



**MOUNTAIN COUNTIES FUNDING AREA
INTEGRATED REGIONAL WATER MANAGEMENT
DISADVANTAGED COMMUNITY INVOLVEMENT
PROGRAM**

**COMMUNITY WELL-BEING & WATER AND
WASTEWATER NEEDS ASSESSMENTS
FOR
UPPER FEATHER RIVER IRWM**

*Prepared by the Sierra Institute for Community and Environment &
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CHAPTER 1. EXECUTIVE SUMMARY

As part of California’s Proposition 1 funding for water supply, distribution, and infrastructure, all Funding Areas in the state received funds through the Disadvantaged Community Involvement program. In the Mountain Counties Funding Area, a portion of these funds were allocated to assess the capacity, socioeconomic status, well-being, and water/wastewater needs of communities throughout the region. These assessments utilized data from the U.S. Census Bureau, community meetings, focus groups, and surveys of water service providers. Community assessments were conducted by Sierra Institute for Community and Environment; assessments of water concerns and needs of water purveyors were conducted by Sierra Water Workgroup.

Most of the Upper Feather River IRWM area is classified as “disadvantaged” or “severely disadvantaged” by the Department of Water Resource, based on median household income. This metric, however, bears little correlation to other ways of assessing communities. The community capacity and socioeconomic status assessments reveal several persistent challenges shared by many communities throughout the Upper Feather River and the Sierra more widely, largely related to the combination of poverty, low population density, and decaying infrastructure. Communities in the Upper Feather River span a wide range of socioeconomic status and community well-being, and on the whole have relatively low community capacity. The western portion of the IRWM (the foothills) scored particularly low, even before the Camp Fire. Notably, many water service providers throughout the entire IRWM area (such as many Community Service Districts) are challenged by lack of funds to hire staff and fund infrastructure maintenance, and lack the capacity to secure outside resources. As the Camp Fire made horrifyingly clear, wildfire is a very significant threat to most of the IRWM, and most communities lack sufficient water storage and/or water pressure to fight fires effectively.

CHAPTER 2. INTRODUCTION

Coupled with state bond funding, Integrated Regional Water Management (IRWM) planning groups have significantly altered watershed management in California. Propositions 50 and 84 brought planning and implementation funds that were critically needed to address water-related issues in supply, quality and the environment. As these programs continued statewide, there emerged a growing gap between funded activities that addressed traditional water

management problems and those that addressed the needs of disadvantaged communities (DACs).

On November 4, 2014, California voters approved Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act. Proposition 1 authorized \$510 million in IRWM funding to 12 hydrologic region-based Funding Areas. That \$510 million was divided based on population, with the result that the Mountain Counties Funding Area – which includes Upper Feather River IRWM and much of the Sierra Nevada – received the least money of any Funding Area despite providing up to 60% of the developed water in the state. Prior to allocating the implementation funds, each Funding Area is required to implement a Disadvantaged Community Involvement Program, a program designed to ensure the involvement of DACs in IRWM planning efforts and close the gap of funded activities across a spectrum of communities.

The purpose of this report is to address that requirement and support Integrated Regional Water Management efforts in continuing to integrate and address the needs of DAC and Tribal communities within IRWMs. This report will: 1) build upon the 2016 IRWM Plan’s identification of regional priority issues and challenges for DACs; 2) provide community assessments that may be more meaningful than DWR’s simple determination of “disadvantaged” status based on income; 3) document the water and wastewater needs and challenges within the Upper Feather IRWM; 4) document the technical assistance needs and requests for each IRWM; and 5) provide recommendations for how to benefit DACs and Tribes moving forward.

CHAPTER 3. BACKGROUND

The DAC Involvement Program, authorized by Proposition 1, allocated \$1.3 million over three years to the Mountain Counties Funding Area for the purpose of supporting and expanding involvement of disadvantaged communities, economically distressed areas (EDAs), Tribes, and underrepresented communities in IRWM planning efforts. Activities included in the Disadvantaged Community Involvement Program include funding for education, outreach and engagement, facilitation, technical assistance, site assessment, and project planning. Needs assessments to understand water related issues in the community are also required.

There are 10 IRWM regions in the Mountain Counties Funding Area, each with its own Regional Water Management Group (RWMG) of the same name. They include:

- *American River Basin* (chose not to participate in the MCFA for Prop 1 funding)

-
- Cosumnes-American-Bear-Yuba
 - Madera
 - Mokelumne-Amador-Calaveras
 - North Sacramento Valley
 - Southern Sierra
 - Tuolumne-Stanislaus
 - Upper Feather River
 - Yosemite-Mariposa
 - Yuba County

overlap, and they may choose to enter into formal agreements with other IRWMs sharing jurisdiction in order to improve coordination.

The MCFA Disadvantaged Community Involvement Program includes the following objectives:

1. Work collaboratively to involve DACs, community-based organizations, Tribes and stakeholders in IRWM planning efforts to ensure balanced access and opportunity for participation in the IRWM activities.
2. Increase the understanding of, and where necessary, identify water management needs of DACs and Tribes across the Funding Area.
3. Develop strategies and long-term solutions to address identified DAC and tribal water management needs.

In 2016, the MCFA DAC Coordinating Committee, which consisted of representatives from the nine participating IRWMs, participated in an open collaborative process to develop a Request for Proposals for implementing the DAC Involvement Program. A year later, the Sierra Institute for Community and Environment (Sierra Institute) was selected as the applicant for the MCFA DAC (and Tribal) Involvement Program¹. The grant was executed November 2017.

The Sierra Institute, with guidance from the MCFA DAC Coordinating Committee, created a four-pronged approach for the DACI Program: 1) project management and grant administration, 2) identification, outreach and engagement of DACs and Tribes, 3) community capacity and needs assessment, and 4) technical assistance and capacity building.

Identification and assessment of disadvantaged, underserved, and low capacity communities through community capacity assessment and multiple socioeconomic indicators was a starting point to gain a more complete view of community well-being. Outreach and engagement of Tribes occurred concurrently, with California Indian Environmental Alliance (CIEA) leading the first year and Tribal Consultant Trina Cunningham taking a lead in the second year of the program.

The benefit of this approach to DAC identification is the creation of a methodology that can be replicated so that communities are not excluded from funding based only on a single economic

¹ Though Proposition 1 and DWR laid out the requirement for a “Disadvantaged Community Involvement Program,” the MCFA has typically referred to its program as the “Disadvantaged Community and Tribal Involvement Program” in an effort to acknowledge that Tribes may not be disadvantaged by the same standards as other communities but should also be better included in IRWM planning and management activities.

or environmental indicator, and so that the capability of communities to address local needs can also be considered. For the purposes of Proposition 1 funding, DWR defines “disadvantaged community” as an entity (Census tract, Census block group, or Census place) with a median household income less than 80% of California’s overall median household income. Reliance on a single indicator using census data can skew results in areas with low populations and does not fully account for unincorporated communities. Median household income (MHI) estimates in these areas often have a margin of error exceeding 100%. As a result, large portions of rural counties, like those in the MCFA, are excluded from funding that benefits DACs, even though most of the region is disadvantaged in some way, whether by poverty, limited capacity, vulnerability to natural disasters, or distance from resources.

Community Capacity and Water/Wastewater Needs Assessment Workshops

A two-part series of workshops was held throughout the MCFA in 2018 and 2019. Part one of the workshop series assessed community capacity and part two assessed water/wastewater specific needs.

To assess community capacity, Sierra Institute first needed to identify communities. Using U.S. Census block groups, the smallest unit for which there is reliable and consistent demographic data, the approach ensured inclusion of dispersed populations throughout the region.

Sierra Institute followed the steps below for Community Capacity Workshops in each IRWM:

- Conducted a preliminary mapping exercise to identify communities in each IRWM (results shared and finalized at the workshops)
- Hosted Community Capacity Workshops with community members that could speak to the capacity of several communities in the IRWM. Those community members first reviewed preliminary maps and refined community delineations, then evaluated the physical, economic, human, social, and cultural capital of each of the communities they knew best, and debated overall scores for each community.
- Finalized a report of capacity measures and narrative assessments of communities in all IRWMs in the MCFA

In addition to facilitating community capacity assessment, the community maps were subsequently used to gather U.S. Census data on five different aspects of socioeconomic status, which were then aggregated into a single socioeconomic status score. Merging community capacity and socioeconomic status allowed us to designate a relative Community Well-Being score to each community. These Community Well-Being scores serve as an alternative metric for determining “disadvantaged” status.

Part two of the workshop series was coordinated and facilitated by the Sierra Water Workgroup to address water/wastewater needs. The Sierra Water Workgroup (SWWG), which has worked with Sierra IRWMs for over ten years, was contracted by the Sierra Institute to fulfill Objective 2: *Identify the water management needs of DACs in each IRWM in the Funding Area*. The SWWG took the following steps to fulfill this objective:

- Conducted preliminary water and wastewater needs assessment survey
- Facilitated one Water/Wastewater Workshop in each IRWM (with the exception of Cosumnes-American-Bear-Yuba (CABY), which had 3 due to its size and population)
- Provided outreach and follow-up with water purveyors and other stakeholders on critical water issues and technical assistance needs
- Finalized DAC Water and Wastewater Needs Assessment for IRWM regions

CHAPTER 4. COMMUNITY ASSESSMENTS

For the purposes of Prop 1 funding, DWR defines “disadvantaged communities” (DACs) based solely on median household income (MHI). To qualify as disadvantaged, a Census tract, Census block group, or Census place must have a MHI below 80% of California’s statewide average. To be “severely disadvantaged,” an area must average less than 60% of the statewide average. To count as an “economically distressed area” (EDA), a status that brings with it certain lesser advantages in qualifying for Proposition 1 funding, a community must meet the following criteria:

1. Be a municipality of less than 20,000 people, a reasonably isolated and divisible segment of less than 20,000 people of a larger municipality, OR within an officially designated rural county;
2. Have a MHI less than 85% of California’s statewide MHI
3. Be experiencing financial hardship (e.g. residential water/wastewater rate exceeds 1.5% of area’s MHI), have an unemployment rate at least 2 percentage points higher than California’s statewide average, OR have low population density (≤ 100 people/mi²)

As discussed previously, the reliance on MHI presents several limitations, including a high margin of error in the statistics and the tendency for a pocket of wealthy residents to numerically obscure nearby areas of poverty. Furthermore, MHI is not necessarily a good indicator of capacity to respond to challenges such as wildfires, failing infrastructure, or water quantity/quality issues.

An alternative tool that some other state agencies use for determining community needs, CalEnviroScreen, combines public health and socioeconomic indicators with environmental metrics. Due to the formula used in CalEnviroScreen, rural communities in the Sierra often have relatively high scores (meaning a low pollution burden) despite significant challenges with poverty, unemployment, failing infrastructure, fire risk, low political support or representation, low organizational capacity, and sometimes a history of recent devastating wildfires that have caused a constellation of problems that makes them as severely distressed as many communities that statistically qualify as such.

Sierra Institute employed a combination of two community assessments that avoid the pitfalls of both MHI and CalEnviroScreen: a community capacity assessment based on the knowledge of community residents regarding the capacity of their communities to tackle problems, and a quantitative socioeconomic assessment based on five metrics drawn from U.S. Census Bureau statistics. Both of these assessment methods have relatively low correlation with simple MHI, with CalEnviroScreen, or with each other, indicating that they represent fundamentally different community attributes. Another way of understanding their important differences is that the socioeconomic assessment is a multi-component metric that provides a static measure of socioeconomic condition, while capacity is composed of five types of dynamic community attributes that collectively represent a community's ability to respond to resident needs and internal and external stressors. The two multi-item measures assess different dimensions of overall community well-being.

Community Capacity

Methods

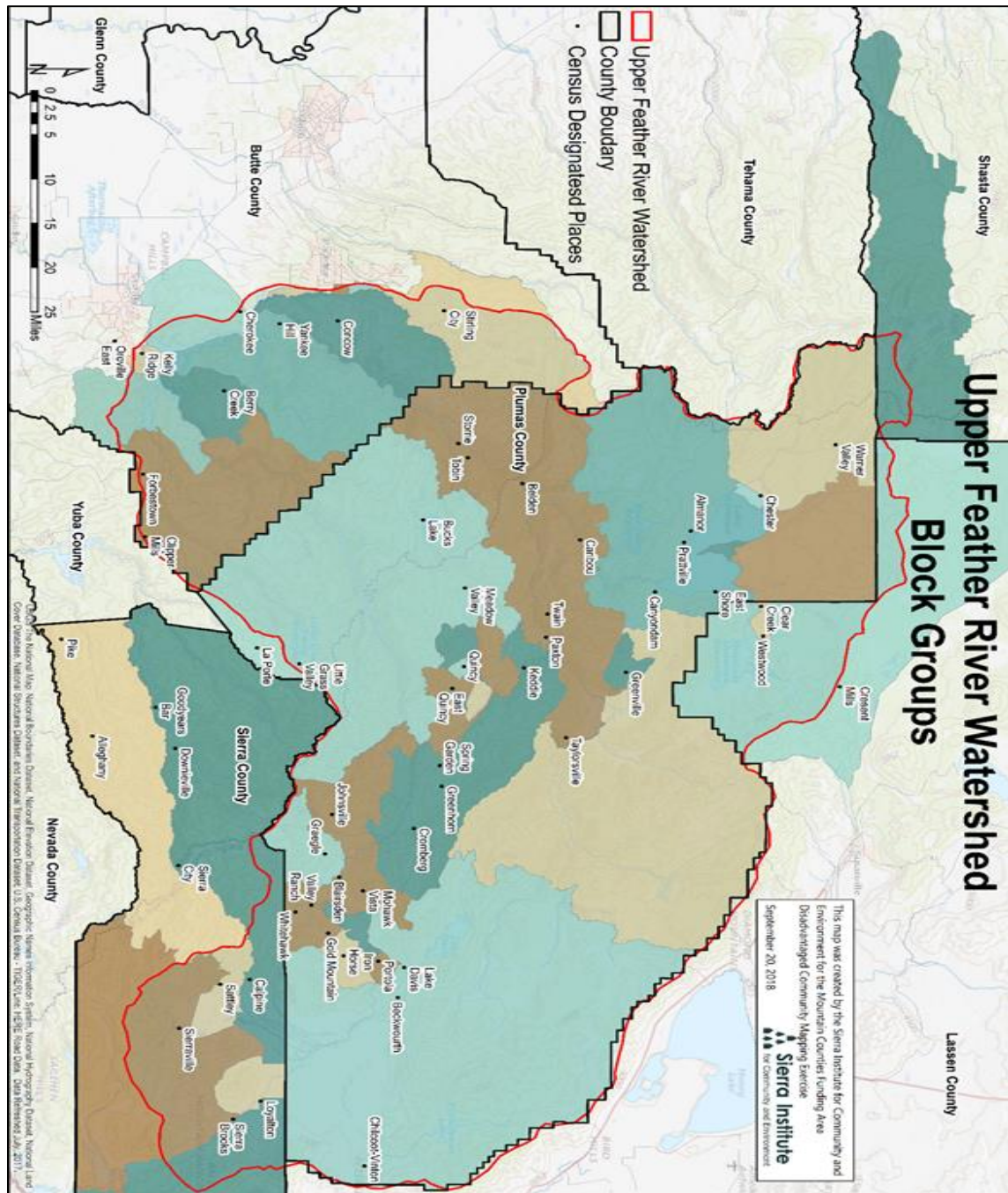
Step 1: Block Group Data- Mapping Exercise

As part of an approach to identifying DACs, Sierra Institute first conducted a community mapping exercise involving county planners and local experts in order to delineate communities in the Mountain Counties Funding Area. The purpose of the exercise is to identify communities based on Census block group boundaries and social characteristics.

