

# The Metropolitan Water District of Southern California

# Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

## **OWC Committee**

J. Abdo, Chair  
T. Quinn, Vice Chair  
L. Ackerman  
R. Atwater  
S. Blois  
G. Cordero  
D. Erdman  
A. Fellow  
L. Fong-Sakai  
C. Kurtz  
R. Lefevre  
C. Miller  
J. Morris  
B. Pressman

## **One Water (Conservation and Local Resources) Committee**

Meeting with Board of Directors \*

**September 27, 2022**

**11:00 a.m.**

Live streaming is available for all board and committee meetings on [mwdh2o.com](http://mwdh2o.com) ([Click Here](#))

A listen only phone line is also available at 1-877-853-5257; enter meeting ID: 831 5177 2466. Members of the public may present their comments to the Committee on matters within the committee's jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference (833) 548-0276 and enter meeting ID: 815 2066 4276.

**Tuesday, September 27,  
2022**

**09:30 a.m. A&E  
11:00 a.m. OWC  
01:00 p.m. Exec**

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**MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012**

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\* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

- 1. Opportunity for members of the public to address the committee on matters within the committee's jurisdiction (As required by Gov. Code Section 54954.3(a))**

### **\*\* CONSENT CALENDAR ITEMS -- ACTION \*\***

## **2. CONSENT CALENDAR OTHER ITEMS - ACTION**

- A.** Approval of the Minutes of the Meeting of the One Water (Conservation and Local Resources) Committee held August 15, 2022 [21-1520](#)

**Attachments:** [09272022 OWC 2A Minutes](#)

## **3. CONSENT CALENDAR ITEMS - ACTION**

- 7-11 Adopt resolution encouraging action to reduce or eliminate irrigation of non-functional turf with potable water; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [21-1522](#)

**Attachments:** [09272022 OWC 7-11 B-L](#)  
[09272022 OWC 7-11 Presentation](#)

**\*\* END OF CONSENT CALENDAR ITEMS \*\***

**4. OTHER BOARD ITEMS - ACTION**

NONE

**5. BOARD INFORMATION ITEMS**

NONE

**6. COMMITTEE ITEMS**

- a. Update on Conservation Programs [21-1523](#)

**Attachments:** [09272022 OWC 6a Presentation](#)

**7. MANAGEMENT REPORTS**

- a. Water Resource Management Manager's Report [21-1521](#)

**Attachments:** [09272022 OWC 7a Presentation](#)

**8. FOLLOW-UP ITEMS**

NONE

**9. FUTURE AGENDA ITEMS**

**10. ADJOURNMENT**

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site <http://www.mwdh2o.com>.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

**MINUTES**

**ADJOURNED ONE WATER (CONSERVATION AND LOCAL RESOURCES)  
COMMITTEE**

**August 15, 2022**

Chair Abdo called the teleconference meeting to order at 3:20 p.m.

Members present: Chair Abdo, Vice Chair Quinn, Directors Ackerman, Blois, Erdman, Fellow, Fong-Sakai, Lefevre, Miller, Morris, and Pressman.

Members absent: Directors Atwater, Cordero, and Kurtz.

Other Board Members present: Chairwoman Gray, Directors De Jesus, Dick, Goldberg, McCoy, Ortega, Peterson, Ramos, Record, Smith, and Tamaribuchi.

Staff present: Coffey, S. Franco, Goshi, Hagekhalil, Schlotterbeck, and Upadhyay.

**1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE  
COMMITTEE ON MATTERS WITHIN THE COMMITTEE’S JURISDICTION**

None

**CONSENT CALENDAR ITEMS – ACTION**

**2. CONSENT CALENDAR OTHER ITEMS – ACTION**

- A. Approval of the Minutes of the Meeting of the One Water (Conservation and Local Resources) Committee held June 28, 2022

**3. CONSENT CALENDAR ITEMS – ACTION**

- 7-14      Subject:            Support Metropolitan’s Application to the United States Bureau of Reclamation’s Water and Energy Efficiency Grant Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA
- Motion:            Adopt the resolution to support Metropolitan’s application for United States Bureau of Reclamation grant funding of \$5 million to provide supplemental funding for residential and commercial landscapes in the Turf Replacement Program: a. Authorize the General Manager to accept grant funds, if awarded. b. Authorize the General Manager to enter into a

contract with United States Bureau of Reclamation for the grant funds, if awarded.

No presentations were given, Director Fellow made a motion, seconded by Director Lefevre to approve the consent calendar consisting of items 2A and 7-14.

The vote was:

Ayes: Directors Abdo, Ackerman, Blois, Erdman, Fellow, Fong-Sakai, Lefevre, Miller, Morris, Pressman, and Quinn.

Noes: None

Abstentions: None

Absent: Directors Atwater, Cordero, and Kurtz.

The motion passed by a vote of 11 ayes, 0 noes, 0 abstain, and 3 absent.

#### **END OF CONSENT CALENDAR ITEMS**

#### **4. OTHER BOARD ITEMS – ACTION**

None

#### **5. BOARD INFORMATION ITEMS**

- 9-3 Subject: Information on policy alternatives Metropolitan may consider for reducing non-functional turf in its service area.

Presented by: Krista Guerrero, Resource Specialist, Water Efficiency Team

Krista Guerrero provided information on policy alternatives Metropolitan may consider for reducing non-functional turf in its service area.

The following Directors provided comments or asked questions:

1. Ortega
2. Record
3. Peterson
4. Miller
5. Ramos
6. Abdo
7. Quinn
8. Dick

## 6. COMMITTEE ITEMS

- b. Subject: Update on Conservation Programs

Presented by: Elise Goldman, Resource Specialist, Water Efficiency Team

Elise Goldman provided an update on recent conservation activity, expenditures, residential and commercial, industrial, and institutional turf replacement program, and the continued efforts in water conservation.

The following Directors provided comments or asked questions:

1. Abdo

- c. Subject: Initial Results from Household Water Use Study

Presented by: Krista Guerrero, Resource Specialist, Water Efficiency Team

Krista Guerrero provided an update on the initial results from the household water use study using Flume devices.

The following Directors provided comments or asked questions:

1. Record
2. Blois
3. Ackerman

## 7. MANAGEMENT REPORTS

- a. Subject: Water Resource Management Manager's Report

Presented by: Kevin Donhoff, Manager, Implementation Section

No presentations were given.

**8. FOLLOW-UP ITEMS**

None

**9. FUTURE AGENDA ITEMS**

None

**10. ADJOURNMENT**

Meeting adjourned at 4:18 p.m.

Judy Abdo  
Chair



- **Board of Directors**

***One Water (Conservation and Local Resources) Committee***

10/11/2022 Board Meeting

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7-11

**Subject**

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Adopt resolution encouraging action to reduce or eliminate irrigation of non-functional turf with potable water; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

**Executive Summary**

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As a result of the record drought in the Southwest, staff brought forth four options to address the irrigation of non-functional turf with potable water to the Board for discussion in August 2022. The Board recommended that all four options be further developed for future review and action. One of the options is to adopt a board resolution encouraging municipalities within our service area to ban the irrigation of non-functional turf with potable water. As there is no fiscal impact or other action needed for this resolution, staff developed the attached resolution and is bringing it forward for board adoption.

**Details**

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**Background**

Due to severe and persistent drought conditions, Metropolitan's Board declared a regional drought emergency in November 2021 and adopted an Emergency Water Conservation Program in April 2022 to address supply shortages in the State Water Project-dependent areas. Conditions on the Colorado River are equally concerning as both Lake Mead and Lake Powell are at their lowest historical levels. In June 2022, the U.S. Bureau of Reclamation Commissioner Camille Touton announced that Colorado River water users need to reduce use by two to four million-acre feet. It is clear that agencies need to permanently reduce potable water demand for all non-essential uses.

