

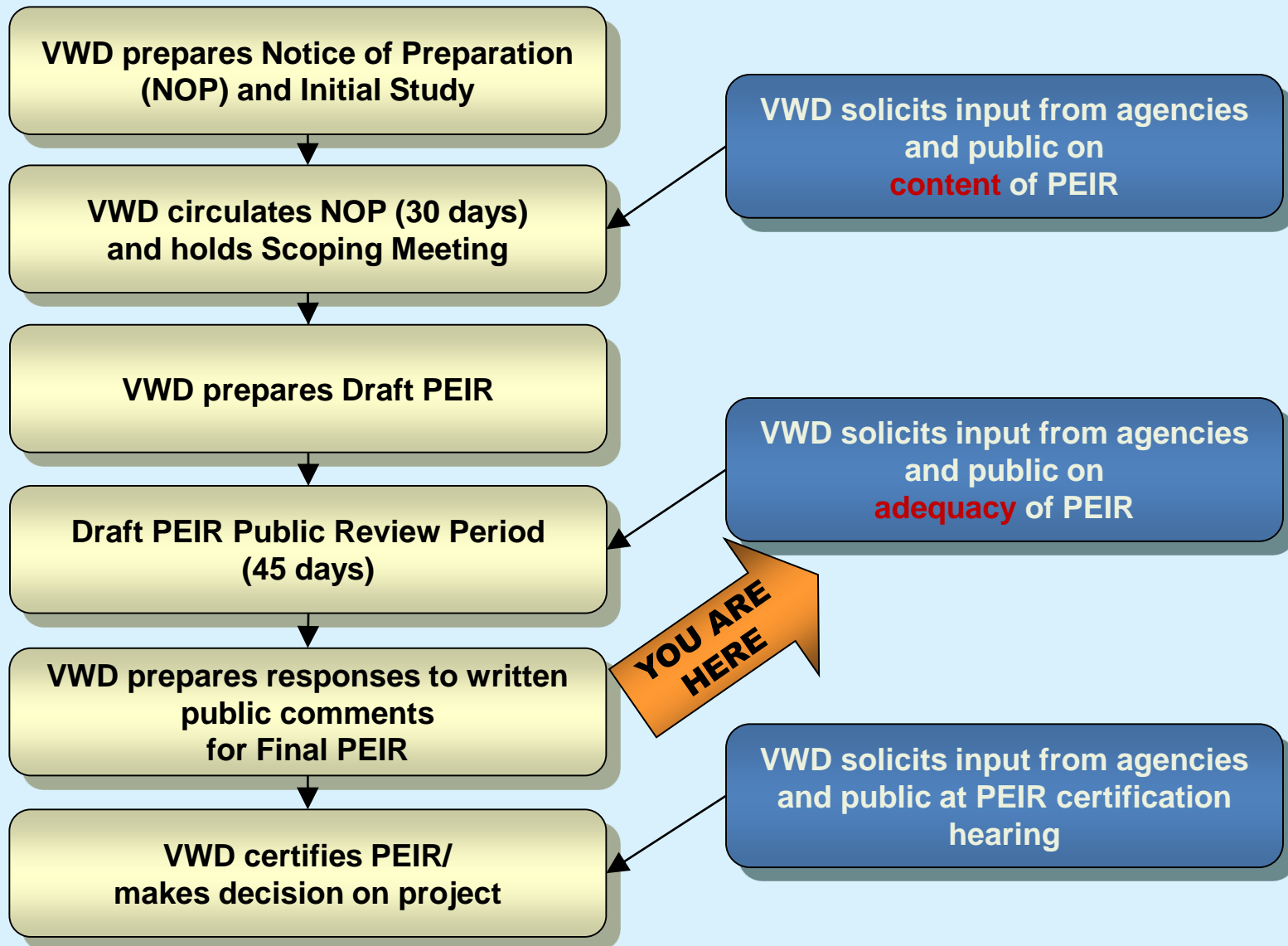


2018 Master Plan Capital Improvement Program

Robert Scholl, Senior Engineer



Final PEIR Process



Master Plan Purpose & Goals



- Goal of a Master Plan – Provide a reasonable approach to accommodate planned development within the District
- Objectives:
 - Provide District staff tools to plan for growth
 - Identify potential water/wastewater infrastructure problems and analyze remedies
 - Provide growth projections to assist in determining necessary capital facilities and appropriate capital facility fees



