

From Board
Packet
2011

October 13, 2011

Ms. Katherine Mrowka, Chief
Watershed Unit 3
Division of Water Rights
State Water Resources Control Board
1001 I Street
Sacramento, California 95814

Re: North Yuba Water District Amended Water-Right Permits 11516 and
11518 (Applications 13957 and 14113): Petition for Extensions of Time

Dear Ms. Mrowka:

On November 30, 2004, the North Yuba Water District ("NYWD"), then called the "Yuba County Water District," filed a petition for extension of time for the above permits. This petition asks the SWRCB to extend the December 31, 2004 deadline in these permits for applying water to beneficial use to December 31, 2040.

On September 8, 2006, Alan Lilly of Bartkiewicz, Kronick & Shanahan, NYWD's attorney, sent you a detailed letter regarding this petition. Because over five years now have passed since Mr. Lilly sent that letter, we are sending you this update letter. It describes NYWD's past actions to divert and use water under these permits, NYWD's estimated future demands for water under these permits, and NYWD's plans to develop additional water system components for this water. NYWD's Board of Directors voted on October 13, 2011 to direct me to send this letter on behalf of the District. For the reasons discussed in this letter, we request that the SWRCB grant NYWD's petition.

1. Construction of South Feather Power Project and NYWD Facilities, and NYWD Water Usage During 2000 Through 2010

As discussed in detail in Mr. Lilly's 2006 letter, Water Rights Decision D-838 concluded that the proposed water project on the South Fork of the Feather River, which ultimately became the South Feather Power Project ("SFPP"), was feasible, if the project initially was operated on a "power demand schedule" (prioritizing the generation of hydroelectric power, with relatively small amounts of water being delivered to NYWD and the Oroville-Wyandotte Irrigation District (which now is called the "South Feather Water and Power Agency" ("SFWPA"))) during the period necessary to finance the construction costs through power revenues. Then, after the construction bonds were paid off, the project could be operated on an "irrigation demand schedule," under which significantly greater amounts of water would be delivered from the SFPP

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to NYWD and SFWPA, which would be sufficient to meet the foreseeable needs of both districts' customers.¹ This same concept was described in the April 30, 1959 order of the Federal Power Commission (which now is called the Federal Energy Regulatory Commission).

Approximately \$60,000,000 in bonds were issued in the early 1960's to finance the construction of the SFPP, the SFPP was completed in 1963, and SFPP power revenues were used to pay the debt service on the bonds. Consistent with the concept that the SFPP had to be operated on a "power demand schedule" until the construction bonds were paid off, the 1959 Agreement between SFWPA and NYWD authorized YCWD to receive only 3,700 acre-feet per year (af/yr), plus surplus water when available, through the Forbestown Ditch for use by NYWD's customers. The primary components of the SFPP and the Forbestown Ditch are shown on the maps that are attached to this letter at tabs 1 and 2.

Since 1959, NYWD has spent over \$650,000 for its share of the costs to operate and maintain the Forbestown Ditch. NYWD uses water from the Forbestown Ditch in two ways.

First, some water is released from the ditch through the Costa Creek Turnout into Costa Creek. This water then flows down Costa Creek and Dry Creek to the Dobbins-Oregon House Canal, where NYWD diverts this water and conveys it through the canal to NYWD's irrigation customers in the Dobbins, Oregon House and Richards Ranch areas.² These facilities are shown in the map attached at tab 2. NYWD has spent over \$350,000 on capital costs for this canal. As funds are available, NYWD continues to upgrade this canal to reduce conveyance losses.

Second, NYWD diverts the remainder of its water in the Forbestown Ditch into NYWD's water treatment plan in Forbestown.³ The location of this treatment plant is shown in the map attached at tab 2. NYWD spent approximately \$2,500,000 to construct this water treatment plant. After water is treated in this plant, NYWD conveys the water through NYWD's domestic water system to NYWD's customers in the Forbestown, Challenge, Sharon Valley, Cummings Ranch, Brownsville and Rackerby areas. These communities are shown on the map attached at tab 2. The components of NYWD's domestic water system are shown on the enclosed large map

¹Following Decision 838, Water Rights Decision 907 approved issuing Permits 11516 and 11518 jointly to NYWD and SFWPA. Following the SWRCB's Order WRO 2004-0029, the SWRCB issued amended Permits 11516 and 11518 solely to NYWD on April 27, 2006.