In November 2021, Metropolitan's Board adopted Legislative Priorities and Principles for 2022 that included "support administrative/legislative actions and funding to improve water use efficiency through non-functional turf management." Currently, Metropolitan's commercial Turf Replacement Program (TRP) is the focus of non-functional turf management activities. However, following board direction, staff now seeks to expand the options available for non-functional turf management.

In May, as part of the state's drought response, the State Water Resources Control Board adopted an emergency regulation banning the irrigation of non-functional turf with potable water for all commercial, industrial, and institutional properties throughout the state. This emergency regulation expires on June 14, 2023. In adopting this regulation, the state acknowledged that irrigation of turf that is not used for recreational or community gathering purposes is an unnecessary use of water.

To date, Southern California residents have removed more than 200 million square feet of turf at residential and commercial properties through Metropolitan's TRP. A recent study by Dr. Andrew Marx indicates that 96 percent of properties in Metropolitan's service area which convert from turf to California Friendly landscaping through Metropolitan's TRP maintain that landscaping over time. In addition, Metropolitan's multiplier study found that for every 100 landscapes that are installed using incentives, another 134 are installed without the use of an incentive payment. Both studies focused on residential properties, but these findings can be extended to commercial properties as well. It is expected that there would be a lower rate of reversion on commercial properties due to less frequent property sales. Therefore, the permanent ban on irrigation of non-functional turf

and the continued effort to convert these areas to California Friendly landscaping would constitute a significant reduction in potable water demand.

In August, staff presented the Board with four options to address the irrigation of non-functional turf with potable water in our service area. All options received a positive response and, accordingly, staff was directed to further develop them for future board review and action. The least complex of these called for the Board to adopt a resolution encouraging municipalities to ban the irrigation of non-functional turf with potable water. This option would not require any programmatic or legislative changes to implement and, as such, staff has prepared a proposed resolution for immediate consideration by the Board.

Attached to the proposed resolution is sample language that potentially could be inserted into a municipality's water conservation ordinance, depending on the nature and scope of its authority. The sample language provides a basic framework, including a definition of non-functional turf, and the following options for addressing non-functional turf:

1. Prohibit irrigation of non-functional turf with potable water after the effective date of the ordinance, with certain exceptions.
2. Prohibit installation of non-functional turf after the effective date of the ordinance, with certain exceptions.
3. Require the removal of all non-functional turf from commercial, industrial, or public properties or facilities by a date certain.

In addition, the proposed language provides placeholders for municipalities to insert their preferred enforcement methods and timelines. Staff recommends this approach to a proposed ordinance as it allows municipalities to make adjustments as they see fit and ensures higher levels of acceptance and accountability.

## **Policy**

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By Minute Item 52802, dated April 26, 2022, the Board adopted a resolution which declared a Water Shortage Emergency Condition and established an Emergency Water Conservation Program for the State Water Project dependent area.

By Minute Item 52579, dated November 9, 2021, the Board adopted Legislative Priorities and Principles for 2022 that included improving water efficiency through non-functional turfgrass management.

By Minute Item 52581, dated November 9, 2021, the Board adopted a resolution which declared specified emergency conditions within the Metropolitan service area.

By Minute Item 49542, dated September 10, 2013, the Board authorized new conservation program initiatives.

By Minute Item 49068, dated May 8, 2012, the Board authorized changes to Metropolitan's water conservation program.

By Minute Item 48772, dated August 16, 2011, the Board adopted the Long-Term Conservation Plan and revisions to the water conservation policy principles.



## California Environmental Quality Act (CEQA)

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### CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because it involves continuing administrative activities, such as general policy and procedure making will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment (Section 15378(b)(5) of the State CEQA Guidelines).

### CEQA determination for Option #2:

None required

## Board Options

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### Option #1

Adopt resolution encouraging action to reduce or eliminate irrigation of non-functional turf with potable water.

**Fiscal Impact:** \$0

**Business Analysis:** Adoption of the resolution could lead to a permanent reduction in potable water demand.

### Option #2

Do not adopt the resolution.

**Fiscal Impact:** \$0

**Business Analysis:** Without this resolution, irrigation of non-functional turf with potable water may continue throughout Metropolitan's service area.


## Staff Recommendation

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Option #1

  
\_\_\_\_\_  
Brad Coffey  
Manager, Water Resources Management

9/22/2022  
Date

  
\_\_\_\_\_  
Adel Hadekhalil  
General Manager

9/22/2022  
Date

**Attachment 1 – Resolution**

**Attachment 2 – Draft Ordinance**

Ref# wrm12692156

**RESOLUTION \_\_\_\_\_****RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
ENCOURAGING THE BAN OF IRRIGATION OF NON-FUNCTIONAL TURF WITH  
POTABLE WATER**

**WHEREAS, The Metropolitan Water District of Southern California and Its Member Agencies are Local and Regional Water Entities Responsible for Distributing, Managing, and Developing Supplies to Meet Current and Future Water Demands Within Their Respective Service Areas and throughout Southern California.**

Metropolitan is comprised of 26 member agencies, all of which are public entities, including 14 cities, 11 municipal water districts, and one county water authority, which collectively serve the residents and businesses of more than 300 cities and numerous unincorporated communities.

Metropolitan estimates that approximately 18.7 million people live in Metropolitan's service area.

Metropolitan's 2020 Integrated Water Resources Plan shows expected population growth of approximately 17 percent in Metropolitan's service area between 2010 and 2035.

**WHEREAS, Long-term and Short-term Trends Suggest that Metropolitan's Imported Water Supplies May Be Constrained by Drought, Climate Change, and Other Environmental Factors.**

The Colorado River system has been continuously in drought since 2000. Lake Mead and Lake Powell were near full in 2000; however, both reservoirs are now at their lowest historical levels since initial filling.

In June 2022, the U.S. Bureau of Reclamation Commissioner, Camille Touton, announced that Colorado River water users need to reduce use by two- to four million acre-feet per year.

Extended drought and increased regulatory constraints have resulted in an average 35 percent allocation of Table A contract supplies from the State Water Project over the last 10 years. During the previous 10-year period, Metropolitan received an average 68 percent allocation from the State Water Project.

Combined deliveries of allocated water from the State Water Project during the past three years are lower than in any other three-year period in the history of the SWP.

The California Department of Water Resources (DWR) classified water years 2020 to 2022 (October 1, 2019, through September 30, 2022) as dry or critically dry, and it projects these three water years will be the driest on record in California for statewide precipitation.

In addition to reduced precipitation since 2020, California's climate is transitioning to a warmer setting in which historical relationships among temperature, precipitation, and runoff are changing. In addition, precipitation in the Colorado River Basin was near 100 percent normal in 2022, but runoff was only at 62 percent of normal. In 2021 precipitation was at 87 percent of normal while runoff was at 32 percent of normal.

**WHEREAS, Governor Newsom Has Declared a State of Emergency to Exist in All California Counties Due to These Severe Drought Conditions.**

On October 19, 2021, Governor Gavin Newsom declared a state of emergency to exist in all California counties due to worsening drought conditions. This proclamation follows other increasingly expansive drought declarations and executive orders that have been issued since April 2021.

Governor Newsom has called on Californians to re-double their efforts to reduce water use by 15 percent and for local and regional water agencies to implement their Water Shortage Contingency Plans (WSCPs) “at a level appropriate to local conditions that takes into account the possibility of a third consecutive dry year.”

California has declared a State of Emergency due to severe drought conditions three separate times since 2007.

