

Testimony for James Yost

1. I am a registered civil engineer in the State of California and a founding partner of the consulting firm of West Yost Associates, and I have been engaged in water resources consulting work since 1972. I have been involved with the Davis-Woodland Water Supply Project (DWWSP) and its predecessor water supply planning efforts since 1990, and I assisted in the projection of water demands that served as the basis for the water right application filing in 1994. I am currently the Project Engineer for the Woodland-Davis Clean Water Agency (WDCWA or Agency) and, in this position, I am responsible for the overall program management for the DWWSP. A copy of my resume, which describes my education, professional registration and work experience, is Exhibit WDCWA-2.

BACKGROUND

2. The Cities of Davis and Woodland currently rely solely on groundwater as their sources for potable water (see Slide 4). Having an additional source of water supply will greatly improve the cities' water supply reliability and sustainability.
3. Both cities are operating aging water systems that soon will require large capital expenditures to keep the systems operational. As the wells age, their production rates decrease, requiring their eventual replacement to meet demands. Each city thus will have to make very significant capital improvements in the future just to maintain its current water supply system.
4. The diminishing quality of the groundwater supplies has caused many wells in both cities to be shut down, requiring construction of replacement wells. Without a diversified water supply, the combination of more stringent drinking water regulations and increasing contaminant levels would leave the cities vulnerable to compliance violations and difficulties meeting their projected demands.
5. Each city's current and anticipated future waste discharge requirements for their wastewater treatment facilities include salinity and boron effluent goals and effluent limits for selenium that cannot be met with the cities' current groundwater-only drinking water supplies. As discussed further in paragraph 10, studies indicate that treating either the groundwater or wastewater to meet the cities' future waste discharge requirements would be cost prohibitive and environmentally adverse.
6. With large foreseeable capital expenditures looming, the Cities of Davis and Woodland, and UC Davis, began in 1990 to investigate potential solutions to meet their long-term water supply needs (see Slide 5). Many supply alternatives were evaluated with preference given to joint regional projects. Studies identified two potentially viable alternatives: 1) a new surface water supply for conjunctive use with groundwater, and 2) wellhead treatment of the groundwater supply. An environmental impact report (EIR) for the DWWSP, certified by Davis and approved by Woodland in 2007, concluded that obtaining surface water from the Sacramento River would provide the best quality water, have the fewest environmental impacts, and be the most cost effective option. Exhibit WDCWA-3 includes pages 5-7, 5-8, 5-9, and 5-54 of the April 2007 DWWSP Draft EIR.

AGING WELL SYSTEMS

7. As previously discussed, the cities operate aging groundwater supply systems that require substantial capital investments to meet existing and future demands (see Slide 7). The typical life of a well is 30 to 50 years. Slides 8 and 9 show the ages of the operational wells in the cities of Davis and Woodland, respectively. Currently 25 of the cities' 39 active wells are 30 years old or older. As wells age, they experience diminished water quality and production losses.

DRINKING WATER QUALITY

8. Of growing concern are the increasing contaminant levels in the cities' groundwater supplies. Three constituents of concern from a drinking water supply standpoint are nitrates, arsenic, and chromium. Slide 11 shows the trend of historical and anticipated future nitrate levels in Woodland wells. As indicated in this slide the maximum drinking water limit is 45 mg/L for nitrates. Because the cities' wells may not operate when any contaminant level exceeds the applicable drinking water limit, the cities have been forced to shut down or destroy a large number of wells. The wells shown in red on Slide 12 have been shut down in Davis and Woodland due to age, production loss, or high contaminant levels. In total, 16 wells in Davis and Woodland have been shut down or destroyed.
9. Exhibits WDCWA-4 and WDCWA-5 describe the histories of the well problems that Davis and Woodland have experienced. With the continuing trend of increasing concentrations of contaminants, more wells will need to be taken out of service so that the cities can continue to meet drinking water standards. The City of Davis, especially, is concerned with the increased levels of arsenic and chromium. As the levels of these and other constituents continue to rise, the cities must consider costly wellhead treatment to reduce the levels of these constituents so that the cities can continue to meet drinking water standards. For most wells, wellhead treatment would be very difficult because of the very limited spaces on which these wells are sited (for example, see Slide 7).

