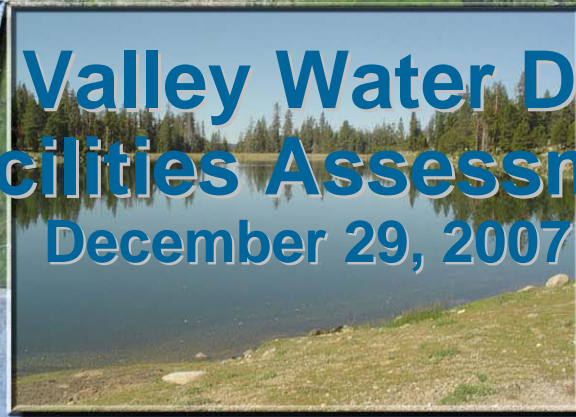




**Bear Valley Water District  
Tertiary Facilities Assessment District  
December 29, 2007**



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# Presentation Outline

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**Need for Project**

**Alternatives to Project**

**Recommended Project**

**Financing Alternatives**

**Recommended Financing**

**Next Steps and Q & A**



# Need For Project

- ❖ Spills occurred in '95, '96, '98, and '99
- ❖ Regional Board issued Cease & Desist Order
- ❖ District obtained additional temporary disposal land from US Forest Service to get by
- ❖ 2003 projections indicated that capacity would be reached within 5 years, so District applied for NPDES permit
- ❖ 2006 Effluent Storage Reservoir had to be sandbagged to avoid a spill



## Need For Project (cont)

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- ❖ District requested NPDES permit for secondary effluent to Bloods Creek
- ❖ Due to objections from downstream users and Regional Board pressures, NPDES permit was issued with tertiary treatment requirement in October of 2005
- ❖ Tertiary treatment is now necessary for current users and future users



# Alternatives to Project

- ❖ **Expansion of Effluent Storage Reservoir**
- ❖ **Acquisition of additional land for storage and disposal**
- ❖ **Treat to tertiary level for only discharge to Bloods Creek**
- ❖ **Pursue relief from the Regional Board permit requirements through legal means**
- ❖ **No-project alternative (C&D, moratorium, and fines)**



# Recommended Project

- ❖ **Build system to accommodate District master plan development at 0.5 Mgal/d**
- ❖ **Keep existing pond as secondary process until expansion/change is necessary**
- ❖ **Utilize membrane ultrafiltration as best means of meeting permit requirements**
- ❖ **Pre-treat before filter with dissolved air flotation (DAF)**
- ❖ **Disinfect utilizing ultraviolet radiation**



# Recommended Project (cont)

## Opinion of Probable Capital Cost for Build-out Tertiary Facilities Project

Capital Expense	Notes	Capital Expenditure
Total Construction Cost	a	\$9,420,000
Design Engineering Allowance	b	\$895,000
Engineering Services During Construction (at 4%)	b	\$377,000
Construction Management, Inspection, and System Startup (at 8%)	b	\$754,000
Incurred Capital Costs plus administration/legal (at 1%)	c	\$369,000
<b>Total Capital Cost</b>		<b>\$ 11,815,000</b>

- a – Projected to a mid-point of construction ENR CCI of 8768 for August 2009 and 10% contingency.  
b – Budget allocations with actual costs to be based on a detailed scope of work for each component.  
c – Includes expenses incurred up through June 2007 and allocation of 1% for administration and legal not related to the assessment district.



