Situational Analysis of the Mendocino County Water Agency

Draft Preliminary Report of Project Component A

Prepared for the

Mendocino County Water Agency Board of Directors

By the

University of California Cooperative Extension

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Executive Summary

At the request of the Mendocino County Water Agency (MCWA) Board of Directors, the University of California Cooperative Extension (UCCE) is conducting a situational analysis of the Mendocino County Water Agency. This analysis is intended to generate information needed to make decisions about Agency structure and focus. To conduct this analysis the project team is adapting the concepts and approaches of strategic and participatory planning to provide a process through which interested parties in the county can provide input and direction for the restructuring of the Mendocino County Water Agency

As designed, the analysis compliments recent resolutions and staffing decisions by MCWA Board of Directors establishing the Agency mission, as well as anticipated planning and implementation action by Agency staff. This study began in March 2003 and will span 12 months. UCCE staff is implementing the analysis through three components: A) Current and past historical summary; B) Development of alternative MCWA roles and approaches; and C) Identification and assessment of implications for developed alternatives. This draft preliminary report has been prepared to provide an update on the completion of Component A and steps to carry out Component B.

The Mendocino County Flood Control and Water Conservation District (MCRC&WCD) was formed in 1949 by an act of the State Legislature. As such, the district was administered by the County Administrative Officer through the Public Protection and Natural Resources or the Public Works Department and provided civil engineering, maintenance and hydrologic consulting and services to water districts throughout the county. Funding for the district was limited to state and county apportioned tax revenues. In 1987, California Assembly Bill 2068 amended the original act, officially changing the agency name to the Mendocino County Water Agency and establishing it as an organization autonomous of other county departments. Direct funding and support of the agency in this new structure was basically unchanged, though grant funds and contributions from the County General Fund are in evidence today. Those available funds were used for legal services regarding water rights applications and to hire an agency hydrologist. Other activities during this new phase of the agency included implementation of water quality and watershed assessment studies and sediment reduction and fishery enhancement projects with grant funds.

During the 50 plus year tenure of the Agency there have been numerous efforts and actions taken to consolidate water resource management in the County. These include the formation of the Mendocino County Russian River Flood Control and Water Conservation Improvement District, Ukiah Valley-Wide Task Force study and report, and Joint Powers Agreement establishing the Inland Water and Power Commission. The County participated in each of these measures but was never granted or accepted a lead role with regard to water resource management. In addition, no other agency or district was identified to have that lead role and as a result, the county and its water users have never been represented with one common voice outside of the county. The fallout from this lack of lead representation and authority is a source of great frustration for some county residents because of a sense of lost opportunities to secure water for countywide beneficial uses.

County staff, at the direction of the Board of Directors, began to explore options and take measures to address these limitations as early as 1998. These measures have included an analysis of MCWA, reorganization, and the hiring of an interim and permanent Agency manager. In addition, the Board of Supervisors has made resolutions and decisions to position the Agency as the countywide water resource management organization. These actions include filing of notice of intent to remove the Agency from the IWPC and submittal of a letter of intent to be the lead local agency on the proposed United States Army Corps of Engineers feasibility study to raise Coyote Dam. These steps and measures are evidence of the commitment and focus of the County to water resource management and the role of the MCWA to be a lead organization. How that agency will be structured and what issues it will focus on remain to be determined?

County population projections for the year 2020 are 40,120 and 118,800 in the incorporated and unincorporated portions of the county, respectively (Pacific Municipal Consultants, 2003). This is a 20 percent increase over estimated county population for the year 2000. This influx of people will increase water demands within the County. In addition, agricultural water use will remain constant or increase by 2020. Estimating the total amount of water needed to meet this demand is difficult to predict and requires assumptions about the level of agricultural, commercial, and domestic water conservation methods as well as the quantities of surface and ground water used. With these factors in mind, estimates of water needs under normal rainfall conditions for the year 2020 range from 10,768 to 14,306, 8,991 to 14,193, and 31,554 to 36,221 acre-feet for the Coastal, Eel, and Russian River basins, respectively (Sommarstrom, 1987, 1989, and 1992). This translates to a 41, 52, and 2 percent increases over 1985 water use for each of these basins, respectively. Meeting this increase in demand will require development of additional water, implementation of water conservation methods, and adoption of efficient water use technologies.

In order to understand both the current organization and operations of water districts in the county along with the ways that they are responding to mounting pressure on water resources, surveys were sent out to 17 community service, irrigation, municipal, and county water districts. Additionally, interviews were completed with representatives from 14 water districts throughout the county. While the results from the survey and interviews only present a snapshot of the current organizational and political landscape and are not intended to be statistically significant, they do provide important insights regarding common areas of concern and conceptions of the role a central water agency could play. The need for a stable water supply for current and future populations was a major issue for water districts, with 62% of the district representatives citing it as one of the top water user concerns. Water rates and water quality were also important concerns that were mentioned often. Additionally, lack of secure water rights was a common limitation identified by districts. Discussions with the water district representatives elucidated a shared frustration with the myriad of uncertainties involved with water supply in the county. As one respondent said, ““We are in a sea of uncertainty.” These uncertainties stem from a variety of sources including increasing regulatory requirements, changing definitions of water rights, insecure water rights, and a growing population.

Questions regarding the future of water management in the county brought to the fore several potential organizational structures. A majority of interview respondents (56%) indicated a preference for a central agency with varied levels of control from a

relatively hands-off source of information, expertise, and guidance (15%), to a stronger entity taking the lead in water development and management throughout the county (39%). Some frequently suggested tasks for a central agency included:

- Build and maintain a communications and cooperation network among water professionals in the county.
- Serve as a clearinghouse and information center or central library for people who manage public water systems or land.
- Develop new sources of water for the county, engage in governmental lobbying, and protect Mendocino Co. interests.
- Track grants and communicate with groups who might benefit from them. Assist in preparation and participate in the grant if appropriate.
- Find water sources for its citizens which live outside water district boundaries.
- Streamline regulatory requirements and assist existing regional water agencies to respond to service, operational and regulatory demands and to promote overall effectiveness and coordination in the delivery of water services.
- Enable resource sharing between districts (staff and equipment).
- Provide water treatment and waste water treatment facilities.

While there were many advantageous services a central agency could provide, there are also many concerns and fears associated with such a change, particularly if the central agency is MCWA. One respondent noted that "MCWA has been asleep for 50 years and all of a sudden it wants to wake up and pick up this big of a problem, they don't know the situation." Another said, "I could see a large agency becoming the pawn of larger interests, benefiting the wealthy/powerful at the expense of the smaller forces." These fears must be respected and addressed in determining the future role of MCWA.