On August 11, 2022, Governor Newsom issued his California Water Supply Strategy which includes a long-term commitment to replace 500 million square feet of turf with drought tolerant landscaping by promoting programs and policies that incentivize turf conversion.

**WHEREAS, Water Conservation and Demand Management Play a Critical Role in Ensuring Supplies Meet Demands in Metropolitan’s Service Area.**

Water conservation and demand management increase resiliency in the event of drought and extend the availability of current and future water supplies.

Metropolitan has invested \$2.3 billion in present value dollars in conservation, local water recycling, and local groundwater recovery since 1990, resulting in nearly 7.6 million acre-feet of water conserved and new supplies.

Local water suppliers and communities have also made multi-billion-dollar strategic and forward-looking investments in water conservation (within and outside the MWD service area), water recycling, stormwater capture and reuse, groundwater storage, seawater desalination and other strategies to improve drought resilience.

Water conserved throughout the service area, among other things, has helped preserve storage in Metropolitan’s diverse storage portfolio and meet demands during these dry conditions.

**WHEREAS, a Permanent Ban on Irrigation of Non-functional Turf and Commitment to Converting These Areas to California Friendly Landscaping through Local Ordinances and Regulations Would Result in a Significant Reduction in Potable Water Demand.**

Amending local ordinances and other land use planning regulations to further prevent non-functional turf from being irrigated with potable water, installed in new construction, or maintained in existing construction will contribute to more sustainable demands within Metropolitan’s service area.

Irrigation of turf grass represents the single largest application of consumptive use of potable water in Southern California and reducing the amount of turf represents a significant water conservation opportunity.

The removal of non-functional turf and replacement with drought-tolerant landscaping reduces water usage on a given site by up to 80 percent.

Approximately 96 million square feet of non-residential non-functional turf have been removed through Metropolitan's turf rebate programs, which equates to just under 13,000 acre-feet of water saved over the last thirty years.

Since the SWRCB issued an emergency regulation temporarily banning the irrigation of non-functional turf with potable water, commercial applications for the turf replacement program have tripled since the emergency regulation went into effect. Therefore, local ordinances permanently banning the irrigation, installation, and maintenance of non-functional turf would likely lead to an even greater increase in turf replacement projects.

Regulations addressing irrigation, installation and maintenance of non-functional turf may be adopted as local governmental codes and ordinances by Metropolitan member agencies and in local jurisdictions throughout Metropolitan's service area, as permitted by each jurisdiction's legal authority.

**NOW, THEREFORE, BE IT RESOLVED** that The Metropolitan Water District of Southern California Board of Directors supports the adoption and promotion of the following principles throughout Metropolitan's service area:

1. Potable water should not be used to irrigate non-functional turf on non-residential properties.
2. Non-functional turf should not be installed at any new or existing non-residential properties, including at any commercial or industrial properties, public buildings, or facilities, or HOAs. Non-functional turf also should not be installed in any new residential properties.
3. Non-functional turf should not be installed in public spaces, including in medians.
4. Non-functional turf should be removed from all non-residential properties, both public and private, including HOAs, by a date certain in the future.

**BE IT FURTHER RESOLVED** that the Board of Directors strongly recommends that all Member Agencies and local jurisdictions within Metropolitan's service area amend their regulatory codes and ordinances, as appropriate, to implement these principles in a manner consistent with each jurisdiction's legal authority. A model ordinance consistent with these principles is attached for reference and potential use.

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Secretary of the Board of Directors  
of The Metropolitan Water District  
of Southern California

### **Model Ordinance Language**

#### **Section X: Definitions**

##### **(A) As used in this section:**

(1) "Non-functional turf" means turf that is not regularly used for human recreational purposes or for civic or community events.

(2) "Turf" means any narrow-leaved grass species that form a uniform, long-lived ground cover that can tolerate traffic and low mowing heights (usually two inches or below). Such grasses include, but are not limited to, annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, Tall fescue, Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustine grass, Zoysiagrass, Buffalo grass, and their associated hybrids.

#### **Section XX: Permanent Water Conservation Requirements**

##### **(A) Prohibition on irrigation of non-functional turf**

(1) After the effective date of this ordinance, non-functional turf shall not be irrigated using potable water with the sole exception of turf at residential properties that was present prior to the effective date of this ordinance.

##### **(B) Prohibition on installation of non-functional turf**

(1) After the effective date of this ordinance, non-functional turf shall not be installed at any new or existing commercial, industrial, or public properties or facilities, including parks, playgrounds, medians, greenbelts, and HOAs. In addition, non-functional turf shall not be installed in any new residential properties.

##### **(C) Removal of non-functional turf**

(1) No later than [DATE CERTAIN], non-functional turf shall be removed from commercial, industrial, or public properties or facilities, including parks, playgrounds, medians, greenbelts, and HOAs.

#### **Section XXX: Penalties and Enforcement**

[TO BE DETERMINED BY ADOPTING JURISDICTION]



One Water Committee

# Resolution Encouraging Municipalities to Ban Irrigation of Non-Functional Turf

Item 7-11

September 27, 2022

## Non-Functional Turf (NFT) Efforts

# Update on Staff Efforts

- Incentives Based
  - Rewarded grant funds to be added to turf removal program (TRP) incentive
  - Pursuing additional grant opportunities
- New water allocation methodology for NFT in drought emergency
  - Continue work with Dr. Marx to develop turf dashboard to assist Member Agencies
- State legislation
  - Added to legislative affairs strategic plan for 2022-2023

# Non-functional Turf Ordinance Development



## Lessons Learned

# Considerations from Southern Nevada Water Authority (SNWA) Legislative Efforts

- Ordinance/legislation is most effective when combined with incentives to promote change
- Legislation is multi-year effort
- NFT Definition

## Non-Functional Turf Efforts

# Defining Non-Functional Turf

- Metropolitan developed definition
  - Similar to SWRCB definition
  - Allows flexibility for municipalities to adjust
- Includes:
  - Potable water irrigation only
  - CII turf not used for recreation / community gathering
    - Includes Homeowner Associations (HOAs)
  - New residential construction

## Non-Functional Turf Ordinance Development

# What Can Metropolitan do to Encourage Ordinance Adoption?

- Cities have water efficiency ordinances
  - Most have permanent ban section
- Metropolitan will provide sample language to be added
- Metropolitan Board resolution encouraging adoption of ordinance language

Non-  
Functional  
Turf  
Ordinance  
Development  
(continued)

# Ordinance Language Options

- Language options may include:
  - Permanent ban on irrigating NFT with potable water
  - Permanent ban on installation of NFT on new development
  - Removal of NFT on CII properties by a specific date
  - Enforcement actions and timeline

## Board Options

- Option #1:

Adopt resolution encouraging action to reduce or eliminate irrigation on non-functional turf with potable water

- Option #2:

Do not adopt the resolution

# Staff Recommendation

- Option #1







One Water Committee

# Update on Conservation Program

Item 6a

September 27, 2022



# Today's Presentation

- Current Expenditures & Commitments
- FY20/21 & FY21/22: In Review

# Current Program Expenditures & Commitments

# Current Conservation Program Expenditures FYs 2022/23 & 2023/24<sup>(1)</sup>

	Paid <sup>(2)</sup>	Committed <sup>(3)</sup>
Regional Devices	\$0.0M	\$8.7M
Member Agency Administered	\$0.0M	\$2.5M
Turf Replacement	\$0.0M	\$28.4M
Advertising	\$0.0M	\$7.0M
Other	\$0.1M	\$1.0M
<b>TOTAL</b>	<b>\$0.1M</b>	<b>\$47.6M</b>

(1) The Conservation Program biennial expenditure authorization was \$86M and expected expenditures for rate setting purposes were \$50M.