## Recommended Project (cont)

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- ❖ **Cost are preliminary and intended to represent conservative upper limit**
- ❖ **Cost savings measures will be considered during design**
- ❖ **Actual project costs will be based on competitively bid construction project**
- ❖ **Project costs for this facility are expected to be higher than similar capacity facilities at lower elevations**



# Financing Alternatives

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## Funding Sources

- ❖ Grants
- ❖ Federal and State Loan Programs
- ❖ Commercial Bank Loans
- ❖ Bonds:
  - ◆ Revenue Bonds
  - ◆ Limited Obligation Imp. Bonds

## Revenue Sources

- ❖ User Fees
- ❖ Special Taxes
- ❖ Assessments
- ❖ Connection Fees
- ❖ Upfront Developer Contributions



# Financing Alternatives (cont)

## Analysis of Plausible Financing Strategies

### ❖ State Loan Programs

- ◆ Secured by user fees
- ◆ High user fees (\$2,280/year)
- ◆ Not equitable
- ◆ Limited ability to refinance previous debt

### ❖ Special Tax

- ◆ Limited ability to tax vacant land or federal land, therefore cost per unit goes up
- ◆ Not equitable.

### ❖ Assessment District

- ◆ Assess current and future users equally based on benefit
- ◆ Flexible refinancing options
- ◆ Reduced cost per unit as current and future benefit is equally distributed
- ◆ Limited ability to lien federal lands



# Recommended Financing

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- ❖ **Limited obligation improvement bonds (1913 Act) to finance project**
- ❖ **Assessment District combined with user fees for users on federal lands to pay down bonds**



# Recommended Financing (cont)

## Total Project Cost and Incidental Expenses for Recommended Financing Approach

Description	Notes	Expense
Total Capital Cost	a	\$11,815,000
Refinancing of Existing Debt	b	\$550,000
Assessment District Engineering Fees		\$75,000
Legal Fees		\$140,000
Out of Pocket Expenses of Special Bond Counsel (at 10%)		\$14,000
Capitalized Interest	c	\$828,000
Reserve Fund	d	\$1,126,000
Underwriters Discount	e	\$150,000
Miscellaneous Expenses (public notices and printing)		\$4,000
<b>Total Capital Cost</b>		<b>\$14,702,000</b>

- a – Projected total capital cost as outlined in Table 1-6.  
b – Refinancing of F&M Line of Credit for Outfall Project.  
c – Based on one year of capitalized interest.  
d – Reserve fund of one year of debt service.  
e – Based on 1% of bond.



# Recommended Financing (cont)

## Resulting Assessment and Cost Comparison

Description	Cost per Sewer Service Unit <sup>c</sup>	Cost per EDU
Total Cost for Prepayment of Assessment	\$2,915	\$8,745
Annual Cost of Bond Repayment <sup>a</sup>	\$223	\$669
Total Cost to Repay Bonds <sup>a</sup>	\$6,690	\$20,070
Alternative Phase I Project Annual Debt Service Cost <sup>b</sup>	\$450	\$1,350

a – Annual cost assuming 6.5% annual interest rate and 30 year term

b – Debt service cost for Phase I facility financed with loan proceeds.

c – Sewer service unit as defined by District Ordinance No. 1



# Next Steps

- ❖ **District receives Input from public**
- ❖ **If assessment district appears to be feasible then:**
  - ◆ Prepare facilities design
  - ◆ Prepare assessment district engineers report
  - ◆ Hold public hearing and receive ballots from assessed land owners
  - ◆ Bid project and issue bonds based on bid costs
  - ◆ Record assessments
  - ◆ Construct project and administer assessment district



## Next Steps (cont)

- ❖ **Notes on the assessment district proceedings:**
  - ◆ Ballots sent to assessed land owners
  - ◆ Ballots weighed according to assessment
  - ◆ Assessment district vote passes weighted ballots received in favor of the assessment district is greater than the weighted ballots received in opposition to the assessment district
  - ◆ Ballots not sent in have no weight
  - ◆ Assessments can be pre-paid to avoid financing charges



# Q & A

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# More Information

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**Additional Information Can be found at:**

**[www.ecologic-eng.com/project\\_links.htm](http://www.ecologic-eng.com/project_links.htm)**

**User Name: bvwd**

**Password: tertiary**

**Send Comments to: [BVWD@ecologic-eng.com](mailto:BVWD@ecologic-eng.com)**

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