²NYWD also directly diverts water from Dry Creek under NYWD's water-right License 12984 (Application 2978).

³As shown on the map at tab 1, the Forbestown Ditch continues past Forbestown and terminates at Lake Wyandotte. SFWPA uses this portion of the ditch to supply water to some of its customers.

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titled "North Yuba Water District, Domestic Water Distribution System." NYWD has spent approximately \$2,500,000 on capital costs for this domestic water system.

Between 2000 and 2010, NYWD received approximately 3,400 acre-feet per year ("af/yr") of SFPP water through the Forbestown Ditch. Accordingly to SFWPA's water-usage reports for the SFPP, the highest amount of water that NYWD received through this ditch during 2000-2010 was in 2008, when NYWD received 4,676 acre-feet.

The 1959 NYWD/SFPWA agreement also authorized NYWD to receive 4,500 af/yr of SFPP water at the Miners Ranch Reservoir, which is shown on the map attached at tab 1. Because Miners Ranch Reservoir is located many miles from YCWD's service area and at a much lower elevation, NYWD could not deliver this 4,500 af/yr of water to NYWD's customers. Instead, NYWD has sold this water to Yuba City since 1965. Between 2000 and 2010, NYWD sold approximately 4,000 af/yr of water to Yuba City. Accordingly to SFWPA's water-usage reports, the highest usage of this water during 2000-2010 was in 2010, when Yuba City used the entire 4,500 acre-feet.

NYWD's permittee progress reports for Permits 11516 and 11518 indicate that, during 2000-2010, the year of highest total water usage was 2004, when a total of 8,357 acre-feet was diverted and used under these permits.

2. NYWD's Future Demands

A copy of the Bookman-Edmonston Engineering report, "Supplemental Testimony of Stephen Grinnell Regarding Water Demands and Conveyance Requirements, Yuba County Water District," which was Exhibit YCWD-5 for the 2000 SWRCB hearing, is enclosed. Pages 10-18 of this report discuss NYWD's estimated future demands. Using projected 2040 populations of the communities within NYWD, Table 8 of this report estimates 2040 potable water requirements. Using the gross areas of the various communities and percentages of usable and irrigated areas within the gross areas, Table 9 of this report estimates 2040 irrigation water requirements. Table 10 of this report compiles the estimated demands for treated and raw water in each community and lists which demands can be provided by water from the Forbestown Ditch. This table states that the total estimated 2040 demand for treated water from NYWD is 5,143 af/yr and the total estimated 2040 demand for raw water from NYWD is 18,555 af/yr. The sum of these two totals is 23,698 af/yr. This number is consistent with the 23,700 af/yr consumptive-use limit in Term 6 of Permits 11516 and 11518.

The other critical demand for NYWD water service is for fire protection and suppression. As shown on the map attached to this letter at tab 3, almost all of NYWD's service area and most adjacent areas to the east are in the "Very High" fire risk severity zone in the Yuba County General Plan. Unfortunately, this very high risk has been made very clear by the large and costly fires that have occurred in the Dobbins-Oregon House area. The areas burned by these fires are

shown on the map attached to this letter at tab 4. The 1997 Williams fire burned 5,743 acres, 91 housing structures, 136 out buildings and 184 vehicles, causing damages totaling \$19,000,000. The 1999 Pendola fire burned 11,725 acres, 14 residences, three commercial buildings, 65 out buildings and 41 vehicles, and caused another \$19,000,000 in damages. Water from NYWD's Dobbins-Oregon House Canal was used to fight these fires. Water from this source also was used to fight the 2009 Yuba fire, which burned 3,891 acres near NYWD's service area and caused \$10,600,000 in damages, and the 2010 Bullards fire, which burned 1,307 acres and caused \$5,300,000 in damages.

Although the 2000 Bookman-Edmonston report does not include any separate estimates for demands for fire protection and suppression purposes, NYWD will need to supply substantial amounts of water for these purposes if there are similar fires in the future.

3. 2005 NYWD/SFWPA Agreement

In May 2005, SFWPA and NYWD executed a new agreement (the "2005 Agreement"), which superseded the 1959 NYWD/SFWPA Agreement. This new agreement provides that, beginning in 2010, NYWD will have the right to increase the amount of water that it may receive through the Forbestown Ditch by 20,000 af/yr, from the prior limit of 3,700 af/yr to a new limit of 23,700 af/yr.