Land Use

- Obtain approved land use information from all land use agencies served by VWD

City of San Marcos

City of Carlsbad

City of Escondido

City of Vista

County of San Diego

- Obtain SANDAG existing population estimates and projected future infill estimates



Duty Factors

- Average water and wastewater demands for various land use categories
 - Readings from all VWD water meter accounts from 2008 to 2014
 - Readings from wastewater flow meters installed throughout the collection system
 - Comparisons between water meter and wastewater flow meter data
 - Comparisons to duty factors utilized in previous VWD master plans
- Adopted by Board on September 21, 2016



Water Duty Factor Comparison w/ Past Master Plans



Land Use Category	1997 MP Update Duty Factor (gpd/ac)	2002 MP Update Duty Factor (gpd/ac)	2008 MP Duty Factor (gpd/ac)	2018 Proposed MP Duty Factor (gpd/ac)
Residential <1 du/ac	1,000	800	800	800
Residential 1-2 du/ac	1,300	1,200	1,200	1,400
Residential 2-4 du/ac	1,900	2,100	1,800	1,800
Residential 4-8 du/ac	1,900	2,400	2,500	2,500
Residential 8-12 du/ac	2,800	2,500	2,800	2,800
Residential 12-15 du/ac	3,400	2,800	3,300	4,500
Residential 15-20 du/ac	3,600	3,200	3,700	5,000
Residential 20-30 du/ac	3,800	4,100	5,000	6,000
Residential 30-40 du/ac	-	-	7,000	7,000
Residential 40-50 du/ac	-	-	9,000	9,000
Intensive Ag/Residential	2,000	600	1,400	1,100
Agricultural/Residential	1,000	700	800	800
Commercial	1,200	1,700	1,500	1,500
Office Professional	1,500	2,000	1,500	1,500
Light Industrial	1,500	1,800	1,800	1,500
Industrial	2,000	1,000	1,000	800
Schools & Public Facilities	1,300	1,400	1,400	1,000
Parks/Golf Courses	1,300	1,700	1,700	1,500
Open Space	200	200	200	200



Sewer Duty Factor Comparison w/ Past Master Plans



Land Use Category	1997 MP Update Duty Factor (gpd/ac)	2002 MP Update Duty Factor (gpd/ac)	2008 MP Duty Factor (gpd/ac)	2018 Proposed MP Duty Factor (gpd/ac)
Residential <1 du/ac	300	140	150	150
Residential 1-2 du/ac	500	500	500	500
Residential 2-4 du/ac	800	700	750	750
Residential 4-8 du/ac	1,400	1,500	1,300	1,300
Residential 8-12 du/ac	1,700	1,500	2,100	2,100
Residential 12-15 du/ac	2,500	2,100	2,500	2,500
Residential 15-20 du/ac	2,500	2,200	3,300	3,300
Residential 20-30 du/ac	3,700	4,000	4,500	4,500
Residential 30-40 du/ac	-	-	6,300	6,300
Residential 40-50 du/ac	-	-	8,100	8,100
Intensive Ag/Residential	300	80	80	80
Agricultural/Residential	300	80	80	80
Commercial	1,200	1,500	1,200	1,200
Office Professional	1,700	1,700	1,200	1,200
Light Industrial	1,300	1,600	1,500	1,300
Industrial	2,100	900	900	700
Schools & Public Facilities	700	800	800	800
Parks/Golf Courses	300	500	250	250
Open Space	200	40	40	0