Interviews with the five individual MCWA directors provided the initial step for the directors to discuss their vision for MCWA, the needs to realize and barriers to implementing that vision, and expectations for this situational analysis. Consistently, the directors see MCWA functioning as source of centralized or consolidated services for water resource management in the county. Services the Agency could provide include outreach and education, science and technical expertise, and procurement of exterior funds for project implementation. In addition, the directors see the agency as a potential broker of countywide agreements. To implement these services and function as a countywide organization, the Agency will need to develop a source of revenue. It will also need to reconcile the level of authority it will have over water resources with that held by local county water districts. Hydrological questions to resolve include water budget analysis that identified the quantities of surface, ground, and under flow water used in the Coastal, Eel, and Russian River basins. The Directors view the situational analysis as the structure and process through which they can explore options for water resource management in the County. They anticipate a list of the pros and cons for those options, the preferred option, and the reasons it is preferable. In addition, it is hoped that the analysis will provide county constituents with information needed to understand the issues and efforts to restructure the Agency

Table of Contents

Introduction

Project Overview

At the request of the Mendocino County Water Agency Board (MCWA) of Directors, the University of California Cooperative Extension (UCCE) is conducting a situational analysis of the Mendocino County Water Agency. This analysis compliments a series of resolutions and staffing decisions by MCWA Board of Directors establishing the Agency mission and anticipated action planning and implementation by Agency staff. This study began in March 2003 and will span 12 months. The goal of this project is to facilitate water resource management in Mendocino County. We will achieve that goal by:

- Identifying the gaps between water resource management objectives and the institutional capacity in the County to meet those objectives;
- Generating alternative functional approaches to address those identified gaps; and
- Proposing steps to implement these alternatives.

UCCE staff is implementing the analysis through three components: A) Current and past historical summary; B) Development of alternative roles and approaches; and C) Identification and assessment of implications and alternatives.

To achieve the project goal and objective, the project team is adapting strategic planning methods (Barry, 1997). Strategic planning is an important process for any organization to be effective, efficient, and successful. Steps involved in strategic planning include mission determination, situation analysis, and implementation. Determining mission is a decision that will rest with the County. The project team will support this mission decision by conducting the situational analysis. We are conducting the analysis as a participatory process (Chambers, 2002) through which the Agency Board of Directors, county water districts, and county constituents can explore the options for countywide water resource management. The information generated from this study will lead to action planning and implementation for selected MCWA roles that can be carried out by Agency staff.

Report Overview

This draft preliminary report has been prepared to provide an update on the completion of Component A. Specifically, the report provides a brief summary of the Agency's past and present water resource management roles and a discussion of previous investigations of water resource management consolidation. Additionally, the report presents results from interviews with Agency Board of Directors and other county water agency and district managers. Lastly, the report outlines the steps to take to conduct Component B of the project. Information for this report was obtained from earlier studies and reports and information from interviews and questionnaires.

Mendocino County Water Resources and Use

Hydrologic Boundaries

Mendocino County and the 3,470 square miles it covers are broadly divided into three general hydrologic units: Eel, Russian, and Coastal River Basins. Technically they are all three coastal watersheds with inland headwaters and terminating estuaries with the Pacific Ocean. Each of these basins is comprised of sub-basins or watershed units with a total of 16 identified within the County (Pacific Municipal Consultants, 2003). The Eel River Basin is shared with Glenn, Humboldt, Lake, Tehama, and Trinity counties covering 3,600 square miles. Of this total, 1,610 square miles are in Mendocino County (Sommarstrom, 1989) including all or portions of the Lower, Middle, South Fork, and Upper Eel watershed. The Russian River basin spans approximately 1,500 square miles of which 500 square miles are in Mendocino County (Sommarstrom, 1986) and the remainder in Sonoma County. The coastal basin covers 1,360 square miles of the County (Sommarstrom, 1992) and is divided by eight watersheds including from North to South: Mattole; Ten Mile; Noyo; Big; Albion; Navarro; Garcia; and Gualala Rivers.

Surface and Ground Water

Surface and ground water are used in varying amounts to meet the agricultural, cold-water fisheries, domestic, industrial, and recreational beneficial uses within these three basins. Surface runoff is comprised almost entirely of rainfall. The significance of this rainfall runoff relationship is evidenced by increased stream flow during the wet cool winters and specific storms followed by reduction and in some cases cessation during the hot dry summers. It is not uncommon for over 90 % of the annual runoff to occur between December and April. Development of these surface waters includes approximately 300 diversions, dams and reservoirs, and stock ponds. The significant water developments in the county include Van Arsdale Reservoir (700 acre-feet), Lake Mendocino (118,900 acre-feet), and other small projects such as Morris Reservoir (723 acre-feet) and Centennial Reservoir (635 acre-feet) (Pacific Municipal Consultants, 2003, and Beach, 1996). There are no significant water developments in the coastal basins.

Ground water resources within the county are dominated by either inland valley or mountain geology. Mountainous areas cover approximately 95 percent of the county (Pacific Municipal Consultants, 2003) and are comprised of Franciscan Complex consolidated rocks that supply less than 5 gallons per minute of water to wells (Farrar, 1986). Interior valleys, covering five percent of the county, are underlain with unconsolidated to loosely cemented gravel, sand, silt, and clay formed as continental basin deposits, continental terrace deposits, or alluvium. The groundwater flow in these materials ranges from 50 to 1,000 gallons per minute depending on the grain size of the material through which it flows. The six county interior valleys include Anderson, Laytonville, Little Lake, Potter, Round, and Ukiah (DWR, 2003).

Population Growth and Water Use

As part of the update for the General Plan population growth projections were made into the future (Table 1). These estimates total 118,800 people by the year 2020 or a 20 percent increase over the 2000 county population. Total city population is projected to increase by 30 percent or 12,050 people over the year 2000 estimates. Population in the unincorporated portions of the county will be 26 percent or 20,485 people higher than in 2000.

Table 1: Mendocino County population growth, 1970-2020 (Pacific Municipal Consulting, 2003)

Jurisdiction	1970[1]	1980[1]	1990[1]	2000[1]	2020[2]	Percent of County Population, 2000
Fort Bragg	4,455	5,019	6,078	7,026	8,720	8.1
Point Arena	424	425	407	474	590	0.55
Ukiah	10,095	12,035	14,599	15,497	23,760	17.9
Willits	3,091	4,008	5,027	5,073	7,050	5.9
Total Cities	**18,065**	**21,487**	**26,111**	**28,070**	**40,120**	**32.45**
Unincorporated	33,036	45,251	54,234	58,195	78,680	67.4
Total County	**51,101**	**66,738**	**80,345**	**86,265**	**118,800**	**100***

Notes

1. U.S. Census
2. Mendocino Council of Government Forecasts

* Numbers may not add due to rounding.

Estimating the projected county water needs of this increased population requires making assumptions with regard to water use efficiency or conservation and the distribution of that population among the three basins. Making such estimations also requires anticipation of agricultural water use requiring assumptions about crop type and irrigation efficiency. From 1986 to 1992, Dr. Sari Sommarstrom prepared three respective water use projection reports for the Coastal, Eel, and Russian River Basins (Sommarstrom, 1986, 1989, and 1992). She compared actual water use for a normal rainfall year in 1985 to estimated water needs for the estimated increased population and agricultural water use in 2020 (Table 2).

