



Update on Sustainability Projects in the Oxnard and Pleasant Valley Groundwater Basins and DWR Grant Opportunity

Kimball Loeb, PG, CEG, CHG
Groundwater Manager
Fox Canyon GMA

Santa Clara River
Watershed Coalition
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FCGMA and Water Supply & Infrastructure Projects

- Water supply & infrastructure projects critical to achieving sustainable groundwater management
- For most of its history, FCGMA was prohibited from undertaking or funding projects by its enabling legislation
- New authority was provided under SGMA when FCGMA adopted Groundwater Sustainability Plans (GSPs) in December 2019
- These initial GSPs include a limited number of projects that were sufficiently defined for inclusion
- All three FCGMA GSPs were recently approved by DWR; majority of GSPs not approved
- In 2020, DWR-funded stakeholder facilitation in the Oxnard & Pleasant Valley (OPV) basins identified a suite of projects for study assisted by FCGMA & UWCD staff

OPV Stakeholder Group Projects (12/2020)

Project	Est. Water / Increased SY	Rough Est. Cost
Oxnard GREAT AWPf delivery of 4,600 AFY to Ag operators in vicinity of Hueneme Road (2021) <i>(GSP project)</i>	4,600 AFY	\$400–\$600/AF O&M
Incentivized temporary fallowing of farmland in pumping depression (2021) <i>(GSP project)</i>	2,700 AFY	\$1,200–\$1,800/AF
Freeman Diversion Expansion Project Phase 1 (2028) <i>(GSP project)</i>	4,000 AFY	\$25M capital \$50 - \$100/AF O&M
State Water Project interconnect flushing/recharge (2027)	500 AFY	\$5M capital \$1,500/AF
State Water Project purchases of Article 21, exchanges, transfers (2021)	6,000 AFY	\$500– \$1,000/AF + \$50/AF O&M
Brackish Water Extraction Barrier Project Phase 1 (2027)	10,000 AFY	\$160M capital \$1,500/AF O&M
Opt. Measure 1: Stop pumping in the seawater intrusion area (2027) <i>(capital for pipeline infrastructure not included in estimate)</i>	4,000 AFY	\$500/AF for water
Opt. Measure 2: Shift UWCD PTP wells from LAS to UAS (2030)	1,000 AFY	\$500/AF

Potential OPV Basins Projects (6/23/2021 Board Meeting)

Project	Stage
Oxnard GREAT Program Advanced Water Purification Facility (AWPF) delivery to agricultural operators in the vicinity of Hueneme Road	Policy Annual Funding
Expansion of GREAT AWPF Program	Design / Implementation?
Incentivized temporary fallowing of farmland in the area of the pumping depression	Policy Annual Funding
Freeman Diversion Expansion Project Phase 1	Design / Permitting?
State Water Project interconnect flushing/recharge	Design
State Water Project purchases/transfers and Article 21	Annual Funding
Brackish Water Extraction Barrier Project	Design / Permitting
Piping network to supply water to seawater intrusion area in lieu of pumping from wells	Feasibility / Design
Shift UWCD PTP wells from LAS to UAS	Design / Implementation
Well destruction to reduce cross contamination of saline water between UAS and LAS in abandoned wells screened across both aquifer systems	Design / Implementation
Seawater intrusion injection barriers at Hueneme and Mugu Canyons	Feasibility
Monitoring well installation	Design / Implementation

DWR SGM Implementation Grant Round 1

- In mid-Oct 2021, DWR announced Sustainable Groundwater Management (SGM) Implementation Grant Round 1; final grant documents Dec 17, 2021
- \$7.6 million available to Critically Overdrafted Basins including Oxnard & Pleasant Valley
- Funding is from the Budget Act of 2021 and Prop. 68; matching funds are not required
- Eligible projects include projects & planning activities related to SGMA implementation such as updates to a GSP and capital improvement projects listed in an adopted GSP
- Projects must be completed by June 30, 2025
- Only public agencies are eligible and only one agency per basin can submit application

Adding Projects to GSP List in Annual Report

- Capital implementation projects must be listed in GSP for grant eligibility
- Projects may be deemed eligible if they are included in the GSP Annual Report
- Potential projects from previous lists and solicitation to agencies within the basins
- FCGMA Board approved list of additional projects to the OPV GSP lists for grant eligibility in 2022 GSP Annual Reports on Jan 26, 2022
- Inclusion on the GSP list is not a commitment by the Agency to fund a project, but to evaluate the project for consideration of funding

Additional Projects – Oxnard Subbasin

Project	Proponent	Projected Yield (AFY)
Advanced Water Purification Facility (AWPF) Improvements – Phase II	City of Oxnard	7,000
Extraction Barrier and Brackish Water Treatment Project	UWCD	15,000 total (12,000 Ox)
Freeman Diversion Expansion Project	UWCD	8,000
Ferro-Rose Artificial Recharge of Groundwater	UWCD	2,000 – 3,000
Laguna Road Recycled Water Pipeline Interconnection	UWCD	1,500
Nauman-Hueneme Road Recycled Water Pipeline Interconnection	UWCD	1,500
Purchase of Supplemental State Water Project Water	UWCD	6,000 Ox & PV
Destruction of Abandoned Wells Creating Cross-Connection Between UAS & LAS	FCGMA	N/A
Installation of Multi-Level Groundwater Monitoring Wells	FCGMA	N/A
Installation of Shallow Groundwater Monitoring Wells	FCGMA	N/A
Installation of Transducers in Groundwater Monitoring Wells	FCGMA	N/A
Seawater Intrusion Injection Barrier	FCGMA	unknown