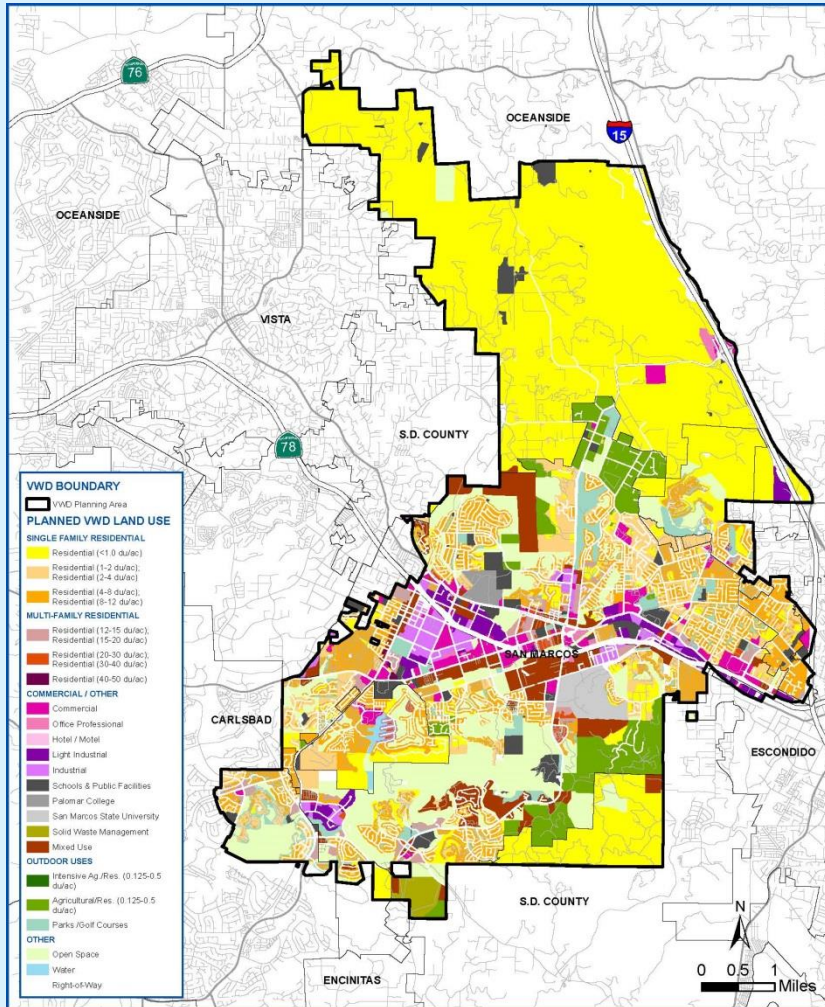
Water and Wastewater Demand Projections



- Ultimate demands established based on the 2018 Master Plan duty factors and approved land uses
 - Demands are calculated for all parcels within the District's boundaries
 - Demands are then totaled
 - This represents the projected ultimate water and wastewater demands for the District
- SANDAG population estimates used to estimate phased demands in 5-year increments
 - 2020 – 2025 – 2030 – 2035



2018 Master Plan CIP Phasing



PLANNED VWD LAND USE CATEGORIES BY PARCELS
 FIGURE 2-4

Planning Phase	Population Projection
Phase 1 2016-2020	106,000
Phase 2 2021-2025	110,000
Phase 3 2026-2030	114,000
Phase 4 2031-2035	118,000
Phase 5 2036-Ultimate	122,000 (in 2036)

Water and Wastewater Models

- Models created using VWD's GIS infrastructure (parcel level loading)
- Water and sewer demands input at point of demand
- Model informs user when criteria are exceeded
- User makes change in model to correct the problem
 - Upsize or install new pipe
 - Add storage or pumping capacity
- Each change = Capital Improvement Project