Sierra Institute first identified communities using block groups, which are an aggregation of U.S. Census Bureau blocks, and are the smallest unit for which there are reliable and consistent demographic data (Map 2). The use of block groups allowed for inclusion of the entire dispersed population across the regions. MCFA residents and local experts then aggregated adjacent block groups to create community units based on local knowledge of social process, economic activities, and administrative boundaries. Factors used for community delineation

included common service centers, regular social and economic interactions, and/or shared social characteristics, geographic features, school systems and community service districts. Block groups were never split into smaller units to preserve data integrity. Identified community size varied, with borders spanning the size of a single block group, multiple block groups, and sometimes even crossing watershed and/or county boundaries.

Exercise participants then named the communities resulting from the block group aggregations. A single name was occasionally sufficient for aggregated block groups but in a number of instances, two, three, and on occasion, even four names in conjunction were needed to capture the key population centers represented.



Map 2. Block groups in the Upper Feather River IRWM

Step 2: Community Capacity Assessment Workshop

The Upper Feather River IRWM region was the pilot for the community capacity workshops. On March 30th 2018 at the Plumas County Fairgrounds in Quincy, thirteen participants attended the workshop, each bringing deep knowledge of several communities in the region, and with

some, like Planning Department staff, holding some knowledge of many communities. After the Disadvantaged Community Involvement Program was explained, the group was presented a draft map of communities in the region that was informed by local knowledge from county planners and other local experts involved in previous community capacity assessment work for the Sierra Nevada Ecosystem Project (1996). Through small and large group discussions, alterations were made to the names of two communities, and two additional communities were merged into one after the group decided that the communities, though socially and culturally different, share a similar sense of place and depend on similar local resources.

Final Communities Identified During Workshop

- Blairsden/ Johnsville/ Whitehawk/ Clio
- Chester
- Cromberg/ Greenhorn
- East Shore/ Lake Almanor West/ Prattville
- Graeagle/ Plumas Eureka
- Indian and Genesee Valleys
- Lake Almanor Peninsula/ North Shore/ Hamilton Branch
- Meadow Valley/ Bucks Lake
- Portola/ Delleker
- Quincy
- Taylorsville/ Crescent Mills/ Feather River Canyon
- Westwood/ Clear Creek

Upper Feather River IRWM also includes areas of overlap with the North Sacramento Valley (Butte County) and Cosumnes-American-Bear-Yuba (Sierra County) IRWMs, and those areas were discussed in community capacity workshops for those IRWMs - North Sacramento Valley workshop (October 24th, 2018 in Oroville) and the Sierra County (part of CABY) workshop (March 18th, 2019 in Sierraville), respectively. The communities identified through those workshops that fall within the Upper Feather River are as follows:

Butte County:

- Stirling City/ Upper Concow
- Yankee Hill/ Lower Concow
- Feather Falls/ Forbestown
- Paradise/ Magalia
- Butte Valley/ Cherokee
- Berry Creek

Sierra County:

- Oroville
- Calpine/ Downieville/ Sierra City
- Alleghany/ Sattley
- Sierraville
- Loyalton/ Verdi

Following community identification, the facilitator explained the concept of community capacity and the five capitals that collectively form capacity. Once participants had a good grasp of these concepts, they were asked to rate their knowledge of each community on a scale of 1-3 (see Appendix A), and then were assigned communities to assess based on their knowledge ratings so that each community was assessed by at least two individuals with high knowledge of that specific community. Communities in Sierra and Butte Counties were not well represented at the Plumas meeting, so their assessment was postponed for the Sierra County workshop (Mar. 18th, 2019, in Sierraville) as part of the CABY four county workshop series, and the North Sacramento Valley workshop (Oct. 24th, 2018, in Oroville).

Most participants completed surveys for 3-4 communities, evaluating them based on their financial, social, cultural, human, and physical capital and overall capacity (see Appendix B). Results from these surveys were confidential and displayed to the whole group without attribution to prompt further discussion. Participants were encouraged not to identify how they personally scored a community to the rest of the group to facilitate discussion of scores. This was aimed at creating a comfortable and open dialogue to encourage all voices. During the full group discussion, communities were given an overall capacity score based on their assets and deficits across the five capitals and through intensive discussion, with the final score determined by consensus. Once all communities were scored, the scores were reviewed with respect to similar scores and relative to all the other communities, with the group agreeing on final consensus numbers for each community.

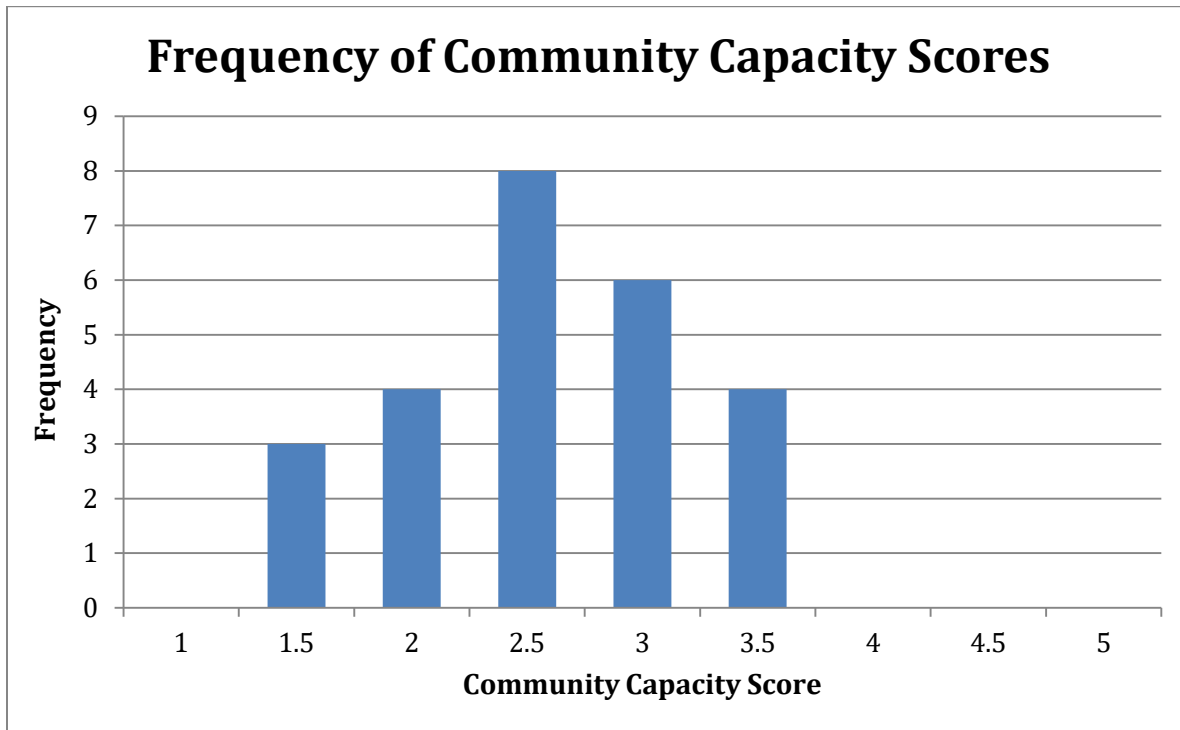
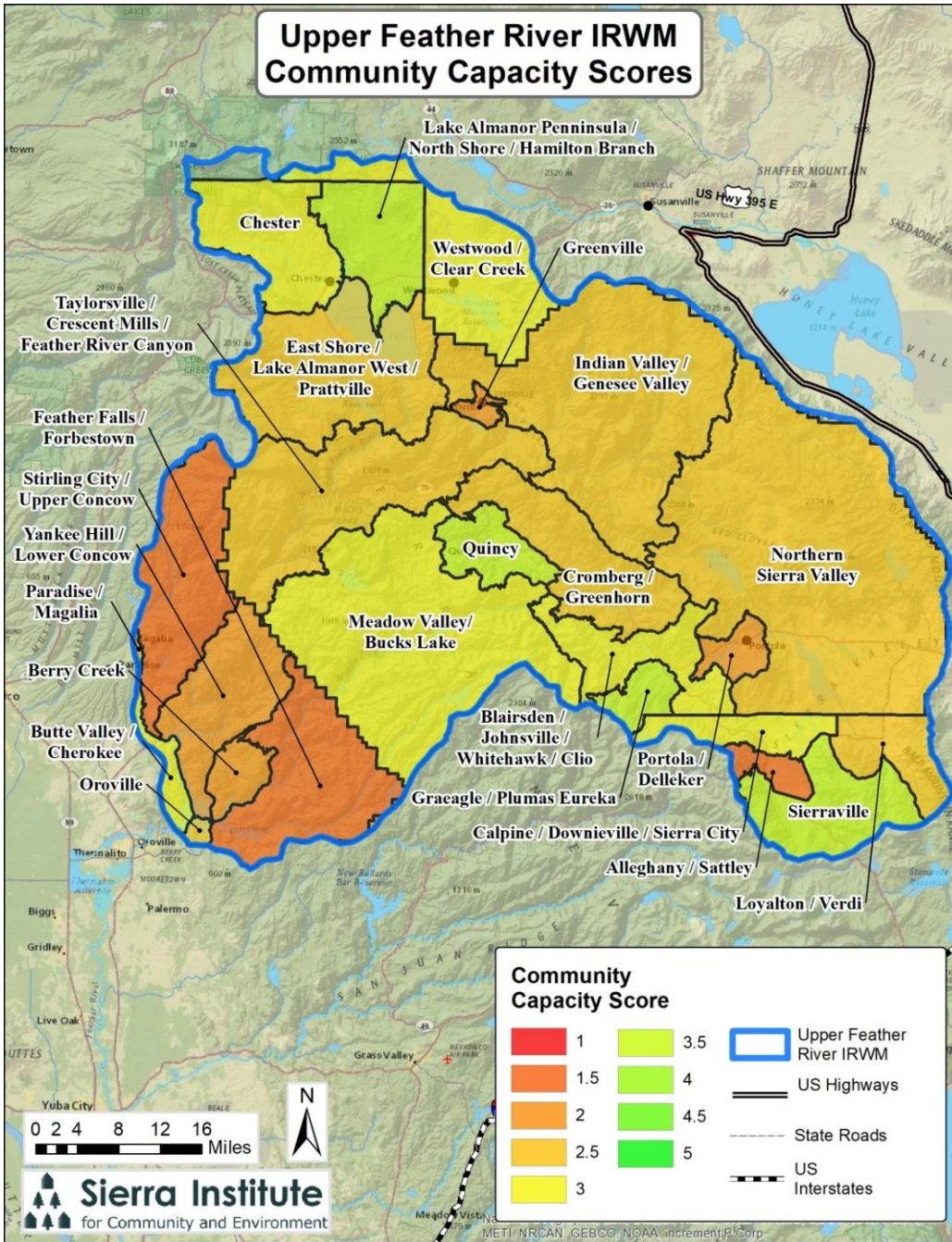


Chart 1: Histogram of Community Capacity scores for the Upper Feather River IRWM

Above is a histogram of all community capacity scores for the Upper Feather River IRWM compiled from the capacity workshops. The histogram shows the overall frequency of each community capacity score, ranging from 1 – 5. Upper Feather River IRWM Community Capacity scores are generally normally distributed, though this distribution is shifted towards lower scores, with all communities scoring in the 1.5-3.5 range and a score of 2.5 being the most common. This distribution of scores somewhat mirrors the overall MCFA Community Capacity distribution, which is also skewed towards lower scores. The Community Capacity scores in the Upper Feather River IRWM reflect the rural, sparsely populated areas that are common throughout the IRWM.



Map 3. Community Capacity scores for the Upper Feather River IRWM

Socioeconomic Status

The socioeconomic assessment used data collected at the level of Census block groups that was aggregated into the same communities identified through the Community Capacity Workshop

process. Data were drawn from the American Community Survey of the U.S. Census Bureau. Six categories were selected and analyzed to produce an overall socioeconomic score:

- Housing Tenure – Proportion of housing in community that is occupied by the owner vs. rented. Housing tenure is suggestive of the relative wealth and permanence of residents in an area and offers an insight into the degree of local control over housing resources.
- Poverty Status – Proportion of residents with income below the annual income poverty threshold, calculated by family size, as well as the relative intensity of poverty of those individuals.
- Education Level – Measure of residents' (25 years and older) overall education level, with higher education producing a higher score
- Employment – Proportion of residents in the labor workforce who are currently employed
- Public Assistance – Proportion of children eligible for free and reduced-price school lunches

Community scores within each of the five categories were relativized across the MCFA before the five scores for each community were combined to create an overall composite score. The composite scores for all communities across the MCFA were then divided into seven categories, with 1 being the lowest and 7 being the highest. The distribution of communities across the categories follows an approximately normal distribution, with the majority of communities falling in the middle of the spectrum.

