Comprehensive Water Conservation Plan FY 20-22 May 19, 2020



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Presentation Overview

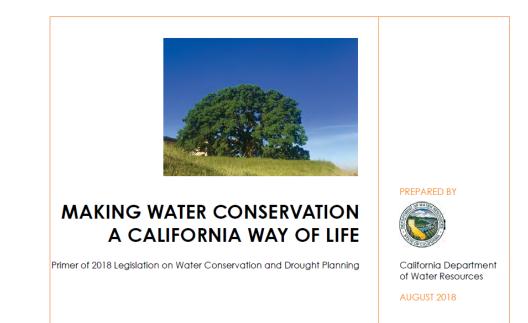
- Making Conservation a California Way of Life
- Estimate of Compliance with New and Emerging Regulations
- Update on Current Conservation Efforts
- Proposed FY 20-22 Comprehensive Water Conservation Plan



Making Conservation a California Way of Life

Primary Goals:

- Use Water More Wisely
- Eliminate Water Waste
- Strengthen Local Drought Resilience
- Improve Agricultural Water Use Efficiency and Drought Planning





Use Water More Efficiently

- Budget-based approach to developing a water use objective for urban retail water suppliers
- Water use objective is an aggregate of all water use in each service area
- Declining indoor water budget 55 gallons per person per day initially – 52.5 (2020), 50 (2030)
- System Water Loss
- Bonus for potable reuse

Urban Water Use Objective =

Aggregate Residential Indoor Use + Aggregate Residential Outdoor Use + Aggregate CII Use + Aggregate Water Loss + Aggregate Variances + Bonus Incentive

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Eliminate Water Waste

- Focus on system water loss
- Includes real loss and apparent loss
- Potential for minimum water loss objective
- Water audit data validity scores (AWWA Software)
- Performance objectives component analysis







Important Dates

Date	Actions		
July 2020	Adopt Regulation for Water Loss Standard		
October 2021	Complete Study on Feasibility of Indoor Water Use Objective		
January 2021	Completion of State Developed Land Use Mapping of Landscaped Area		
June 2022	Adoption of Water Use Standards and Performance Measures		
November 2023	Water Suppliers Calculate Water Use Objectives		
January 2024	Water Suppliers Submit Plan to Achieve Water Use Objectives		
January 2027	Water Suppliers Need to Meet Water Use Objectives		



Estimate of Regulatory Compliance

Actions	Water Conserved (AF/Yr)		
Efforts associated with the 2018-20 CWCP:	141		
Efforts associated with the 2020-22 CWCP:	130		
SmartMeter/AMI System:	1,000		
Future CWCPs:	229		
Total (by 2027):	1,500		
"Credit" for Pure Water Program (by 2030):	2,000		
Total (with Pure Water Program credit)	3,500		



2018-20 Comprehensive Water Conservation Plan Program Updates

Plan Elements:

- One-on-One Consultations
- Smart Irrigation Controller Program
- Landscape Conversion Initiative
- Rain Barrel Program





One-on-One Consultations

- 953 one-on-one consultations have been conducted
- Includes through account review
- Provides opportunity to discuss irrigation efficiency
- On-site verification of irrigated area
- Discuss leak detection and meter movement



Smart Irrigation Controller Program

- Program has been well received
- 2,139 controllers have been installed
- Preliminary analysis shows significant conservation
- Reduction in number of wasteful customers
- Reduction in amount of water used over budget

Breakdown					
Redeemed	1765				
Checked, but didn't redeem	374				
Canceled	228				
Trip Charge / Canceled	31				
Total Residents (that entered)	2398				
Total Residents (still in program	2139				
Water type: High	1746	82%			
Water type: Normal	393	18%			
Zone Type: 8	836				
Zone Type: 16	747				
Zone Type: 24	134				
Zone Type: 32	78				
Zone Type: unknown	0				





Landscape Conversion Initiative

- Evaluated other landscape conversion programs
- Ease of implementation, cost, program success, longevity
- Partnering with local agencies for program implementation
- Developed partnership with Tree People
- Potential for funding partnerships and regional efforts
- Work in progress





Comprehensive Water Conservation Plan Rain Barrel Program

- Amazing customer response
- Over 600 customers registering for program in first few hours
- Over 325 rain barrels distributed
- Lesson learned market rain barrel programs when its raining





2020-22 Comprehensive Water Conservation Plan Program Updates

Plan Elements:

- One-on One Consultations
- Landscape Conversion Initiative
- Water Loss Prevention Program (New)
- Improved Tracking of Water Use and Conservation Effectiveness (New)
- Rain Barrel Incentive Program
- Education and Outreach
- Smart Irrigation Controller Program





One-on One Consultations

- Coordinated team effort with Field Customer Service
- New Conservation Specialist position for proactive customer engagement
- Focus on most wasteful customers
- Continue to reach out to customers over budget after smart controller installation
- Leak detection reports from AMR/AMI



Landscape Conversion Initiative

- Continue to work on development of a regional conservation program
- Develop partnerships with local non-profit organizations to assist with program coordination and implementation
- Allow for broader application of programs such as "Garden in a Box"
- Continue to seek grant funding



