



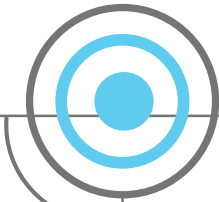
# City of Monrovia Penalty Revenue Allocation Study Session

Special Meeting

December 20, 2022

# Background

July 2021



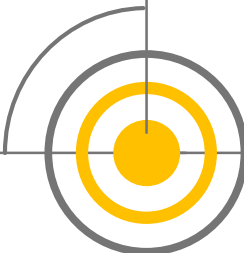
Governor Gavin Newsom called upon the entire State of California to reduce water consumption by 15%.

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A proclamation was issued extending drought emergency conditions statewide, which extended to Los Angeles County.

October 2021



December 2021



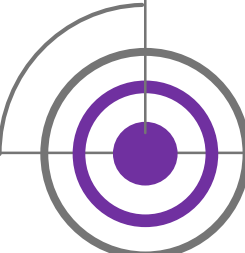
City Council implemented Phase II of the Water Conservation Plan.

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Monrovia began enforcement of Phase II water requirements.

March 2022

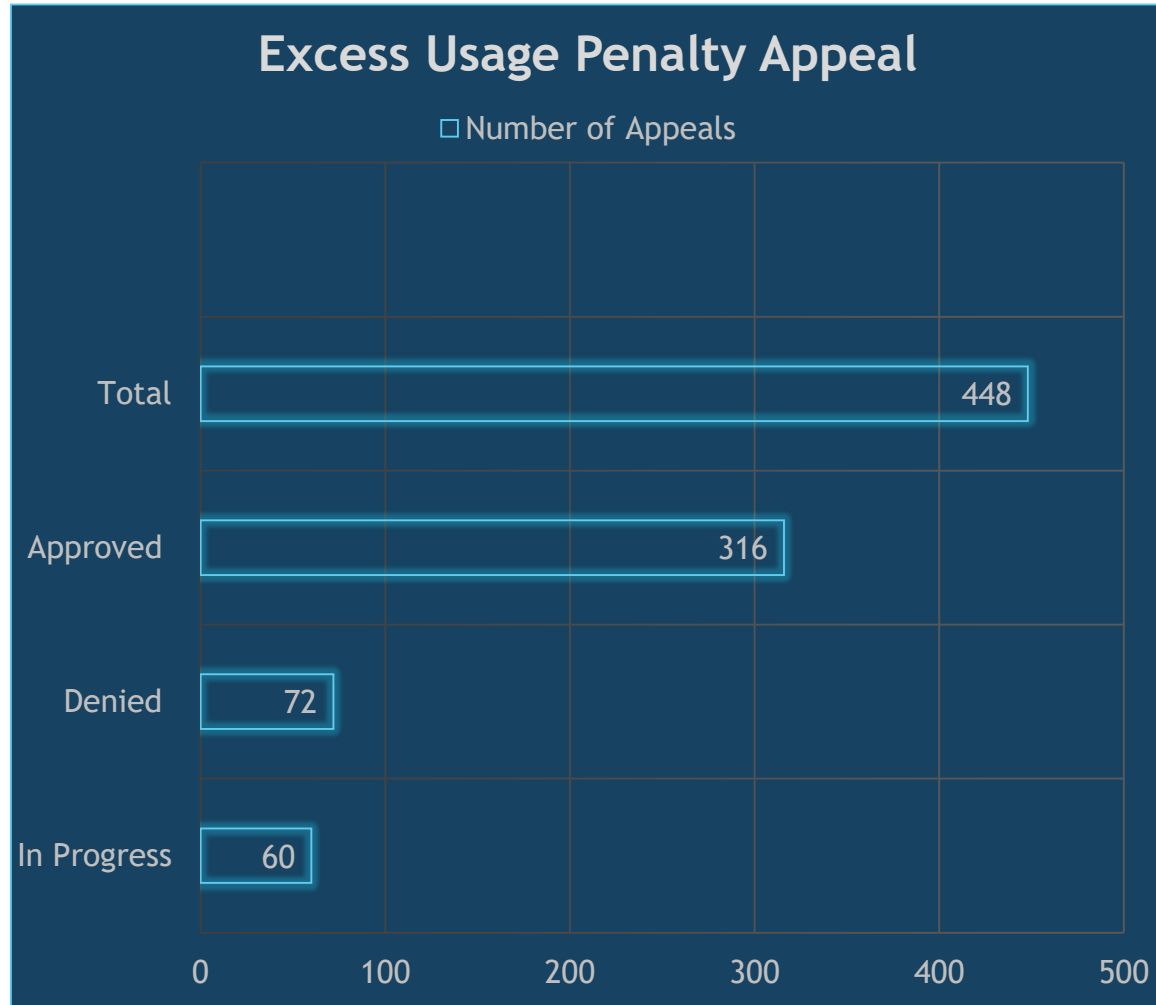


# Phase II - Mandatory Conservation

- ▶ Phase II requires mandatory water use restrictions and water conservation of 10% from the base period allocation (year 2020).
- ▶ Residents and businesses who exceed 90% of their base period allocation, are charged a penalty rate for each unit in excess.