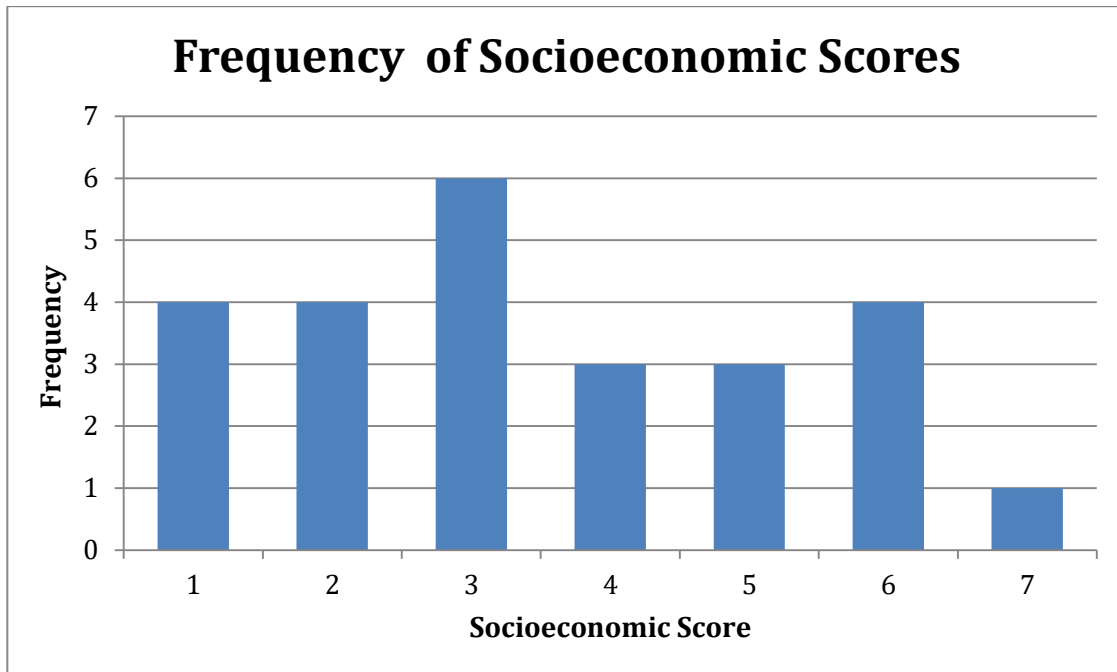
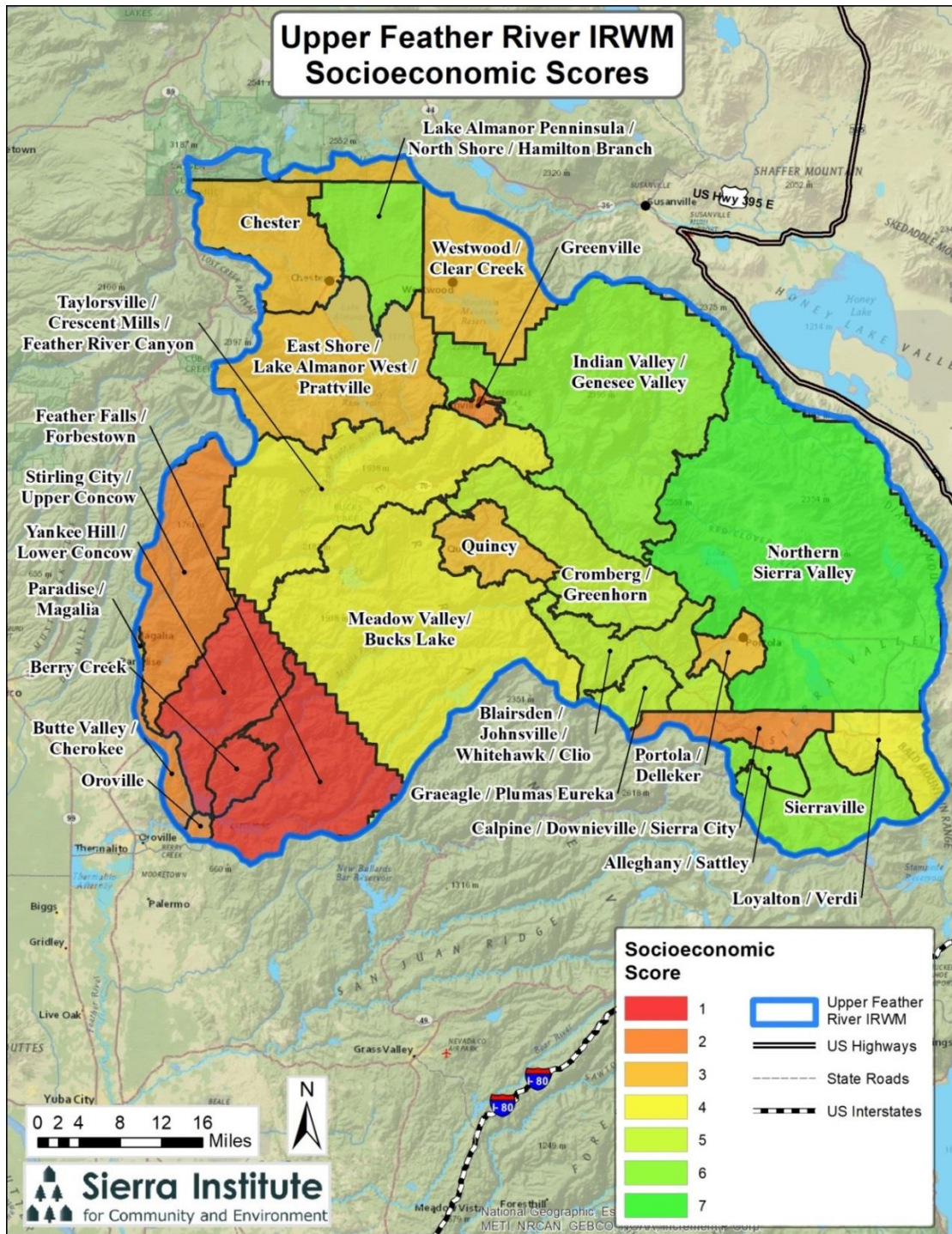


Chart 2. Histogram of Socioeconomic Status scores for Upper Feather River IRWM

The distribution of MCFA communities across the 7 Socioeconomic Status scores follows an approximate normal distribution, with the majority of communities falling in the middle of the spectrum with a most common score of 4. Upper Feather River IRWM communities do not follow this approximate normal distribution. Upper Feather River IRWM communities are skewed towards lower scores, with 3 being the most common score and almost double the number of communities falling into the lower half of the scores (1-3) versus the upper half (5-7) (Chart 2). In general, MCFA communities score similarly in both Socioeconomic Status and Community Capacity scores. This relationship does not always hold true though. For example, there are many cases where poor communities can still possess great capacity to pull together during tough times or to accomplish community projects. Conversely, there are communities possessing a large number of vacation homeowners who are only present seasonally raise the median household income for an area and thus, the Socioeconomic Status for an area, but are not present to assist with community projects or be active in the communities at all, resulting in lower Community Capacity. This last case could be the explanation for several communities in the Upper Feather River IRWM, such as Northern Sierra Valley and Indian Valley/ Genesee Valley, which exhibit medium Community Capacity but higher Socioeconomic Status scores (Map 4).



Map 4. Socioeconomic Status scores for communities in the Upper Feather River IRWM

There is a wide range of community Socioeconomic Status scores across the UFR, with the Northern Sierra Valley as the highest scoring community with a 7 of 7, and Indian Valley/Genesee Valley scoring a 6 of 7. Interestingly, Northern Sierra Valley also counts as

“disadvantaged” and Indian Valley/Genesee Valley as “severely disadvantaged” under DWR’s standards. There are two reasons for how this can occur. One is that Socioeconomic Status scores include factors that DWR does not account for and which relate to, but do not closely correlate with, median household income (MHI), such as housing tenure and education. The second reason is because of how DWR calculates MHI by geographic area, with “disadvantaged status” being affected by the spatial scale at which MHI data is available and the MHI of surrounding communities. This second reason will be discussed in-depth in the “DWR Disadvantaged Classification” section.

It is worth noting that the data for the Socioeconomic Status assessment comes primarily from 2016, two years before the Camp Fire burned through eastern Butte County and the town of Paradise. The low socioeconomic scores for that area, then, reflect conditions that are not the result of wildfire, and underscore the combined challenges the area now faces due to both wildfire and longstanding impoverishment.

Community Well-Being

Community Well-Being levels were created by combining Community Capacity and Socioeconomic Status scores. Communities that had low scores in both attributes were assigned a Community Well-Being score of Low, and communities with high scores in both categories received a score of High. Communities with Medium-Low and Medium-High scores were those that had either middling scores in both categories or had significant differences between their Community Capacity and Socioeconomic Status scores.

As discussed above, Community Capacity and Socioeconomic Status measure different dimensions of well-being, and so combining them into a single Community Well-Being score deserves some explanation. Community Capacity is a measure of a whole community’s ability to respond to internal and external stressors, overcome obstacles, and take advantage of opportunities (or create opportunities) for improvement. Socioeconomic Status is a composite of attributes primarily at the individual household level. When a community is affected by an adverse event (fire, economic recession, water shortages), individuals with higher socioeconomic status are better able to avoid the worst effects and/or to recover more quickly.

Community Well-Being									
Community Capacity Score	5						1		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #008000; margin-bottom: 5px;"></div> High <div style="width: 15px; height: 15px; background-color: #90EE90; margin-bottom: 5px;"></div> Medium-High <div style="width: 15px; height: 15px; background-color: #FFD700; margin-bottom: 5px;"></div> Medium-Low (Disadvantaged) <div style="width: 15px; height: 15px; background-color: #FF0000; margin-bottom: 5px;"></div> Low (Severely Disadvantaged) </div>
	4.5					1		1	
	4	2	2	3	4	4	1	2	
	3.5	1	4	7	7	8	5		
	3	1	6	11	12	10	8	1	
	2.5	1	2	9	4	4	4	1	
	2	5	3	4	9	3	1		
	1.5	1	3	2		2	1		
	1			1					
	0	1	2	3	4	5	6	7	
	Socioeconomic Score								

Table 1. A matrix of Community Capacity scores and Socioeconomic Status scores for the entire Mountain Counties Funding Area. This table shows both how each combination of scores was assigned an overall Community Well-Being score and how many communities within the entire MCFA received each combination of scores, as indicated by the number in each box. A Well-Being score of Low can be interpreted as “severely disadvantaged,” while a score of Medium-Low can be interpreted as “disadvantaged.”

In communities like Northern Sierra Valley, where Socioeconomic Status is high but Community Capacity is low, individual households within the region may pull through tough times but the community as a whole is less able to address challenges and therefore is more likely to be adversely affected, such as by the loss of already limited businesses or services.

To put the Community Well-Being scores into the language of Prop 1, “disadvantaged” and “severely disadvantaged” status can be viewed through the lens of capacity *or* socioeconomic status, the latter of which is more in line with DWR’s definition based solely on median household income. Additionally, “disadvantaged” may be viewed as a combination of both Community Capacity and Socioeconomic Status, which was done in the Sierra Nevada Ecosystem Study (1996). When combining the two, a score of Medium-Low would constitute “disadvantaged” status, while a Low score would constitute “severely disadvantaged” status. The difference between this approach and use of median household income is considerable, as can be seen by comparing the different metrics in Table 2 (p. 20-21).

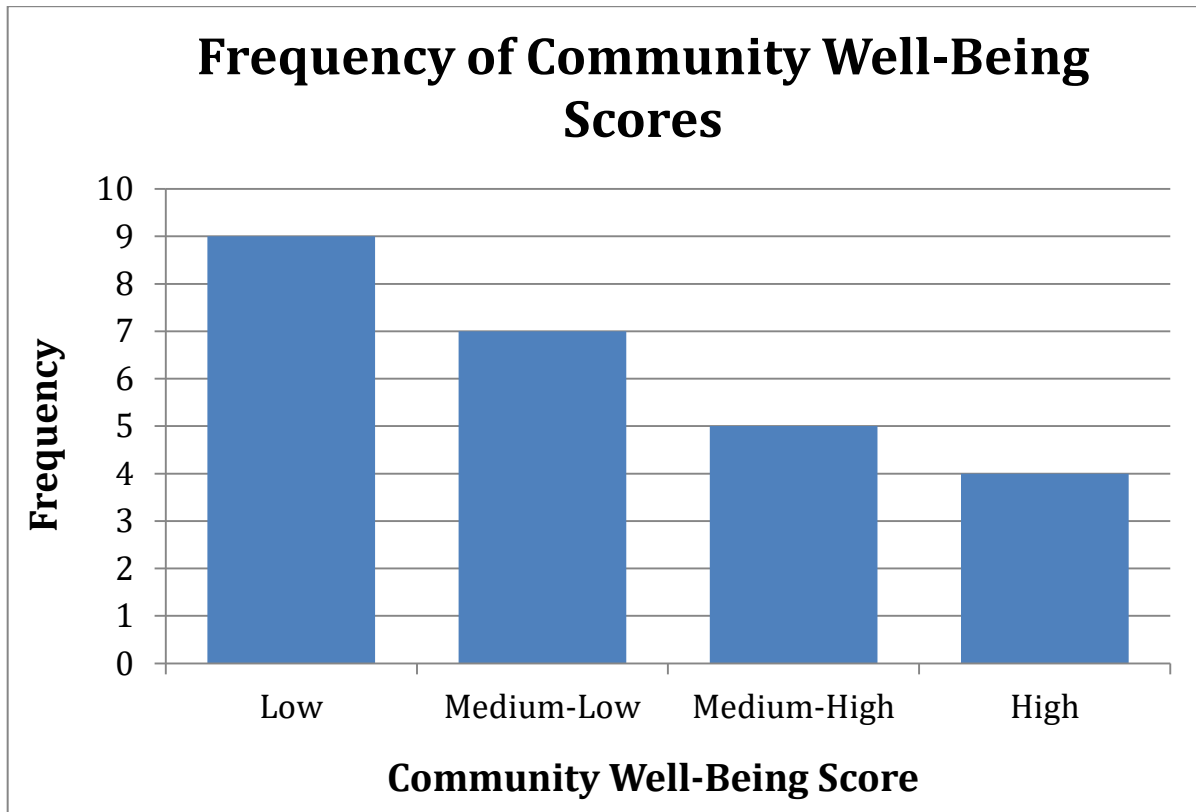
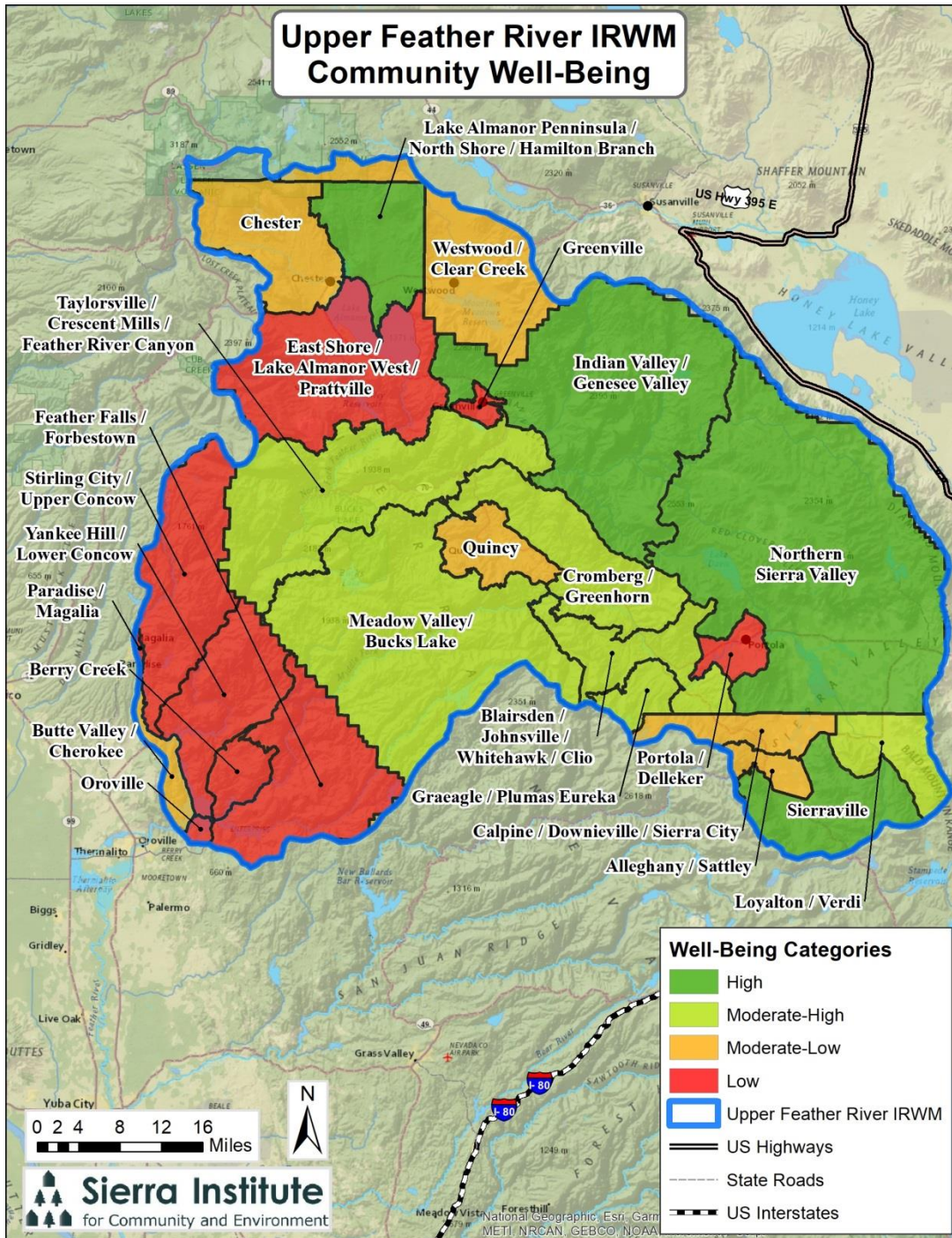


Chart 3. Histogram of Community Well-Being scores for Upper Feather River IRWM

As a result of the number of lower Community Capacity and Socioeconomic Status communities, The Upper Feather IRWM skews towards lower overall Well-Being, with “low” being the most common Well-Being score (Chart 3). From Table 1, above, note that this distribution of Well-Being scores fits within the rest of the MCFA, where Well-Being trends towards “low” and “medium-low”, showcasing the need for assistance across the MCFA.