This agreement also provides that, beginning in 2010, NYWD and SFWPA will share, on a 50-50 basis, the net revenues from SFPP power generation and water sales. The SFPP construction bonds were paid off in 2010, and SFWPA now is building up a \$15,000,000 reserve fund for major SFPP repairs. After this reserve fund is built up, the distributions of net power revenues to NYWD and SFPWA will increase substantially. While the exact amounts that will be distributed each year will depend on the amounts of power generated each year, power prices and the SFPP operation and maintenance costs, the current best estimates are that these amounts will be the following during 2012-2020:

<u>Year</u>	<u>Amount (to be paid in March of following year)</u>
2012	\$2,056,000
2013	\$2,289,000
2014	\$2,386,000
2015	\$2,856,000
2016	\$4,998,000
2017	\$4,614,000
2018	\$4,446,000
2019	\$5,523,000
2020	\$5,993,000

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These annual amounts are projected to increase further after 2020. These amounts will significantly increase NYWD's annual budget, which in recent years has been approximately \$950,000 per year. When these additional revenues become available to NYWD, they will give NYWD the ability to finance major improvements to NYWD's water system and to pay for the additional water that NYWD has the right to receive from the SFPP.⁴

The 2005 agreement also provides that on January 1, 2011, SFWPA will convey the portion of the Forbestown Ditch between Turnout SF-14 on the SFPP's Woodleaf Penstock and NYWD's water treatment plant in Forbestown (both shown on the map attached at tab 2) to NYWD, and that NYWD may replace this portion of the ditch with a pipeline. SFWPA has made this conveyance, and, as described in the following part of this letter, NYWD is working on a project to replace this portion of the ditch with a pipeline.

4. NYWD's Development Plans

a. Forbestown Pipeline Project

The highest priority for NYWD is to replace the portion of the Forbestown Ditch between Turnout SF-14 and NYWD's water treatment plant in Forbestown with a pipeline. This replacement pipeline is critical to NYWD for several reasons. First, the Forbestown Ditch, which was originally constructed in the 1860's, contains several reaches that run along the sides of steep hillsides and several major siphons in areas with very limited access. As a result, this ditch is prone to failures that are difficult and time-consuming to repair. This risk was vividly demonstrated in December 2008, when one of the siphons blew out, and when, during the following weeks before the siphon could be repaired, the water supply at NYWD's water treatment plant came within a few hours of completely running out of water. Second, other reaches of the ditch pass through fields where animals graze and near septic tanks, and thus are subject to contamination. Third, there are substantial losses when water is conveyed through this ditch.

Enclosed with this letter is a copy of a November 5, 2009 report by Kennedy/Jenks Consultants, titled "North Yuba Water District Forbestown Ditch Improvements Feasibility Study." This report discusses the various pipeline alignments that Kennedy/Jenks evaluated, the recommended project facilities, the permitting requirements, and the estimated construction costs. The estimated construction cost for the preferred alternative (Alternative 1) is approximately \$19,000,000.

⁴The 2005 agreement requires NYWD to pay the SFPP for lost power revenues associated with deliveries of non-surplus water to NYWD through the Forbestown Ditch that exceed 3,700 af/yr.

Until now, NYWD has not been able to afford this project. However, now that NYWD soon will be receiving its share of the SFPP net power revenues, as discussed above, NYWD will be able to finance the design and construction of this project. NYWD recently hired Capitol Public Finance Group ("Capitol PFG") to prepare a business plan for this project. This plan contemplates that NYWD will issue approximately \$3,400,000 in three-year or four-year bond anticipation notes to finance CEQA/NEPA, permitting and design work for the project, and that NYWD then will issue approximately \$30,000,000 in 30-year construction bonds to pay off the bond anticipation notes and finance construction costs. The payments on the construction bonds will be approximately \$2,300,000 per year, starting in 2016. Based on NYWD's share of the projected SFPP net power revenues discussed above, NYWD will be able to build up a reserve fund for these payments and then make these payments as they become due.