Table 2: Mendocino County water use in 1985 and projected need for a "normal year" in 2020 (Sommarstrom, 1986, 1989, and 1992)

	Population		Urban Water Use		Agriculture Water Use		Total Water Use	
Basin	**1985**	**2020**	**1985**	**2020**	**1985**	**2020**	**1985**	**2020**
Coastal	22,500	44,868	2,901	4,316-5,675	5,517	3,917-5,417	8,418	10,768-14,306
Eel	16,100	31,486	2,676	5,777-6,143	4,191	3,214	6,867	8,991-14,193
Russian	32,500	50,200-70,800	10,354	14,520-19,187	15,636	17,034	35,370*	31,554-36,221

*Includes 9,380 acre-feet for use by Potter Valley.

These results are only projections and were developed as much as 16 years ago. It will be helpful and important for the Agency to compare them with documented water use in 1990 and 2000. The results, however, do serve as an indication of future water needs throughout the County. Estimated water needs for 2020 are 41, 52, and 2 percent greater than 1985 water use for the Coastal, Eel, and Russian River basins, respectively. Finding the additional 5,888, 7,326, and 851 acre-feet needed for the respective basins will require development of additional water, implementation of water conservation methods, and adoption of efficient water use technologies.

Mendocino County Water Agency Past, Present, and Future Roles

Formation and Supporting Legislation

In 1949, the United States Army Corps of Engineers completed a flood control and water conservation study of the Russian River Watershed (U.S. Army, 1950). Results from this study identified the opportunities for controlling floods and providing water for beneficial use through dam projects in the Dry Creek and East Fork Russian River tributary watersheds. Simultaneously and in response to these findings and interest, the Mendocino County Flood Control and Water Conservation District (MCRC&WCD) was established by state legislation to control and dispose of storm and floodwaters in the county (Stats, 1949). This was a special district governed by the Mendocino County Board of Supervisors and administered by the County Administrative Officer. In this capacity, the district used nominal tax revenues to address flood control projects through the county's Public Protection and Natural Resources or Public Works Department.

In 1987 California Assembly Bill 2068, sponsored by Representative Hauser, was passed amending the original act (Stats, 1987). This amendment resulted in the change of name for the district to the "Mendocino County Water Agency" and the establishment of MCWA as a county entity independent of other county departments. Assembly Bill 3275, also sponsored by Representative Hauser, further amended this decision and the original act in 1990, authorizing the Board of Directors to appoint a zone council within a zone of benefit, in addition to the option of electing the council.

Past Opportunities to Consolidate Water Resource Management

Assessment and commitment to water resource management consolidation in Mendocino County is not new. During the last 55 years, there have been numerous efforts and actions taken to form a lead water resource management authority in the county. These include county wide and local district elections, numerous studies, and formal agreements between respective county water agencies and districts.

Local mandate and formation of a consolidated Ukiah Valley district was formalized in 1956 with 3-to-1 majority wide vote to establish the Mendocino County – Russian River Flood Control and Water Conservation Improvement District (Ukiah Daily Journal, 1956). This vote approved a $650,000 bond measure to be used as the County's contribution for construction of Coyote Dam on the East Fork of the Russian River resulting in impoundment of Lake Mendocino. In return, the County and more directly the Russian River Flood Control and Water Conservation Improvement District was awarded approximately 11% or 8,000 acre-feet of the beneficial water stored in Lake Mendocino. This measure was place on the ballot only after an attempt to have the County Water Agency be the lead through the passing of a countywide bond measure failed. The prevailing attitude at the time was that the Coyote Dam project was a Ukiah Valley and not a county wide issue. The explicit result for the county was that the Agency would not be the lead water resource management agency.

The Local Agency Formation Commission (LAFCO) solicited a study of consolidation for the Ukiah Valley in 1986 (Culp/Wesner/Clup, 1986). This study explored the feasibility of water service consolidation between Calpella County Water District, Millview County Water District, City of Ukiah Municipal Water System, and Willow County Water District. Alternatives explored included a joint powers agreement between the four entities, expansion of one of the existing county water districts to serve as the lead service provider, and creating a single new agency governed either by the City of Ukiah or Mendocino County. Results indicated that alternatives to consolidated services into one agency either through expansion of an existing organization or establishment of a new agency would provide the most cost-effective and highest quality of service but were viewed as the least politically feasible. Recommendations from this report were not pursued.

Only four years after the LAFCO study, Mendocino County and City of Ukiah established the Ukiah Valley-wide Task Force. The charge of this task force was to "initiate a long, overdue study of possible consolidation of services, and consolidation of interests in providing services and /or meeting future service needed in the areas of water, sewer, emergency services and development standards (Lowery and Henderson, 1991)." The task force, as a broad based group of representatives from the county, city, and other water districts, developed findings and recommendations encouraging the Russian River Flood Control and Water Conservation District to become the lead agency for water services in the valley. Because of the existing water rights, the task force recommended that other water districts continue to provide water to their respective users, and to begin the process of consolidation into one larger agency. Lastly, the task force called for the formation of the "Ukiah Valley Water Task Force." The mission of that task force would be to coordinate the implementation of the original task force's recommendations and facilitate a joint powers agreement between the water agencies and districts in the Valley. None of the recommendations were implemented.

In 1996, the Inland Water and Power Commission (IWPC) was formed through a signed joint powers agreement (IWPC, 1996) between the County of Mendocino, City of Ukiah, Mendocino County Russian River Flood Control and Water Conservation Improvement District, Redwood Valley County Water District, and Potter Valley Irrigation District. This commission has a board of directors made up of representatives from each of the member agencies and authority to serve the agreement purposes including: the right of first refusal for the agencies to develop new water and water rights, water and power acquisition, water development, maintain the viability of the PG&E Potter Valley Project, and raise funds as needed. As a result of this agreement, the County was a commission member but not the lead on water resource management in the Ukiah Valley or the County.

The result of this history today is a decentralized and fractionalized water resource planning and delivery system that most residents would agree should have been designed and implemented differently.

Future Role of the Mendocino County Water Agency

The formation and history of the MCWA demonstrates the complexity of organizational structure to affect water resource management. As described, there have

been key moments in that history when action or inaction limited the County's ability to effectively provide water resource management services. County staff, at the direction of the Board, began to explore options and take measures to address these limitations as early as 1998. These measures included comparison of MCWA roles and two searches for an agency manager. Since these measures were taken, the Board has issued three significant decisions with regard to the MCWA and hired Interim Agency Manager, Jim Stretch in May of 2002 and most recently permanent Agency Manager, Roland Sanford. These policy and staffing decisions provide the mission and goals for the Agency that will be used as the context for this situational analysis.