WASTEWATER TREATMENT AND DISCHARGE COMPLIANCE

10. Another major concern is the impact of deteriorating quality water supplies on the cities' abilities to meet current and future wastewater discharge requirements. The cities' current and future NPDES discharge permits contain effluent objectives and limits for various mineral constituents (salinity, boron, and selenium) that the cities cannot meet if they continue to use their current groundwater supplies without some form of wellhead treatment. These constituents are present in the groundwater supplies at elevated concentrations, which are the principal causes of the cities' inability to meet their future waste discharge limits. Exhibit WDCWA-6 is the Woodland NPDES permit dated February 5, 2009 and Exhibit WDCWA-7 is the Davis NPDES permit dated September 23, 2010. Exhibit WDCWA-16 is the City of Davis Time Schedule Order No. R5-2010-0098. The following pages in the cities' respective NPDES permits reference the constituents mentioned in Slides 15 and 16: for Davis (Exhibit WDCWA-7) – pgs. 9 and 11 (selenium), pg. F-44 (EC), pg. F-43 (Boron), and pg. F-46 (TDS); for Woodland (Exhibit WDCWA-6) – pg. 9 (selenium), pg. F-20 (EC and Boron), pg. F-21 (TDS). Exhibit WDCWA-8 is a summary table of

compliance schedules for selenium, EC, and Boron as specified in the NPDES permits or Time Schedule Orders for Davis and Woodland.

11. Woodland's recently upgraded tertiary wastewater treatment facility (see Slide 14) cannot comply with the anticipated future waste discharge limits for salinity, boron and selenium (see Slide 15). The City of Davis has similar problems (see slide 16). The City of Woodland is currently being fined \$3,000 per violation (typically on a monthly basis) for exceeding the selenium effluent limit. These minerals cannot be removed by conventional wastewater treatment. To reduce the concentrations of these minerals in the cities' present groundwater-based water supplies would require wellhead treatment using a reverse osmosis (RO) process, which is very energy intensive and costly, especially considering the cost to dispose of the brine waste stream generated by the process (the volume of which would equal 10% to 20% of the volume of the groundwater production). In comparison, a surface water supply from the Sacramento River will contain much lower concentrations of these minerals, which will allow the cities to meet wastewater discharge limits using conventional treatment processes.

PROPOSED PROJECT

12. As discussed above, the objectives of the DWWSP are to provide a reliable, sustainable, and affordable source of water that will allow both cities to meet their current and future waste discharge permit requirements and meet all anticipated drinking water limits (see Slide 18). The DWWSP must be constructed so that both cities can meet the selenium provisions of their NPDES permits and future anticipated salinity and boron effluent limits. The DWWSP goal is to provide a project that will not adversely impact the environment, while also minimizing the cost impacts on the customers.
13. A project to greatly improve the quality of water supplied to both cities was envisioned at a conceptual level during master planning efforts in 1990 and has since been evaluated in multiple feasibility studies. Over two dozen alternatives were considered, including individual and regional projects, and groundwater, surface water, and conjunctive use projects. Of the many alternatives considered, only two meet the project objectives: 1) obtaining a supplemental surface water supply that could be conjunctively used with groundwater, and 2) wellhead treatment of groundwater (see Slide 19). The groundwater treatment option would use RO treatment to remove minerals from the groundwater. The cost of this groundwater treatment alternative has been estimated to be more than twice the cost of the supplemental surface water supply option. Exhibit WDCWA-9 is a technical memorandum completed in 2007 that estimated the costs of the proposed project in comparison to the costs of the wellhead treatment alternative.
14. RO treatment also would have major environmental impacts associated with disposal of the brine waste from the RO process. Brine disposal options are limited because of the brine's very high salt content. Brine must either be concentrated or evaporated by energy intensive processes, evaporated in ponds, injected deep into the ground, or conveyed in a pipeline and discharged into the ocean. One brine disposal option considered was evaporation ponds. However, this option was rejected, because of the large land area needed to construct several thousand acres of ponds, and primarily because of the high potential for adverse impacts of highly saline evaporation ponds

