	1	12	Identified as a good candidate by NCRWQCB. Interested in alternative energy systems.	Energy efficiency/ alternative energy study/project.
Lake Shastina C.S.D (Wastewater)	Siskiyou	N	Y	1	12	Working on planning grants for upgrades/repairs of sewer system. Need help finding/applying for funding to continue	Sewer system upgrades and repairs.
Del Norte County Community Service Area	Del Norte	Y	N	1	10	Identified as a good candidate by NCRWQCB. They have over 15 old lift stations in need of upgrade or replacement.	Lift station replacement
Covelo C.S.D.	Mendocino	Y	Y	1	4	Moderate repairs of collection system needed.	Collection system repairs.
Hopland Public Utility District (Wastewater)	Mendocino	Y	N	1	4	Under order from CA Regional Water Board to conduct monitoring for their percolation pond. They are currently non-compliant.	Identify locations and implement monitoring wells for their percolation pond.
Mendocino City C.S.D. (Wastewater)	Mendocino	Y	Y	1	4	Ocean outfall needs to be replaced	Ocean outfall replacement.
Ukiah, City Of (Wastewater)	Mendocino	Y	Y	1	4	Not meeting discharge permit requirements	Treatment system upgrades.
Weaverville S.D.	Trinity	Y	N	1	7	Identified as a good candidate by NCRWQCB.	Treatment system/collection system upgrades.
<del>Geyserville Sanitation Zone (SCWA)</del>	<del>Sonoma</del>	<del>Y</del>	<del>Y</del>	<del>1</del>	<del>7</del>	<del>Lack of DAC WWTPs in Sonoma County</del>	<del>Wastewater System Energy Optimization</del>

Appendix J. NCRP Technical Assistance Rankings

Table 6.2 Top Ranked Wastewater Systems for IRWMP Technical Assistance

System Name	County	Survey(s) Completed		County Rank	Total Points	Ranking Justification	Potential Project
		2014	2018				
Newell County Water District (Wastewater)	Modoc	N	N	1	5	Identified as a good candidate by NCRWQCB.	Surveys/NCRWQCB provided no indication of specific potential project.
Montague, City Of (Wastewater)	Siskiyou	Y	N	2	11	Identified as a good candidate by NCRWQCB. Recent lawsuit cleaned out their funds.	Treatment system upgrades.
Redway C.S.D. (Wastewater)	Humboldt	Y	N	2	11	Sewer mains in need of replacement.	Sewer main replacement
Miranda C.S.D. (Wastewater)	Humboldt	Y	Y	2	11	Identified as a good candidate by NCRWQCB.	Piping/infrastructure replacement
Crescent City, City Of (Wastewater)	Del Norte	Y	N	2	8	WWTP has had trouble meeting effluent limits for TSS and TRC. They are in the process of fulfilling a compliance project.	Assistance in meeting compliance project goals. Treatment upgrades.
<del>Airport/Larkfield/Wikiup Sanitation Zone (SCWA)</del>	<del>Sonoma</del>	<del>Y</del>	<del>N</del>	<del>2</del>	<del>6</del>	<del>Lack of DAC WWTPs in Sonoma County</del>	<del>Surveys/NCRWQCB provided no indication of specific potential project.</del>
City Of Rohnert Park (Wastewater)	Sonoma	N	Y	2	6	Lack of DAC WWTPs in Sonoma County	Surveys/NCRWQCB provided no indication of specific potential project.
Cloverdale, City Of (Wastewater)	Sonoma	N	Y	2	6	Lack of DAC WWTPs in Sonoma County	Surveys/NCRWQCB provided no indication of specific potential project.
<del>Occidental County Sanitation District (SCWA)</del>	<del>Sonoma</del>	<del>Y</del>	<del>N</del>	<del>2</del>	<del>6</del>	<del>Lack of DAC WWTPs in Sonoma County</del>	<del>Surveys/NCRWQCB provided no indication of specific potential project.</del>

**Table 6.2 Top Ranked Wastewater Systems for IRWMP Technical Assistance**

System Name	County	Survey(s) Completed		County Rank	Total Points	Ranking Justification	Potential Project
		2014	2018				
Sea Ranch Sanitation Zone (SCWA)	Sonoma	Y	N	2	6	Lack of DAC WWTPs in Sonoma County	Surveys/NCRWQCB provided no indication of specific potential project.
Lewiston C.S.D. (Wastewater) <sup>1</sup>	Trinity	N	Y	2	5	At the time of the 2018 survey, they were in need of funding to implement SWRCB and CWSRF capital improvement projects.	After receiving \$17 million in funding, unclear what projects may be remaining.
Dorris, City Of (Wastewater)	Siskiyou	Y	Y	3	9	Identified as a good candidate by NCRWQCB. Sewer lift stations are failing.	Sewer lift station replacements.
Fieldbrook Glendale C.S.D. (Wastewater)	Humboldt	Y	N	4	9	DAC wastewater service area, with High inflow and infiltration resulting in high treatment costs.	Address Inflow and Infiltration into the Sewer Collection System

Notes:

1. Lewiston Community Services District includes the recently consolidated Lewiston Park Mutual Water Company and Trinity Dam Mobile Home Park. And, although they have recently received significant funding, there were no other wastewater systems within Trinity County that had any points, except for the higher ranking Weaverville Sanitary District.

## **7. Recommendations**

Given the amount of funding available (\$5,000 - \$15,000 per system), GHD expects that approximately twenty (20) DAC water and wastewater systems in the North Coast region will be able to be helped by this first allocation of technical assistance. To assure the distribution of technical assistance throughout the seven (7) counties within the region and to provide assistance to both water and wastewater systems, GHD recommends that these twenty (20) systems include the two highest-ranking water systems and the single highest-ranking wastewater system for each county (omitting wastewater systems from Sonoma County managed by Sonoma County Water Agency (SCWA), per SCWA direction). Although it is clear that both water and wastewater systems in the North Coast region are in need of technical assistance, the water systems in the region appear to have a slightly greater need, not only per the evaluation criteria used in the rankings, but also per discussions with the NCRWQCB and DDW Districts 1, 3 and 18. Therefore, GHD recommends this 2/3 water and 1/3 wastewater distribution approach.

Technical Assistance for North Coast Tribes will be selected through a subsequent process led by the North Coast Tribal Representatives and the Tribal Engagement Coordinator, CIEA.

## **8. Next Steps**

1. The Ad Hoc Committee reviews the Technical Recommendations and considers approval of the above recommendation, modifications to be made to the list and/or direction for process improvement.
2. GHD works with West Coast Watershed (WCW) to implement the technical assistance direction of the Ad Hoc Committee through subcontracts with engineering firms approved by the ad hoc committee in the fall of 2017.
3. WCW and GHD will send out an email to the systems that will be offered technical assistance committee through this allocation.
4. Within a week of the email, GHD will call each system to discuss and confirm their need for technical assistance. GHD will also gather additional information on the potential project during these calls.
5. If through these discussions, it is discovered that a system is no longer in need of technical assistance, GHD will call and make the offer of technical assistance to the next highest-ranking system on the list within the same county.