Butterfly Bounty

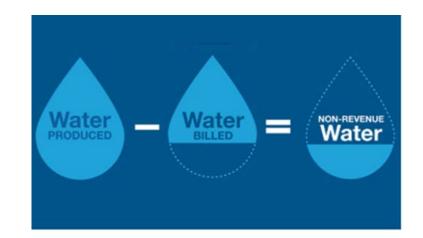
Full sun | 100 sq. ft. | 27 starter plants

\$158.00

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Water Loss Prevention Program

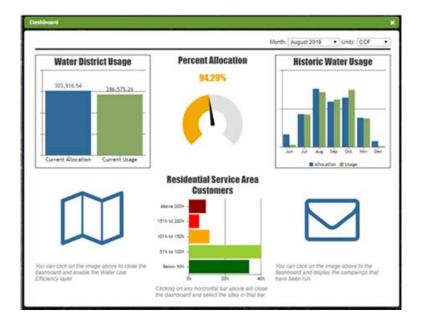
- Identify areas to reduce system water loss and prioritize implementation
- Improve the District's water loss audit score
- Identify potential implications of new and emerging regulations and develop plan for compliance
- Develop a District Water Loss Prevention Plan that identifies specific actions and timelines to achieve the goals above





Improved Tracking of Water Use and Conservation Effectiveness

- Implement new WaterView software
- Allows for more efficient tracking of customer water use
- Improves ability to track results of conservation programs
- Improves ability to measure water use against state water use objectives
- Provides for more efficient collection of information needed for regulatory reporting





Rain Barrel Incentive Program

- Incentivize attendance at District educational events
- Provide up to 100 rain barrels per year to customers free of charge over a two-year period
- Remind customers of the need to conserve water outdoors, especially in the winter months
- Encourage the use of native plants and climate appropriate landscaping
- Provide attractive rain barrels that complement local residences and landscaping





Education and Outreach

- Improve customer understating of water use efficiency and state regulatory mandates
- Develop educational opportunities with new Sustainability Garden
- Develop broad range of outreach topics to appeal to a broader audience
- Develop more video based outreach for web site and social media applications
- Develop outreach material for one-on-one consultations
- Continue Fall irrigation adjustment campaign





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Smart Irrigation Controller Program

- Reduce water waste resulting from over-irrigation
- Reduce the number of penalty paying customers
- Improve customer engagement and satisfaction
- Maximize the numbers of controllers installed and correctly programmed
- Minimize District administrative effort
- Evaluate four options for continuation of the program





Option One

- Continue with current installation and give-away program
- Current program implemented with two year PSA budgeted \$900,000 scalable to available funding
- Program funded with penalties assessed for wasteful water use
- Targeted on wasteful water use customers 80% of controllers
- Email marketed to only wasteful water use customers
- Program available to all customers 20% of controllers
- Diminishing return on marketing efforts, difficult to maintain 80/20 ratio
- Estimated: \$460/controller cost to District, 1,000 controllers, 65 AF water savings



Option Two

- Continue with modified version of current program
- FY 20-22 Budget includes \$500,000 over two years for program implementation
- Provide controllers and installation free to wasteful water use customers
- Provide controller and installation to all other customers at discounted rate
- Non-wasteful customers would pay for discounted cost for controller and installation
- Tiered program difficult to market and potential public perception concern
- Customers are provided convenience of packaged deal and website scheduling
- Does this provide enough incentive to DYI customers with a MET rebate?
- Estimated: \$125-460/controller cost to District, 543-2,000 controllers, 40-84 AF water savings



Option Three

- Free controller and discounted installation, customer cost share
- Professional installation company implements the program
- Installation company provides a potentially discounted controller, submits MET rebate on customers behalf, schedules installation, collects customer cost share
- District supplements the program for the remaining amount (\$500,000 FY 20-22)
- Program available to all customers
- Easy to market and relatively low administrative cost to the District
- Customer cost share low enough to provide incentive with program convenience
- Estimated: \$170/controller cost to District, 1,470 controllers, 63 AF water savings



Option Four

- Rebate or voucher program for controller only, no installation
- Customers could take advantage of MET rebate with an additional rebate provided by the District (\$500,000 FY 20-22)
- Opportunity for customer specific website for discounted controller
- Available to all customers, easy to market
- Lack of installation could result in controllers not being set up properly
- Provides for maximum distribution of controllers
- Potential for significant District administrative burden
- Estimated: \$100/controller cost to District, 2,500 controllers, 85 AF water savings



Option Summary

Annually

Program Cost	Cost per Controller	Number of Controllers	Professional Installation	Water Savings	Wasteful/Regular
\$450,000	\$460	1,000	Yes	65 AF	80/20
\$250,000	\$125 - \$460	543 - 2000	Yes	40-84 AF	100 or 30/70
\$250,000	\$170	1,470	Yes	63 AF	30/70
\$250,000	\$100	2,500	No	85 AF	10/90



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Conclusions

- District has been able to achieve previous conservation objectives and is ramping up conservation efforts
- New water use objectives will require a concerted and sustained effort to achieve
- Estimates of regulatory compliance indicate that the District is on track to be compliant with *Making Conservation a California Way of Life* mandates
- Current conservation efforts are achieving positive results
- However, in order to achieve water use objectives, additional conservation efforts will be needed