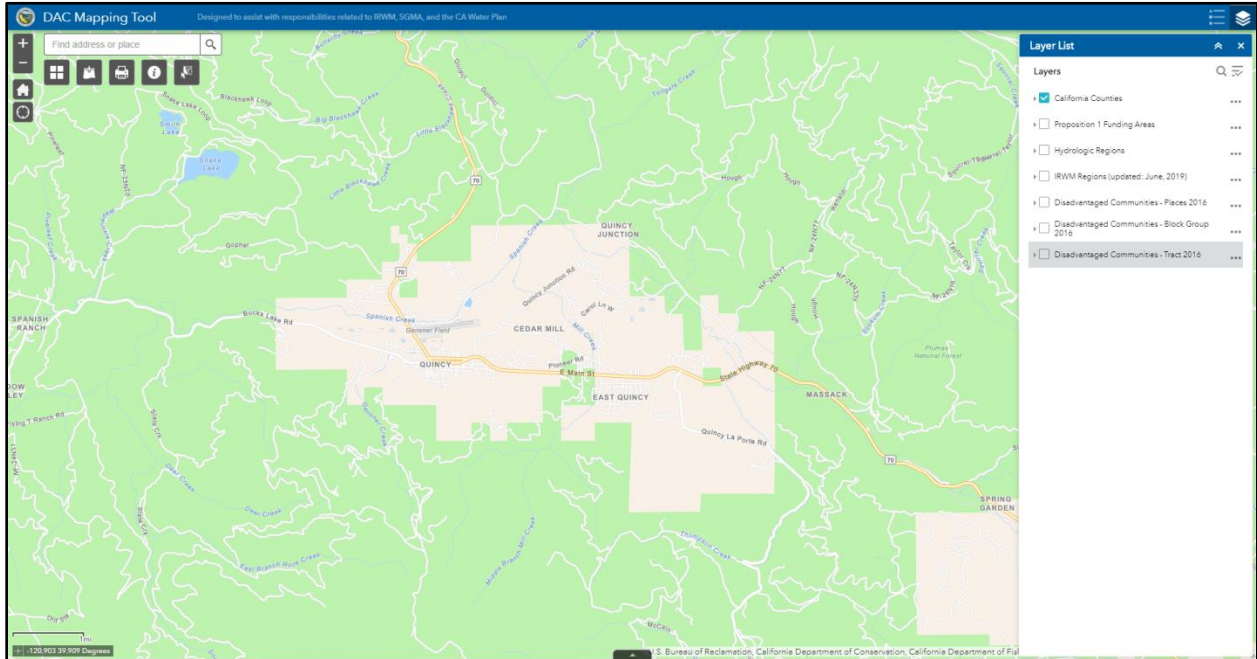
Map 5. Community Well-Being scores for the Upper Feather River IRWM. Note preponderance of low scoring communities in the southwestern portion of the IRWM.

DWR Disadvantaged Status

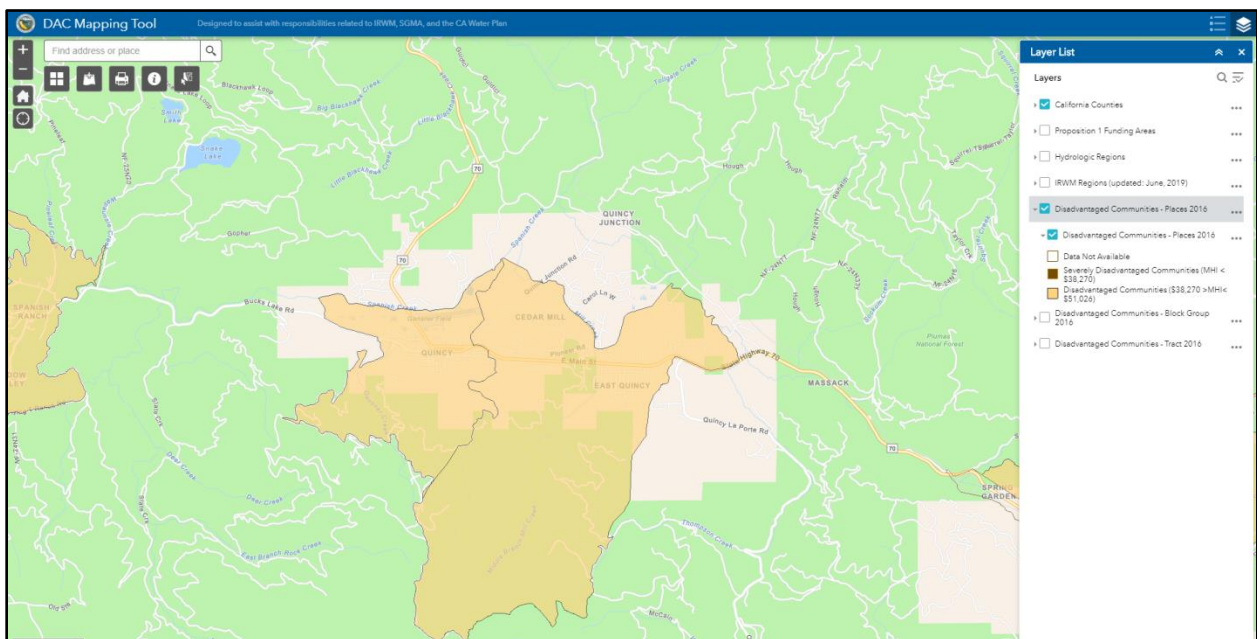
Some communities have multiple DWR designations because DWR uses U.S. Census data from three different geographic scales to determine “disadvantaged” status: Census tracts, Census block groups, and Census places. Tracts are the largest Census area designation and contain multiple block groups; block groups are smaller than tracts and more specific, while census places are typically small areas and cover only concentrated population centers (including both incorporated towns and unincorporated Census Designated Places). Census data at each of these geographic scales can be seen on DWR’s DAC Mapping Tool online. To count as “disadvantaged” for the purposes of DWR funding, a community only needs to be listed as “disadvantaged” under any one of the three scales, but many communities are included in more than one (e.g., Northern Sierra Valley).

A community’s disadvantaged classification can vary greatly depending on which geographic scale of Census data is used. While both Census tracts and block groups are statistical areas covering the entire United States, it is worth noting that for some sparsely populated rural areas, which are commonplace in the MCFA, the U.S. Census does not have median household income (MHI) data available at the finer block group or place scale due to an inability to acquire a large enough sample size. In these cases, only coarser-scale tract data is available. This can help or hurt a community’s ability to qualify as “disadvantaged”. As an example of the negative impacts, at the larger Census tract scale, poorer communities in one block group area may be masked by the wealth of the communities in neighboring Census block areas and within the same Census tract, thus raising the MHI of the entire Census tract and precluding disadvantaged designation by DWR for all communities in that Census tract. This masking can also work conversely to benefit areas, where a community whose MHI is not low enough to qualify or whose MHI data is missing at the block group scale could still qualify as “disadvantaged” at the tract scale due to data being available for poorer neighboring block groups within the same Census tract, which lowers the overall MHI for the area. For example, when relying on Census block groups, Northern Sierra Valley is not disadvantaged and Indian Valley/Genesee Valley lacks sufficient data to report outcomes. Census tract data, however, include a larger area, resulting in the MHI for Northern Sierra Valley being averaged with Portola and Delleker. Because the population for Northern Sierra Valley is so low, the overall median household income for the Census tract is lower, and consequently fits the DWR definition of “disadvantaged.” Similarly, using census tracts, Indian Valley/Genesee Valley, with a small population, is lumped in with Greenville and Taylorsville/Crescent Mills/Feather River Canyon and together they have an average median income that qualifies the area as “severely

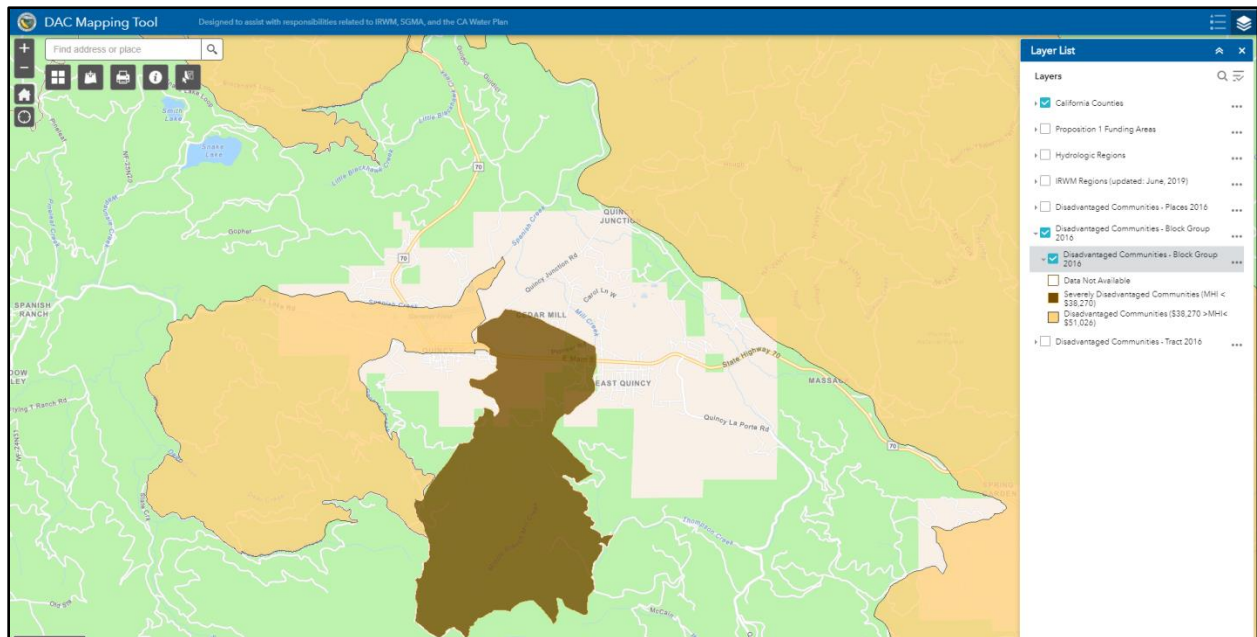
disadvantaged.” Hence, the spatial unit of analysis used to calculate MHI can make a huge difference regarding whether a community qualifies as “disadvantaged” or not.



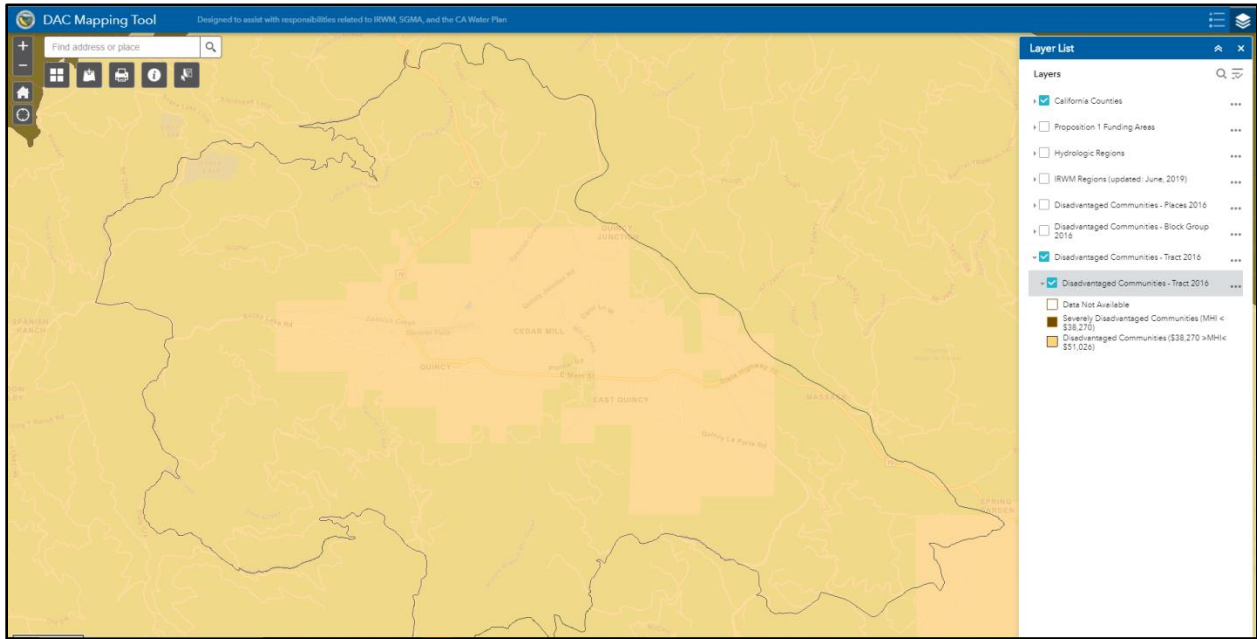
Map 6. Above is a screenshot of the unincorporated town of Quincy in the Upper Feather River IRWM displayed using DWR’s DAC Mapping Tool. No “Disadvantaged Communities” layers are currently checked on the tool.



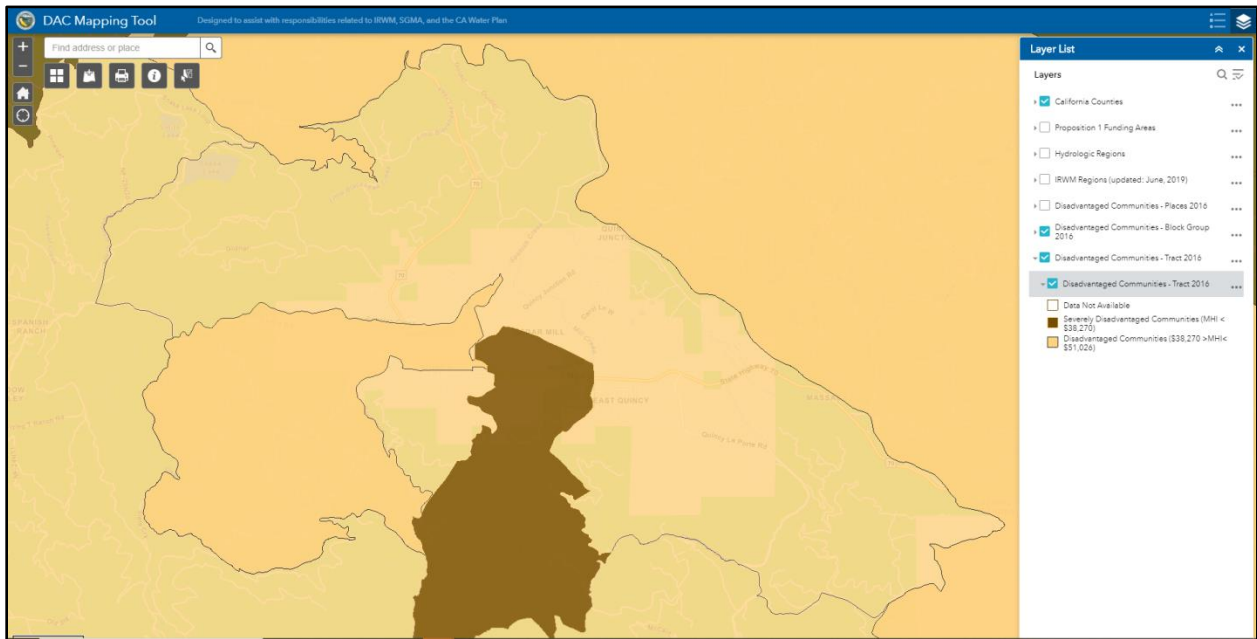
Map 7. A screenshot of Quincy on the DAC Mapping Tool with the “Disadvantaged Communities - Places 2016” layer (Census-designated places and incorporated areas) checked and turned on. Quincy is split into two Census-designated places, Quincy and East Quincy, both of which are listed as disadvantaged by Median Household Income (as noted in light brown). Additionally, more areas around Quincy are now listed as disadvantaged.