On September 22, 2011, NYWD's Board of Directors directed Capitol PFG to prepare a proposed financing for the pre-construction work for this project, and NYWD expects to be able to consider, and hopefully approve, this financing in November of this year. If this financing proceeds as planned, then NYWD plans to follow the following schedule for development and construction of this project:

- Completion of 30% design plans and specifications: July 2012
- Certification of Final EIR: December 2012
- Forest Service adoption of FONSI and issuance of special-use permit: March 2013
- Completion of 100% design plans and specifications: April 2013
- Circulation of bid package to interested bidders: May 2013
- NYWD obtains all permits and easements: June 2013
- Completion of construction financing: July 2013
- Award of construction contract and commencement of construction: August 2013
- Completion of construction: July 2015

b. Domestic Water System Improvements

As discussed in the enclosed April 17, 2008 Kennedy-Jenks report, "North Yuba Water District, Near-Term and Ultimate Water System Improvements Recommendations," NYWD's domestic water system needs several system upgrades and improvements, particularly larger pipelines and larger water storage tanks. This report estimates that these upgrades and improvements will cost a total of \$14,453,000. NYWD is making these improvements and upgrades as funds are available. For example, we recently approved a project to construct a new water tank in Forbestown, which will cost \$1,200,000. This project is scheduled for construction next spring.

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These improvements will allow NYWD to provide better and more reliable service to NYWD's existing domestic customers, and also to serve new customers. NYWD expects that there will be significant numbers of new connections to its domestic water system. For example, on March 2, 2011, Yuba County LAFCO approved the annexation to NYWD of two parcels in the Forbestown area owned by Sierra Pacific Industries, with a total area of 187 acres. Development of these parcels will result in 75 new connections to NYWD's domestic water system. Another proposed annexation, of 5,296 acres owned by the Soper-Wheeler Company, is likely to be considered by Yuba County LAFCO in the near future.

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Overall, we believe that the estimated 2040 demand of 5,143 af/yr for water from NYWD's domestic water system in the 2000 Bookman-Edmonston report still is the best estimate of future total demand for water from this system.

c. Irrigation Water System Improvements

The demand in the Dobbins-Oregon House area for irrigation water from NYWD currently far exceeds available supplies. NYWD currently provides irrigation water to 119 customers in this area. These parcels contain less than 10 percent of the land in the Dobbins-Oregon House area and there are over one thousand more parcels in this area for which the owners would like to receive irrigation water from NYWD. NYWD cannot supply these other parcels now because of capacity limitations in the Forbestown Ditch and the Dobbins-Oregon House Canal. Considering this very large unmet demand, we believe that the 2040 estimated demand of 18,555 af/yr for irrigation water from NYWD in the 2000 Bookman-Edmonston report remains the best estimate of total future demands for irrigation water from NYWD in this area.

On September 27, 2011, Kennedy-Jenks Consultants submitted a proposal to NYWD for preparation of a feasibility study and report for further development of NYWD's irrigation system in the Dobbins-Oregon House area. A copy of this proposal is enclosed. NYWD's Board of Directors approved this proposal on October 13, 2011. Kennedy/Jenks is scheduled to complete this study and report in December 2011. We will send a copy of this report to you when it is available.

This study will review and update the demands for irrigation water in the Dobbins-Oregon House area and develop a conceptual plan for conveying water from Dry Creek to NYWD's irrigation customers in the Dobbins-Oregon House area. We expect that infrastructure improvements will include replacing existing the Dobbins-Oregon House Canal with a piped water system. This replacement will eliminate the substantial conveyance losses in the canal, allow NYWD to deliver water to many more irrigation customers through a pressurized water system, and greatly facilitate deliveries of NYWD water for fire-suppression purposes.

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The construction schedule for this piped water system will depend on its total costs. NYWD will be able to finance these construction costs after the Forbestown Pipeline Project (discussed above) is completed and as additional surplus SFPP power revenues become available. At this time, we anticipate that such additional revenues will start becoming available in 2016, when NYWD's share of projected SFPP annual net power revenues will exceed the amount of NYWD's projected annual payments on the Forbestown Pipeline Project construction bonds by at least \$2,500,000. Our best current estimate is that environmental, permitting and design work on this system will begin in 2016, and construction will begin in about 2020.

d. Dobbins-Oregon House Domestic Water System

There also is a significant need for NYWD to provide domestic water service in the Dobbins-Oregon House area. Many of the homes in this area currently rely on wells that have yield and water-quality problems. We anticipate that, after NYWD completes the irrigation water system improvements discussed above, NYWD will begin work on a new domestic water system for the Dobbins-Oregon House area, with construction occurring during the 2025-2030 period.