on water fowl and other aquatic life. Slide 20 shows examples of these impacts on birds at Kesterson Reservoir. Because of the problems with evaporation ponds, the most viable brine disposal option would be to convey the brine in a pipeline to the Carquinez Strait for discharge there. Slide 21 shows the conceptual alignment of the approximately 55 mile long brine disposal pipeline that would be necessary to convey the brine from Davis to the Carquinez Strait. The TDS concentration in this brine is expected to be two to ten times the TDS concentration of water in the Carquinez Strait at the point of discharge, depending upon time of year and the amount of Sacramento River flow. Brine conveyance lines to the ocean have been constructed in Southern California but the financial viability of such a long pipeline would require regional participation of various water users in the Sacramento Valley. An NPDES permit would be required for brine discharge and because this area is tidal and has beneficial uses designated in the Basin Plan (including fish migration, fish spawning, ocean commercial and sport fishing), it is uncertain whether a discharge permit or California Environmental Quality Act (CEQA) compliance could be obtained for discharge from such a brine pipeline into Carquinez Strait.

15. As presented in the DWWSP EIR, the proposed surface water project was determined to be the most feasible, lowest cost option with the least environmental impact. The proposed project includes several joint regional facilities and local infrastructure components. Slide 22 illustrates the components of the project. The intake/pump station would be a joint facility with Reclamation District 2035 (RD 2035). The joint intake diversion capacity would be 400 cfs, with a firm pumping capacity for the Agency of 80 cfs, and an instantaneous capacity of 100 cfs. The raw water would be pumped approximately 4.5 miles through dual pipelines to a regional water treatment facility. The treatment facility would be located on Woodland-owned property and would have an ultimate capacity of 52 mgd. Following treatment, the potable water would be delivered to Woodland and Davis through treated water pipelines. Each city would construct the necessary local infrastructure to store and distribute the surface water to its customers. If UC Davis elects to participate in the project, then a pipeline would be constructed, connected to the Davis treated water pipeline, to deliver project water to UC Davis.
16. To implement this project, the Cities of Davis and Woodland, with participation from UC Davis, in September 2009 formed the WDCWA (see Slide 23). This joint powers agency has the authority to implement and operate the regional facilities associated with the water supply project. The governing board consists of two council members from each City and is funded by each City's water rates.
17. The current project schedule calls for permitting and pre-design to occur in 2010 and 2011 (see Slide 24). The Agency intends to bid this project as a Design-Build-Operate (DBO) contract. Over the course of the next two years procurement documents will be prepared, contractors will develop detailed proposals, and a contract for the design, construction, and operation of the regional facilities will be signed. Critical to the schedule is securing funds for the project. The major source of funds will be revenue bonds which will be issued over the course of the project, with the need for major project funding beginning in 2012. Facility design and permitting will continue in 2012, with construction commencing in 2013. With the completion of construction, clean water testing of the facilities will take place in late 2015 followed by regional facility start-up and operation in 2016. This schedule will allow Davis and Woodland

to meet their selenium effluent limits in 2016 and facilitate their staged compliance with the future anticipated EC and Boron effluent limits when they are established about that time.