2018 Master Plan

Water and Wastewater CIP



- 11 Water Pipeline Projects
 - 55,900 Total Linear Feet of Pipe
- 10 Reservoir Projects
 - 38.9 Total Million Gallons of Storage
- 7 Water Pump Station Projects
 - 29,400 Total Gallons per Minute of Capacity
- 25 Sewer Pipeline Projects
 - 73,900 Total Linear Feet of Pipe
- 1 Sewer Lift Station Replacement Project
 - 400 Gallons per Minute of Capacity
- Parallel Land Outfall Project
 - 34,000 Total Linear Feet of Pipe
- Wastewater Treatment



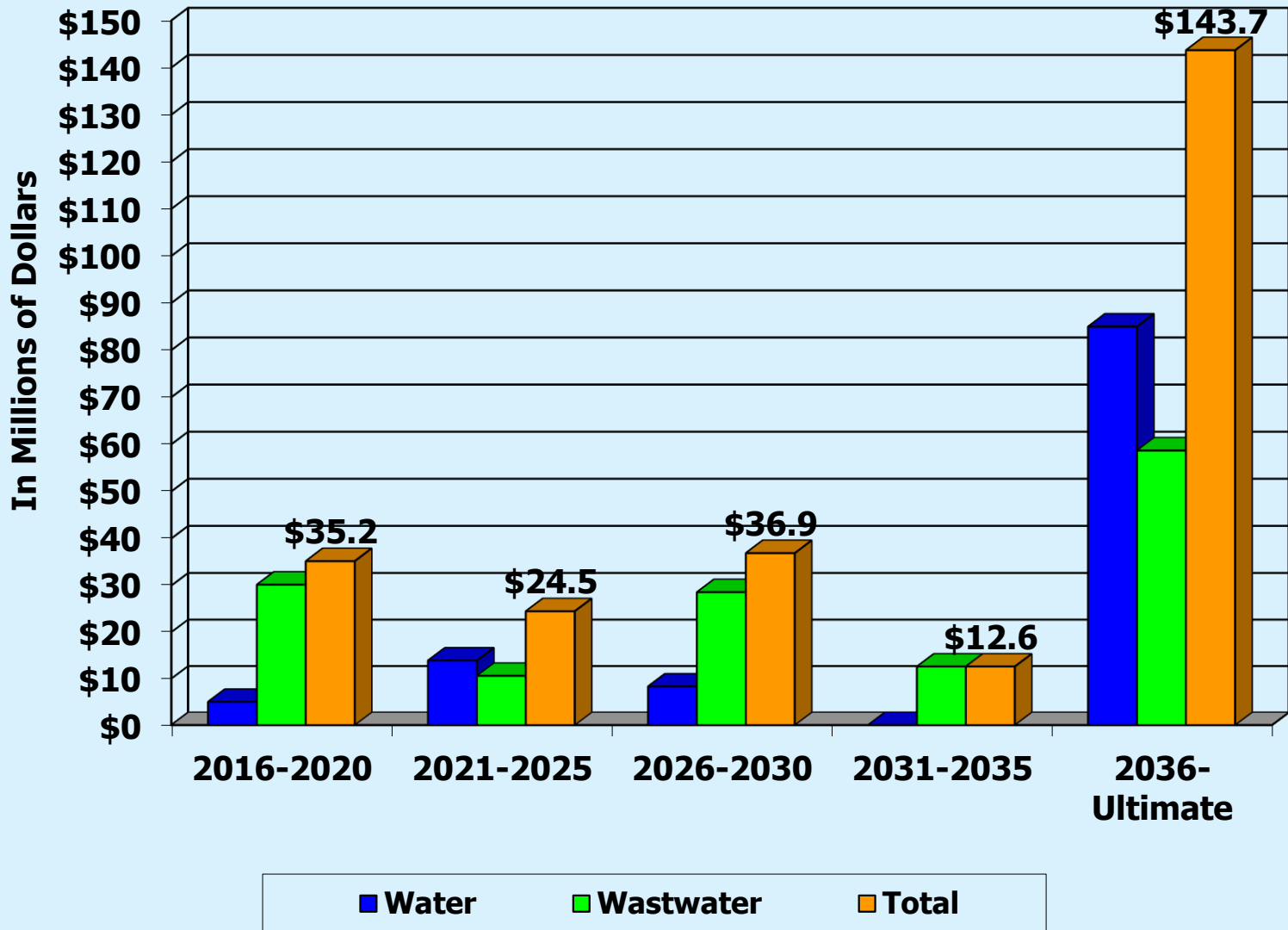
CIP Cost Estimate Comparison



Component	Current CIP Cost Estimate
Water Storage	\$54,200,000
Water Pump Station	\$28,800,000
Water Pipelines	\$29,100,000
Wastewater Pipelines	\$50,100,000
Wastewater Land Outfall	\$44,800,000
Wastewater Treatment	\$45,900,000
Total Cost Estimates	\$252,900,000



CIP Costs per Phase – Current



CEQA / PEIR Purpose

- Evaluate impacts of the Capital Improvement Program at a Programmatic Level
- Disclose the Significant Environmental Effects of the Proposed 2018 Master Plan CIP Projects
- Identify Ways to Avoid or Reduce Environmental Impacts
- Consider Feasible Alternatives
- The PEIR will Provide the Basis for Subsequent Environmental Review of CIP Projects



PEIR Effects to be Analyzed

- All effects analyzed at a Programmatic Level
 - “30,000-foot-level” Analysis
 - Cumulative effects of all CIP Projects and other known Agency Projects

Air Quality	Hydrology/Water Quality
Biological Resources	Landform Alteration/Visual
Cultural Resources	Land Use/Planning
Energy	Noise
Geology/Soils	Public Safety & Circulation
Greenhouse Gases	

Notice of Preparation



- Briefly Describes the Master Plan and CIP
- Solicits Input from Agencies and Public on *content* of PEIR
- Released on November 16, 2017 for 45-day Public Review
- Nine Comment Letters Received

Notice of Preparation of a Program Environmental Impact Report and Scoping Meeting

Date: November 16, 2017

To: State Clearinghouse, Responsible Agencies, Trustee Agencies, Organizations, Stakeholders and Interested Persons

Lead Agency: Vallecitos Water District
201 Vallecitos De Oro
San Marcos, CA 92069
Contact: Robert Scholl
Phone: (760) 744-0460
E-Mail: rscholl@vwd.org