Map 8. A screenshot of Quincy on the DAC Mapping Tool with the “Disadvantaged Communities - Block Group 2016” layer checked and turned on. One can see that the Quincy area has both a “disadvantaged” block group (light brown) AND a “severely disadvantaged” block group (dark brown) when looking at MHI on a smaller scale.



Map 9. A screenshot of Quincy on the DAC Mapping Tool with the “Disadvantaged Communities - Tract 2016” layer checked and turned on. One can see that all of the MHI nuances from looking at block groups are masked by the MHI of the entire census tract. The overall “disadvantaged” designation of the Census tracts inside and outside of Quincy obscures the block groups that individually would not qualify or would qualify as “severely disadvantaged.”



Map 10. A screenshot of Quincy on the DAC Mapping Tool with both the “Disadvantaged Communities - Tract 2016” and “Disadvantaged Communities - Block Group 2016” layers checked and turned on. When both the Census tract and Census block group layers are turned on in the DAC Mapping Tool, one can see that the Quincy community is mixed between “disadvantaged” (light brown) and “severely disadvantaged” (dark brown), while outside of Quincy is “disadvantaged.” Looking at the composite of multiple disadvantaged communities layers is vital to capturing all available data.

Comparative Assessment Results

It is helpful to see all of the assessment metrics side-by-side for each community – Community Capacity, Socioeconomic Status, Community Well-Being, and DWR’s “disadvantaged”/ “severely disadvantaged” status. Because of the visual confusion caused by the overlap of the three census data scales as described above, we are not including a map of DWR “disadvantaged”/ “severely disadvantaged” status in this report. Instead, we list whether a community qualifies as either “disadvantaged”, “severely disadvantaged”, or has mixed status areas. If an area qualifies for multiple statuses, the greatest disadvantaged status is listed. All of the assessment metrics are listed in Table 2, below.

Communities	Community Capacity	Socioeconomic Status	Community Well-Being	DWR Disadvantaged Status (by either Census Block Group or Census Tract)
Graeagle/ Plumas Eureka	3.5	5	Medium-High	None
Lake Almanor Peninsula/ North Shore/ Hamilton Branch	3.5	6	High	None
Quincy	3.5	3	Medium-Low	Mix: Disadvantaged and Severely Disadvantaged
Westwood/Clear Creek	3	3	Medium-Low	Mix: Disadvantaged and Severely Disadvantaged
Blairsdon/ Johnsville/ Whitehawk/ Clio	3	5	Medium-High	None
Chester	3	3	Medium-Low	Disadvantaged

Meadow Valley/Bucks Lake	3	4	Medium-Low	None
Cromberg/ Greenhorn	2.5	5	Medium-High	Disadvantaged
East Shore/ Lake Almanor West/ Prattville	2.5	3	Low	None
Taylorville/ Crescent Mills/ Feather River Canyon	2.5	4	Medium-High	Severely Disadvantaged
Indian Valley/ Genesee Valleys	2.5	6	High	Severely Disadvantaged
Northern Sierra Valley	2.5	7	High	Disadvantaged
Greenville	2	2	Low	Severely Disadvantaged
Portola/ Delleker	2	3	Low	Mix: Disadvantaged and Severely Disadvantaged
Butte Valley/ Cherokee	3	2	Medium-Low	Disadvantaged
Paradise/ Magalia	2.5	3	Low	Disadvantaged
Oroville	2.5	2	Low	Disadvantaged
Yankee Hill/ Lower Concow	2	1	Low	Severely Disadvantaged
Berry Creek	2	1	Low	Severely Disadvantaged
Stirling City/ Upper Concow	1.5	1	Low	Mix: Disadvantaged and Severely Disadvantaged
Feather Falls/ Forbestown	1.5	1	Low	Severely Disadvantaged
Sierraville	3.5	6	High	Disadvantaged
Calpine/ Downieville/ Sierra City	3	2	Medium-Low	Disadvantaged
Loyalton/ Verdi	2.5	4	Medium-High	Disadvantaged
Alleghany/ Sattley	1.5	6	Medium-Low	Disadvantaged

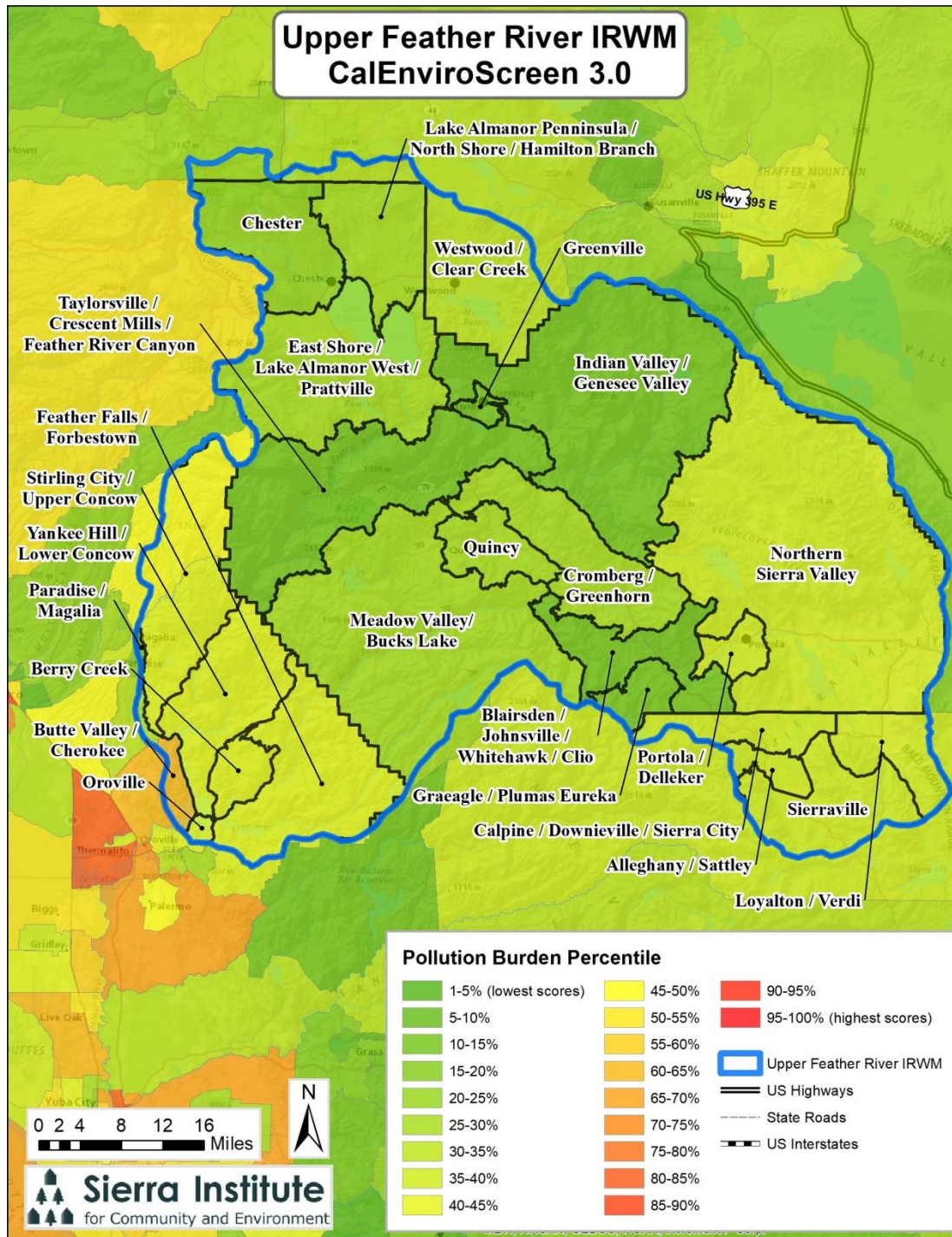
Table 2. All communities within the Upper Feather River IRWM as identified through community workshops. For the DWR Disadvantaged status, communities are listed as “severely disadvantaged” and/or “disadvantaged” if they are designated as such in *either* the Census tract, Census block group, or Census place layers on DWR’s online DAC Mapping Tool. A particular community may be listed as “disadvantaged” by one metric but not by another; Northern Sierra Valley, for instance, is listed as “severely disadvantaged” according to Census tract but is not designated for any disadvantaged status when using the Census block group layer.

CalEnviroScreen vs. Community Well-Being

CalEnviroScreen is a tool created by the California Office of Health Hazard Assessment to determine the pollution burden of communities. The tool incorporates numerous environmental quality indicators (e.g. air quality, traffic density, groundwater threats) with public health and socioeconomic data that relate to pollution vulnerability. The integrated tool is meant to capture both the degree of pollution exposure a particular community has and the vulnerability to that exposure. The CalEnviroScreen tool was used by the California Environmental Protection Agency (CalEPA) to designate communities as “disadvantaged” for the purpose of allocating funds from the Greenhouse Gas Reduction Fund, and is used for similar purposes by other agencies.

Statewide, the communities with the highest pollution burden according to CalEnviroScreen are all located in the Central Valley, urban areas, or in the state’s southeast corner. There are no high-scoring or disadvantaged communities in rural mountainous areas. Environmental pollution burdens in general are low because, as the thinking goes, mountainous areas typically have lower levels of air, soil, and water pollution as a whole. But this is not always the case and underscores a deeply problematic and fundamental flaw in an otherwise robust CalEnviroScreen tool.

Rural forest communities that struggle with low socioeconomic conditions including those with pollution burdens do not qualify as disadvantaged under the CalEnviroScreen because they lack air quality or water pollution measurement equipment common in Central Valley and urban communities. Episodic smoke events from wildfire can result in extremely dangerous air quality for weeks on end in forest communities along with localized water pollution sources from fire and old mines that present serious contamination and pollution burdens. Lack of measures for constituent air, water and soil pollution are treated as if there are no pollution burdens. This is a fundamental methodological flaw of CalEnviroScreen for constructing a disadvantaged community scale that include forest communities. For these reasons, along with others, CalEnviroScreen is an inappropriate tool to evaluate disadvantaged status for rural forest communities, and it is particularly problematic given that considerable state funding is based on this tool.



Map 11. CalEnviroScreen scores for the Upper Feather River IRWM and surrounding area. Note that there are no high scoring communities in the mountains.

Furthermore, CalEnviroScreen does not reflect a community's capacity to address problems, such as wildfire risk or aging water infrastructure. There is no obvious connection between

pollution burden and local ability to apply for and receive grant funds to improve local water infrastructure, for example. The alternative assessment methods described here are important for demonstrating a type of community need that is entirely absent from the CalEnviroScreen tool.

CHAPTER 5. WATER/WASTEWATER ISSUES OF CONCERN

On March 30, 2018, the Sierra Water Workgroup conducted a Water and Wastewater Workshop in the Upper Feather River Integrated Regional Water Management area (UFR IRWM). The workshop was the first of many to be held in the Mountain Counties Funding Area (MCFA). The purpose of the workshops was to identify the water management needs of DACs and Tribes in the MCFA. Water purveyors, wastewater service providers, local government officials, Tribal representatives and other interested stakeholders attended.

Prior to the workshop, extensive outreach was done to identify all water and wastewater service providers in the UFR IRWM. Through cross referencing lists from the California State Water Resources Control Board and the Department of Water Resources, the T-Stan IRWM was found to have 229 water and wastewater service providers, with 79 (34%) of those in areas designated as disadvantaged. Of those providers in disadvantaged communities, 27 (34%) of those are residential, 20 (25%) are businesses, and 32 (41%) are other. Representatives of these aforementioned water and wastewater organizations, neighborhood groups and other interested parties were encouraged to attend and participate in the Water and Wastewater Workshop.

In addition, a survey (Appendix C) was sent to all identified water and wastewater service providers to initially understand the challenges facing the purveyors and their needs for technical assistance. Sixteen surveys were completed. The results of the survey indicated the topics of concern in the UFR, prioritized based on responses, include:

- Aging infrastructure
- Staffing and/or Training
- Regulatory Compliance
- Drinking Water Supply
- Water Quality
- Wastewater Treatment Systems

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- Fire Suppression Water Supply
 - Storage and Operations
 - Water Conservation
 - Water Pressure

NOTE: The topics of concern identified in the surveys and their priority, as well as the topics discussed at the workshop, may or may not be the same as those stated in the UFR IRWM Plan. The survey and workshop were open to anyone whether they participated in the UFR IMWM or not.

Workshop attendees reviewed the survey results and then identified and discussed additional water and wastewater issues of concern for Disadvantaged Communities. They also identified and discussed their technical assistance needs. Although some regional issues are already discussed in the Upper Feather River IRWM Plan 2016, the list below recognizes those existing issues, provides additional detail, and identifies new issues of concern.

Existing issues

➤ Aging Infrastructure

Aging infrastructure is a prevalent problem throughout the UFR IRWM. As noted in the UFR IRWM Plan 2016, many water districts are old and do not have the revenue to fix or upgrade their system to regulatory standards.

- Failing Water Pumps - Commercial water well pumps and irrigation pumps have a lifespan dependent upon operation and maintenance. Failing pumps are a serious concern for water purveyors in this region.
- Water Leaks – Water leaks for potable supply can reduce conservation goals and increase costs to the water purveyor and/or their customers. Although irrigation inefficiencies were discussed in the 2016 Plan, potable water supply leaks have been identified as a significant issue.
- Upgrades – State and Federal regulatory mandates require upgrades to stay in compliance. Many purveyors were hesitant to admit whether they do/or do not meet regulatory requirements. Not upgrading water and wastewater facilities can be hazardous to human health and safety.