ENVIRONMENTAL BENEFITS

18. The DWWSP will provide environmental benefits associated with new diversion facilities on the Sacramento River. The existing unscreened RD 2035 intake was constructed prior to 1920 and there are structural, mechanical, safety and environmental concerns related to its operation (see slide 26). An entirely new intake structure will be constructed for the proposed project, which will alleviate concerns related to code compliance and safety (see Slide 27). Slide 28 contains the conceptual design drawing of the joint intake. Constructing a joint intake with RD 2035 will result in a single, screened intake on the Sacramento River for both entities' diversions and will be a substantial improvement for fish in the river in the vicinity of the intake. The new intake will have a state-of-the-art fish screen that will comply with all applicable federal and state requirements.
19. The DWWSP also will reduce the salt load discharged to the Sacramento-San Joaquin Delta (Delta) watershed. Based on the 2009 annual average wastewater discharge flows and discharge water quality, the Cities of Davis and Woodland collectively discharge a total of approximately 80,000 pounds of salt per day into the Tule Canal, Willow Slough Bypass, and Conaway Ranch Toe Drain, which are tributary to the Delta. The improved surface water quality that will be provided by the proposed surface water project will allow the cities to reduce this salt load by approximately 48 percent (see Slide 29).
20. Sacramento River surface water also contains concentrations of boron and selenium that are much lower than the concentrations of these constituents in groundwater. The lower concentrations of these constituents in the source water will allow the wastewater treatment plants to meet their current and anticipated future waste discharge permits for these constituents (see Slide 30). This will result in reduced selenium concentrations in the source water for the Yolo Bypass wetlands downstream of the cities discharges.
21. The surface water supply project also will have a lower carbon footprint than either the existing facilities or the groundwater treatment alternative. As presented on pages 3-9 through 3-11 of the Final EIR (Exhibit WDCWA-10), when compared with the cities' current groundwater system, the surface water supply project will reduce carbon emissions by 30 percent (see Slide 31). This reduction is because the net pumping head for diversion, conveyance and delivery of surface water from the river to the users in each city plus the power consumption in the treatment plant is substantially less than the net pumping head for groundwater.

PROJECT WATER SUPPLY

22. In 1994 Yolo County Flood and Water Conservation District (YCFC&WCD) filed an application (Application 30358) for a water right permit for diversions of water from the Sacramento River (see Slide 34). Eleven protests were filed to this application. Ten of the 11 protests have been resolved, and only the California Sportfishing Protection Alliance (CSPA) protest remains unresolved. In 2001, YCFC&WCD

assigned Application 30358 to the Cities of Davis and Woodland and UC Davis. The State Water Resources Control Board (SWRCB) staff then split this application into two separate applications, 30358A, which was assigned to Davis and UC Davis, and Application 30358B, which was assigned to Woodland. Each application has the same proposed point of diversion, place of use and purpose of use.

23. In 2010, the Davis and Woodland City Councils adopted resolutions assigning their cities' interests in the applications to the WDCWA and Notices of Assignment have been filed with SWRCB (see Exhibits WDCWA-11 and WDCWA-12 for the filed resolutions and Exhibits WDCWA-13 and WDCWA-14 for the filed Notices of Assignment). It is anticipated that UC Davis will make a similar assignment. The Agency anticipates that the SWRCB then will assign these applications to the Agency and issue the water-right permits on these applications to the Agency.
24. If the SWRCB issues water right permits in the forms of the drafts that were attached to the hearing notice, then these permits together will authorize the project to divert water from the Sacramento River at a 30-day average rate of 80 cfs, with a maximum instantaneous rate of 100 cfs (see Slide 35). The maximum authorized annual diversion volume will be 45,000 acre-feet. The permits will require the Agency to demonstrate that it has alternate water supplies to use when the permits do not authorize diversions, and the permits will require the Agency to complete application of the water to full beneficial use by December 31, 2052.
25. The permits will not allow diversions when the diversion prohibition in Term 91 is in effect. Term 91 prohibits diversions when stored Central Valley Project or State Water Project water is being released for the benefit of in-basin uses or Delta water quality. Exhibit WDCWA-15 lists the numbers of days that the Term 91 diversion prohibition was in effect each year from 1984 through 2010. This information is summarized in Slide 36. The permits will contain terms providing that when the Term 91 diversion prohibition is in effect and water therefore is not available for diversion under the permits, the cities will need to use other sources of water.
26. Currently the Agency is evaluating other water supply sources that the Agency may use during times when the Term 91 diversion prohibition is in effect. Such sources may include water that may be diverted under water rights purchased from holders of upstream, senior Sacramento River water rights, or transfers of water by the holders of such rights (see Slide 37). The Agency also is evaluating a potential conjunctive use project that would be constructed in western Yolo County to provide the Agency with surface water during summer months. Another option would be for the Agency to develop aquifer storage and recovery (ASR) wells and integrate them into DWWSP operations. When demands are lower in the winter and there is unappropriated water in the Sacramento River, some of this water could be diverted, treated and injected into ASR wells and stored in the groundwater aquifer until needed in the summer months. This arrangement could provide both a source of supplemental supply during the peak demand periods and also improved groundwater quality for the two cities during these periods.
27. The long-range plan for implementation of the DWWSP includes projections of the cities' future water demands. These water demand projections already have incorporated aggressive water conservation programs to comply with the recently adopted statutory requirements that municipal water providers reduce per capita water