Water Consumption Rates	
Description	Drought Penalty Rate For Each Billing Unit**
New Construction (after 3/8/18) of 5+ Residential Units	6.54
Residential Single, Residential Multi, Commercial	4.88
Senior* <i>Discount program offered to customers 65 years or older</i>	4.64
Low Income* <i>Discount program offered to customers with household income at or below 50% of LA County median income</i>	3.66
Low Income Senior* <i>Discount program offered to customers 65 yrs or older and with household income at or below 50% of LA</i>	3.66
Veteran* <i>Discount program offered to customers who served in a branch of the US Armed Forces</i>	3.66
Lifeline <i>Legacy discount program previously offered to customers 62 yrs or older, disabled and low income</i>	1.70
<i>*In order to qualify for the discount program: 1) Applicant's name must appear on the Municipal Utility Bill, 2) Applicant must live at the property, 3) The property must be a single-family dwelling unit.</i>	
<i>**Each billing unit is equivalent to approximately 748 gallons or 1,000 cubic feet of water.</i>	

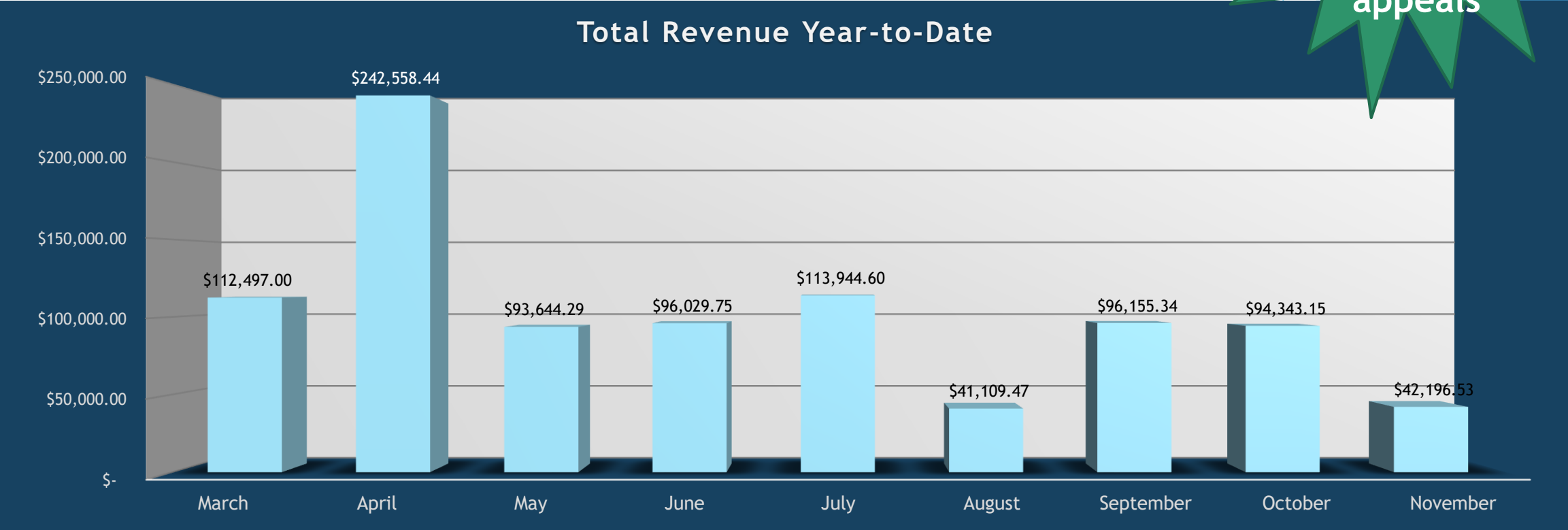
# Excess Usage Penalty Appeals



- ▶ Each appeal is reviewed on a case-by-case basis.
- ▶ Taking the following into consideration:
  - ▶ Conservation measures taken
  - ▶ Reason for appeal
  - ▶ Comparison to same account type in the same route
  - ▶ Account history
- ▶ Adjustments to targets made or credit issued to over 300 accounts!