(2) As of 7/1/2022 –7/31/2022.

(3) Committed dollars as of August 10, 2022.

# Fiscal Years 2020/21 & 2021/22

## In Review

## FY 20/21 & FY21/22 In Review

- Expenditure & Activity Summary
- Turf Replacement & Device Trends
- Classes/Workshops & Trainings
- Local Project Highlights
- Pilots, Research & Studies
- Efforts to Accelerate Conservation

# Conservation Program Expenditures FYs 2020/21 & 2021/22 <sup>(1)</sup>

	Paid <sup>(2)</sup>
Regional Devices	\$7.6M
Member Agency Administered	\$8.0M
Turf Replacement	\$17.4M
Advertising	\$4.6M
Other	\$2.9M
<b>TOTAL</b>	<b>\$40.5M</b>

(1) The Conservation Program biennial expenditure authorization was \$86M and expected expenditures for rate setting purposes were \$50M.

(2) As of 7/1/2020 –6/30/2022.

# Activity & Lifetime Water Savings

FY20/21 & FY21/22

Lifetime savings  
for all activity

89 TAF

Lifetime savings includes regional rebate program and MAAP activity



## Turf Replacement Rebates:

9,177,381 ft<sup>2</sup> removed



## Smart Controllers:

26,992 units rebated



## Rain Barrels and Cisterns:

5,914 units rebated



## Sprinkler Nozzles:

60,464 units rebated



## Clothes Washers:

31,577 units rebated



## Toilets:

23,848 units rebated

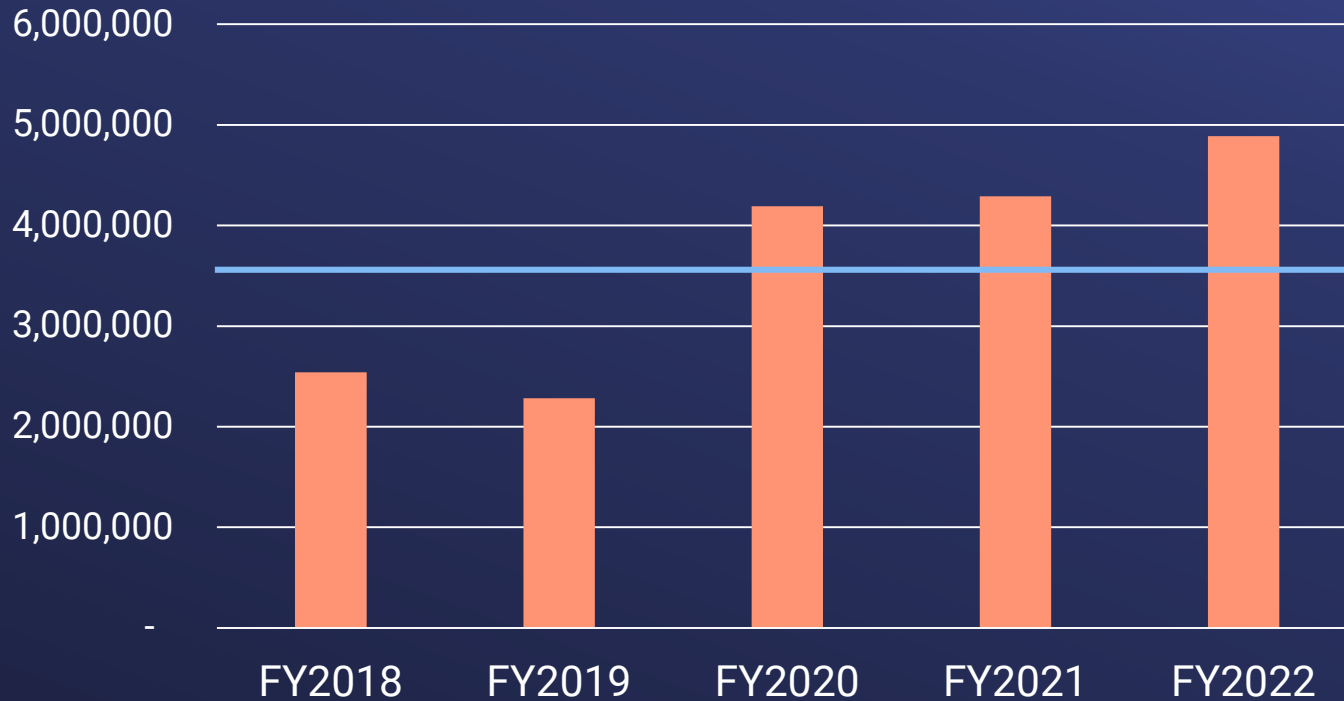




# Device & Turf Replacement Rebate Trends



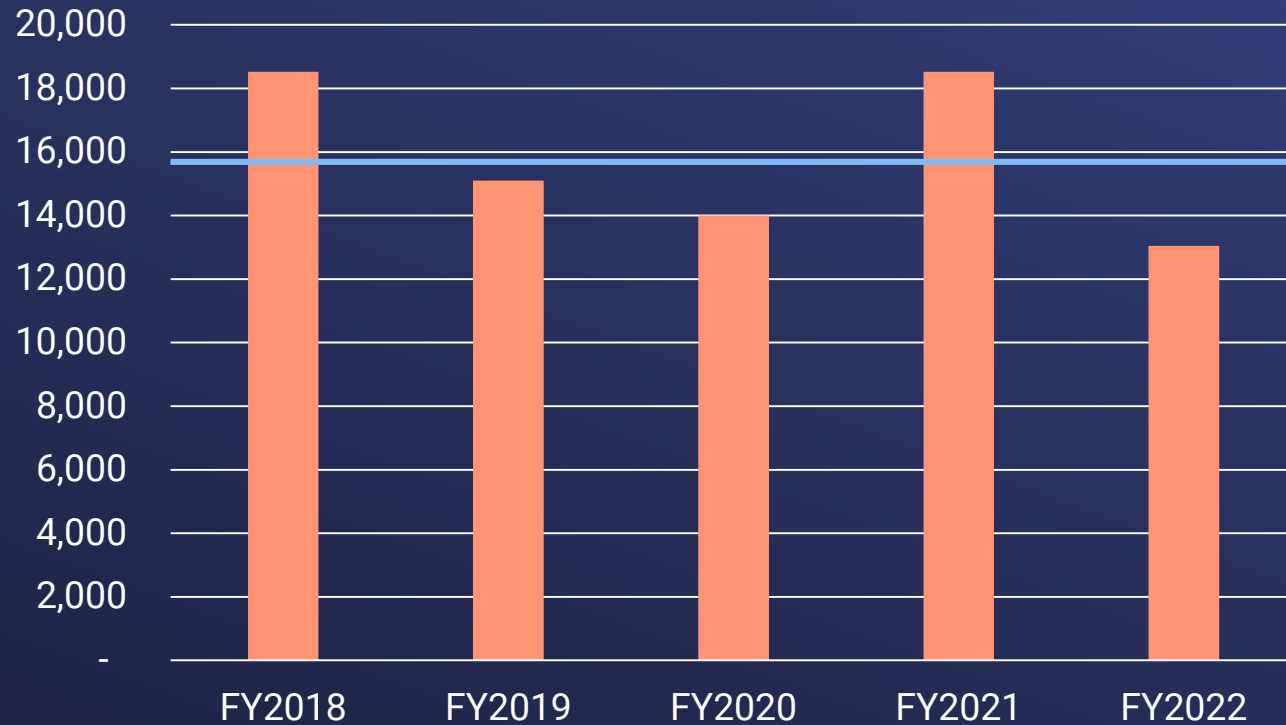
# Turf Removal Rebates (square feet)