Total

Additional Projects – Pleasant Valley Basin

Project	Proponent	Projected Yield (AFY)
PVCWD Private Reservoir Program	PVCWD	500 – 1,000
PVCWD Recycled Water Connection Pipeline	PVCWD	1,000 – 2,000
Extraction Barrier and Brackish Water Treatment Project	UWCD	15,000 total (3,000 PV)
Freeman Diversion Expansion Project	UWCD	2,000
Laguna Road Recycled Water Pipeline Interconnection	UWCD	
Purchase of Supplemental State Water Project Water	UWCD	6,000 Ox & PV
Installation of Multi-Level Groundwater Monitoring Wells	FCGMA	N/A
Installation of Shallow Groundwater Monitoring Wells	FCGMA	N/A
Installation of Transducers in Groundwater Monitoring Wells	FCGMA	N/A
Stormwater Diversion to Camarillo WRP for Treatment and Reuse Feasibility Study	City of Camarillo	N/A
Camarillo Hills Drain Stormwater Diversion to Camarillo WRP Feasibility Study	City of Camarillo	N/A
Camarillo Airport Regional Stormwater Project Feasibility Study	City of Camarillo	N/A
Infiltration Basin Near Camarillo Sanitary District WRP Feasibility Study	City of Camarillo	N/A
City of Camarillo North Pleasant Valley Desalter Expansion Feasibility Study	City of Camarillo	N/A
Houweling Nursery's Indoor Grow Facility RO Brine Recovery Project	Houweling Nursery	300

Projects for SGM Grant Submittal

- For Round 1, DWR requires basins to self-evaluate projects for grant application using DWR's Evaluation Criteria
- Evaluation by ad hoc Project Committee that was part of the DWR-sponsored OPV Stakeholder Facilitation process
- The ad hoc Project Committee held two meetings week of Jan 17, 2022, to evaluate and score the projects
- Committee came to consensus on the proposed projects for grant funding in each basin
- FCGMA Board approved Committee recommendations and authorized submitting grant applications for the Oxnard and Pleasant Valley basins

Selected Grant Projects – Oxnard Subbasin

Project Name	Project Proponent	Score Based on DWR EC	Anticipated Project Yield (AFY)	Total Project Cost	Max Grant Request (\$)	Min Grant Request (\$)	Recommended Grant	
							Project (\$)	Project (% of Total)
Ferro-Rose Artificial Recharge of Groundwater	UWCD	26	2,000 - 3,000	\$4,000,000	\$3,800,000	\$1,900,000	\$2,510,295	33%
Laguna Road Recycled Water Pipeline Interconnection	UWCD	24	1,500 - 6,000	\$4,225,000	\$4,013,750	\$2,000,000	\$2,651,500	35%
MW Construction & Data Collection for Design of Extraction Barrier & Brackish Water Treatment	UWCD	20	N/A	\$2,100,000	\$1,995,000	\$1,000,000	\$1,317,905	17%
Installation of 3 Monitoring Wells to Assess the Hydraulic Connectivity Between Surface Water Bodies, Semi-Perched Aquifer, the Principal Aquifers	FCGMA	18	N/A	\$493,442	\$382,500	\$127,500	\$382,500	5%
Install Multi-Depth Monitoring Wells at Two Locations in the Oxnard Subbasin	FCGMA	18	N/A	\$1,700,580	\$1,305,000	\$652,500	\$737,800	10%
Totals:				\$12,519,022	\$11,496,250	\$5,680,000	\$7,600,000	100%

Selected Grant Projects – Pleasant Valley Basin

Project Name	Project Proponent	Score Based on DWR EC	Anticipated Project Yield (AFY)	Total Project Cost	Max Grant Request (\$)	Min Grant Request (\$)	Recommended Grant	
							Project (\$)	Project (% of Total)
Recycled Water Connection Pipeline	PVCWD	22	1,000-2,000	\$5,600,000	\$5,260,000	\$5,260,000	\$5,260,000	69%
Private Reservoir Program	PVCWD	22	500-1,000	\$590,000	\$550,000	\$550,000	\$550,000	7%
Install Multi-Depth Monitoring Wells at Three Locations in the Pleasant Valley Basin	FCGMA	19	N/A	\$2,550,158	\$2,107,500	\$652,500	\$1,075,000	14%
Installation of 3 Monitoring Wells to Assess the Hydraulic Connectivity Between Surface Water Bodies, Semi-Perched Aquifer, the Principal Aquifers	FCGMA	18	N/A	\$493,442	\$382,500	\$127,500	\$382,500	5%
Stormwater Diversion to WRP Feasibility Study	City of Camarillo	18	N/A	\$350,000	\$332,500	\$332,500	\$332,500	4%
Totals:				\$9,583,600	\$8,632,500	\$6,922,500	\$7,600,000	100%

Next Steps

- Combination of Brackish Water Extraction Barrier and Intrusion Injection Barrier projects are key for addressing seawater intrusion
- Projects including Freeman Expansion that increase diversions of Santa Clara River water critical to increasing sustainable yields of basins
- Recycled water projects (Oxnard AWWPF) and piping infrastructure important for reducing pumping demand
- FCGMA continues working closely with UWCD to model scenarios and refine projects
- FCGMA developing CIP list for Board review and prioritization
- FCGMA studying implementation of replenishment fees to fund projects
- 2025 GSP updates will include new projects, modeling, and revised sustainable yield estimates which likely result in revised minimum thresholds and measurable objectives

Questions



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