NYWD also is seeking grant funding and other mechanisms to finance these improvements. If NYWD is successful in obtaining such grant funding or alternative financing, then NYWD may be able to construct these improvements sooner.

5. NYWD/Yuba City Agreements

As discussed above, the 1959 NYWD/SFWPA agreement gave NYWD the right to receive 4,500 af/yr of water from the SFPP at Miners Ranch Reservoir. Because Miners Ranch Reservoir is located many miles from YCWD's service area and at a much lower elevation, NYWD could not deliver this 4,500 af/yr of water to NYWD's customers. Instead, NYWD has sold this water to Yuba City since 1965. These sales were pursuant to agreements that NYWD and Yuba City executed in 1965 and 1980. The 1980 agreement expired at the end of 2010.

In May 2010, NYWD executed new agreement with Yuba City. This agreement provides that, so long as NYWD does not need the entire 23,700 af/yr of water that it may receive from the SFPP at the Forbestown Ditch, it will sell up to 4,500 of this water to Yuba City. The term of this agreement is through 2035. The agreement clearly provides that these sales are of surplus water and that Yuba City will not acquire any permanent right to SFPP water through these sales. NYWD intends to continue to supply water to Yuba City under this agreement until NYWD needs this water for deliveries to its own customers. NYWD then will stop providing this water to Yuba City and start using it for NYWD's own customers.

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6. NYWD Resolution Regarding Future Development and Petition For Extension Of Time

On October 13, 2011, NYWD's Board of Directors passed and adopted NYWD Resolution No. 11-693. A copy of this resolution is attached to this letter at tab 5. In this resolution, NYWD's Board of Directors confirms the estimated 2040 demands for treated water and raw water that are described in the 2000 Bookman-Edmonston Engineering report and NYWD's intention to construct the Forbestown Pipeline Project, the domestic water system improvements, the irrigation water system improvements and the Dobbins-Oregon House domestic water system on the schedule stated in the resolution. In this resolution, NYWD's Board of Directors also asks the SWRCB to grant NYWD's 2004 petition for extension of time.

CONCLUSION

For the reasons discussed in this letter, the estimated 2040 total demand of 23,700 af/yr for water from NYWD's treated water and raw water systems in the 2000 Bookman-Edmonston report remains the best estimate of these future demands. NYWD's rights under water-right Permits 11516 and 11518 and NYWD's contractual rights under its 2005 agreement with SFPWA now authorize NYWD to receive this amount of water from the SFPP. NYWD has clear plans to develop facilities and improvements that will convey this amount of water from the SFPP to NYWD's customers, and NYWD has a firm source of revenues to pay for the construction and operation of these facilities. It will take NYWD 20 years to complete these facilities, but NYWD will be able to complete them, and to use the entire 23,700 af/yr, well before the 2040 deadline in NYWD's petition for extensions of time. NYWD therefore requests that the SWRCB grant NYWD's petition.

