

Water Efficiency Program Update

June 7, 2022



Overview

- State Drought Regulations
- Turf Replacement Surveys
- Evaluating Costs and Saving of Water Efficiency Programs
- Ongoing Incentive Programs
- Next Steps

State Drought Regulations

Emergency Regulation to Reduce Water Demands and Improve Water Conservation adopted May 24, 2022

- Implementing Level 2 Demand Reduction Actions
- Annual Water Supply and Demand Assessment
- Irrigation Prohibition on Commercial, Industrial and Insitutional Non-Functional Turf

Implementing Level 2 Demand Reduction Actions

Each urban water supplier that has submitted a water shortage contingency plan shall implement all demand reduction actions identified in the supplier's water shortage contingency plan for a shortage level of 10-20% (Level 2)

- Demand Reduction Actions for each Shortage Level are detailed in the District's Water Shortage Contingency Plan
 - Demand Reduction Actions are the list of water use prohibitions
- Newly adopted Normal Year prohibitions exceed Level 2 Response Actions
- Ongoing campaign to encourage customers to use water wisely

Annual Water Supply and Demand Assessment

Each urban water supplier shall submit to the Department of Water Resources a preliminary annual water supply and demand assessment no later than June 1, 2022, and submit a final annual water supply and demand assessment to the Department of Water Resources no later than July 1, 2022.

- Marin Water submitted the preliminary assessment on May 31^{st.}
- Assessment shows no shortage projected for July 1, 2022 to June 30, 2023

Irrigation Prohibition of Non-Functional Turf

The use of potable water is prohibited for the irrigation of non-functional turf at commercial, industrial, and institutional sites.

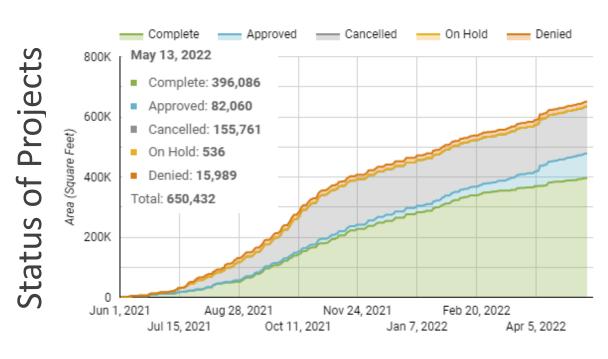
- 1. Irrigation is allowed to the extent necessary to ensure the health of trees and other perennial non-turf plantings or to the extent necessary to address an immediate health and safety need.
- 2. Water supplier may approve a request for continued irrigation of non-functional turf where the user certifies that the turf is a low water use.

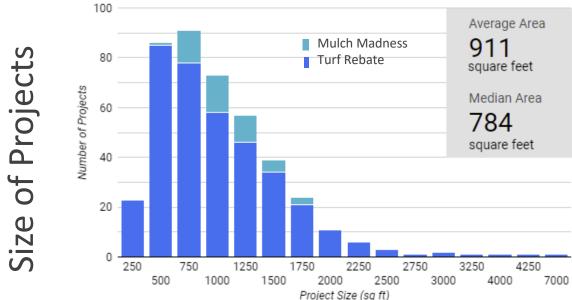
• Outreach notifications are underway to all commercial, industrial, and institutional sites sites to support the State Regulation.