Project Title: Vallecitos Water District 2017 Water, Wastewater, & Recycled Water Master Plan

Project Location: San Diego, California

Project Applicant: Vallecitos Water District

Case Number: 15-071

NOTICE OF PREPARATION (NOP): In accordance with the California Environmental Quality Act (CEQA) Article 7, Sec. 15082, this NOP is to notify public agencies and the general public that the Vallecitos Water District (VWD), as the Lead Agency, will prepare a Program Environmental Impact Report (PEIR) Supplement which will supplement the assessments of environmental effects associated with implementation of the 2011 PEIR for the VWD 2008 Water, Wastewater, and Water Reclamation Master Plan Update (2008 Master Plan; State Clearinghouse Number 2010071073). The 2017 Master Plan describes a long-term Capital Improvement Program (CIP) that would be implemented through the Year 2030; intended to complement approved land use development plans and growth projections within the VWD service area and adjacent areas of influence, consistent with forecasts projected by the San Diego Association of Governments (SANDAG). The CIP involves the new construction and expansion of potable water and wastewater facilities, including pipelines, pump stations, lift stations and reservoirs. The PEIR will provide the basis for subsequent environmental review of future CIP projects.

The VWD would like to know the views of your agency or interested party as to the scope and content of the environmental information that is germane to your agency's or interested party's statutory responsibilities in connection with implementation of VWD's 2017 Master Plan. VWD requests that any potential responsible or trustee agency or interested party respond to this NOP in a manner consistent with State CEQA Guidelines Section 15082 (b). If you are responding as an interested organization or individual citizen, VWD would like to know your views as to the environmental information you would like us to address in the 2017 Master Plan update. Public agencies may need to use the PEIR prepared by VWD when considering applicable permits or other approvals for the master plan. The general public is also encouraged to provide input on the scope of the EIR.