Sincerely,

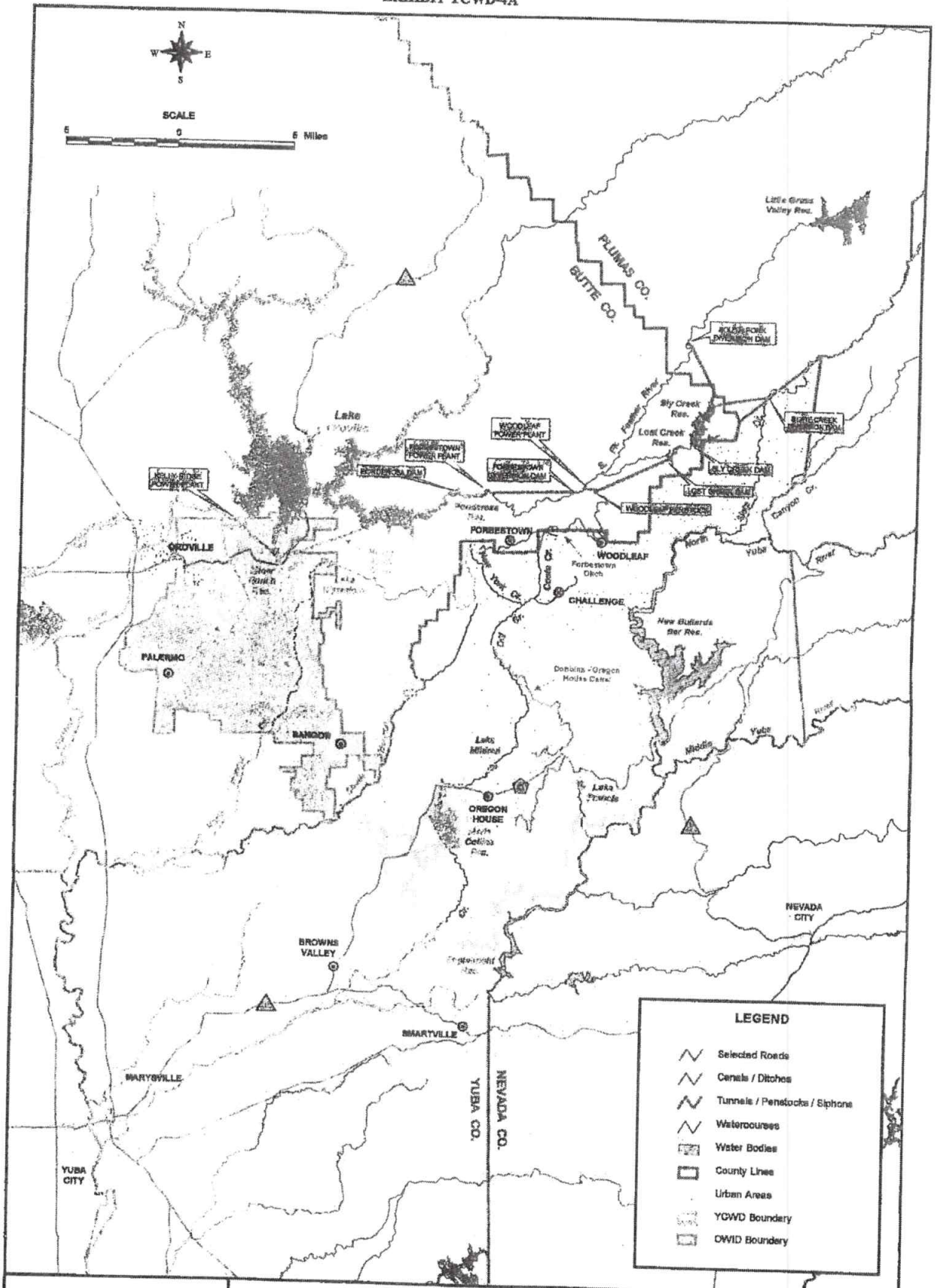
Jeanette L. Cavaliere, President

- Attachments:
1. Map of SFWPA and NYWD service areas and facilities (exh. YCWD-4A)
 2. Map of NYWD and demand areas (Fig. 2 from exh. YCWD-5)
 3. Map of Yuba County General Plan Fire Risk Severity Zones
 4. Map of Yuba County Fire History
 5. NYWD Board of Directors Resolution No. 11-693

- Enclosures:
- Map "North Yuba Water District, Domestic Water Distribution System"
 - October 2000 Bookman-Edmonstron Engineering Report, "Supplemental Testimony of Stephen Grinnell Regarding Water Demands and Conveyance Requirements, Yuba County Water District (exh. YCWD-5)

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- November 5, 2009 Kennedy-Jenks Consultants report, "North Yuba Water District Forbestown Ditch Improvements Feasibility Study"
- April 17, 2008 Kennedy-Jenks Consultants report, "Near-Term and Ultimate Water System Improvements Recommendations"
- September 27, 2011 Kennedy-Jenks Consultants' "Proposal for Engineering Services, North Yuba Water District Irrigation Water Delivery Feasibility Study"