Turf Replacement Surveys

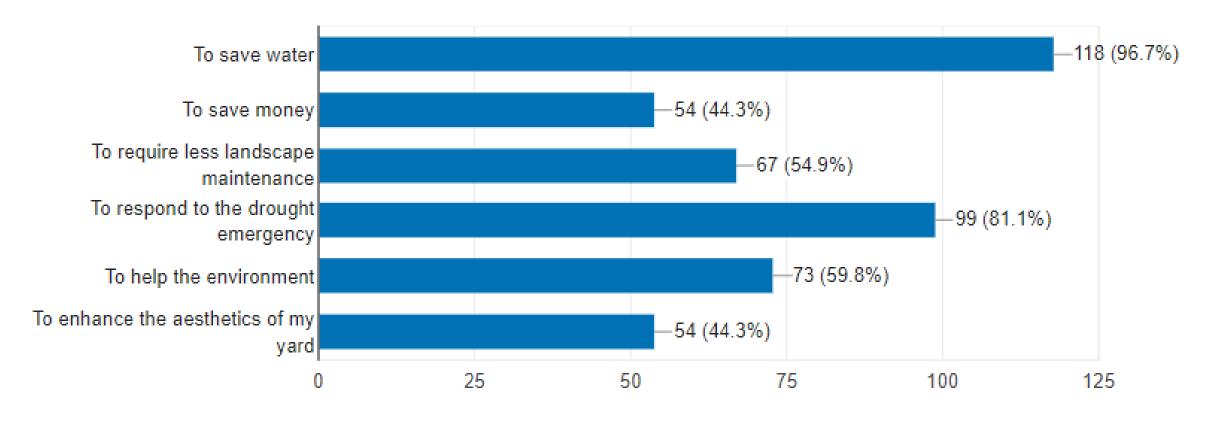
Turf Incentive Programs

- Informal survey sent to 300 participants with completed projects at the end of April
- 122 responses received



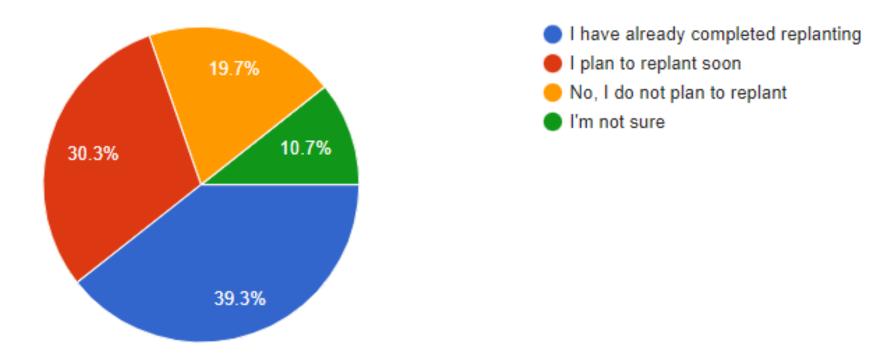


What motivated you most to remove your lawn? (Please check all that apply)



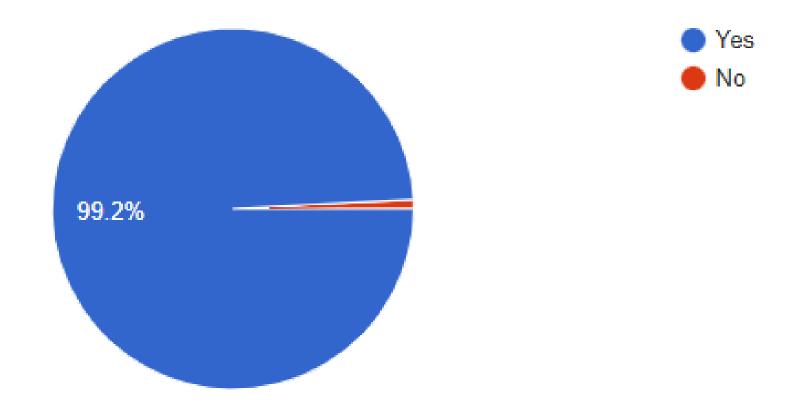
- Saving water was significantly more important than saving money
- Relative to other factors, saving money was less important overall

Did you already or do you intend to plant low water use plants in the area where you removed your lawn?



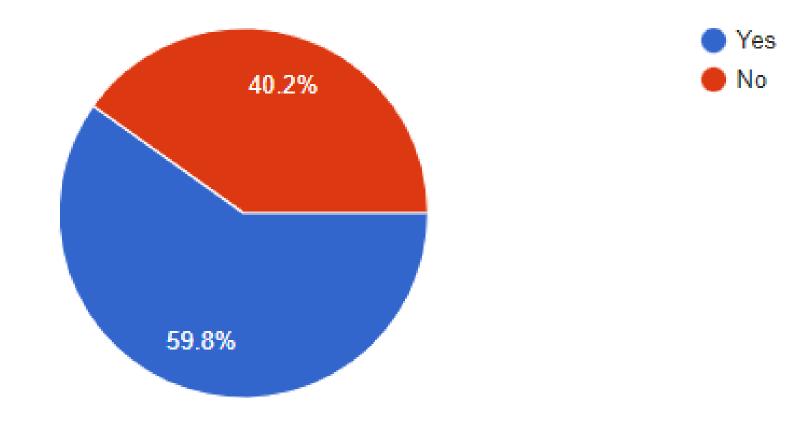
 There's an opportunity to influence replanting choice by offering outreach

Would you recommend the program to a friend?