Annual Avg = 3.6M

- 60% RES & 40% CII
- Avg RES project = 1,500 sf
- Avg CII project = 14,000sf

# Residential High Efficiency Clothes Washers

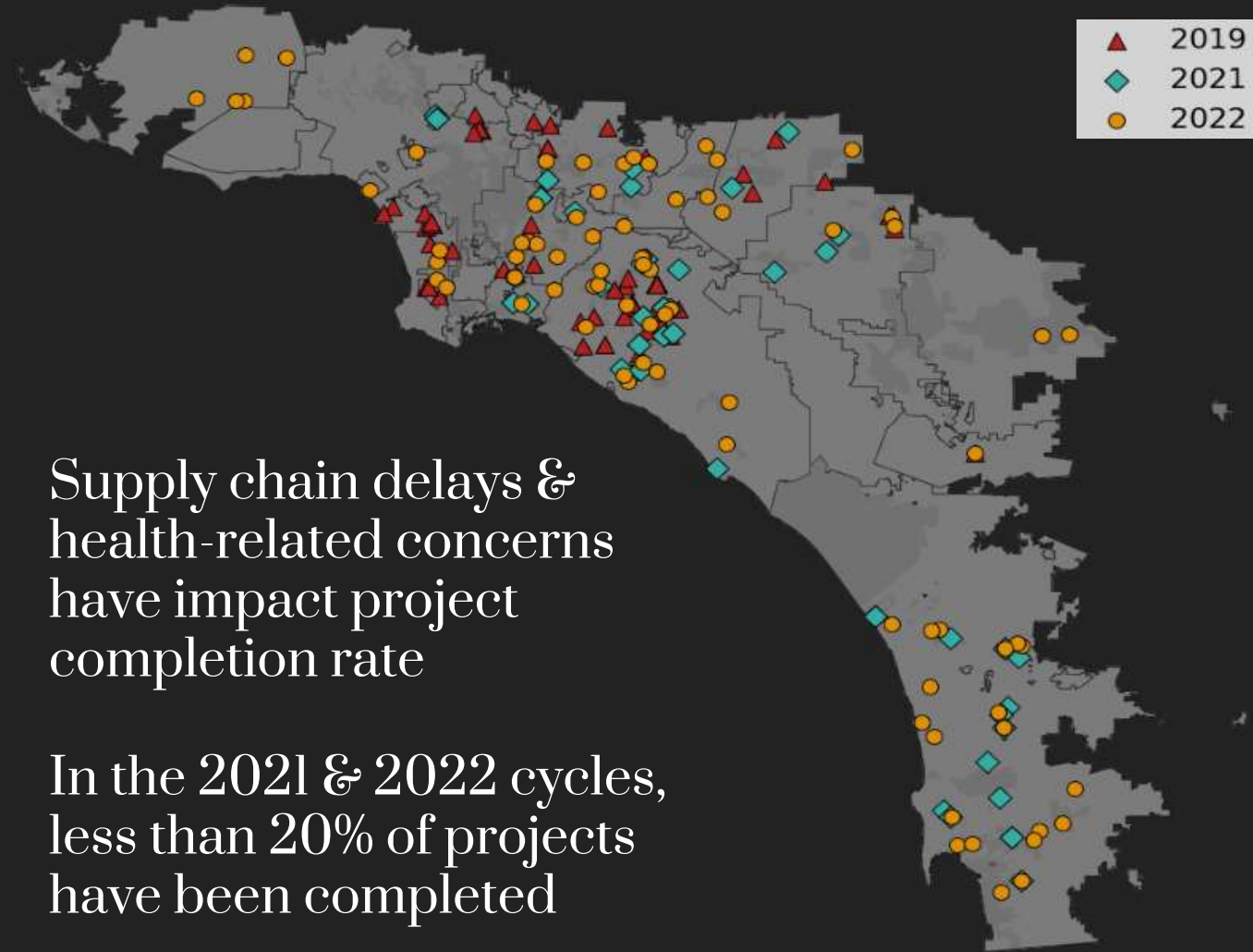


# Pre1994 Multifamily Property Toilet Replacement Program

Three cycles to date:

- July 2019 (Pilot program)
- July 2021
- January 2022

- Supply chain delays & health-related concerns have impact project completion rate
- In the 2021 & 2022 cycles, less than 20% of projects have been completed
- Contractors still experiencing supply shortages for toilets







# Classes/Workshops & Trainings



# Water Efficiency Landscaping Classes: Residential Focus

- California Friendly® & Native Landscapes
- Turf Removal & Garden Transformation
- Irrigation Basics & Water Use Efficiency
- Deciphering your Irrigation Controller
- Drip Irrigation Maintenance & Troubleshooting
- Rainwater Capture
- Garden Design

217 classes | ~5,000 participants



# Trainings for Landscape Professionals



**Find a Landscape professional**

- Six classes held in partnership with California Landscape Contractor's Association (CLCA)
- 128 certified professionals
- Avg rating 9.5 out of 10







# Local Project Highlights

Local project implemented by Member and Retail Agencies with financial assistance through the Member Agency Administered Program, or in partnership with member agencies



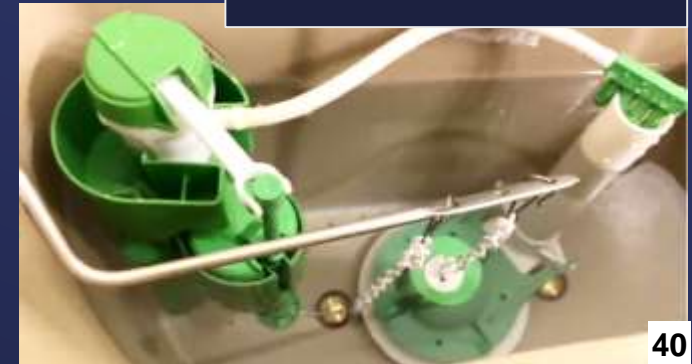
# Member Agency & Retail Agencies Projects

## Types of Local Project

- Demonstration gardens & plant giveaways/vouchers
- Landscape design assistance & irrigation tune ups
- Leak detection: In-home & distribution systems
- Energy utility direct install partnerships
- Drought messaging & enforcement