On February 4, 2003 the Board passed Resolution Number 03-032 (Attachment A) directing the Agency "to assume a leadership role in addressing water related matters in Mendocino County." These matters and issues include watershed protection and restoration, water conservation, water reuse, new water development, and habitat and fisheries protection and restoration. The Agency is further directed to:

- Work in partnership with other Mendocino County water agencies, as well as local, state, and federal agencies outside of the county;
- Collaborate with Mendocino County water agencies through granting and technical assistance;
- Develop revenue for the Agency;
- Encourage and assist in water resource management consolidation for efficient, effective, and economical benefits; and
- Develop and maintain a comprehensive database of countywide assets, services, connections and capacities for all water agencies.

The Board also passed Resolution Number 03-033 (Attachment B) on February 4, 2003. This resolution established and supported a priority list of county water resource management projects to be submitted for funding consideration through California State Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. The list of priority projects was the result of an Agency facilitated consensus process inventorying $223,619,000 in projects needs and prioritizing those to ten projects with a total funding need of $10,000,000. This process and resolution were made voluntarily to speak with a unified voice for the needs of Mendocino County and demonstrated the potential coordination role that the Agency could provide.

On March 25, 2003 the Board elected to provide a letter of intent to withdraw from the Joint Powers Agreement (JPA) that established the Inland Water and Power Commission. This decision was made with the intent to return the full authority under the enabling Act to the Agency so that it could fulfill the newly delivered mandate by Resolution Number 03-032. At this juncture, staff has been directed to submit the letter and initiate discussions with the commission members to develop proposed amendments to JPA requirements' of right of first refusal, ability to work with agencies outside of the county in an autonomous manner, and retain membership in the Commission.

Most recently on May 6, 2003, the Board took up the matter of local sponsor for the Coyote Dam feasibility study and elected to submit a letter to the United States Army Corps of Engineers to express their intent for the countywide Water Agency to be the local sponsor. At the time of the vote, public and supervisor comments indicated the

need to balance this opportunity for the County to be the lead water resource agency with the importance of maintaining trust and collaborative relationships with other county water agencies. Both aspects of this decision are explicit directives in Resolution Number 03-032. The importance of this balance was borne through a subsequent Board decision on May 13 to delay submittal of the letter of intent until full discussion with other water districts and agencies could be held. Measures to foster those discussions included the water forum held by the Board on May 20, 2003.

The Board's vision of a viable countywide water agency, once widely supported by water districts throughout the county, including the larger inland water agencies, will inevitably challenge the status quo and may now be felt by some as either moving to fast or posing a threat to traditional inland roles.

County Water Resource Management Structure, Capabilities, and Capacity

County Water Districts and Purveyors

There are 17 community service, irrigation, municipal, and county water districts and purveyors that provide water for agricultural, domestic, and industrial use within Mendocino County. Descriptions of these providers are given in the recent Mendocino County General Plan Update (Pacific Municipal Consultants, 2003) and the Drinking Water Adequacy Assessment (DHS, 2002). In addition to these sources of information, we sent out a survey (Attachment C) to county providers and followed up the surveys with semi-structured interviews (Attachment D). Due to time constraints, the 2002 State Annual Water System Report (distributed by DHS) was accepted in lieu of the completed survey questionnaire in several cases. This section presents the responses from the surveys and reports that we have received, as well as the information provided by personal interviews with water district superintendents and representatives. The survey and report responses are laid out clearly in Tables 3 & 4, while the interview information is summarized to protect the anonymity of respondents in Table 5.

Survey Responses

The surveys were intended to elicit responses regarding each water district's: 1) organization and operations, 2) rights and capacity, 3) infrastructure, 4) financial considerations, and 5) future planning efforts. Surveys were returned by the following districts: Brooktrails, Ukiah, Willits, and Fort Bragg. The 2002 State Annual Water System Reports were distributed by the Department of Health Services in order to gather information on water district organization, water sources, infrastructure, direct additives, contaminants, monitoring efforts, and planned improvements. Surveys were returned by the following districts: Redwood Valley, Caspar South, Willow, Calpella and Millview. A table of survey responses and report responses are provided below (Tables 3 & 4).

Table 3. Summary of survey responses

	Brooktrails	Ukiah	Willits	Fort Bragg
Organization				
1. What type of water district do you represent ?	Community service district	Municipality	Municipality	Municipality
2. What is the district's mission statement and management objectives?	Provide utility and fire services	None	NA	- Ensure that new development and annexations are served by adequate water system services and infrastructure. - Assure that the City's water system infrastructure is maintained and expanded to meet the needs of the City's residents. -Provide high quality customer service and water system information to water system users. -Continue the City's water conservation and retrofit program. -Maintain an adequate rate structure which meets the water system operating needs while maintaining reasonably affordable customer rates. -Protect the City's water sources and their watersheds from contamination.
3. What type of full-time and part-time staff do you employ?	11 FT, 1 PT, 1 lawyer, 1 architect, 1 pro golf contractor	PT Director, PT Operation Supervisor, 7 PT field personnel, and 3 FT plant operators	5 Treatment operators	- Director of Public Works (FT) - Water Treatment Superintendent (FT) -4 Treatment Plant Operators (FT) -1 Operator-in-training (FT) -1 Water Quality Technician (FT) -Public Works Supervisor, 6 Maintenance Worker II staff, 1 Equipment Operator - Water Project Manager (PT) works in an administrative capacity to help the City achieve the previously stated management objectives. - Finance Department takes care of all water billing, arranges for customer service and serves as a contact point for water customers.
4. Public office hours?	M-F 8am-5pm	M-F 8am-5pm	M-F 7:30am-4pm	M-F 9am-Noon and 1 to 5 PM. General contact phone number is (707) 961-2823.
5. What are the names and contact information of Board Members and the Chair?	5 Board of Directors	City Council, 300 Seminary Ave., Ukiah	City Council (Ron Orienstein, Denny McEntire, Bruce Burton, Tami Jorgenson, Karen Oslund)	City Council (Jere Melo, Mayor; Dan Gjerde, Mayor Pro Tem; Brian Baltierra, Council member; Lindy Peters, Council member; Dan Turner, Council member; Connie Jackson, City Manager)
6. When are the meeting dates of Board?	2nd & 4th Tues.	1st & 3rd Wed.	2nd & 4th Wed.	1th Monday of every month at 7 PM, 363 Main Street, Fort Bragg.