# Excess Usage Penalty Revenue

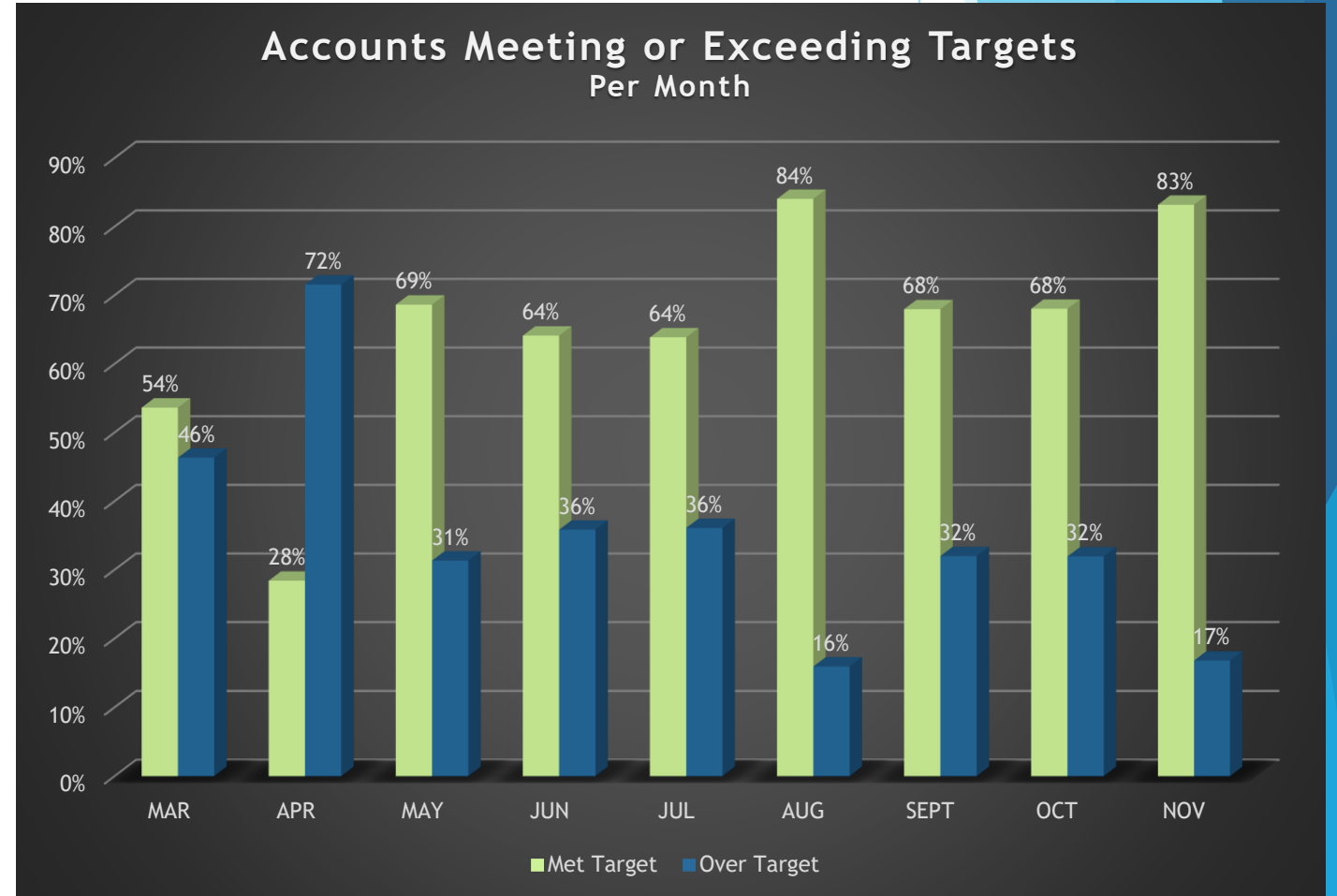
**\$25,000.25**  
credit through  
appeals



Revenue year-to-date:  
**\$907,478.30**

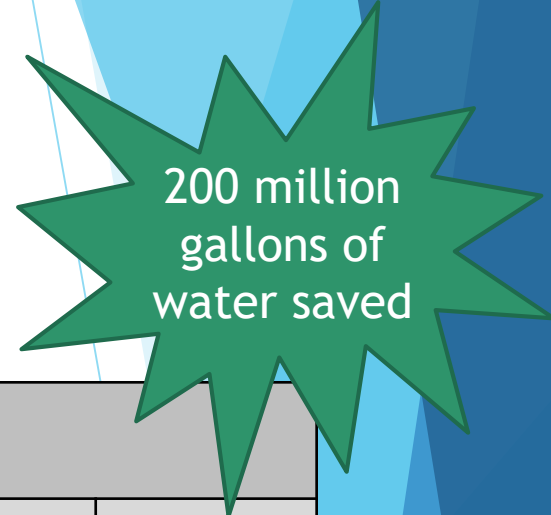
# Phase II Trends

- ▶ The number of accounts that have met their targets has been increasing since the start of the program in March 2022.
- ▶ April targets were lower causing a spike in account exceeding their targets.



# Phase II: Water Usage Comparison 2020

- ▶ A comparison of the City of Monrovia’s water production needs from the start of Phase II in March 2022 compared to the respective months in 2020 shows an overall 11% decrease in water usage.



Water Production in Gallons 2020 Comparison										
	March	April	May	June	July	August	September	October	November	Total
<b>2020</b>	139,780,000	141,838,000	210,500,000	198,698,000	230,022,000	265,849,000	222,783,000	247,865,000	170,570,000	1,827,905,000
<b>2022</b>	171,182,000	168,550,000	186,681,000	182,158,000	196,449,742	205,920,409	190,225,750	178,539,880	146,878,717	1,626,585,498
<b>Monthly + / -</b>	31,402,000	26,712,000	-23,819,000	-16,540,000	-33,572,258	-59,928,591	-32,557,250	-69,325,120	-23,691,283	-201,319,502
<b>Month-to-Month Comparison</b>	22.47%	18.83%	-11.32%	-8.32%	-14.60%	-22.54%	-14.61%	-27.97%	-13.89%	-11.01%
<b>Percent Saved from May – November</b>										<b>-16.77%</b>

# Phase II: Water Usage Comparison 2021

- ▶ A comparison of the City of Monrovia’s water production needs from the start of Phase II in March 2022 compared to the respective months in 2021 shows an overall 10% decrease in water usage.