Toilet leak detection





# Local Project Examples

Landscape Tune-Up Program



Landscape assistance website



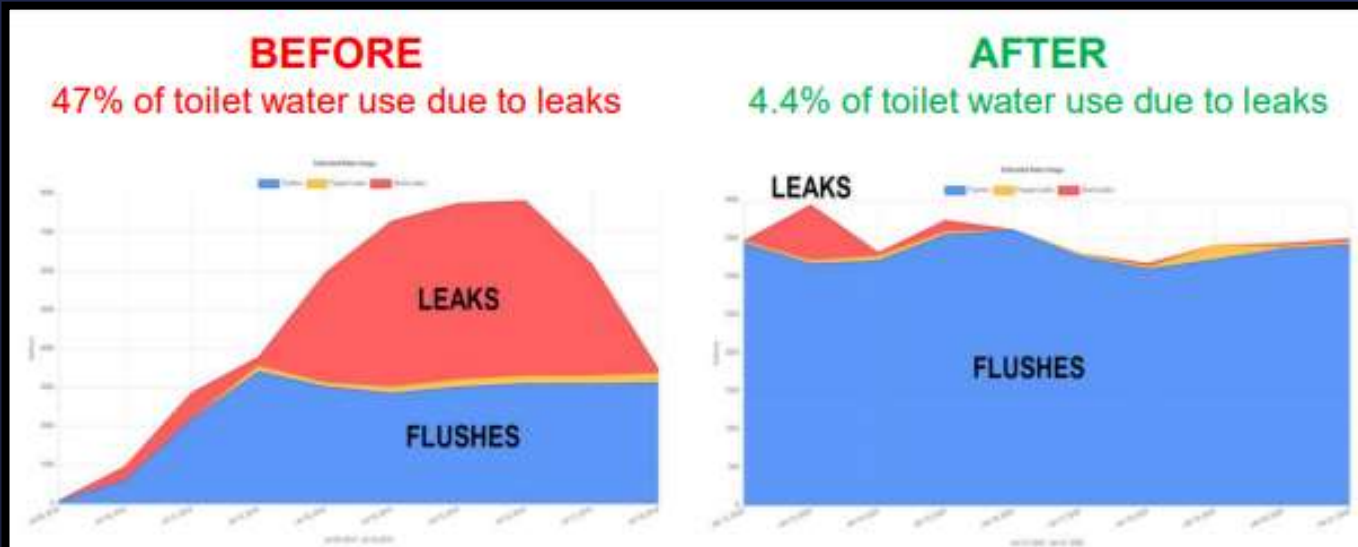
Plant giveaway events





# Water Savings Incentive Program Delivers Water Savings Through Award Winning Project

- Partnership with LADWP, Pacific Institute, Proctor & Gamble, Blue Triton, Google, Coca Cola & Target
- Low-income housing for seniors
- 183 toilet leak sensors installed
- Est. annual water savings: ~1M gallons





# Pilots, Research & Studies

Metropolitan engages in research in partnership with outside entities

## Leak Detection Pilot Efforts

### Residential Leak Detection

- October 2020 Board approved \$100 rebate for select devices; issued ~500 rebates to date
- Residential water use study with the 6,000+ Flume devices installed in Metropolitan service area

### Municipal Leak Detection

- \$100K available per member agency
- 4 participating agencies
- ~2,500 miles of pipe inspected for leaks



# Innovative Conservation Program: ICP 2020

- 20+ years offering water efficiency innovation grants
- Partnership with Southern California Gas Company
- New cycle open now to award \$275,000



ICP 2022 **OPEN NOW**  
Applications due:  
December 15 @ 1:00pm PST

# 2020 ICP Projects

- **Alliance for Water Efficiency:** Assessed water savings from water agency AMI data
- **Burbank Water and Power:** Tested multi-family flow monitor/leak detection devices
- **CNSRV:** Deployed commercial food defrosting technology
- **Responsive Drip Irrigation:** Utilized soil chemistry to determine plant watering needs
- **University of Florida:** Developed test methodology for efficient spray nozzles
- **Vinduino:** Assessed agriculture irrigation system optimization



## Completed Research & Studies

- Turf Removal Rebate Program
  - Quantifying the Multiplier Effect
  - Estimating the Reversion Rate
- Assessment of Water Affordability & Conservation Potential

## Turf Multiplier & Reversion

Combined results of the multiplier effect and turf reversion studies have an **overall positive affect on landscape conversion.**

+132% Multiplier effect  
- 4% Reversion back to turf  
**+128% net positive**



# Alliance for Water Efficiency (AWE) Long Beach Affordability Assessment



- AWE released Metropolitan sponsored research report January 2022
- Long Beach Water contributed water billing data & staff time
- AWE determined the burden of water/wastewater bills for single family households at the census tract level
- Following up with direct installation of water/energy efficiency devices



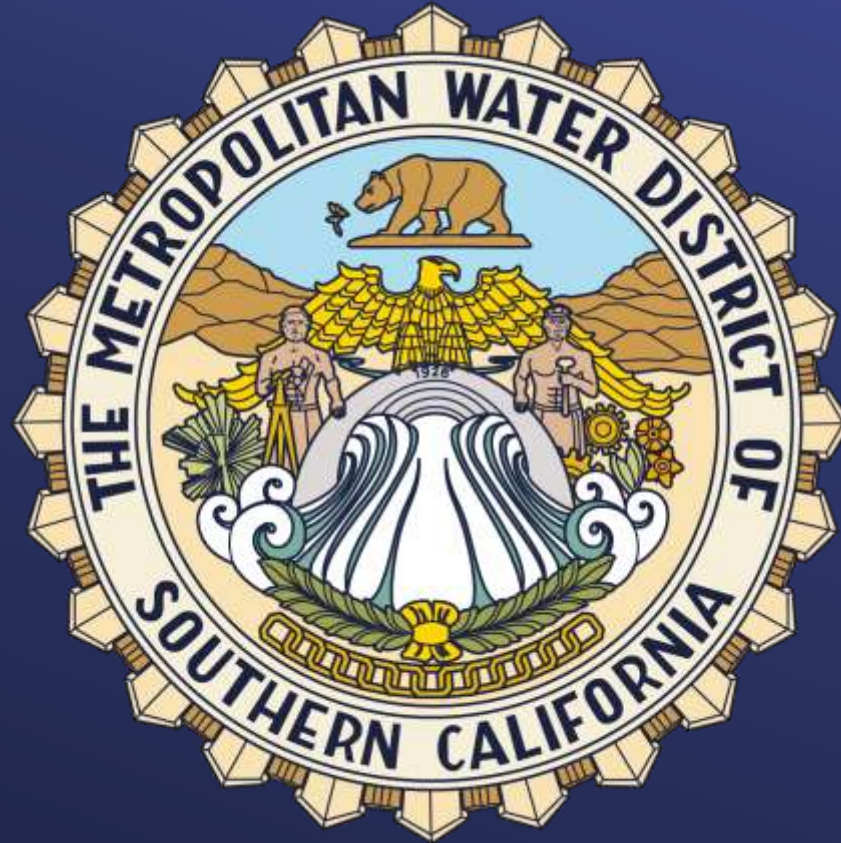
# Efforts to Accelerate Conservation

## Efforts to Accelerate Conservation

# New and modified programs: Response to current water supply conditions

- Modified turf program & expanded flexibility in MAAP for public agency projects
- Added municipal leak detection funding for agencies
- Expanded Pre-1994 Multifamily Property program & SoCalGas direct install partnership
- Awarded \$6.5M in grants from both DWR & USBR for expanded SoCalGas program and further increase incentives for turf removal; continue to seek additional grants