 Overall very positive program results with good potential for word of mouth promotion

Have your neighbors asked you about your project and/or expressed interest in removing their lawns?



 Projects are noticed by neighbors and word of mouth promotion is likely happening

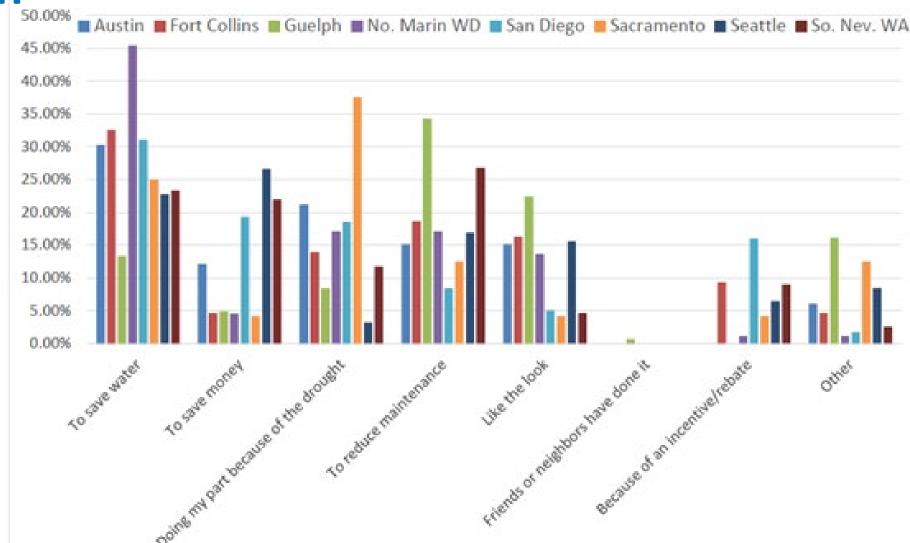
Turf Incentive Program Survey: Key Findings

- Saving water is significantly more important than saving money to participants
- About 50% of participants were unhappy with their landscapes and already considering replacing their lawns
- The water shortage emergency had a significant influence on participation – so participation levels might drop off regardless of incentive amount

AWE 2016 Turf
Transformation
Study

Various reasons, each an opportunity to motivate a change to current landscape

AWE Landscape Transformation Participants: Which one reason would you say was the most important in your decision to change your landscape?



Evaluating Costs and Saving of Water Efficiency Programs

Turf Program Water Savings

- Weather
 - 10 year average net ETo of 45.8 inches
- Conversion to low water use plants
 - Plant factor goes down from 0.8 to 0.3
- Irrigation conversion
 - Efficiency increases from 0.6 to 0.9
- Estimated Total Water Use (ETWU) reduces from 38 to 9 gallons per square foot per year
- Savings of 28 gallons per square foot per year

ЕТо	45.8	inches	
	Lawn	Water efficient	
Plant factor	0.8	0.3	
Irrigation efficiency	0.6	0.9	
ETWU (gal/SF/year)	38	9	
Savings	28	gallons per SF per year	

Estimated Total Water Use Formula:

$$ETWU = (ETo)(0.62) \left(\frac{PFxHA}{IE}\right)$$

Evaluating Incentive Programs

Evaluation completed with the Alliance for Water Efficiency's Conservation Tracking Tool

Inputs include: water savings, participation, program costs

Sample Program: Turf Replacement Program

- \$3/sqft rebate
- Overhead costs
- Average 1,000 sqft removed per site
- Savings of 28 gallons/year/sqft
 - Assumes site converts turf to low water use plants
- Useful savings life: 15 30 years
 - Influenced by maintenance, irrigation efficiency, plant material installed