➤ Inadequate storage

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- Need New Storage - The region requires more storage and conveyance to meet the needs of the growing population and the changes due to climate change. In addition to the storage there was discussion of new conveyance systems required to meet the flow needs.
 - Additional or Deeper Wells – With current climate conditions there is a growing concern for additional drinking water supplies. The cost to address alternate water supplies with additional wells or deeper wells is also a concern.
- Insufficient operations and maintenance capacity
- Training – Operational training is expensive and burdensome for the small water purveyors. Many have to travel extensive distances to receive training with little to no money budgeted for this effort. In addition, there is no capacity currently to coordinate training region wide.
- Limited staff and budget
- Staffing – Limited staff and budget is an overarching problem in the rural areas of the Sierra region. However, not meeting administrative, operational or regulatory requirements is not acceptable to UFR communities. Stakeholders in this region are struggling to staff certified operator positions to meet their regulatory requirements, and individuals are often performing multiple jobs in one position.
- Financial strain of meeting regulatory requirements
- Reporting Requirements – In combination with the issues listed above, small service districts lack the revenue to meet the regulatory reporting requirements. The difficulty in raising utility rates are compounded in rural areas. The stakeholders in the UFR expressed their frustration with the inability to keep up with regulatory requirements and changes.
 - Data Management –There is a lack of data on water and wastewater monitoring requirements. This is primarily due to the financial costs and staffing.
- Water Quality
- Arsenic, Iron, Manganese and Uranium – Although these water quality parameters are discussed in the 2016 Plan, the small water providers in the UFR reiterated their concern with toxic impact to customers and the costs to treat these contaminants.

New Issues

➤ Water Conservation

- Drought Plan – There is no coordinated drought plan for the water purveyors in the UFR Region. Climate change models predict less snowpack, more flooding and extended dry periods. Drought contingency plans are required for essentially all water purveyors as part of California AB 1668 but many purveyors in the UFR lack the capacity to draft these plans.
- Metering – Although there are a number of DAC service providers that have water meters, there is still a need to provide meters to the small service providers who attended the workshop. Metering encourages conservation and can be used to identify leaks.

➤ Treatment Systems

- Expense – Wastewater treatment systems are in constant need of repair and upgrade. Leaks can be a health hazard. However, the expense is too great for many of the small water providers.
- Regulatory Compliance – The compliance requirements are too burdensome for the small water providers in the UFR. Regulatory compliance is mandatory, and they need financial and technical assistance.

➤ Fire Suppression Supply

- Storage – The Sierra communities are in extreme danger of wildfire. It is imperative that these communities have substantial water storage to fight fire. The UFR Region does not have enough storage to support extended fire suppression activities.
- Pressure – In many areas, hydrants, if in existence, have inadequate water pressure for use by the CAL FIRE and local fire protection agencies. In addition, there are communities that lack the appropriate size pipe connection to the water tankers.

➤ Water Pressure

- Pressure – Water pressure is low in many communities in the UFR region. Water pressure is required for commercial purposes and often requires the service provider to upgrade pumps and retrofit pipes throughout the area.

CHAPTER 6. TECHNICAL ASSISTANCE NEEDS

While the *UFR IRWM Plan 2016* identifies capacity (staffing, technical expertise, financial, etc.) as a universal need throughout the region, it does not directly address specific technical assistance needs and requests from the stakeholders. Below is information gathered from surveys, workshop and one-on-one conversations. The intent of this section is to identify technical assistance needs for follow-up with stakeholders through the IRWM process.

➤ Engineering and Design

- No Expertise – Many of the small service districts lack staff with expertise in engineering and design. When possible, engineering work is contracted out for project development, which adds to total project costs.
- Funding for Consultants – Because of the lack of local expertise, funding is always required to hire consultants with expertise in engineering and design.

➤ Project Planning and Development

- Staff – Lack of staff is an on-going issue for the rural areas. Project planning requires staff with in-depth knowledge of the region.
- Funding – Funding for project planning and development is also difficult for small service districts with limited technical expertise and staff with too many responsibilities.
- Lack of specific/local expertise – State and Federal regulatory mandates require upgrades to water systems to stay in compliance. Many water purveyors were hesitant to admit whether they do/or do not meet regulatory requirements. Not upgrading water and wastewater facilities can be hazardous to human health and safety.

➤ Grant Writing and Administration

- Grant writers and administrators – In addition to lack of funding, there is a need for staff or consultants to assist organizations with writing grants for DAC projects and for staff or a separate entity to administer the grant. Lack of funding to pay sufficient staff reinforces ongoing low capacity as there is typically little ability to find or

successfully apply for outside grants. Among service districts, in essence, the rich get richer while the poor get poorer.

- Delayed Funding – Because of the small and sometime non-existent funding reserves, small service districts and NGO's need prompt funding to implement projects. Delayed grant funding can devastate the timeline and ability of an agency to implement projects.

➤ Mapping

- Data Management – There are many organizations in the UFR that requested a mapping system to create and store spatial data. This data includes project information, locations of water/wastewater infrastructure, water supply and water quality data.
- System mapping – There are many old water and wastewater system maps that need to be converted to GIS format. There are also inaccurate maps that need correction.
- Staff trained in GIS – There is a concern and need for staff to be trained in GIS software to create informational maps for project reports, grant applications, and internal organizational use.

➤ Regulatory Compliance

- Technical Training – Staff from public agencies and small service districts often do not have the proper training or understanding of complicated state and federal regulatory compliance. There is a desire for cost effective opportunities for staff training, and many entities requested assistance from local organizations in this effort.
- Better Understanding of Compliance Issues – There is a lack of understanding of compliance, violations and application standards. Training is requested.

➤ Environmental Compliance

- Environmental Planners – There is a need for environmental planners to assist organizations with CEQA/NEPA compliance; there is a general lack of expertise and funding.

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- Mitigation Measures – Assistance is requested for implementation of mitigation measures associated with projects in the UFR.

➤ System Operations and Maintenance

- Mitigation Measures – Assistance is requested for implementation of mitigation measures associated with projects in the UFR.

➤ Safety Training

- Safety Training Officer– Safety training officers can be essential for avoiding accidents in the workplace. Training for this position has been requested to oversee multiple organizations.
- Occupational Health and Safety (OSHA) Training – This required training is being requested to help small service providers stay in compliance.

CHAPTER 7. RECOMMENDATIONS

The following recommendations were developed from a combination of work efforts that includes data collected from the Water/Wastewater Workshops, surveys, phone conversations, “Lessons Learned” Conference, and discussions with State/Federal employees. It is our expectation that the RWMG within each IRWM will hold a meeting and discuss these suggested next steps.

1) Recommendations to Address Priority Issues

a. Water Conservation

- Develop a regional drought plan for the water purveyors in the UFR Region. Climate change models predict less snowpack, more flooding, and extended dry periods. Drought contingency planning will soon be required under AB 1668, but small water purveyors often lack the capacity to complete these plans without assistance.

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- Consider a phased approach to continue implementing water meters for communities in the UFR. Not only does this encourage water conservation, it educates and engages stakeholders in water issues across the Sierra.
 - Include new projects to address wastewater treatment systems. These systems are in constant need of repair and upgrade. Leaks can be a health hazard. However, the expense is too great for many of the small water providers.
 - Assist small water purveyors with regulatory compliance requirements. They can be too burdensome for the small water providers in the UFR.

b. Fire Suppression Supply

- New tanks are required for water storage to support fire suppression efforts. The Sierra communities are in extreme danger of wildfire. It is imperative that these communities have substantial water storage to fight fire.
- Address water pressure issues with projects such as the installation of new pumps and retrofitted pipes. In many areas, there is inadequate water pressure for use by the California Department of Forestry and Fire Protection.

2) Technical Assistance

The recommended technical assistance provisions for the UFR IRWM to consider are described below. These recommendations are based upon three coordinated strategies. These strategies are derived from stakeholders participating in the Water/Wastewater Workshops in UFR and across the MCFA, information from the “Lessons Learned Summit,” and SI, SWWG, and Tribal representative team discussions.

a. Information Sharing

- More outreach is required to share information (annual workshops, outreach by phone and field trips) - There are a number of stakeholders within the UFR that do not have any current information on projects being implemented or opportunities for funding or discounted/cheap service provision (e.g. upcoming grants, state and federal programs, such as the Low Income Rate Assistance Program).

b. Education and Training

-
- Coordinate safety classes and training for multiple water districts. Many of these classes are offered at no cost, however they need to be organized and located to the UFR region if possible.
 - Provide regulatory compliance training classes.
 - Provide grant writing classes.
 - Provide coordinated operators training
- c. Technical Support
- Implement a region-wide GIS mapping system.
 - Provide an equipment sharing program
- d. Regional Resource Center
- Work with the Plumas County Community Development Commission to expand services for DAC's and Tribes. This may include professional services such as environmental permitting (CEQA/NEPA), engineering and design, and project planning.
 - Assist in the development of DAC and Tribal projects for the Prop 1, Round 1 & 2 implementation grants. Also identify and submit projects for other grant opportunities.

APPENDIX A COMMUNITY CAPACITY NARRATIVES

Narratives emerged out of discussions during the Community Capacity workshops. Written and verbal descriptions of the communities, and their strengths and weaknesses, were summarized to provide insight into how each of the communities functions. Due to varying levels of expertise at the workshops regarding each of the communities, the narrative descriptions vary widely in the detail they contain.

Region Overall (Upper Feather River IRWM)

Capacity Measure Range: 1 to 3.5

Due to geographic isolation and natural barriers, this region is fragmented. Communities have developed distinct identities and many areas are insular with few interactions beyond their local community. There is a regional mindset that has developed overtime that if one community receives an opportunity, every community in the region must receive the same. There is competition for limited resources leading to condemnation and resulting in a large number of special districts (40-50 for only 20,000 people). Communities are characterized as unwilling to discuss consolidation and common good.

Throughout the region, organizations and communities are struggling with changing demographics with an aging population and young residents moving out of the region in search of employment. Due in part to the rural nature, poverty, demographics, and the decline of industry in the region, no community in the Upper Feather River region has a capacity rated greater than a 3.5.

Blairsdan/ Johnsville/ Whitehawk/ Clio

Capacity Measure: 3

Responses for social, cultural and physical capital varied. The four sub-communities identified in this region all have operating facilities with increasing demands and financial need. All four sub-communities cited challenges in some form of capital. Generally, communities were characterized as having high social capital within their distinct sub-communities (i.e., Blairsdan/Johnsville/Whitehawk/Clio) and tended to cooperate across the four sub-communities; however, social capital is limited by the small number of permanent residents. Seasonal residents' lack of understanding community issues was described by workshop participants, which resulted in lowering the social capital of the region as a whole.

Informants discussed Whitehawk as an upper income community, compared to the other three areas, who may encounter more difficulty in acquiring funds for projects. Whitehawk has a mutual water company and a CSD, Gold Mountain/Clio has a CSD, and Johnsville has a Public Utilities District.

Blairsdon, Johnsville and Clio need to develop capacity to meet the demand for licensed water/wastewater operators and address their aging infrastructure. According to one informant, dependence on an individual expert to manage services and aging infrastructure in an area creates vulnerability- institutional knowledge and expertise needs to be maintained through transitions in personnel and community members.

Chester

Capacity Measure: 3

Workshop participants described Chester as having an “identity as a community,” maintaining a high level of human capital supported by skilled retirees and community experts. However, several informants indicate that while Chester has high human capital, there is an unwillingness to engage and work together for a common goal, indicative of lower social capital. With some poverty, a predominantly low to middle income population, and a handful of wealthy residents, Chester suffers from a declining population in part due to the few workforce opportunities available in the area. One informant described a dichotomy between the timber/working community verses the retired elite. Others described a seasonal population that has not been bought into the community and the challenges in trying to involve community members.

Physical infrastructure concerns included roads in disrepair due to a limited budget for repairs. Fire protection, ambulance service, and streetlights have also faced budgetary problems. With storm occurrences and aging sewage infrastructure, workshop participants voiced concerns related to the proximity of the septic system to the lake. Participants did also acknowledge the Public Utilities District employees as very knowledgeable (human capital), but lacking financial capital.

Cromberg/ Greenhorn

Capacity Measure: 2.5

Participants described Cromberg and Greenhorn as two very different areas. Greenhorn is a summer vacation area and Cromberg is a year-round rural community. No specific challenges and strengths were provided for these communities.

East Shore/ Lake Almanor West/ Prattville

Capacity Measure: 2.5

Community experts separated East Shore from Lake Almanor West and Prattville owing to low financial and physical capitals. East Shores permanent residents have a high average income but capacity on the East Shore is lower than other regions due to poor human and social capital. With the exception of three seasonal RV resorts, the entire 6-mile length of East Shore is private residences with few full time occupants. For nearly 300 homes, the 2010 census identified only 50 year-round residents. By the time of the workshop participants estimated that number to be even lower after deaths and departures without replacements. Because residents are spread out over a 6 mile stretch of State Highway 147, interaction between year round residents is very difficult and extremely limited. Lake Almanor West was considered by workshop participants to have good to excellent infrastructure and an overall higher level of capacity; Prattville was deemed to have marginal infrastructure. The Lake Almanor West area was described as having high levels of human capital among older, retired residents and second home owners. A small group of educated and experienced retirees work together on issues, but are seldom involved outside of this group. Other informants emphasized how second home ownership and summer/vacation properties lead to poor community involvement.

Participants cited an “unwillingness to participate” in HB district meetings, which resulted in a failure of the community to support Prattville’s Fire and Police Department.

Graeagle/ Plumas Eureka

Capacity Measure: 3.5

Graeagle/Plumas Eureka was described as stable, fairly well off, and comprised of 75% snowbirds who reside less than 6 months of the year in the area. Infrastructure is fairly good in the short term, but Graeagle needs a central sewer system. Large infrastructure projects may need to be financed in the future. The community appears to have high social capital indicated by their ability to work together. Nonetheless, public involvement in decision making remains low.

Greenville

Capacity Measure: 2

Greenville received mixed capacity ratings owing to a number of recent factors: the increased effectiveness of the CSD, the 2017 Main Street revitalization project, road improvements and other non- specified improvements with funding received through Proposition 50. Greenville is a center of many services, including a grocery store, bank, pharmacy, schools, and parks. However, many participants reflected how in the earlier years, Greenville had significantly more services, stores, offices (e.g., Forest Service office), and an even an airstrip. Prior to the

revitalization project in Greenville, the community struggled with infrastructure with many improvement projects reliant on volunteers due to a lack of county funding.

While physical infrastructure has improved, workshop participants described a transient population, characterized by residents not invested in the area for the long term. Other concerns include limited public and private financial resources, high levels of welfare, few homeowners, and limited employment opportunities in the town except for businesses that are family-owned and family-staffed. Some of the exodus is likely due to people having to search outside of Greenville for employment as high levels of unemployment plagues the area.

There is a high degree of place-based pride and cultural capital, even across the divergent perspectives with a high level of volunteerism and community participation of some of the more devoted community members. This dovetails with the high level of human capital, specifically knowledge and interest, noted among the older population. There is concern regarding the younger population and their lack of participation in local groups, interests or projects. Many capable youths leave for university and do not return. Social capital has emerged during problematic times such as when schools and hospitals have closed, but participants noted finding solutions has been difficult owing to the diversity of interests.

Social capital is also impacted by racism and tight-knit social circles, according to several workshop participants. There is a perceived difference between people who work in town and those who work out of town, and between those who are retired or unemployed. Other tangible divides in the community are between the public school and charter school, with the public-school losing students to the charter school resulting in less funding allotted to the public school. There is a Native American community that is also perceived as separate. However, as previously noted, during times of need, the community is able to come together despite the differences.

Indian and Genesee Valleys

Capacity Measure: 2.5

Several families have inhabited the area for a long time and are referred to as “locals”. Many of those local families are ranchers and are the “wealth of the valley.” Largely self-sufficient, many ranchers are considered “land wealthy, but money poor,” with the exception of the Palmaz family, owners of much of Genesee Valley. Community experts wonder if the money will spread throughout the community. The family has renovated the Genesee Store with plans to reopen.