	Brooktrails	Ukiah	Willits	Fort Bragg
7. What is the population that you serve (current and projected population)?	3,700	Current 15,000 +5 yrs 15,200 +10 yrs 15,400 + 20 yrs 15,800	5,000 w/in city, unknown outside city limits	From City of Fort Bragg General Plan, 2002: Present (2000): 7,445 2005: 7,604 2010: 8,863 2020: 10,179 The projected growth rate is 1.9 % per year
Rights & Capacities				
8. What kind of water right does the district hold?	Appropriative	Appropriative	Appropriative	1. A pre-1914 right to divert half the average annual flow from Newman Gulch. 2. An appropriative water right to divert half the annual average flow from an unnamed stream (locally known as Waterfall Gulch). 3. A 1956 application for an appropriative water right to divert 3 cfs from the Noyo River. This has been renewed on a temporary basis since 1956.
9. What is the quantity of water held in these rights (current and pending)?	413 af in 2 reservoirs: Lake Emily (275 af) and Lake Ada Rose (138 af)	20 cfs	2 cfs direct diversion, 1,440 af storage	1. The Newman Gulch pre-1914 water right is for 300 acre-feet annually. 2. The Waterfall Gulch appropriative water right is for 0.668 cfs or 480 acre-feet annually. 3. The Noyo River appropriative water application is for 3 cfs, with low-flow limitations.. 4. The City of Fort Bragg is limited to a total of 1,500 acre-feet annually from all appropriative water rights held now or acquired in the future.
10. Do you have other sources of water available?	2,500 ac greenbelt for groundwater	Well not included in appropriative right	No	Yes. The City has a production well drilled into the Noyo River alluvium. The well has a production capacity of approximately 500 gallons per minute, or about 40 % of the City's present average use. The well is not presently tied into the City's raw water supply system. The well is considered a reserve source that could be added to the system if needed, but only after a major expenditure in infrastructure expansion (pipeline, pumps and blending facilities).
11. What are the current and projected water needs of your constituency?	Specific Plan: water to supply buildout to 4,000 single family residences	4,100 af currently, no future projections	~450 MG/year	Current water demand is seasonal. Peak day demand in late summer is about 1.7 MGD. Average daily demand is about 0.825 MGD. Annual water use is about 1,200 acre-feet. Projected water demand at build-out (from the City of Fort Bragg General Plan, 2002) is about 1,450 acre-feet annually.
12. What do you see as the abilities or limitations of the district to meet current and future water needs?	Build a 3rd dam—In 1982 district applied for a 3rd reservoir (2,400 af), however cost & environmental challenges must be overcome.	Available water	Will need to develop new water sources in order to meet instream releases for Fish & Game.	The water supply can meet all current demands. Present information indicates that if the City succeeds in obtaining a permanent license to divert 3 cfs from the Noyo River, the water supply will be able to meet current demand projections at build-out. The status of water availability for the future redevelopment of the 450-acre former mill site property is unresolved at this time. These statements may be revised during the preparation of the Water System Management Plan.

	Brooktrails	Ukiah	Willits	Fort Bragg
Infrastructure				
13. How many miles of water line does the district provide (size/type)?	64 miles A/C water, plant capability 1.2 MG/day, 62 miles of sewer line		53.4 miles	5.7 miles of raw water delivery lines. 28.4 miles of potable water distribution lines.
14. How many fire hydrants (type)?	257 hydrants		225 hydrants	246 hydrants
15. What is the storage capacity of your system?	413 af	3.0 MG	Water tanks-3MG, 1.5 MG, 130,000 G Wood-2 x 43,000 gallons Reservoirs-Centennial	6.6 MG
16. What are the ages of various parts of the system?	Water system developed in 1966		0-60 years	Some of the oldest parts (Newman Reservoir) date from the 1890s. Other major additions date from the late 1940s, the 1950s, 1960s and 1970s. Very little of the system is newer and almost no parts of the distribution system are less than 10 years old. The main raw water pipeline from Madsen Hole on the Noyo River was built about 1958. About 3,700 feet of that line will be reconstructed in 2003. Part of the Newman-Simpson pipeline was reconstructed in 1992, but other sections may be as old as 100 years.
17. What is the condition of the system (engineering assessments)?	Assessment is good, annual water seepage ~19% in 2002		The city inherited a depleted system in 1984. All the pipe had been installed in the 40s and 50s. Since that time we have replaced much of that line and the treatment plant, but we still have much to do.	It is an aging system, but age is not the only factor. Some sections of the system with PVC pipe installed in the 1960s and 1970s have an abnormally high number of leaks. For the last two years, the Public Works crew has repaired an average of one system leak per week in the distribution system. Periodic leak detection efforts always find new leaks.

	Brooktrails	Ukiah	Willits	Fort Bragg
18. What number of connections does the district provide and of what type?	1,488 connections R-1,482 C-6 *		2,146 connections R-1,830 C-296 I-20	2,675 connections R-2.285 I-17 C-361 A-22
19. Are there any connection moratoriums (dates)?	Feb. 28, 2003 CA DHS issued a compliance order to the district prohibiting further connections beyond its existing 1,451, in March this was amended to 1,488	No	No	Yes. There are 3 moratoriums.
20. How is water use metered or measured?	Metered	Water is metered and billed on cubic feet	Customer meters.	Raw water is metered at each source. Two meters are mechanical, one is magnetic. These meters are read monthly. Overall demand on the potable water supply is metered with a single magnetic meter. Readings are continuous. This is reported as "water production". Distribution meters are all mechanical. All services are metered. Meters are read by "pencil & paper" method every 2 months.
Financial Considerations				
21. What is the annual budget of the district?	$1.9 million	$1.9 million	$1.5 million	$1.3 million
22. How is your budget spent?	95% operational, 5% capital improvements and reserves		Admin.: $596,655 Maintenance: $277,850 Operations: $321,795 Engineering: 25,000 Contingencies: $15,000 Debt Service: $264,485	Debt service: 32 % Operations & management: 63 % Other professional services: 3 % Capital expenditures: 2 %

	Brooktrails	Ukiah	Willits	Fort Bragg
23. What are your sources of revenue (and what are the dollar amounts of each)?	User fees (consumption), water availability charges (blanket lien providing "special benefit", sewer standby charges, water & sewer hookup fees, general fund ad valorem tax, fire fund special tax.	Sale of water	Total revenue $1.7 million ($1.6 million from user charges)	Total income: $ 1,557,332 Water sales and fees: $ 1,480,741 Use of money and property: $56,000 Miscellaneous revenue: $ 20,581
24. What price do you pay for water (wholesale and retail)?	Impound water	Cost of production	N/A	The City of Fort Bragg does not pay for water per se. 55 % of Fort Bragg's water comes from the Noyo River. The cost of this water is the annual pumping cost (electricity and other costs of operating the Madsen Hole pump station and pipeline). The other 45 % flows to the Water Treatment Plant by gravity. These sources were paid for at least 50 years ago. The only transmission costs are those of pipeline and intake maintenance.
25. How much do you charge for water (rate structure)?	4 tier fee structure based on consumption		$2.30/100 cubic ft + meter charge	
26. What are other actual or potential sources of funding?	Grants		None	The City is using its own Water Enterprise Funds for the two current construction projects and for completion of watershed protection plans for our two secondary water supplies. The City has used pooled municipal bonds in the past. The City applied to DHS for a construction loan from the Drinking Water State Revolving Fund in November, 2000. The City has had success with a grant obtained under Title XVI (Reclamation Wastewater and Groundwater studies) of Public Law 102-575 (Reclamation Projects Authorization Act of 1992). The City is currently working with staff from the California Integrated Waste Management Board to develop a grant proposal for protection of one of our secondary water sources.
Future Planning				
27. What kinds of planning studies have been done for the District?	Specific Plan adopted in 1997.		Willits Water System Master Plan (1984), Water System Capacity Investigation(2003)	The City of Fort Bragg has had a large number of planning and feasibility studies done in the struggle to develop a reliable water supply. In addition, several studies have been directed at protecting our smaller water supplies. Only the Fort Bragg-specific studies will be cited here. We assume the Mendocino County Water Authority already has copies of the regional studies.