250 million gallons of water saved

Water Production in Gallons  
2021 Comparison

	December	January	February	March	April	May	June	July	August	September	October	November	Total
<b>2021</b>	182,623,000	167,983,000	140,818,000	154,961,000	175,794,000	210,297,000	213,550,000	243,871,000	233,771,000	213,699,000	202,793,000	180,905,000	2,321,065,000
<b>2022</b>	141,154,000	152,016,000	151,386,000	171,182,000	168,550,000	186,681,000	182,158,000	196,449,742	205,920,409	190,225,750	178,539,880	146,878,717	2,071,141,498
<b>Monthly + / -</b>	-41,469,000	-15,967,000	10,568,000	16,221,000	-7,244,000	-23,616,000	-31,392,000	-47,421,258	-27,850,591	-23,473,250	-24,253,120	-34,026,283	-249,923,502
<b>Month-to-Month Comparison</b>	-22.71%	-9.51%	7.50%	10.47%	-4.12%	-11.23%	-14.70%	-19.45%	-11.91%	-10.98%	-11.96%	-18.81%	-10.77%

Phase II Implementation



# Recommended Programs

Giving back to the community while furthering our conservation efforts.



**Residential/Commercial  
Turf Replacement  
Program**



**Water Audit  
Program**



**Conservation Devices  
Rebate Program**

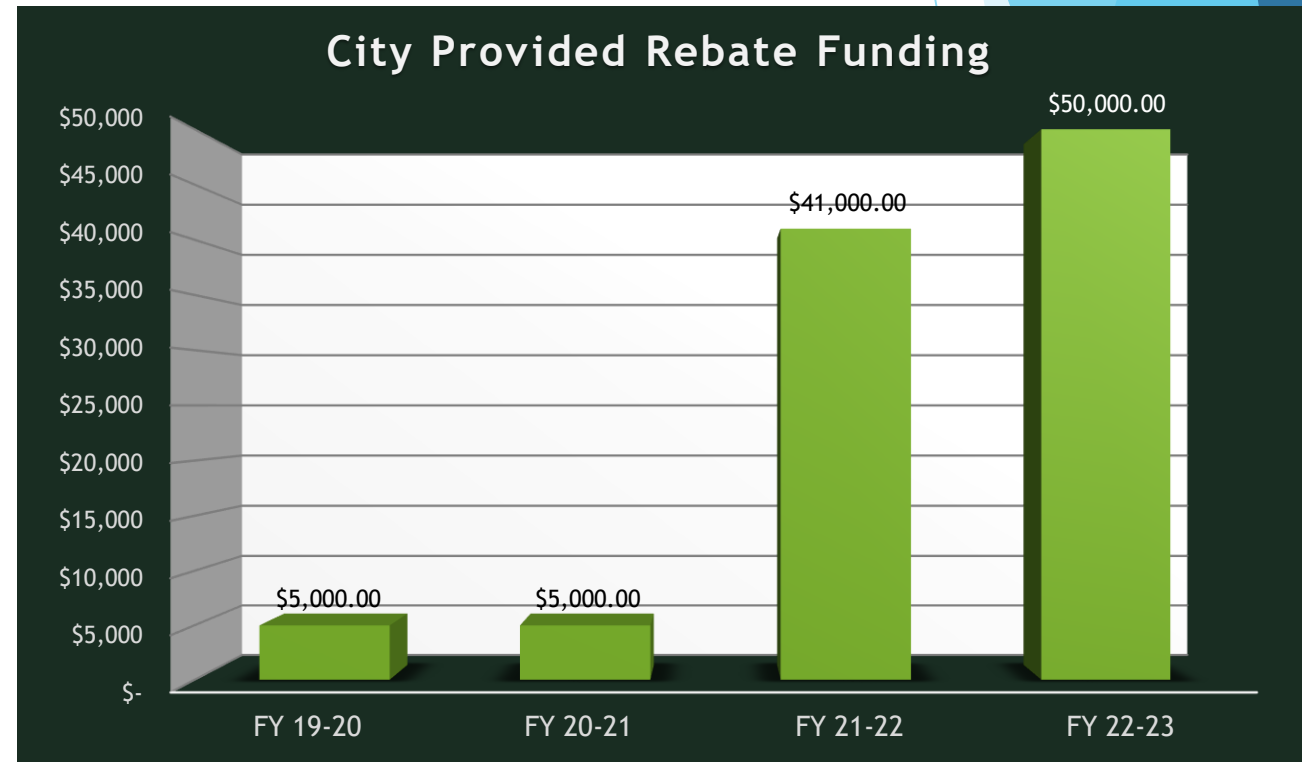
# Residential/Commercial Turf Replacement Program

- ▶ **Goal:** Expansion of this program for commercial customer's to encourage replacement of non-functional turf
- ▶ The City of Monrovia has partnered with the Upper San Gabriel Water District to provide incentives for residents and businesses to replace their turf with native and drought tolerant plants.
- ▶ The City currently offers a rebate of \$3.00/ sq. ft.