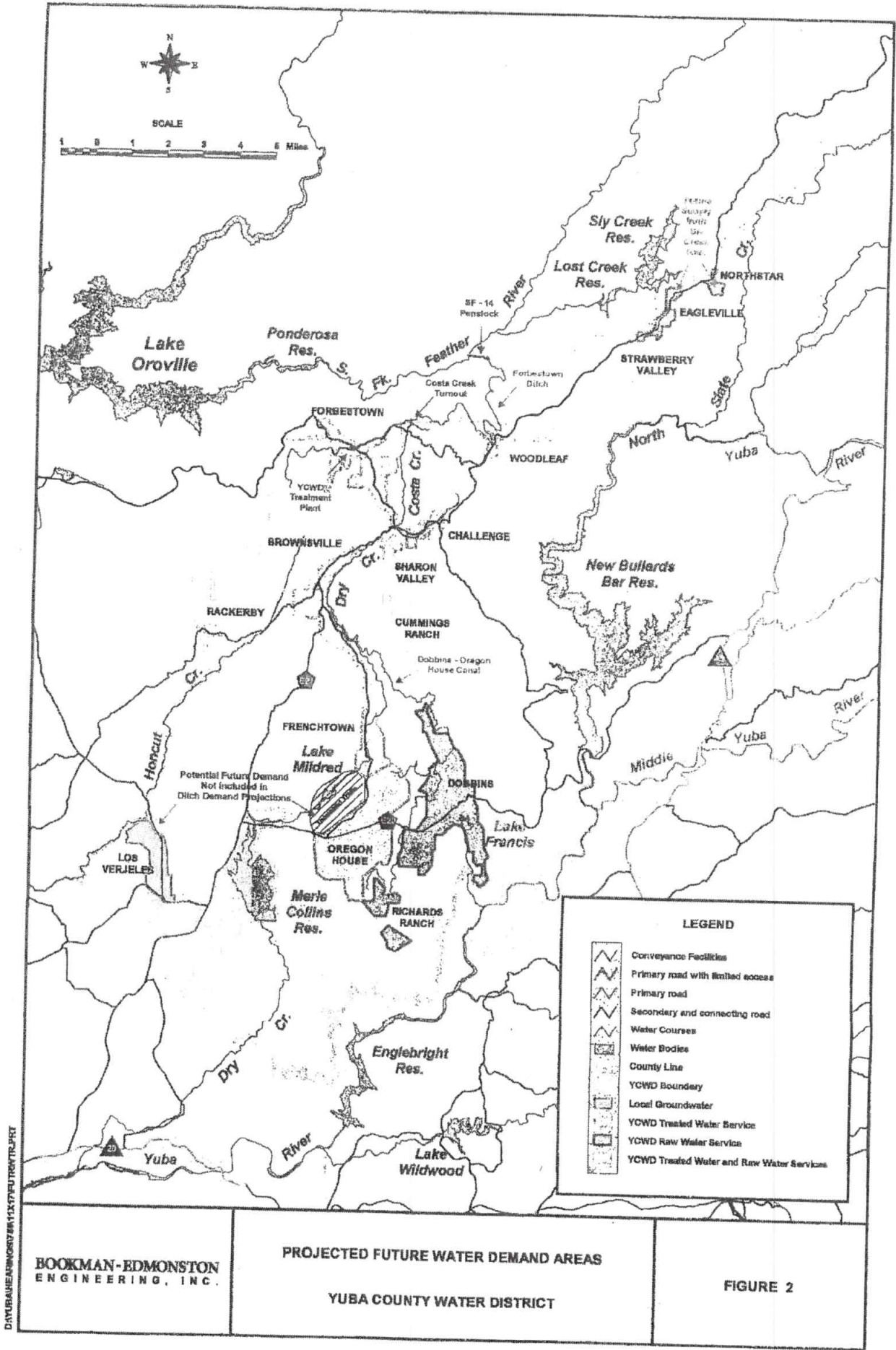


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**BOOKMAN-EDMONSTON
ENGINEERING, INC.**

**SOUTH FORK FEATHER RIVER PROJECT
FACILITIES AND OWID AND YCWD AREAS
YUBA COUNTY WATER DISTRICT**

FIGURE 1



BOOKMAN-EDMONSTON
ENGINEERING, INC.

PROJECTED FUTURE WATER DEMAND AREAS

YUBA COUNTY WATER DISTRICT

FIGURE 2

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Source: California Department of Forestry and Fire Protection (Cal Fire), California Fire Hazard Severity Zone Map Update Project, 2008.