use in their service areas by 20 percent by 2020 (see Slide 38). Under these projections the Agency ultimately will divert up to 45,000 acre-feet annually, which is consistent with the maximum total annual diversion volume in the draft water right permits.

PROJECT WATER RIGHT PERMIT TIMING

28. The Agency's obtaining these water right permits now is critical to the successful scheduling and implementation of this project (see Slide 40). To finance the design and construction work for this project, the two city councils will have to approve significant increases in the cities' water rates. The Agency's receiving these permits now will greatly increase the credibility and viability of the project in the minds of the cities' rate payers and help to convince them that the project can be successfully implemented and that the rate increases therefore are appropriate.
29. The status of these water right permits also will be a key question for contractors that are considering submitting bids for the design, construction and operation of the project. To remain on schedule, a request for qualifications for such bidders will be issued early in 2011. The request for proposals from these bidders is expected to be issued in the fall of 2011. Under the DBO procurement process, bidders must expend large amounts of money (one million dollars or more per bidder) to prepare the required comprehensive bid proposals. To ensure that the cities receive an adequate number of responsive bids, each potential bidder must be convinced that this is a viable project that justifies the substantial investment of time and effort that will be necessary to prepare a proposal. The Agency needs the water right permits to demonstrate project viability.
30. Award of the DBO contract for the project is scheduled for 2012. Prior to that award, all funding and permits must be in place. Another reason why the Agency needs the water right permits now is that many permitting agencies besides the SWRCB will not consider applications for project permits unless the Agency already has its water right permits.
31. Under current economic conditions, the bidding climate is optimum for the cities to obtain competitive bids for the project. Interest rates for financing projects like this one are also at very low levels. Any delays in the proposed schedule that would be created by delays in the SWRCB's issuing the water right permits could be costly for the cities by greatly increasing the amounts of both project bids and financing costs.
32. To reduce the amounts of the increases in city water rates that will be necessary for the project, the Agency plans to seek all available and applicable funding opportunities. Cal Infrastructure Bank low interest loans, Cal State Revolving low interest loans, and federal appropriations may not be obtained for projects that are not ready to proceed. Therefore, a delay in issuance of the project's water right permits by the SWRCB would prevent the Agency from applying for these funding opportunities in a timely manner. In addition, the Agency will not be eligible for potential future State Water Bonds and Proposition 84 IRWMP implementation funds until the project is ready for implementation. A delay in the SWRCB's issuance of the project's water right permit would mean that the Agency would not be eligible for these funds.

33. Revenue bonds will be a crucial funding source. Much of the project's design and construction costs will be financed through revenue bonds. Revenue bonds may be very difficult to sell if the project's water right permits have not been issued and other critical regulatory components of the project are not in place by the time revenue bonds need to be sold. Even if such bonds can be sold, their interest rates probably would have to be higher if the project's water-right permits had not been issued.
34. For these reasons, the Agency needs these water rights now to be able to successfully implement this project.

Water Right Hearing for Permits 30358A and 30358B

State Water Resources
Control Board

January 18, 2010

1

- Background
- Aging Groundwater Systems
- Drinking Water Quality
- Wastewater Treatment and Discharge Compliance
- Proposed Project
- Environmental Benefits
- Project Water Supply
- Water Right Permit Acquisition Timing

2

- Background
- Aging Groundwater Systems
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3

Woodland and Davis Issues and Needs

- Total dependence on groundwater
- Declining production and drinking water quality compliance
 - Many wells reaching ends of useful lives
 - Increasing contaminant levels (nitrates, arsenic, chromium)
 - More stringent drinking water standards
 - Shut downs of many wells
- Inability to meet existing/likely future wastewater discharge standards (salinity, selenium, boron)
- Major future capital expenditures