# Current Residential Turf Replacement Program

- ▶ Due to increasing demand and popularity of the program, the City increased the budget for the residential rebate program.
- ▶ Funding dramatically increased after the start of Phase II of the Water Conservation Plan in March 2022.



# Local Turf Replacement Project



**BEFORE**



**AFTER**

# Turf Replacement Project Rebate

**Project Size: 800 sq. ft.**  
**Total Rebate: \$3.00/ sq. ft.**

	MWD	Monrovia	TOTAL
Funding	\$1,600	\$800	\$2,400

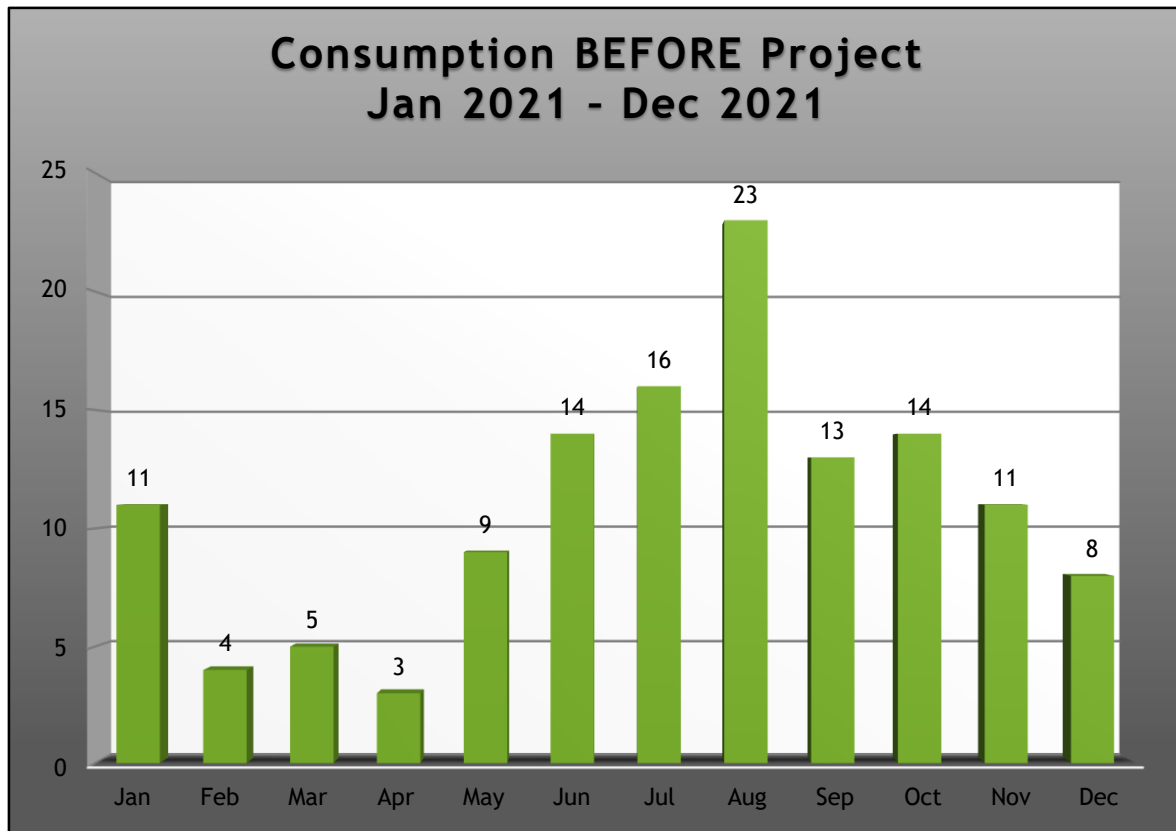
**Project Size: 800 sq. ft.**  
**Total Rebate: \$4.00/ sq. ft.**