Draft PEIR Public Review



- Solicits Input from Agencies and Public on adequacy of the PEIR
- 45-Day Review Period Recommended
 - Commences October 22
 - Concludes December 7
- All Comments Received will be Addressed



Print Form Appendix C

Notice of Completion & Environmental Document Transmittal
 Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #2017111082

Project Title: Vallecitos Water District 2018 Water, Wastewater, and Recycled Water Master Plan
 Lead Agency: Vallecitos Water District Contact Person: Robert Scholl
 Mailing Address: 201 Vallecitos de Oro Phone: 760-744-0480
 City: San Marcos Zip: 92069 County: San Diego

Project Location: County: San Diego City/Nearest Community: San Marcos
 Cross Streets: N/A Section: N/A Twp.: N/A Range: N/A Base: N/A Zip Code: 92069
 Longitude/Latitude (degrees, minutes and seconds): 33 ° 8 ' 30 " N / 117 ° 8 ' 33 " W Total Acres: 28,800
 Assessor's Parcel No.: N/A
 Within 2 Miles: State Hwy #: 78 Waterways: San Marcos Creek
 Airports: N/A Railways: NCTD Sprinter Schools: Mission Hills High School

Document Type:
 CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document
 Early Cons Supplemental/Subsequent EIR EA Final Document
 Neg Dec (Prior SCH No.) Draft EIS Other: _____
 Mit Neg Dec Other: _____ FONSI

Local Action Type:
 General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other: _____

Development Type:
 Residential: Units _____ Acres _____ Transportation: Type _____
 Office: Sq.ft. _____ Acres _____ Employees _____ Mining: Mineral _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____ Power: Type _____ MW
 Industrial: Sq.ft. _____ Acres _____ Employees _____ Waste Treatment: Type _____ MGD
 Educational: _____ Hazardous Waste: Type _____
 Recreational: _____ Other: _____
 Water Facilities: Type _____ MGD _____

Project Issues Discussed in Document:
 Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Coastal Zone Noise Solid Waste Land Use
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Economic/Jobs Public Services/Facilities Traffic/Circulation Other: _____

Present Land Use/Zoning/General Plan Designation:
 Various

Project Description: (please use a separate page if necessary)
 The 2018 Vallecitos Water District Master Plan evaluates the existing and future needs for water, wastewater and recycled water services, and includes a facilities plan and Capital Improvements Program to accommodate these needs. The Master Plan addresses many local and regional issues, including service area growth, water conservation, local water supply development, and wastewater disposal capacity. The CIP provides proper capacity to WWD's water and wastewater systems to serve its anticipated customers through 2035 and to ultimate build-out. One CIP project, the Diamond Siphon Replacement Project, has been evaluated at the project level within the PEIR for the 2018 Master Plan.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2010

Previous Board Meetings



Activity	Board Meeting Date
Black & Veatch Contract Award	April 2, 2014
Water/Wastewater Unit Generation Rates Presentation	July 15, 2015
Master Plan Capital Improvement Plan Presentation	January 27, 2016
Black & Veatch Contract Amendment #1 Approval	July 20, 2016
Adoption of Water/Wastewater Unit Generation Rates	September 21, 2016
Master Plan Capital Improvement Plan Presentation	February 13, 2017
Notice of Preparation Release for Draft PEIR	November 16, 2017
Master Plan Capital Improvement Plan Workshop	April 18, 2018



Remaining Schedule



Activity	Projected Date
Request Board approval to circulate Draft PEIR	October 17, 2018
State Clearinghouse to receive Draft PEIR to initiate 45-day public review period	October 22, 2018
Draft PEIR public meeting	November 14, 2018
45-day public review period concludes	December 7, 2018
Final Master Plan workshop w/ Board of Directors	January 9, 2019
Board adoption of Master Plan and Final PEIR	February 6, 2019





Questions?