4

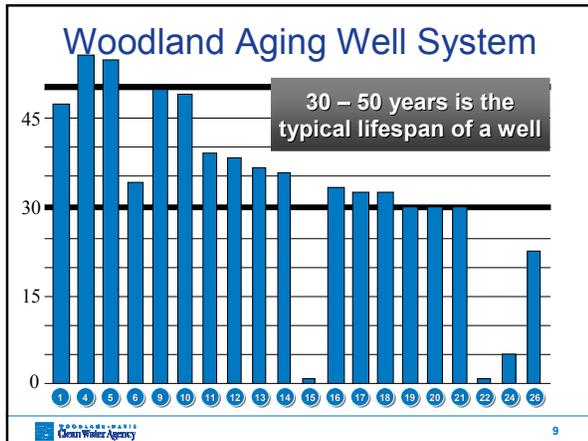
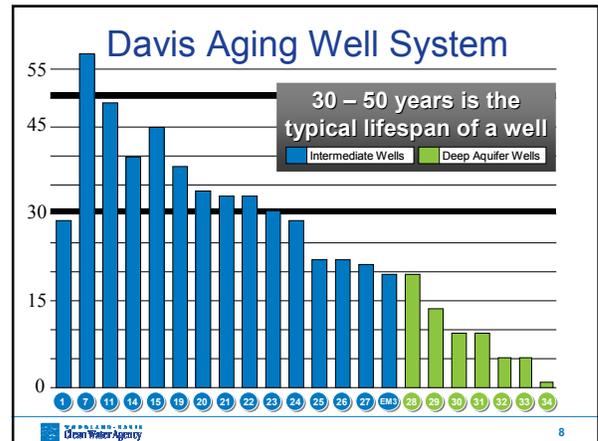
Davis Woodland Water Supply Project

- Planning began in early 1990's
- Many alternatives evaluated and joint projects pursued
- Feasibility studies concluded just two viable options:
 - Supplemental surface water supply
 - Wellhead treatment of groundwater
- EIR process concluded DWWSP is preferred project

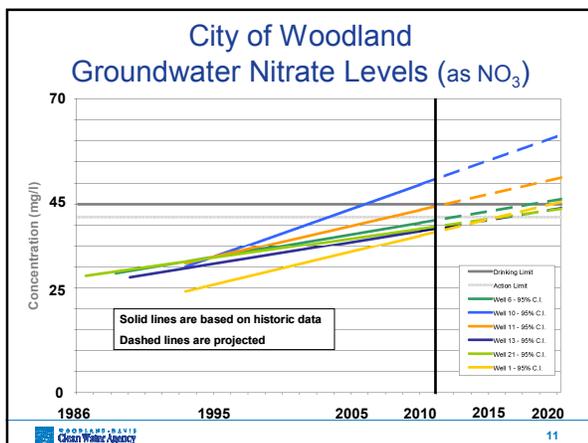
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6



- Background
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- WOODLAND-DAVIS Clean Water Agency
- 10



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Woodland Tertiary Wastewater Treatment Facility



Major Wastewater Concerns City of Woodland

| Constituent | Anticipated Future Discharge Limit | Current Discharge |
|------------------------|---------------------------------------|-------------------|
| Salinity, EC, µmhos/cm | 700 - 1000 | ~1,560 |
| Boron, ppb | 700 | ~2,550 |
| Selenium, ppb | 3.2 (monthly avg.) 9.2 (max daily) | <2 – 8.4 |

Source: Current Woodland Waste Discharge Permit

Major Wastewater Concerns City of Davis

| Constituent | Anticipated Future Discharge Limit | Current Discharge |
|---------------------|---------------------------------------|-------------------|
| Salts, EC, µmhos/cm | 700 - 1000 | ~1,900 |
| Boron, ppb | 700 | ~1,800 |
| Selenium, ppb | 4.4 (monthly avg.) 7.1 (max daily) | 1.2 – 5.6 |

Source: Current Davis Waste Discharge Permit

- Background
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Objectives of Davis Woodland Water Supply Project