	Brooktrails	Ukiah	Willits	Fort Bragg
28. What are future goals of the district?	Up to 4,000 single family residences		Develop sources to continue to serve the customers with high quality drinking water.	See response to question #2
29. What do you see as the strengths and weaknesses of the district currently and in the future?	Weaknesses is cost to develop 3rd reservoir			The strength of the City's water system is that we have a very clear quantitative picture of the water resources available to the City both now and in the future. We also know what we need to do to maintain the system and to protect our water quality. There are two main weaknesses with the system. The first is endemic to all communities. The City does not have either the financial resources or staff to maintain the water collection and distribution system to the level needed. The second weakness is that the City is completely dependent on the quality of surface water collected from surface and shallow subsurface runoff in the Noyo River watershed. The City does not have the resources to monitor or mitigate the activities that impact our water supply.
30. How can the Mendocino County Water Agency be of assistance to your district and to water resource management in the county?	Access to State funding through various propositions, ex. Prop. 50		Find water sources for its citizens which live outside water district boundaries.	See Trends & Suggested Actions section.
31. What is your preferred structure for county water resource management?	Depends on whether the County wants to include Brooktrails Township CSD as a housing target. The BOS authorized 6,000+ lot subdivision with only 25% of the water known at the time of development.			The organization must be autonomous, open, accessible, and professional. The structure should promote and facilitate easy access to and sharing of information among agencies. The structure should also give staff the ability to provide assistance and support to regional issues in a timely manner. If those of us who are water managers need help, we will need it on a short time scale. Often we have 15 or 30 days to respond to some proposal or 6 weeks to develop a grant proposal. An effective MCWA response may be required in that time frame. MCWA should not seek to develop additional regulatory jurisdiction or requirements, but to assist existing regional water agencies to respond to service, operational and regulatory demands and to promote overall effectiveness and coordination in the delivery of water services.

* R=residential, C=commercial, I=industrial, P=public authority, A=agriculture, O=other

Table 4. Summary of 2002 State Annual Water System Report responses

	Millview	Willow	Calpella	Redwood Valley	Caspar South
Organization					
Manager	Timothy Bradley (millview@ saber.net)	David Redding (WillowWater@ pacific.net)	David Redding (WillowWater@ pacific.net)	David Wallen (rvwaterdistrict@pacific.net)	Warren Wade (wwade@mcn.org)
Contact Info	3081 N. State St., Ukiah, 707-462-7992	707-462-2666	707-462-2666	PO Box 399, Redwood Valley 707-485-0697	PO Box 774, Mendocino, 707-964-6362
Physical location	2850 Redemeyer Rd., Ukiah		151 Laws Ave, Ukiah	8961 Colony Dr., Redwood Valley	14050 Pt. Cabrillo Dr., Mendocino
Population served	5,500	3,760		2,970	100
Rights & Capacities					
# & type of water sources	GW-18 SW-1 *	GW-5	GW-1	SW-1	GW-6
Annual water produced (MG)	GW-178.9 SW-323.11	385.1	9.6	244.5	4.5
Water purchased	0	0	26.1	0	0
Water sold	26.57	34.4	0	0	0
Infrastructure					
# & type of service connections	1479 connections R-1239 C-162 I-17 P-27 O-2**	1029 connections R-950 C-61 A-18	153 connections	1132 connections R-1109 C-23	87 connections R-87

	Millview	Willow	Calpella	Redwood Valley	Caspar South
Future Planning					
Water system improvements	2002-well field rehabilitation 2003-600 MG storage, emergency standby generators, chlorination system	Retrofit of a well, 120% increase over old diesel motor		2002-standby generator, rehab of #2 clarifier, surge tank, 2003-installation of solar powered aerators	2003-100,000 gallon storage tank
User Feedback					
# & type of problems	29 connection breaks/leaks, 3 main breaks/leaks	7 connection breaks/leaks, 5 main breaks/leaks		21 connection breaks/leaks	
# & type of complaints	2 taste/odor, 4 turbidity, 2 pressure	0	2 color/taste	10 taste/odor	0

* GW=groundwater, SW=surface water

** R=residential, C=commercial, I=industrial, P=public authority, A=agriculture, O=other

Interview Information

The interviews were intended to elicit information about each district's water users and the most prevalent issues that they face, areas that need improvement, and general feelings about the county water agency. A total of 12 water district superintendents and water company managers were interviewed, representing 14 water districts. Five of the districts were located in the Mendocino Coast region, three were located in the Inland-North County region (Eel River drainage), and seven were located in the Inland-South County region (Russian River drainage).

Table 5. Summary of interview responses.

Category and Questions	**Number of water districts that gave this response** (could choose more than one response to a question)	**Percentage of water districts that gave this response*** (does not include non responses)
Water uses		
Municipal	2	12.5%
Commercial	2	12.5%
Agricultural	2	12.5%
Residential	10	62.5%
Water Rights		
Nov-June water permit (from the Russian River)	4	20%
July-Oct water permit (from the Russian River)	2	10%
Water rights held by RRFCD	4	20%
Groundwater permit	5	25%
Year-round water right (not from the Russian River)	4	20%
Undeveloped water right	1	5%
Water User Concerns		
Water supply	8	62%
Water rates	3	23%
Water quality	2	15%
District Limitations		
Lack of secure water right	7	20.5%
Aging infrastructure	7	20.5%
Lack of funding	8	23.5%
Small customer base	3	9%
Unaccounted for water loss	1	3%
Growth moratorium	5	15%
Lack of clear regulatory/policy guidelines	3	9%
Vision for County Water Resource Management		
Status quo	2	15%

JPA framework	3	23%
Unidentified cooperative structure	1	8%
Central agency to assist districts	2	15%
Central agency leading water management	5	39%
Role of MCWA		
No role	1	11%
Limited role	5	56%
Lead role	3	33%

*These percentages have not been analyzed using statistical methods, they only reflect the percent of district representatives, from those interviewed, who gave the respective response.

Trends & Suggested Actions

While the results from the survey and interviews only present a snapshot of the current organizational and political landscape and are not intended to be statistically significant, they do provide important insights regarding common areas of concern and conceptions of the role a central water agency should play. It is clear that the districts represent many different needs and visions of water management within the county, however there are some common areas of concern that Table 5 highlights. First, the need for a stable water supply for current and future populations is a major issue, with 62% of the district representatives citing it as one of the top water user concerns. Water rates and water quality are also important concerns that were mentioned often. Not surprisingly, lack of secure water rights was a common limitation identified by districts. Water districts in Brooktrails, Redwood Valley, and Fort Bragg are all currently under DHS mandated moratoriums limiting additional water hookups. Willow and Calpella are also currently restricted in their ability to service growing populations.