One Water Committee

# Water Resource Manager's Report

Item 7a

September 27, 2022

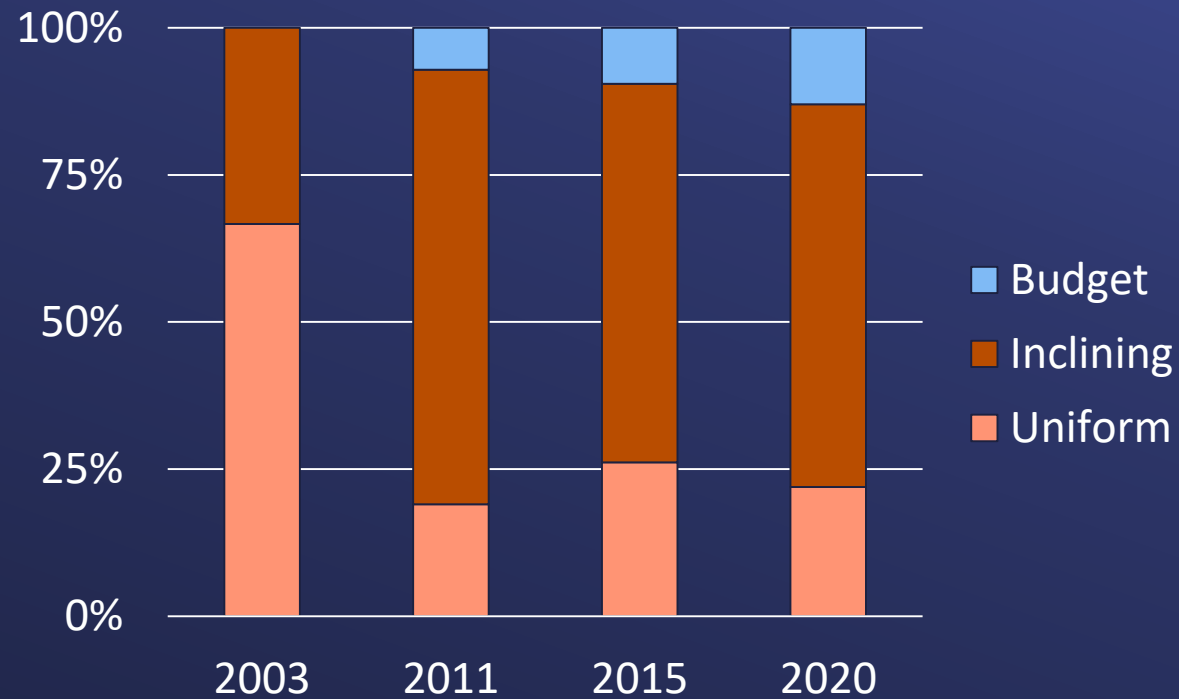
# Water Resource Manager's Report

## Follow-Up on Director Requests

- Water conservation rate structures
- Turf replacement if no existing grass
  - Allowed if pre-existing yard with dead grass
- Turf replacement activity
  - Compared to prior drought period
  - Current reservation activity

## Use of Water Conservation Rate Structures

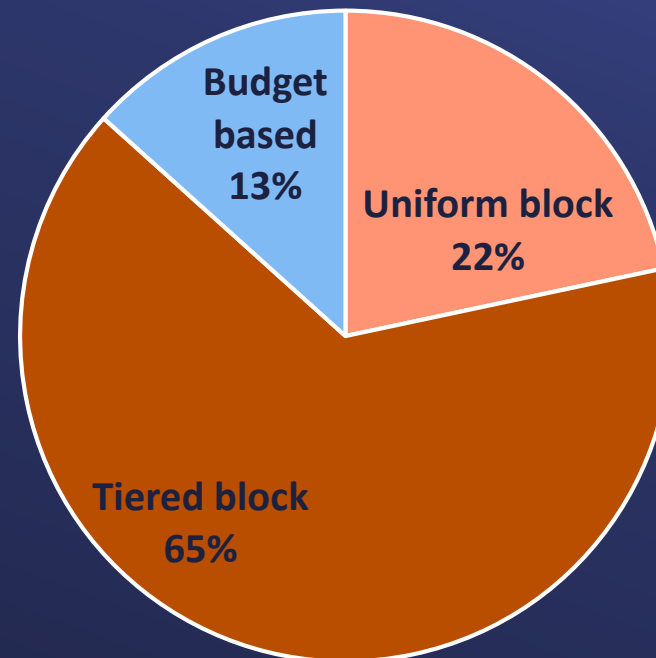
# Southern California Shifted Towards Inclining Block Rates and Water Budgets



From Gaur & Diagne (2017). *Journal AWWA* 109:9  
& AWWA Cal-Nevada Rate Survey (2020)

# Use of Water Conservation Rate Structures

## Southern California Shifted Towards Inclining Block Rates and Water Budgets

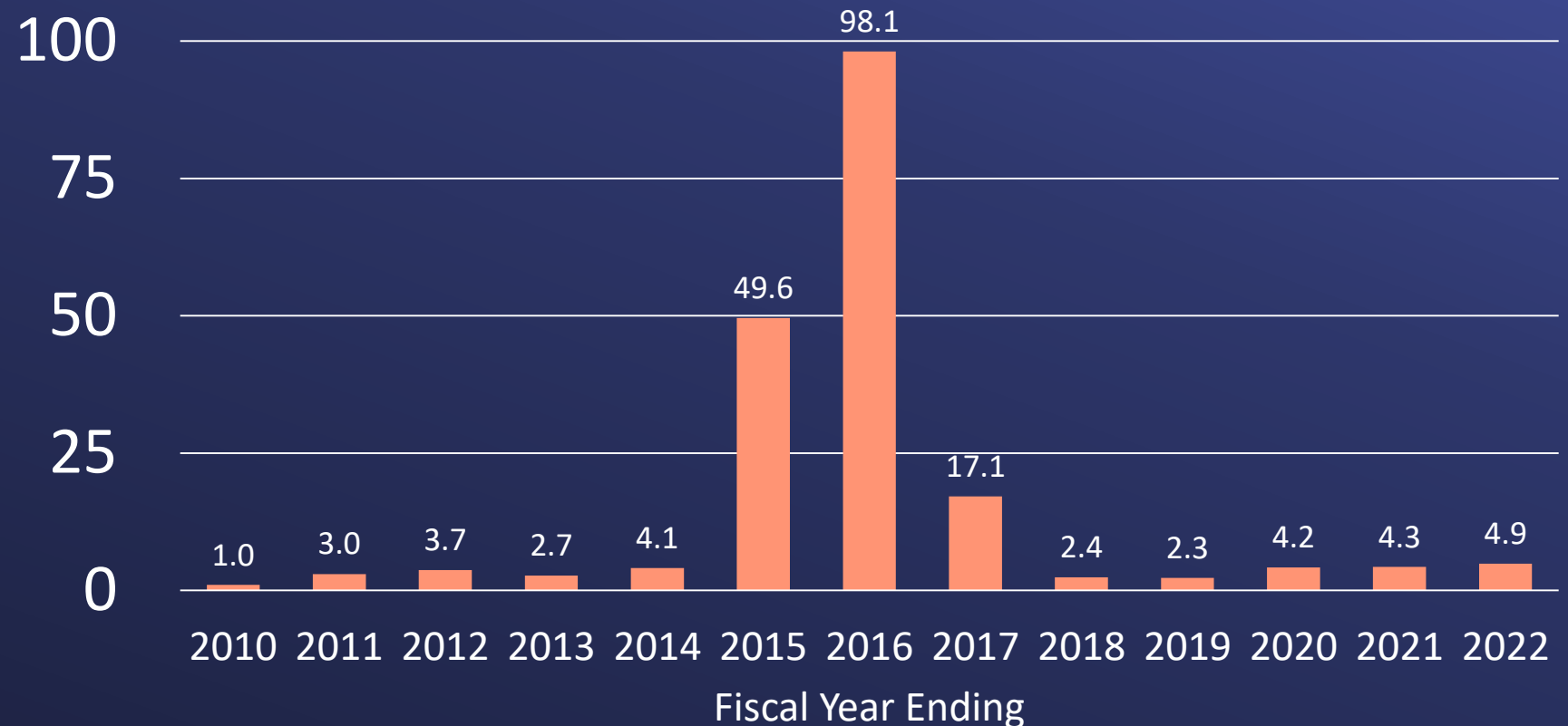


AWWA California-Nevada Rates Survey (2020);  
120 utilities in MWD service area responded