	MWD	Monrovia	TOTAL
Funding	\$1,600	\$1,600	\$3,200

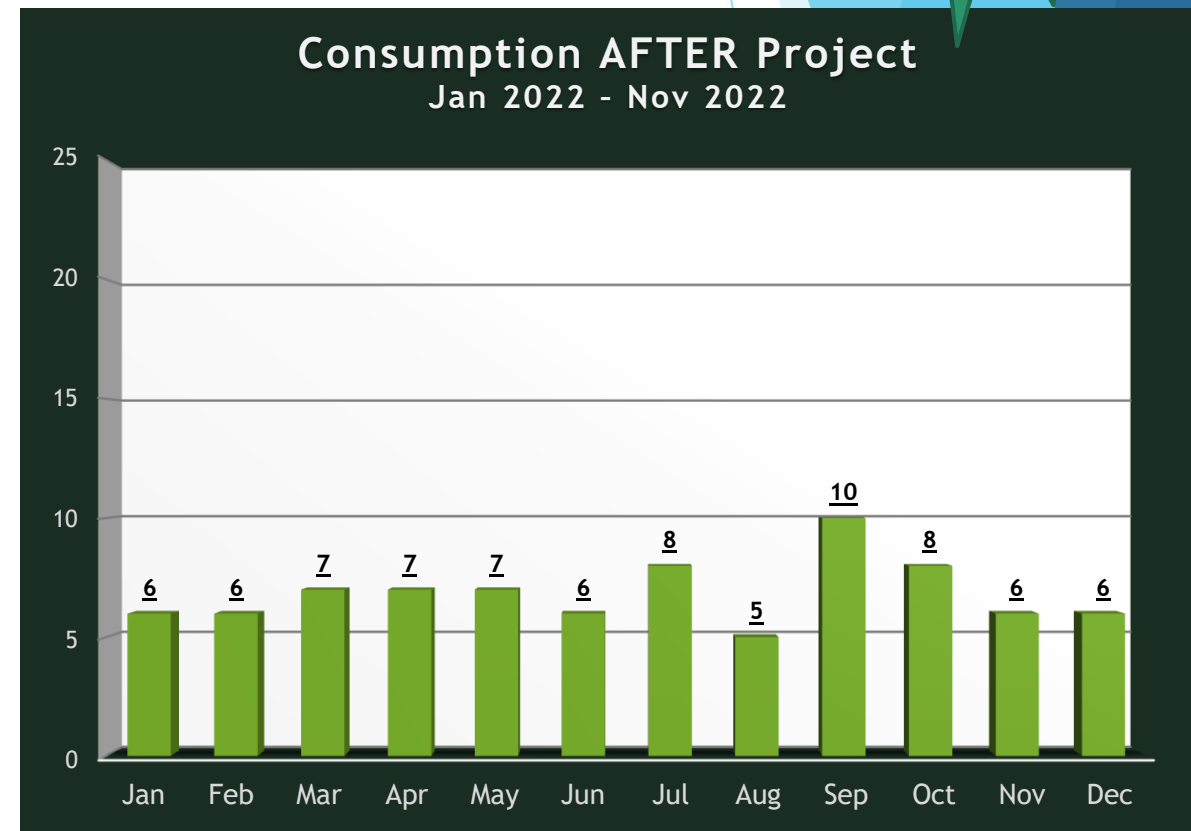


# Water Consumption Before & After Project

50%  
Water  
Savings



97,988 gallons of water  
Annual average: 11 units



56,848 gallons of water  
Annual average: 7 units

# FY 2021-2022 Residential Projects

APPLICATION	PROJECT SIZE (SQ. FEET)	MONROVIA REBATE AMOUNT	MET REBATE AMOUNT	TOTAL RESERVATION AMOUNT	TOTAL RESERVATION \$1.00 additional MONROVIA
246782	2255	\$2,255.00	\$4,510.00	\$6,765.00	\$9,020.00
249543	800	\$800.00	\$1,600.00	\$2,400.00	\$3,200.00
253002	1000	\$1,000.00	\$2,000.00	\$3,000.00	\$4,000.00
260239	576	\$576.00	\$1,152.00	\$1,728.00	\$2,304.00
260771	555	\$555.00	\$1,110.00	\$1,665.00	\$2,220.00
262661	1255	\$1,255.00	\$2,510.00	\$3,765.00	\$5,020.00
263427	2091	\$2,091.00	\$4,182.00	\$6,273.00	\$8,364.00
263955	1037	\$1,037.00	\$2,074.00	\$3,111.00	\$4,148.00
264480	2219	\$2,219.00	\$4,438.00	\$6,657.00	\$8,876.00
264826	900	\$900.00	\$1,800.00	\$2,700.00	\$3,600.00
265293	3724	\$3,724.00	\$7,448.00	\$11,172.00	\$14,896.00
265876	2631	\$2,631.00	\$5,262.00	\$7,893.00	\$10,524.00
266171	2033	\$2,033.00	\$4,066.00	\$6,099.00	\$8,132.00
266454	1950	\$1,950.00	\$3,900.00	\$5,850.00	\$7,800.00
266594	1875	\$1,875.00	\$3,750.00	\$5,625.00	\$7,500.00
266858	1309	\$1,100.00	\$2,618.00	\$3,718.00	\$4,818.00
267428	350	\$350.00	\$700.00	\$1,050.00	\$1,400.00
267782	2079	\$2,079.00	\$4,158.00	\$6,237.00	\$8,316.00
268081	3414	\$3,414.00	\$6,828.00	\$10,242.00	\$13,656.00
268176	700	\$700.00	\$1,400.00	\$2,100.00	\$2,800.00
269047	2412	\$2,412.00	\$4,824.00	\$7,236.00	\$9,648.00
269395	744	\$744.00	\$1,488.00	\$2,232.00	\$2,976.00