Additionally, lack of funding sources and aging or inadequate infrastructure were also commonly cited. As one survey respondent noted, “There are two main weaknesses with the system. The first is endemic to all communities. The City does not have either the financial resources or staff to maintain the water collection and distribution system to the level needed.” Interestingly, several district representatives mentioned the lack of clear policy or regulatory guidelines at the county level, as a limitation to their district. This presents a direct area of action for MCWA.

Questions regarding the future of water management in the county brought to the fore several potential organizational structures. A majority of interview respondents (54%) indicated a preference for a central agency with varied levels of control from a relatively hands-off source of information, expertise, and guidance (15%), to a stronger entity taking the lead in water development and management throughout the county (39%). When asked about the role of MCWA in the future of water management, 56% saw it having a limited role, including structures where MCWA would serve as an umbrella organization or as a partner/resource to the districts. Finally, 33% saw MCWA taking a lead role, including structures where MCWA would direct countywide water development and allocation and/or coordinate/streamline water policy and regulatory requirements. Together 89% of the district representatives envisioned some role for MCWA in the future of water resource management.

Discussions with the water district representatives elucidated a common frustration with the myriad of uncertainties involved with water supply in the county. As one respondent said, "We are in a sea of uncertainty." These uncertainties stem from a variety of sources including increasing regulatory requirements, changing definitions of water rights, and growing populations. "[There are] so many regulations now, and so many things we have to test for, that the cost of running a water district has almost doubled in the past 6 years…San Francisco/Santa Rosa can spread out the cost of improvements…[smaller agencies] can't." Several respondents mentioned that this was an area where a central agency could help districts, "[We need] some kind of entity to coordinate bond issues and assist districts to get money for upkeep and to keep up with regulatory requirements. Most of the districts are so small that they can't spread costs over a large consumer base. The kind of role the county water agency could have includes providing representation for funds through prop. 50 and water bonds." Commonly cited tasks of a central agency included:

- Develop new sources of water for the county, engage in governmental lobbying, and protect Mendocino Co. interests.
- Track grants and communicate with groups who might benefit from them. Assist in preparation and participate in the grant if appropriate.
- Build and maintain a communications and cooperation network among water professionals in the county.
- Serve as a clearinghouse and information center or central library for people who manage public water systems or land.
- Find water sources for its citizens that live outside water district boundaries.
- Streamline regulatory requirements and assist existing regional water agencies to respond to service, operational and regulatory demands and to promote overall effectiveness and coordination in the delivery of water services.
- Enable resource sharing between districts (staff and equipment).

Other, less frequently suggested tasks included:

- Provide water treatment and wastewater treatment facilities.
- Maintain an up-to-date Geographic Information System (GIS) covering:
  - All watersheds in the county that are used as water supplies.
  - The usual topography, soils, vegetation, & erodibility layers.
  - Grazing areas and animal density.
  - Composites of Timber Harvest Plans (THP) and other land disturbing activities.
  - A series of "Cumulative Effects" overlays with composites for roads and their condition, known dump sites, large scale septic systems, places where chemicals are used, etc.
  - Water quality and quantity data.
- Maintain contact and interchange information with other GIS-users.
- Review and classify all THPs, other land disturbing activities requiring permits, and pesticide use permits. Notify water system managers when something is proposed in their areas of interest and assist in providing comments as needed and appropriate.

- Maintain a library of well logs for all wells in the county. Develop one or more GIS overlays with these data.
- Develop well and septic system maps for each heavily populated area in the county lacking developed sewer systems. Build a set of GIS overlays addressing this theme. The coastal marine terraces are a good place to start.
- Work as a team with public water system managers and others to provide both data and ideas when informed comments are needed in a short time.

While there are many advantageous services that a central agency could provide to the districts, there are also many concerns and fears associated with an expanded role for the county water agency. One respondent noted that "MCWA has been asleep for 50 years and all of a sudden it wants to wake up and pick up this big of a problem, they don't know the situation." Another said, "I could see a large agency becoming the pawn of larger interests, benefiting the wealthy/powerful at the expense of the smaller forces." These fears must be respected and addressed in determining the future role of the county water agency.

MCWA Board of Directors

In addition to surveying and interviewing the individual water service providers in the County we conducted individual interviews with the MCWA Board of Directors. These interviews lasted approximately one to one and on half hours with six questions explored:

- What is your preferred structure or vision for water resource management in the county;
- What do you see as bottlenecks to this vision or sources of tension;
- Describe your constituency;
- What opportunities does the resolution (03-032) creating a stronger MCWA represent for you and your constituents;
- What are the implications of the recent Board decisions to consider revising/withdrawing from the JPA with the IWPC; and
- What are your expectations for this project/review?

It is important to point out that the directors' participation in these interviews served as a first step for each of them to explore their thoughts and ideas with the project team. As such, we view their responses as the first installment of an ongoing discussion between the project team, directors, and county water users regarding the future role of MCWA. We have summarized these responses under three broad categories: Vision for MCWA role; Needs for realizing and barriers to the Vision; and Situation summary expectations.

<u>Vision for MCWA</u>

In describing their vision for the Agency, directors used a number of metaphors and analogies. These visions ranged from a "father-figure" to an "uncle-figure" to the

"hub and spokes of a wheel." In using these metaphors and analogies, the directors presented similarities and differences in the structure and approach to water resource management for the Agency.

Consistently, the directors identified the need for centralization or consolidation of services within the County because the smaller water districts often lack the resources and staff to address their respective needs. Repeatedly identified services that the Agency could provide through consolidation were outreach and education, science and technical assistance, and the pursuit of grant funds and sources of financial assistance. This centralized or consolidated role would also provide a countywide identity to agencies and organizations outside of the County.

An additional vision the directors consistently saw for the Agency was as arbitrator of disputes over water resources or alternatively as the broker of agreements between the respective county water districts. In describing this centralized or consolidated role, the directors similarly voiced that the Agency will need to go slow and evolve into that role, in order to gain the trust and credibility of the local county water districts. Several directors see that trust building as a result of Agency actions and demonstrated commitment to effective water resource management.

Differences in the directors' vision for the Agency centered about the semantics of authority and the issue of water rights and development. Differences over what level of authority the Agency should have focused on the contrast between consolidation and centralization of services. In some cases, these two modes were used synonymously but in others the differences between consolidation and centralization were made explicit. We will explore these differences and their implications in Project Component B as alternatives for Agency organizational structure are developed.

With regard to water rights, there were not necessarily differences in the directors' vision for the Agency as there was recognition that county water district rights needed to be respected as the Agency develops additional water for the county.