- Drinking Water Quality - meet current and anticipated drinking water standards
- Reliability - consistently meet projected water demands of Project Partners
- Wastewater Quality - facilitate compliance with current and anticipated discharge permit requirements and facilitate possible effluent reuse opportunities
- Environmental Impacts – minimize potential adverse environmental impacts
- Implementation – begin operation in 2016
- User costs - minimize impacts on customer costs

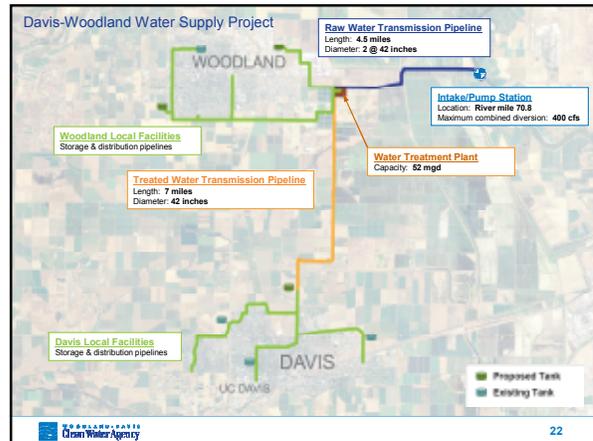
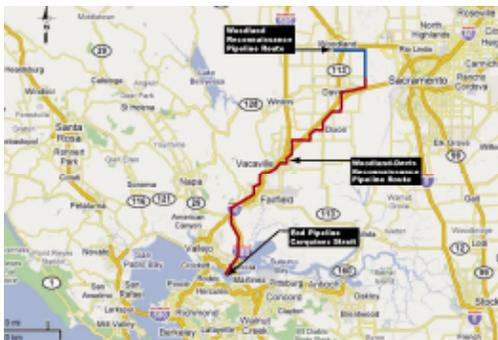
Project Alternatives Analysis

- Project envisioned in master planning in early 1990's
- Over two dozen alternatives considered in multiple feasibility studies
- Only groundwater treatment and supplemental surface water supply meet defined project objectives
- Surface water supply most feasible, lowest cost and least environmental impact
- Groundwater treatment over twice as costly, creates major environmental concerns
 - Evaporative brine ponds
 - Brine disposal line

Potential Hazards Related to Evaporative Ponds



Potential Brine Pipeline Route



Woodland-Davis Clean Water Agency

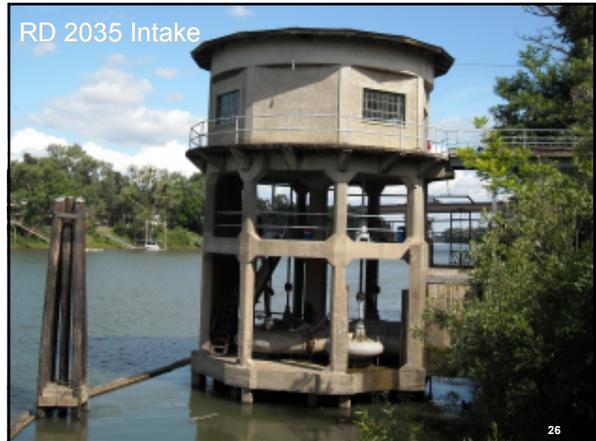
- Formed September 15, 2009
- JPA of Davis and Woodland
- UC Davis a Contracting Agency
- Implements and operates regional facilities
- Governing Board – 2 council members from each city
- Funded by user fees in each city

DWWSP Implementation Schedule



- Background
- Aging Groundwater Systems
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- **Environmental Benefits**
- Project Water Supply
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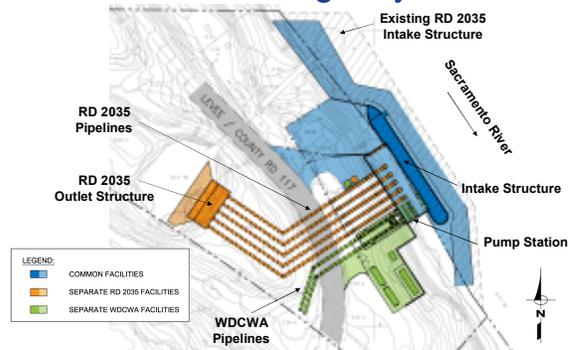
RD 2035 Intake