22 Reserved Projects

Monrovia Funded

~ \$36,000

MWD Funded

~ \$72,000

Total Funding

~ \$108,000

# FY 2022-2023 Residential Projects

APPLICATION	PROJECT SIZE (SQ. FEET)	MONROVIA REBATE AMOUNT	MET REBATE AMOUNT	TOTAL RESERVATION AMOUNT	TOTAL RESERVATION \$1.00 additional MONROVIA
270246	1150	\$1,150.00	\$2,300.00	\$3,450.00	\$4,600.00
271239	1000	\$1,000.00	\$2,000.00	\$3,000.00	\$4,000.00
272829	4570	\$4,570.00	\$9,140.00	\$13,710.00	\$18,280.00
273508	1000	\$1,000.00	\$2,000.00	\$3,000.00	\$4,000.00
274920	2096	\$2,096.00	\$4,192.00	\$6,288.00	\$8,384.00
275559	2238	\$2,238.00	\$4,476.00	\$6,714.00	\$8,952.00
277049	621	\$621.00	\$1,242.00	\$1,863.00	\$2,484.00
277228	1140	\$1,140.00	\$2,280.00	\$3,420.00	\$4,560.00
277971	1000	\$1,000.00	\$2,000.00	\$3,000.00	\$4,000.00
278245	629	\$629.00	\$1,258.00	\$1,887.00	\$2,516.00
278315	1500	\$1,500.00	\$3,000.00	\$4,500.00	\$6,000.00
279063	3000	\$3,000.00	\$6,000.00	\$9,000.00	\$12,000.00
280135	1604	\$1,604.00	\$3,208.00	\$4,812.00	\$6,416.00
280596	2025	\$2,025.00	\$4,050.00	\$6,075.00	\$8,100.00
280717	1500	\$1,500.00	\$3,000.00	\$4,500.00	\$6,000.00
280836	940	\$940.00	\$1,880.00	\$2,820.00	\$3,760.00
280858	3003	\$3,003.00	\$6,006.00	\$9,009.00	\$12,012.00
280910	830	\$830.00	\$1,660.00	\$2,490.00	\$3,320.00
281029	1923	\$1,923.00	\$3,846.00	\$5,769.00	\$7,692.00
281062	990	\$990.00	\$1,980.00	\$2,970.00	\$3,960.00
281241	532	\$532.00	\$1,064.00	\$1,596.00	\$2,128.00
281393	684	\$684.00	\$1,368.00	\$2,052.00	\$2,736.00
281677	1627	\$1,627.00	\$3,254.00	\$4,881.00	\$6,508.00
281797	558	\$558.00	\$1,116.00	\$1,674.00	\$2,232.00
283093	4000	\$4,000.00	\$8,000.00	\$12,000.00	\$16,000.00
284920	700	\$700.00	\$1,400.00	\$2,100.00	\$2,800.00
286071	2000	\$2,000.00	\$4,000.00	\$6,000.00	\$8,000.00
286262	1200	\$1,200.00	\$2,400.00	\$3,600.00	\$4,800.00
286681	2500	\$2,500.00	\$5,000.00	\$7,500.00	\$10,000.00
287036	7702	\$5,000.00	\$10,000.00	\$15,000.00	\$20,000.00
287599	900	\$900.00	\$1,800.00	\$2,700.00	\$3,600.00
289255	750	\$750.00	\$1,500.00	\$2,250.00	\$3,000.00
289944	2536	\$2,536.00	\$5,072.00	\$7,608.00	\$10,144.00
290953	1325	\$1,325.00	\$2,650.00	\$3,975.00	\$5,300.00
292853	1100	\$1,100.00	\$2,200.00	\$3,300.00	\$4,400.00
293699	5900	\$5,000.00	\$10,000.00	\$15,000.00	\$20,000.00