There exists a strong cultural bond to place, but some fragmentation within the broader community among ranchers, Tribes, cannabis-growers, and the school divide between charter versus public. There is overlap among the Indian Valley and Genesee Valley, but no common vision. If there is a need to work together, the community has proven able. While the

community is distinct from Greenville, both of the valleys are reliant on Greenville for services (groceries, gas, banking, pharmacy, health clinic).

Volunteerism is strong with community fundraisers for the volunteer fire department, churches, and other community-oriented initiatives, especially among the highly involved older population. The younger generation is thought to lack involvement in local issues.

The CSD has maintained systems, but there is need for improvement and replacement of aging water infrastructure and a struggle to meet that need. Participants cited a high level of unemployment, a limited number of public and private dollars, and a large number of welfare recipients in the area.

Lake Almanor Peninsula/ North Shore/ Hamilton Branch

Capacity Measure: 3.5

Overall the Lake Almanor Peninsula/North Shore/Hamilton Branch was described by community experts as having good infrastructure in terms of water, roads and utility systems and the ability to maintain and improve infrastructure. Some areas, particularly the Lake Almanor Country Club were characterized as having a few multi-millionaire residents that are not present nor invested in the community. However, there is a connection between the Country Club and the greater community because the neighborhood does not have services and is dependent on the surrounding area.

Several participants identified a contrast between the extreme wealth seen in Hamilton Branch and some parts of the Peninsula with their high Median Household Income (MHI) and the poorer residents located in the North Shore and other parts of the Peninsula. The lake serves as the common bond shared among all residents of different socio-economic backgrounds. Overall, there is some variation in cultural and social capital within the community residents, but community experts agree they have an effective CSD and Fire Departments.

Meadow Valley/ Bucks Lake

Capacity Measure: 3

Community experts characterize Meadow Valley and Bucks Lake areas as distinct communities. Meadow Valley has a solid group of residents expressing interest in and working for the community through the volunteer fire department, Meadow Valley schoolhouse, cemetery, church, and social club that's indicative of the strong social cohesion felt among residents. The two areas have a range of financial capacity and services, many provided by individual homeowners.

There are no permanent residents in Bucks Lake. Seasonal residents consist of primarily PG&E and USFS recreational homeowners and are “voracious about their needs.” According to informants, oversight in the area is steady, but uneven with distinct populations of homeowners and visitors. The public works commitment is strong in Bucks Lake and everyone uses a personal septic system and mostly wells.

Northern Sierra Valley

Capacity Measure: 2.5

The Northern Sierra Valley is a ranching community that is highly rural and mostly undeveloped. There isn’t much infrastructure but residents are largely self-sufficient. The community has a ranching culture that, though not unique in the area, identifies as a group. Ranchers in this area tend to take care of their own needs, but can also organize when necessary and are willing to help on specific projects. There are no public funds and a high degree of poverty, though some pockets of wealth exist (e.g., Chilcoot- Vinton). It was noted that residents are “land rich and money poor.

Portola/ Delleker

Capacity Measure: 2

This community has a history tied to the Union Pacific Railroad and logging. Following the decline of those industries, the community has been hit hard economically and socially, losing a shared bond and distinct culture, resulting in many abandoned, brownfields sites and high unemployment. The community has some challenges working together (tension between the haves and the have nots), though one respondent noted a wealth of knowledge and interest in addressing the issues facing the community. Portola is the only incorporated city in Plumas County and as such has some associated institutional capacity but still qualifies for access to public funds allocated to severely disadvantaged communities. Workshop participants described considerable differences between Portola and Delleker, with the latter having less access to funding and resources combined with limited human capital, emphasizing the low capacity of Delleker. Both communities are experiencing severe poverty and infrastructure challenges.

Quincy

Capacity Measure: 3.5

There was agreement among workshop participants that Quincy is one of the highest capacity communities in the region, and participants also noted that individuals from other communities often experience frustration that Quincy seems to receive more resources than other communities from the county. The county seat is situated in Quincy, enhancing the capacity of the community. There are numerous stores, job opportunities, and a “healthy” art scene. Many educated and younger professionals reside in Quincy, especially compared to the rest of the county. Quincy is a like-minded, tight knit community, but there are also many subgroups with a tendency toward cliques. Participants agreed that the capacity of Quincy is strongest during business hours. The town shuts down after 5:00 when government employees make their way home.

Taylorsville/ Crescent Mills/ Feather River Canyon

Capacity Measure: 2.5

There is general agreement that the block group forming this community is the most awkward in the region. Taylorsville and Crescent Mills make more sense as a part of the Indian Valley community and have little in common with the canyon. Participants were unable to discuss this community as a whole, instead noting that Taylorsville has a higher capacity and more year-round employment than other communities in the region. Crescent Mills is comprised of low income but working residents, and the Feather River Canyon has a high transient and unemployed populations. Residents of each sub- community (e.g., Taylorsville, Crescent Mills, Feather River Canyon) tend to stay within their own community and social groups. Respondents also mentioned enormous social divisions within each sub- community, particularly relating to schools (public and charter) in Taylorsville. There are pockets of wealth and talent within the community but low capacity overall. Improvements are needed for schools, sewers, and drinking water.

Westwood/ Clear Creek

Capacity Measure: 3

Westwood/Clear Creek has low financial capital and are unable to meet their infrastructure needs. Residents have low incomes and many job opportunities are seasonal. The water system is compromised and the sewer system has been identified by SWRCB as a problem, with concerns about runoff from sewer ponds. Westwood is not incorporated so it depends on Lassen County for most of its public services and residents feel they are getting the “short end of the stick.” The group praised the high social capital of the community, noting good attendance at meetings and public events, long established residents, strong community leaders, and resources like the Chimney Fund and Family Resource Center. Westwood has a distinct

identity as a company town founded by Red River Lumber Co. Westwood was discussed in relation to Chester, and the group determined that while Westwood has a lower financial capital, the community makes up for it in social capital which ultimately equalizes the two communities' scores.

Berry Creek

Capacity Measure: 2

Berry Creek, Feather Falls/ Forbestown and Yankee Hill/ Lower Concow all operate on the historical boom and bust nature of the foothills and as commonly experienced in natural resource dependent communities. One participant told of how people “sign up for the cyclical wild west experience of community growth and atrophy when they move out to rural areas.” Physical capital is limited by the number of roads and sewers in need of repair. Roads are big challenge in Berry Creek with many unpaved, private roads that the county does not maintain. “Even the main roads don’t get fixed for a long time” mentioned one workshop participant. There is not a main sewer system, the majority of residents draw their water from wells, and residents have their own propane. Conditions for residents could turn dire if wildfire and climate change affect drawing water from wells. Across all communities in the area, there is a lack of capacity to deal with forest thinning along their own home or roads. Many residents prefer a taste of isolation that a rural setting can provide, but are also willing to work together when there is a shared interest.

The large geographic area causes divisions and only a small handful of people consistently participate in the community. Berry Creek has a seasonal summer population that leaves when the weather turns cold. Residents rally around the local fire department and events like Berry Fest. There is a school and a community park that was recently added. Similar to Feather Falls/ Forbestown and Yankee Hill/ Lower Concow, Berry Creeks’ upper foothill community has a “can-do” attitude but struggles with low population and high levels of poverty. Given the location, Berry Creek is often overlooked for public dollars given the location on the edge of Butte County.

Butte Valley/ Cherokee

Capacity Measure: 3

Butte Valley/ Cherokee exemplifies another instance of dichotomous conditions in a single block group aggregation. The area of Butte Valley was described by workshop participants as the wealthiest of the communities in North Sacramento Valley. There is a broad financial base from land rich farmers who have known the land for hundreds of years, to trailer parks to the

middle-class families living on large lots of 5-10 acres. One participant noted however that “it seems that there are often large parcels of land that contain potential community resources but may not be available for meeting local needs.” This area was settled in the gold rush and there are a few very old families on ranches. Residents are proud to live in Butte Valley. The neighborhood around Butte College was reviewed as “...a great place to live, there are no houses for sale and residents don’t want to change it.” The college area is mainly an island unto itself. Each street in Butte Valley seems to be collaborative, with those in immediate proximity talking, but conversation topics only relate to what’s going on in relation to their own street neighborhood.

Most residents pull water from a private well and everyone owns a propane tank. Their electrical system is old and during severe wind storms power poles blow over. Since this community has a low population their needs are low on the repair list. Butte Valley has a fairly strong volunteer fire department. In Cherokee, there’s more unpaved gravel roads and overall capacity is more akin to Berry Creek or Feather Falls/ Forbestown. Community events aren’t common in Cherokee, even the school is more connected to Concow.

Feather Falls/ Forbestown

Capacity Measure: 1.5

As with Berry Creek and Yankee Hill/ Lower Concow, Feather Fall/ Forbestown is an upper foothill community that has a can-do attitude but struggles with low population and poverty. They community has struggled with overgrown forests and the aftermath of wildfire damage. Residents include fixed income retirees with valuable knowledge as well as low income families. Workshop participants attributed a “lack of societal cohesion” to sub groups of residents including families, new retirees, pot growers, homesteaders and some troubled families. There are core community groups such as the local grange and community association, but they are unable to attract high levels of participation. Local fire safe councils from each town have cultivated a relationship with the community over the last ten years, allowing residents to identify where capacity needs exist. Very little opportunity for work exists in the community with most residents traveling “down the hill” for employment. Fire burned down half of the Feather Falls homes in 2017, initiating a yearlong recovery process some of those affected by fire still living in trailers and waiting for electrical hookups. Following the fire, community member came together, but cultural capital faltered as the population dwindled. After the fire in Forbestown, community fundraisers and events sprouted up in support.

Describing physical capital, workshop participants discussed the school in Feather Falls cautioning that “in two years, it’s not going to be there because there are currently about 8

students.” Roads are “okay” but in need of repair and there is not sewer system, residents rely on septic. One participant noted that “Feather falls does not have the water infrastructure... and the age of septic tanks will start causing an issue.” Forbestown does have hydrants, city water from its district and has sufficient escape routes in case of wildfire.

No school exists in Forbestown, instead students are bussed to the nearest town. Road maintenance rarely occurs except for the main road that logging trucks travel. The local general store does not carry all the necessities, so residents travel to Oroville or away on from Butte County on a better road to Marysville for shopping. Participants referred to Forbestown as a bedroom community where the doctors and retirees travel away to spend money and work. Participants concluded that “human capacity is great, but overall capacity is lacking.”

Oroville

Capacity Measure: 2.5

Participants felt like Oroville is a “regional rising star” as long as its political, economic and infrastructure challenges can be solved. The community seems splintered for many reasons: 1) a governance split between city and county; and 2) a divide between urban and rural. Oroville exists as an example of an “octopus” style of urban expansion as the city is incorporating neighborhoods that would benefit the tax base and is excluding poorer areas. This results in pockets of lower income residents situated next to wealthy residents, the unincorporated next to incorporated. Social capital rated as middle of the road, but there is some disconnect within sub-communities and church affiliations separating residents. Some participants went even further, saying residents have a “terrible time coordinating and working together, groups have even changed their names over time...people with common interest can’t work together.” A small number of volunteers appears to do most of the community-oriented work.

Workshop participants cited the spillway as having given the whole community a point to focus on and provide a vehicle for resistance for Tribes and special interest groups.

Workshop participants discussed how many residents live below the poverty line and low levels of home ownership hinder the accumulation of local wealth. “Entrepreneurial pursuits are limited as the entrepreneurial class moves elsewhere for opportunities” noted one participant. Oroville struggles with allocating funds to projects that benefit the entire community and workshop participants attributed this to politically motivated reasons. Participants felt that the city of Oroville, even though it’s the county seat, does not have good access to public funds compared to some other communities in the region. The vacuum of leadership, both among the city and city council, was a common theme throughout the Oroville conversation. Residents have limited knowledge of local government. The city is on the verge of bankruptcy while simultaneously experiencing a problem retaining or recruiting staff that severely limits

addressing local needs. “The area needs management and realignment towards the overall benefit of citizens” summarized one participant.

Infrastructure in Oroville needs repair as “some parts are over 100 years old,” like the antiquated sewer system. Nonetheless, there are three different water purveyors in Oroville, which participants explained is not necessarily beneficial; however, community water needs are generally met. Workshop participants discussed high charges for CalWater service, perceived as “some of the highest rates for water in California,” that “no one can afford”. Water rates have been a divisive issue, partly from lack of public knowledge of operational costs between agencies. With a few pockets of private septic, residents are less vulnerable to drought than the other foothills area that have more reliance on private systems. Over the years, issues with the Department of Water Resources and their lack of funding continue to nettle residents. Oroville offers a number of activities like hiking, white water rafting, mountain bike trails and triathlons. Oroville Lake is now managed for environmental issues, whereas before, its primary purpose centered around recreation and agriculture. A number of mills closed in the recent past and two superfunds sites were established, which is partially why Oroville is listed as disadvantaged on CalEnviron Screen. Participants listed all of the above as contributors “to how hard it is for this area”.

Paradise/ Magalia

*Capacity Measure: 2.5**

**This assessment preceded the 2018 Camp Fire by several weeks.*

Paradise/ Magalia struggles with poverty, fire safety and a lack of infrastructure improvements. Many private and county roads are not well maintained and residents worry about navigating road conditions in the event of a wildfire. Participants felt the community is “ripe” for increased involvement and proactive change Individually, as long as it resolves some issues.

Paradise and Magalia have different cultures and experience unique challenges. Paradise, on the other hand, is an incorporated area that “has capacity built into structure as compared to unincorporated communities that rely on volunteers.” The town’s incorporation sets the tone for community ownership of governance. Nonetheless, Paradise does not have a sewer system and has poorly funded public works. Without sewer, commercial enterprises cannot thrive, and the ones that do operate in Paradise, confront failing septic systems. Road conditions are average to poor and the local school is underfunded. A few infrastructure projects happen each year, yet there is still evidence of deferred maintenance. Paradise remains a retirement community with fixed income intermixed with low income households. The older, active citizenry brings plenty of knowledge and spend time involving themselves in churches and

civic groups.

Magalia is an unincorporated area that was labeled as somewhat of an urban center in Butte County given its 9,000+ population. Residents have not sustained an organized leadership body like a city council or town hall giving way to active but fractured groups that raise money for roads or traffic light maintenance issues. From its former function as a retiree community, Magalia now maintains a huge property association of 3,000 homes. Compared to Paradise's urban status, Magalia's smaller population base doesn't capture much wealth.

A shared identity of "the ridge" exists and a culture that is "certainly unique but seemingly critical with no offered solutions." There is a shift occurring in Paradise towards a more diverse populous as new family arrivals create opportunities for change. Some workshop participants believe the demographic changes have undermined the area's cultural capital. The small-town vibe lends itself to more involvements at neighborhood level. No large institutional presence anchors the town beyond the Feather River hospital. Due to its older population, Paradise faces a financial liability from pension funding that's impacting the local water districts. Paradise's remote location on the ridge means curbed sales tax revenues and other revenue raising mechanisms require voter approval. Overall, Paradise wants to attract more federal, state and private funding. Residents can't afford to remove trees, especially trees larger than 10 DBH, increasing already high fire risk. One participant rated physical capacity as a 2 because of the combined fire and septic challenges, "If there is ever a fire up there lots of people will perish." Water issues divided residents in the past few years even as their water supply is less vulnerable to drought and well unreliability than other communities.