➤ Cost: \$1,225 - \$2,580/acft

Annual Water Savings







Program Participation

Ongoing Incentive Programs Offerings

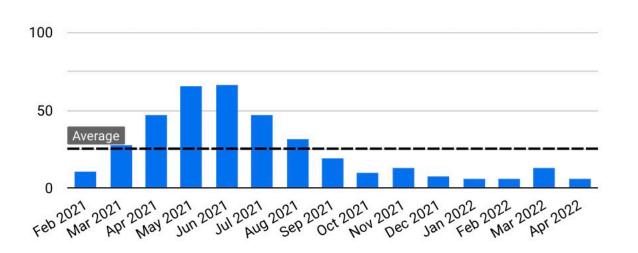
Irrigation Controllers Programs

Rachio Point-of-purchase discount

- Cost share
 - District \$100
 - Customer Contribution: \$70 (8 station)\$90 (16 station)
- 30 discounts issued this year

EPA WaterSense Irrigation Controllers Rebate

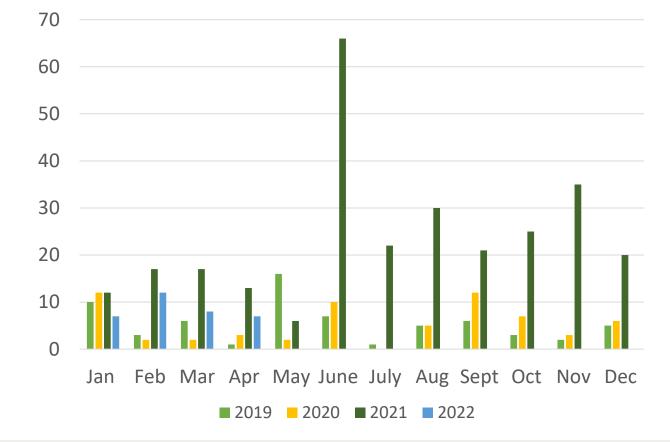
- Launched May 15, 2020
- \$100 rebate
- 15 rebates issued this year

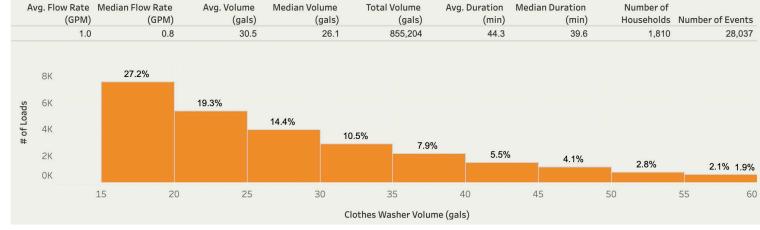




Clothes Washers

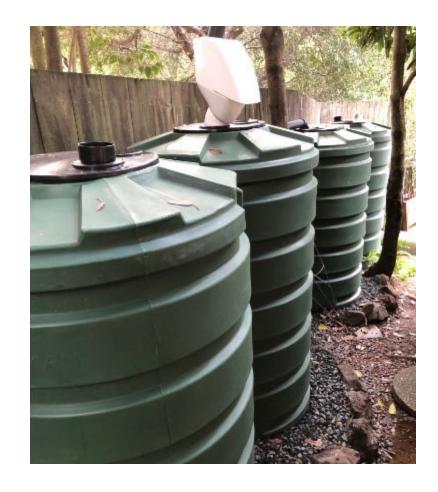
- Long-standing program
- \$100 rebate
- Washers meet Energy Star Most Efficient criteria, the most efficient option available
- 34 rebates so far in 2022
- 47% of loads are efficient
- End use study data is being evaluated to determine if saturation has been reached





Rain Barrels & Cisterns

- Launched January 1, 2020
- Up to 50 cents per gallon of storage
- \$1,000 maximum
- Program Summary:
 - 93 rebates approved since program start date
 - Average system size: 770 gallons
 - Total volume = 71,610 gallons (0.22 AF)



Laundry to Landscape Graywater Program

- \$125 discount on "laundry-tolandscape" graywater component kit
- Monthly webinar: 1st Tuesday
- Technical assistance and guidance provided by Urban Farmer Store
- Subsidized installer training under development to increase local installers

	Workshop	# Attendees	# Kits
2020	Aug	20	-
	Sept	31	-
	Oct	10	-
	Nov	23	1
2021 (Water Shortage Emergency)	May 12	146	2
	June 9	250	13
	Sept 23	59	6
	Oct 27	26	7
2022	Mar	14	1
	Apr	14	2
	May	35	

Next Steps

- Monitor participation and expenditures of incentives
- Continue attending community events
- Continue ongoing evaluation of programs to understand participation and increase program effectiveness