Needs for Realizing and Barriers to the Vision

The first and most consistently mentioned barrier for the Agency was a source of secure funding. County general funds have been allocated to hire the Agency general manager. This use of general funds is viewed as temporary with the intent that the Agency will develop a revenue stream of sufficient size to become self-supporting. Combined with this need for Agency funding is recognition that the diverse services and functions that could be appropriate for the Agency to take on require a respective level of financial support. It may not be possible for the Agency to these multiple functions simultaneously and will therefore need to prioritize those services and the funding needed to implement them.

Politically, the directors identified the ongoing differences of opinion and legal disputes between individual county water districts as a significant barrier to their Agency vision. These observations are tied closely to the concerns about the level of authority and water rights the Agency will have in contrast to the local authority held by individual county water districts. In addition, the existing conditions of the IWPC JPA potentially present a barrier to the consolidation of water resource management under the Agency. The underling question being explored is whether water resource management is better

served in the County by the local water service providers or by a consolidated organization. Responses from the directors support the exploration of a combination of the two to capitalize on the merits and reduce the drawbacks of each.

The principle hydrological barrier to the Agency vision is a lack of understanding about the amount of available water within the three basins and the amount being used. Unresolved components of this barrier include the differentiation between surface, ground, and under flow water extractions. In addition, water use is not metered in many cases, leaving county water districts guessing about the amount of water provided in comparison to the amount held through water rights.

Situation Summary Expectations

In general, the directors expressed their hopes that this situation analysis will offer a process through which, a commonly held Agency mission and the steps and resources required to put that mission into effect can be identified. Directors asked that the project team be honest and direct, but also to provide solutions not simply critique. In this capacity, the directors want the project team to serve as a source of science and research and provide them with a structure through which they can productively explore the options for water resource management within the County. Products hoped for from the project include a listing of the pros and cons for the different options, a preferred option, and an explanation for why it is preferable. In addition, several directors identified the importance of this project in providing constituents with the information to understand the issues and the steps being taken to restructure the Agency.

Identifying Alternatives for Managing Water Resources

Opportunities to secure and manage water resources in a consolidated fashion for the County have been missed, producing a fractionalized approached to resource management. Reasons for this in the past include a lack of financial capital to participate in water development projects and separation in water resource management goals and objectives between water service providers and the three hydrologic basins. Cognizant that opportunities for the County and its water users have been missed in the past, the County is now presented with the opportunity to evaluate that past role and set direction for the future. What are the water resource management expectations of the County by residents in the Russian River, Eel River and Coastal watersheds? Should the County and MCWA focus solely on the service of providing water for domestic, agricultural, and commercial purposes, or do issues of instream habitat and water quality appropriately fall within its purview and responsibilities? What should the agency's role be in the development, management, and financing of new and additional water resources? Is there a role that the agency should play in support of either some or all of the other water agencies in the County? What are the benefits to being an agency with countywide independent authority and what are alternative structures of governance? Which functions are better satisfied by a countywide water agency, which by individual water districts in terms of: efficiency/effectiveness, responsibility to district members/users, responsibility to countywide population/wellbeing, present conditions, or future projected conditions?

The first step in answering these questions is to develop a list of alternative roles and approaches for the Agency. We will generate this list through an IF:THEN approach to generate alternative organizational structures and combinations of duties, as well as their implications which County will use in determining its water resource management role. The alternatives that we identify are the IF components of the IF:THEN scenarios. Here are some examples of this method of analysis:

- IF the primary objective is (economic growth, agricultural viability, fairness, environmental protection), THEN the best combination appears to be _____
- IF the acceptable fiscal burden is _____, THEN the best combination is _____
- IF the acceptable minimum stable supply is ____ for all citizens, THEN the best combination is ____
- IF the acceptable environmental risk is _____, THEN the best combination is _____

We will generate these alternatives using the Agency models and purposes identified through the Board of Directors and water service providers' survey and interviews. In addition, we will hold several public workshops, at least one per hydrologic basin, throughout the county to solicit input on the potential structure, role, and approach of the County and Agency to water resource management. These will be facilitated meetings with brief presentations of Project Component A findings and structured discussion periods to collect area water user input on desired and needed water resource management services. In preparation for these public workshops we will hold one Board of Directors workshop to identify and refine alternatives. Following the

Director's and public workshops we will meet with the Board of Supervisors to report on Project Component B including submittal of the component report.

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Attachment A

Attachment B

Survey of Water District Representatives for MCWA Situational Analysis

Thank you in advance for your time completing this survey. On behalf of the University of California Cooperative Extension and the Mendocino County Water Agency, we are collecting this information to compile a county data base of the current water resource management situation. Please answer the questions on a separate piece of paper using the numbering system provided and then email or fax the answers to Juliet Christian-Smith at jchristi@nature.berkeley.edu or (510) 643-2504.

Organization & Operations

1. What type of water district do you represent (flood control, county water district, etc.)?
2. What is the district's mission statement and management objectives?
3. What type of full-time and part-time staff do you employ (personnel, engineers, consultants, lawyers, etc.)?
4. Do you have a public office (hours)?
5. What are the names and contact information of Board Members and the Chair?
6. When are the meeting dates of Board?
7. What is the population that you serve (current and projected population of district in 5, 10, and 20 years)?

Rights & Capacity

8. What kind of water right does the district hold (riparian, appropriative)?
9. What is the quantity of water held in these rights (current and pending)?
10. Do you have other sources of water available?
11. What are the current and projected water needs of your constituency?
12. What do you see as the abilities or limitations of the district to meet current and future water needs?

Infrastructure

13. How many miles of water line does the district provide (size/type)?
14. How many fire hydrants (type)?
15. What is the storage capacity of your system?
16. What are the ages of various parts of the system?
17. What is the condition of the system (engineering assessments)?
18. What number of connections does the district provide and of what type (residential, commercial, & industrial)?
19. Are there any connection moratoriums (dates)?
20. How is water use metered or measured?

Financial Considerations

21. What is the annual budget of the district?
22. How is your budget spent (percentages on debt service, operations & management, capital replacement, legal expenses, engineering, etc.)?
23. What are your sources of revenue (and what are the dollar amounts of each)?
24. What price do you pay for water (wholesale and retail)?
25. How much do you charge for water (rate structure)?

26. What are other actual or potential sources of funding?

Future Planning

27. What kinds of planning studies have been done for the District (dates and copies)?
28. What are future goals of the district?
29. What do you see as the strengths and weaknesses of the district currently and in the future?
30. How can the Mendocino County Water Agency be of assistance to your district and to water resource management in the county?

31. What is your preferred structure for county water resource management?

Attachment D

Interviews of Water District Representatives for MCWA Situational Analysis

1. What are the main water uses in your district?
2. What issues do you find among your water users?
3. Can you identify areas of abilities and limitations within your district?
4. What are some of your thoughts on ways to address the limitations that you have identified?
5. What is your vision for water management in the county? (how could it be improved?)
6. Could the county water agency be of any assistance to your district or water management within the county in general?
7. Is there anything else that you would like to discuss?