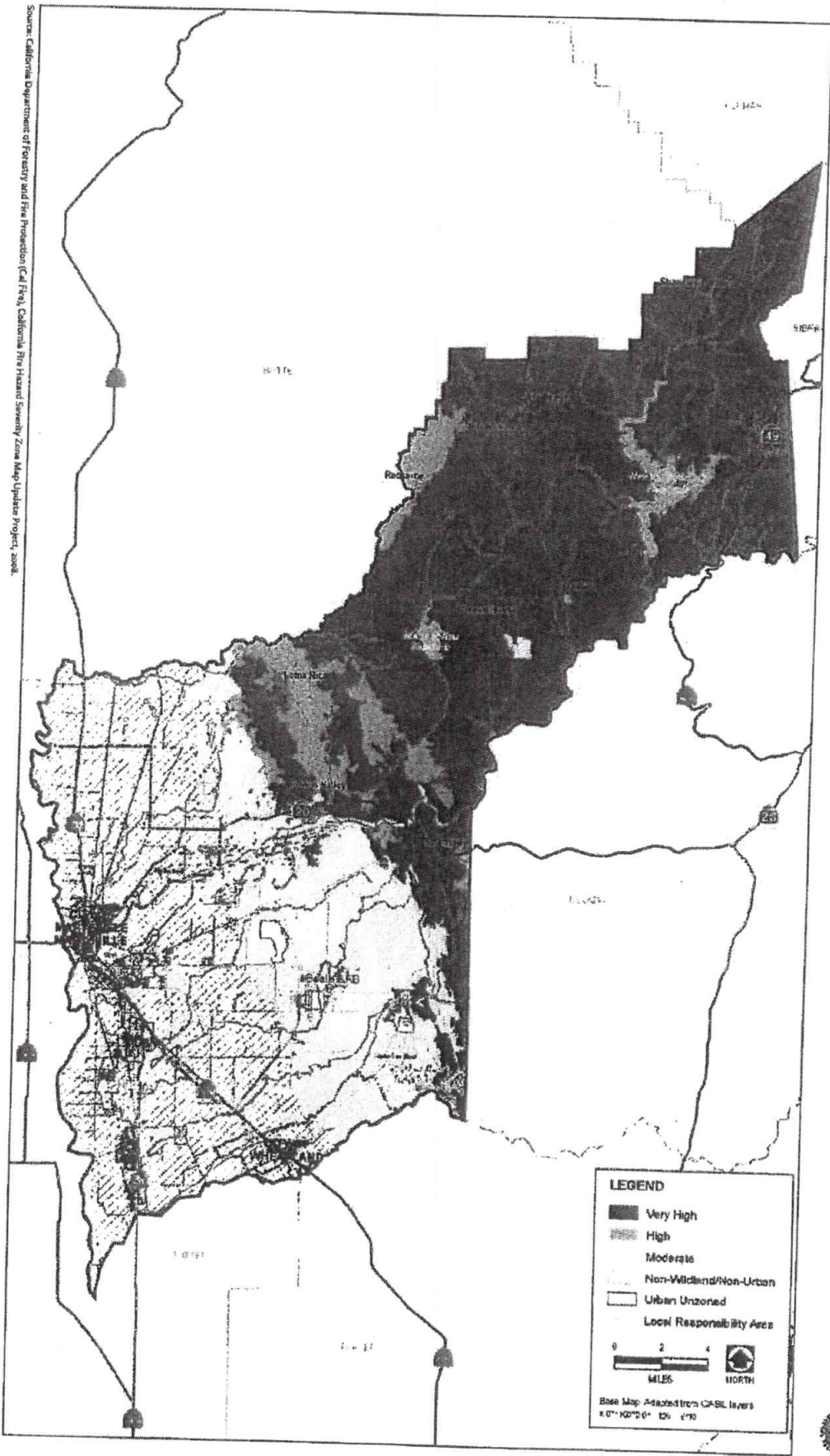


Exhibit Public Health & Safety-4, Fire Risk Severity Zones

PUBLIC HEALTH & SAFETY-12

YUBA COUNTY GENERAL PLAN



Dobbins-Oregon House Fire Protection District Multi-Hazard Mitigation Plan

Figure 1-6 Yuba County Fire History 1900 to Present