Stirling City/ Upper Concow

Capacity Measure: 1.5

The Stirling City/ Upper Concow community has its own identity and was described as "most town-like of any community" in the North Sacramento Valley region since it actually has a small downtown street grid. Participants lauded Stirling City Clotilde Merlo Park as a "gem" that attracts visitors. Retirees center themselves around the Stirling Historical Museum. Upper Concow was noted as having a good park and pool facilities.

Fire generates a shared interest across the community. Fires have burned over Stirling City, and particularly Upper Concow multiple times. The area lost at least 60 structures, and participants estimated 80,000 to 120,000 acres burned resulting in a mass exodus of residents. Like all rural areas in the upper foothills of Butte County, this community is "tough" and has a "can do attitude," but deals with a sparse population, lack of resources, and poverty. A group of Chico State students attempted surveying the area to properly assess income, but residents would not answer any questions. Physical capital, especially water systems, needs help. An old septic

system in Stirling is failing from root and soil intrusion. Roads, in general, need repair and the school in Stirling closed.

Yankee Hill/ Lower Concow

Capacity Measure: 2

The overall community capacity score is lifted by human, social and cultural capitals in Yankee Hill/ Lower Concow, but falters from physical and financial capital challenges. As in many rural, foothill communities with low populations and low incomes, there exists a self-reliant, can-do attitude. Participants rated this community more engaged than others, despite struggling from lack of funding and services. Residents work together over shared interest like fire, even if there is not much money to accomplish projects. Strong residents run the Yankee Hill Fire Safe Council, work on road maintenance, deal with tree mortality and cultivate a culture of preparedness. There is engagement with the historical society and a few other groups but only a select number of community leaders have emerged and younger member are not joining. One participant described resident interrelationships as “retirees, pot growers, low income families... there’s too many social groups to create inclusion.”

Alleghany/ Sattley

Capacity Measure: 1.5

Workshop participants differentiated between the communities of Alleghany and Sattley. Situated in the hill about 40 miles west, slightly southwest of Sattley, Alleghany was described as a fiercely independent, remote community. As an area previously committed to mining, Alleghany was said to contribute to historical significance and related business opportunities have emerged in the area. Since the closure of mining, participants told of low financial resources in the Alleghany area, with a dependence on the Forest Service, and some property owners cultivating marijuana for economic gain. Residents were described in two manners, those who do not want the government involved with their lives and others living there because they are unable to move. The school in Allegheny is closed, leaving the residents without a community center, garden, or social space for residents to congregated. What remains is two businesses and a bar. Physical infrastructure in “poor, not the best.” Nonetheless, the water district is successfully maintained by volunteers, yet the reliance on volunteers leaves the community vulnerable if something were to occur. Participants noted the high number of volunteers that help to keep county facilities operating. If communities could be separated, workshop participants would designate Alleghany as a 1 for overall community capacity. “We tried to do a grant in Allegheny years ago, everyone qualified, definitely disadvantaged. Even with money in pot, they didn’t want people to come into their homes to fix things.”

Sattley is part of Sierra Valley and offers “a totally opposite conclusion with pastoral scenes and strong agricultural values.” Sattley exhibits a tightly knit community devoted to agricultural uses and “is on the coattails of the agricultural community of Sierra Valley.” Both Alleghany and Sattley have low populations and income levels; however, workshop participants noted that ranchers and other private businesses have more resources and a close tie to the land. Sattley has few employment opportunities and low human capital.

The communities try to pull together, but this is not always possible due to the long distance to travel in-between communities, resulting in two very distinct with little communication.

Calpine/ Downieville/ Sierra City

Capacity Measure: 3

Sierra City and Downieville have many residents with historic ties to the area. The residents of the community are heavy into fundraising evidenced by several community supported programs, volunteer fire departments, the school and community members working together to better the community, and everyone’s “willingness to help.” Participants described high levels of volunteerism, with a population small enough to create a fishbowl, it is difficult not to participate or know what is going on. There area has a high percent of motivated professionals or businessman who may work outside the area or have home business. Private funds are quite often offered at fundraisers with above average per capita income in Sierra City and Calpine occupied by vacation and second homes. Downieville has lower overall income levels.

With a unique geography, rich history and active community involvement, workshop participants told of a “love of our rural lifestyle.” Calpine and Sierra City have a large percent of professionals residing in the county. Downieville is the county seat and is the home of governmental activity. Historically, tax values were high in Sierra City and Calpine. Sierra City has a high value recreation area (Lakes Basin) and the Downieville-Sierra City area has a rich “gold country” historical with high value resources to access.

Infrastructure is almost nonexistent in some areas, but is very much needed. There is not sufficient funding to meet infrastructure needs. Inadequate infrastructure includes road improvements, challenges with water and sewer, a lack of cell service on the west side, poor cell coverage on the east side, and limited broadband. However, with high social capital noted by participants, “when infrastructure really needs improvement, we manage to find the funds.”

Calpine was more specifically characterized as a ranching and retirement community and incredibly active with volunteers.

As the county seat, Downieville also has many volunteers and is well known for hosting successful events (e.g., Downieville Classic Mountain Bike Race). There has been a loss of business and participants told of gas not always readily available. The Downieville school has decent program, including arts and theater, and increasing enrollment. The school drives a lot of people on the west side (Downieville/ Sierra City), and socially the school gets a lot of people out. We need a bunch of infrastructure. The clock doesn't work on the courthouse in Downieville, which did not surprise workshop participants.

Sierra City has a business community which has become seasonal. Fun volunteer activities are planned throughout the year with volunteer fire and recreation, but like many of the communities in Sierra County, there is a transition toward bedroom communities for Truckee and Reno.

There is a clear divide between the east side and the west side of the county with more transient tourism on the west compared to more agricultural and ranching on the east.

Loyalton/ Verdi

Capacity Measure: 2.5

The City of Loyalton and Verdi are distinct areas. In describing Loyalton, workshop participants told of a city on the verge of financial bankruptcy and plagued by governance challenges. In need of road repair and water treatment plant maintenance, Loyalton suffers from physical infrastructure issues. Loyalton is an incorporated area that hosts about a third of the county's population, lots of vacant homes, and properties in disrepair. A low-income trailer park was closed with residents displaced, leaving the property in shambles and increasing homelessness. Some residents were moved to Reno, but some assimilated into Loyalton.

A few organizations (i.e., ESVCC and Rotary) actively raise money that is funneled back into the community as donations to the hospital and educational scholarships. Loyalton has some professionals with knowledge and experience who are able to address community problems and are willing to work together to try to improve conditions; however, there are also residents who are unaware or unwilling to address community challenges or be involved. Many residents will get involved in a crisis and contribute their capabilities then.

Loyalton community meetings were said to have limited attendance and of those who attend, many will argue on community issues and will express disagreement with decisions made by city officers and county supervisors. Another workshop participant described resident participation as good, but with many activities for the small community, including an "excellent museum." Workshop participants recognized the value of their rural lifestyle and passing on knowledge of land management to younger generations, though some thought the school system could do better in supporting rural livelihoods though their lessons and activities.

The overall community capacity score for Loyalton was “increased because of Verdi and Verdi and Loyalton are different worlds.”

Verdi was characterized as a bedroom community to Reno. Small ranchettes or high value properties scatter the terrain of this ranching community. Residential infrastructure is challenged already with respect to sewer and water. Participants described diversity within the community with a large segment of seniors and another sizable segment commuting to other locations for work and living in Verdi but “not paying attention.” Many commuters take their children to school in Reno or Truckee because Sierra County doesn’t have bus service in the area. Lastly, participants described volunteers, teachers, and social services- the people who show up.

Verdi is populated by capable people, but there is reliance on a portion of the community to help resolve issues with the “same people coming and helping and a lack of community interest by others.”

One workshop participant noted that social capital is often higher in the lower socioeconomic areas, which facilitates stronger support systems. For example, “in the trailer park, if someone has a need, neighbors come together and take care of one another.” There is weariness of outsiders coming in and helping. “Seems that some of the higher socioeconomic areas do not have the same community support,” such as the bedroom communities.

Sierraville

Capacity Measure: 3.5

Sierraville is both a community of ranchers and a bedroom community for residents who commute to Truckee for work. Financial capital is higher than other areas in the county given the influx of workers from Truckee; however, “there is more money in bank accounts than invested in the community.” Some contention exists among “new comers” and old-time residents. Participants told of new comers not supporting change and pointed toward old-time residents recognizing the need for development and revitalization. “We are on the verge of some very significant changes with bedroom community issues. Some people are not contributing to the community.” There are also limitations on growth as “agricultural properties are very well defined by law. There’s a real limit or where it will grow and how.”

The community dynamics are increasingly commuter-oriented. “People moving in live here, take their kids to Truckee where they work, resulting in a lack of contribution to the health of the community.” Schools are declining enrollment. As they retire, they are living here, but not volunteering. “There are mattresses in home, but no contribution to communities. Sitting in this building [old school house] shows what has happened. This used to be a thriving K-12 school,

but slowly the population declined. They closed the mill and the population started to change. When we closed Sierraville school, we had three students remaining.”

Regarding social capital, one participant told of how the “community came together to raise money for a cancer patient (\$50,000). That is a huge scale to help a local community member.” The fire department is all volunteers and has “nice trucks and an annual successful bike tour” in Sierraville. “New comers have come together for meetings, such as what to do with the old school house, but then no one wants to be a part of the process. They want someone else to do it.”

Community gatherings include games at the ball fields and a few local events, but no historical society within the immediate area. Longtime residents get very involved in events and any new projects. They hold community meetings and write letters to the editor.

Regarding physical infrastructure, residents have recently repaired old barns downtown and other old buildings. Road work is still needed owing to last year’s flood on the state highway, but most roads are in decent shape.

“Everyone loves where we live and doesn’t want it to change. There is a strong community with capable individuals. This is a small, close-knit community.”

APPENDIX B COMMUNITY ASSESSMENT WORKSHOP

Sierra Institute Socioeconomic Monitoring: Community Capacity Assessment Workshop

March 30th, 2018

Community Name _____

Please circle the number that best reflects your community's level of capital or capacity (on a scale of 1-5, 1 being the lowest level of capital or capacity and 5 being the highest level). Use space beneath each type of capital to provide narrative information. For example, describe the unique or important characteristics of your community that informed your decision. Additional space is provided at the end of this worksheet.

FINANCIAL CAPITAL

LOW 1 2 3 4 5 HIGH

(Availability of dollars for local uses and projects and to meet pressing local needs. These may be public dollars or private dollars, but if private they are tightly linked to community purpose and not just self-interested purposes.)

Please describe why you rated this community as you did in the box below.

HUMAN CAPITAL

LOW 1 2 3 4 5 HIGH

(Individuals with knowledge/ability to address conditions and stressors of concern; it is also the experience and capabilities of local residents their willingness to use these locally.)

Please describe why you rated this community as you did in the box below.

SOCIAL CAPITAL

LOW 1 2 3 4 5 HIGH

(The ability and willingness of local residents to work together towards community ends and purposes.)

Please describe why you rated this community as you did in the box below.

CULTURAL CAPITAL

LOW 1 2 3 4 5 HIGH

(The prevalence and strength of shared local bonds and ways of living, and the uniqueness of and identification with this.)

Please describe why you rated this community as you did in the box below.

PHYSICAL CAPITAL

LOW 1 2 3 4 5 HIGH

(The “hard infrastructure” of a community, such as roads, sewers, schools, etc., including the quality of this infrastructure and its ability to meet local need.)

Please describe why you rated this community as you did in the box below.

OVERALL CAPACITY RATING

LOW 1 2 3 4 5 HIGH

Please describe why you rated this community as you did in the box below.

Additional Narrative Information:

**UPPER FEATHER RIVER IRWM
Small Community Water/Wastewater Preliminary Survey**



**Disadvantaged Community Involvement Program
Small Community Water/Wastewater Preliminary Survey**

Thank you for participating in our survey. Your feedback is important. We expect the survey will take no more than five to ten minutes to complete. The following information is being collected for discussion purposes at the Water/Wastewater Workshop on March 30, 2018, at Plumas County Fairgrounds, Mineral Building: 204 Fairground Rd, Quincy, CA 95971, from 1:00-4:00 p.m. We hope to see you there!

1. Organization Name/address

2. Primary contact:

3. Phone number/email:

4. Which communities do you serve?

5. Do you have an emergency response plan?

6. What services do you provide to DAC areas? (See DWR Mapping Tool):

<https://www.water.ca.gov/Programs/Integrated-Regional-Water-Management/Mapping-Tools>

- Drinking water treatment and supply
- Irrigation/agricultural water distribution
- Wastewater treatment/collection
- Other (list below)

7. If you believe you serve a DAC community that is not listed on the DWR mapping tool, please indicate the service, and list the community(s)

- Drinking water treatment and supply
- Irrigation/agricultural water distribution
- Wastewater treatment/collection
- Other (list below with DAC Community)

8. Please indicate your source(s) of water supply?

- Wells
- Canals/ditches
- Reservoir
- Instream
- Other (list below)

9. Approximately how many hook-ups or connections do you have for water supply?

- 0-50
- 51-100
- 101-250
- 251-500
- 501-1000
- 1001-5000
- Over 5000

10. Approximately how many hook-ups do you have for sewer?

- 0-50
- 51-100
- 101-250
- 251-500
- 501-1000
- 1001-5000
- Over 5000

Challenges

(Please indicate your level of concern for each category, and write any additional comments below)

a. Drinking water supply

- No concern
- Limited concern
- Moderate concern
- Extreme concern

b. Water quality

- No concern
- Limited concern
- Moderate concern
- Extreme concern

c. Water pressure

- No concern
- Limited concern
- Moderate concern
- Extreme concern

d. Treatment system

No concern

Limited concern

Moderate concern

Extreme concern

h. Staffing and/or training

No concern

Limited concern

Moderate concern

Extreme concern

e. Aging infrastructure

No concern

Limited concern

Moderate concern

Extreme concern

i. Regulatory compliance

No concern

Limited concern

Moderate concern

Extreme concern

f. Fire suppression supply

No concern

Limited concern

Moderate concern

Extreme concern

j. Storage/Operation

No concern

Limited concern

Moderate concern

Extreme concern

g. Water Conservation

No concern

Limited concern

Moderate concern

Extreme concern

k. Other (please explain below)

Technical Assistance and Training Needs

(Please indicate your level of need for the following types of Technical Assistance)

l. System infrastructure – operations/maintenance

- No need
- Moderate need
- Strong need
- Extreme need

m. Safety training

- No need
- Moderate need
- Strong need
- Extreme need

n. Financial management (budget, rate structure)

- No need
- Moderate need
- Strong need
- Extreme need

o. Regulatory compliance

- No need
- Moderate need
- Strong need
- Extreme need

p. Program management (water conservation, recreation, watershed management, etc.)

- No need
- Moderate need
- Strong need

Extreme need

q. Mapping

- No need
- Moderate need
- Strong need
- Extreme need

Environmental compliance (CEQA/NEPA)

- No need
- Moderate need
- Strong need
- Extreme need

Grant writing/administration

- No need
- Moderate need
- Strong need
- Extreme need

Engineering/design

- No need
- Moderate need
- Strong need
- Extreme need

Project planning/development

- No need
- Moderate need
- Strong need
- Extreme need

Integrated Regional Water Management Involvement

(Please indicate your level of involvement)

How involved is your organization in the Upper Feather River IRWM

- Not involved
- Rarely involved
- Often involved
- Very Involved

Please share any additional concerns, technical needs or suggestions.

If you have any questions about this survey or the workshop, please contact:

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- or -

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Thank you for your time - we appreciate your input!