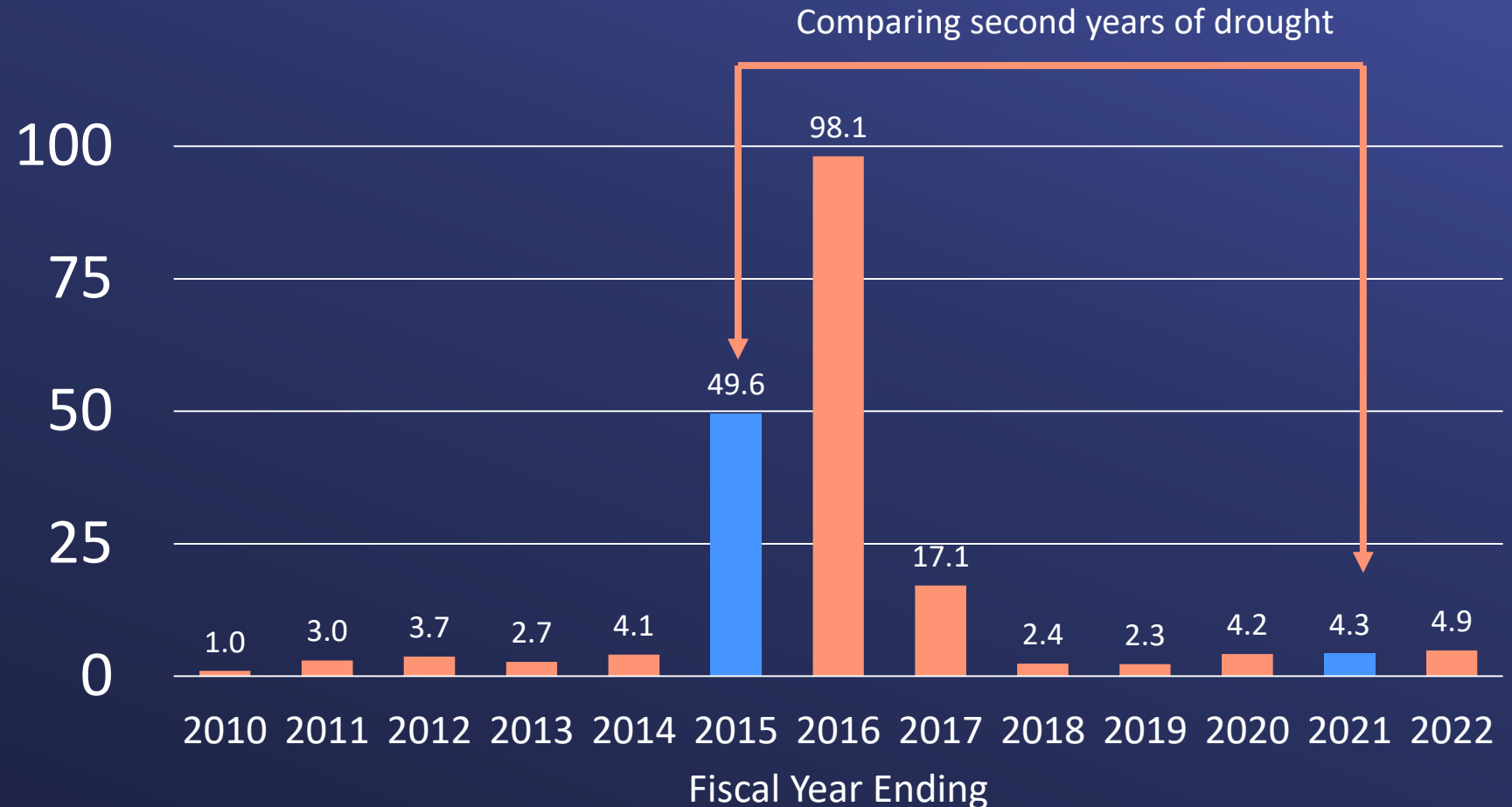
# Historical Turf Replacement

## Residential & CII Turf Replacement (million square feet, sf)



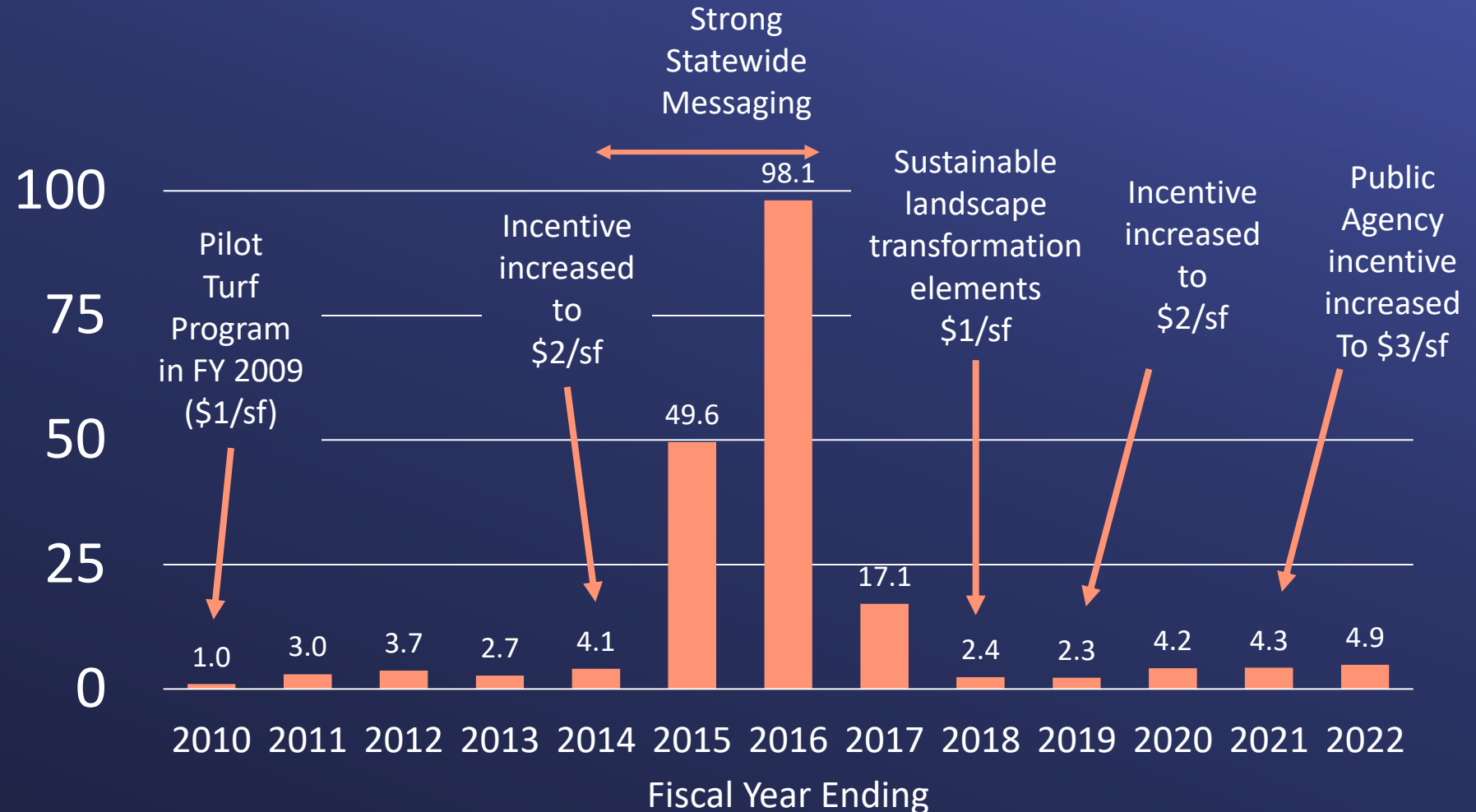
# Historical Turf Replacement

## Residential & CII Turf Replacement (million square feet, sf)



# Historical Turf Replacement

## Residential & CII Turf Replacement (million square feet, sf)



Turf  
Replacement  
Activity is  
Increasing

## Five-Fold Increase in Residential & CII Applications

Total Committed Turf  
Funding ~ \$32 M;  
Adding ~\$4 M/month