Joint RD 2035/WDCWA Intake

- Existing intake
 - Constructed before 1920
 - Structural, mechanical, and safety issues
 - Largest remaining unscreened intake on the Sacramento River
- Joint Intake
 - Will comply with latest fish screening requirements

Joint RD 2035/Agency Intake



Salt Load on Sacramento River

- Daily Salt Load (pounds/day)
 - City of Woodland ~44,000
 - City of Davis ~36,300
 - Total **~80,300**
- Projected Total with Project **~41,800**
- **Reduction ~48%**

Wastewater Discharge Benefits

| Constituent | Anticipated Future Discharge Limit | Anticipated Future Wastewater Characteristics |
|-----------------------|--|---|
| Salinity, EC, mhos/cm | 700 – 1000 | 700 – 1000* |
| Boron, ppb | 700 (annual average) | <100 - 400 |
| Selenium, ppb | 4.4 (Davis) 3.2 (Woodland) (monthly average) | <0.1 – 3.0 |

*In conjunction with other source control efforts in the cities

Project Carbon Footprint

(carbon dioxide emissions, metric tons/yr)

- Existing System **~10,000**
- Proposed Project
 - Surface water pumping ~5,500
 - Groundwater pumping ~1,500
 - Total **~7,000**
 - Reduction **~30%**

Summary of Environmental Benefits

- Joint Intake replacing existing unscreened facility
- Salt loading to Sacramento River reduced by over 50%
- Lowest carbon footprint of alternatives studied, and significant reduction from current level
- Reduced selenium levels in the Yolo Bypass and Delta

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Water Right Application

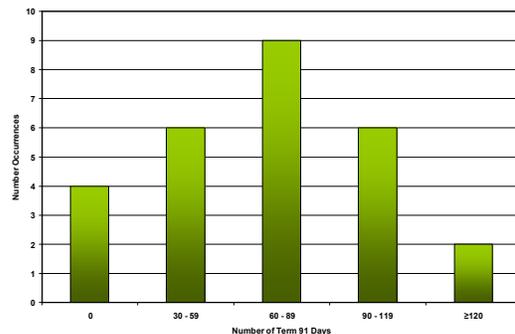
- 1994 – Application filed by Yolo County Flood & Water Conservation District
- 1994 - 2010 all 11 protests resolved except CSPA
- 2001 - Application assigned to Davis/Woodland/UCD
- 2005
 - Application 30358A assigned to Davis and UCD
 - Application 30358B assigned to Woodland
- 2010 – Woodland/Davis/UCD assign their interests in applications to WDCWA
- 2011 – Anticipate State Board assignment of applications to WDCWA

Water Right Permit Conditions

- Diversion Rate:
 - 80.3 cfs, 30-day average
 - 100 cfs max instantaneous
- Annual Diversion Volume: 45,000 ac-ft
- No diversions when Term 91 in effect
- Must have alternate water supply during Term 91 times
- Full beneficial use by December 31, 2052

Historical Term 91 Days

(Term 91 in effect from 1984 - date)



Potential Supplemental Water Supply Sources

- Purchase(s) from other Sacramento River water rights holders
- Conjunctive use project within Yolo County
- Aquifer Storage and Recovery well integration into DWWSP over time

Projected Demands

- Projected demands include compliance with the 2009 water legislation – 20% reduction in demand by 2020
- 45,000 afa by 2052

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Why The Permit Can't Wait?

- Project Credibility
- Public Support
 - Significant water rate increases necessary
- Construction Contract Procurement
 - Adequate and responsive bids
 - Funding in place prior to contract award
- Environmental Permitting Impacts
 - Water right permits critical for environmental permitting
- Financing
 - Lower interest rates and construction costs
 - Revenue bond approval and sales
 - State and federal funding opportunities

Questions