36 Reserved Projects

Monrovia to Fund

~ \$63,000

MWD to Fund

~ \$126,000

Total Funding

~ \$190,000

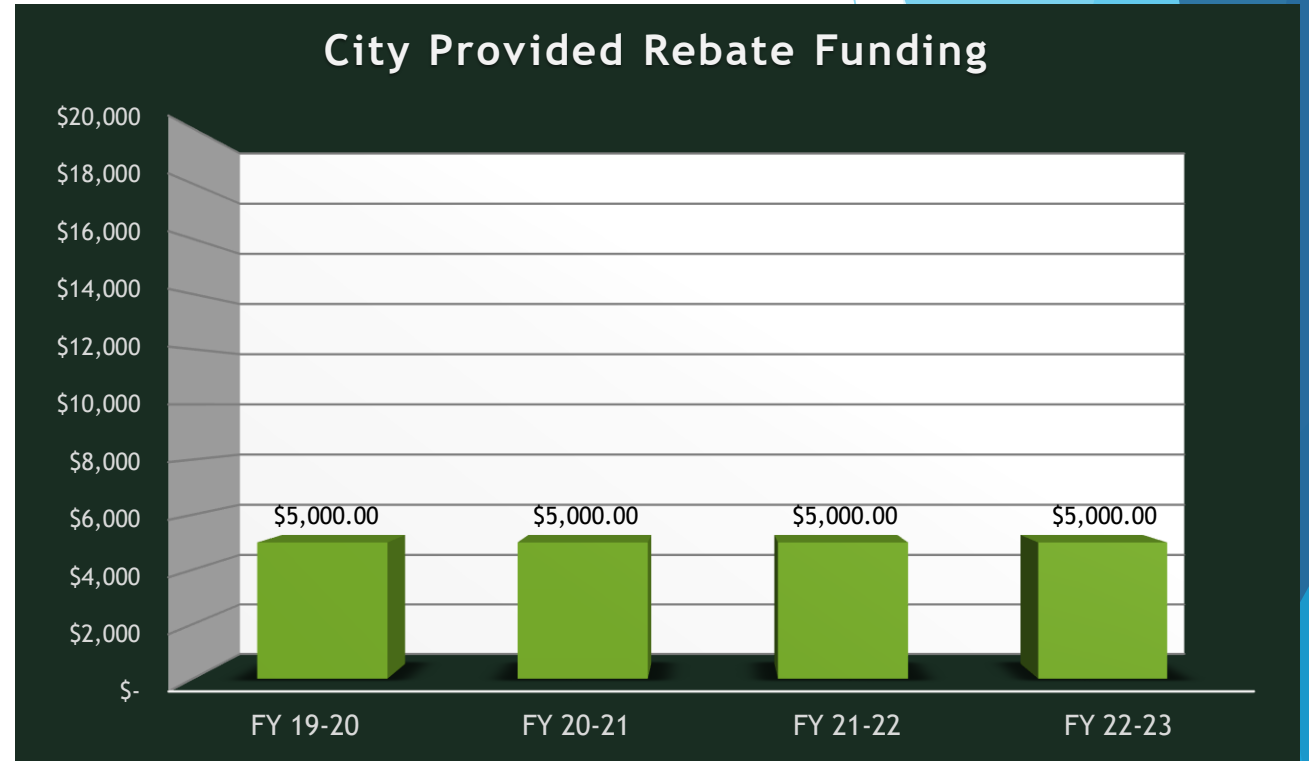


# Current Commercial Turf Replacement Program

- ▶ Commercial rebate funding has remained the same... but not for lack of interest!
- ▶ Commercial projects tend to be larger in size and therefore require more funding per project.
- ▶ Commercial projects would benefit the most because they use the majority of their water on non-functional turf and outdoor irrigation.

## Commercial Program Parameters

MWD Funding	\$2.00/sq. foot
Monrovia Funding	\$1.00/sq. foot
Total	\$3.00/sq. foot
Max. sq. foot/project	50,000 sq. feet



# FY 2021-2022 & FY 2022- 2023 Commercial Projects

APPLICATION	PROJECT SIZE (SQ. FEET)	RESERVATION RETAIL AGENCY AMOUNT	RESERVATION MET AMOUNT	TOTAL RESERVATION AMOUNT	TOTAL FUNDING IF ADDITIONAL FUNDING ALLOCATED
260911	19,870	\$5,000.00	\$39,740.00	\$44,740.00	\$59,610.00

1 Reserved Project

Monrovia to Fund  
~ \$5,000

MWD to Fund  
~ \$39,740

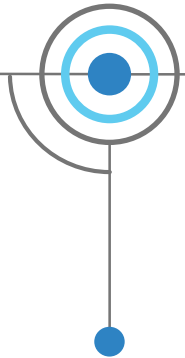
Monrovia's  
Total  
allocated  
budget for  
FY 22-23



# Looking Ahead - 2023 Water Restriction Legislation

- ▶ New legislation targets turf irrigation for commercial, industrial and institutional areas.
- ▶ Removing turf would reduce costs for businesses while maintaining beautification with native, drought tolerant plants.

June 2022



The State Water Board passed a ban on watering of non-functional turf irrigation in commercial, industrial and institutional areas.

Watering of non-functional turf in commercial, industrial and institutional areas becomes prohibited for all Californians



June 2023

# Commercial Turf Replacement Program

Save Water  
Save Money

Target commercial accounts with large unused turf areas. Saving costs for water and maintenance while conserving.

Benefits

- ▶ Expanding program for additional projects
- ▶ Reduce outdoor water use
- ▶ Prepare for future legislation

Proposed  
Revenue  
Use

**\$150,000**

# Water Audit Program

- ▶ **Goal:** Expansion of this program to all residential and commercial accounts in Monrovia. Further conservation efforts with direct assistance.
- ▶ In December 2022, Council approved the agreement with the Upper San Gabriel Valley Municipal Water District (USGVMWD) for grant funding for an irrigation survey program.
- ▶ Grant funding targets customer's who have received a penalty and have been denied their appeal.
- ▶ Focuses on outdoor conservation.



# Water Audit Program

Roughly **50% of daily water** use goes towards **outdoor watering**.

Properly managed irrigation systems can reduce water use by nearly 9,000 gallons of water (equivalent to 500 showers)

## HOW IT WORKS:



### STEP 1:

Call Toll Free  
Number



### STEP 2:

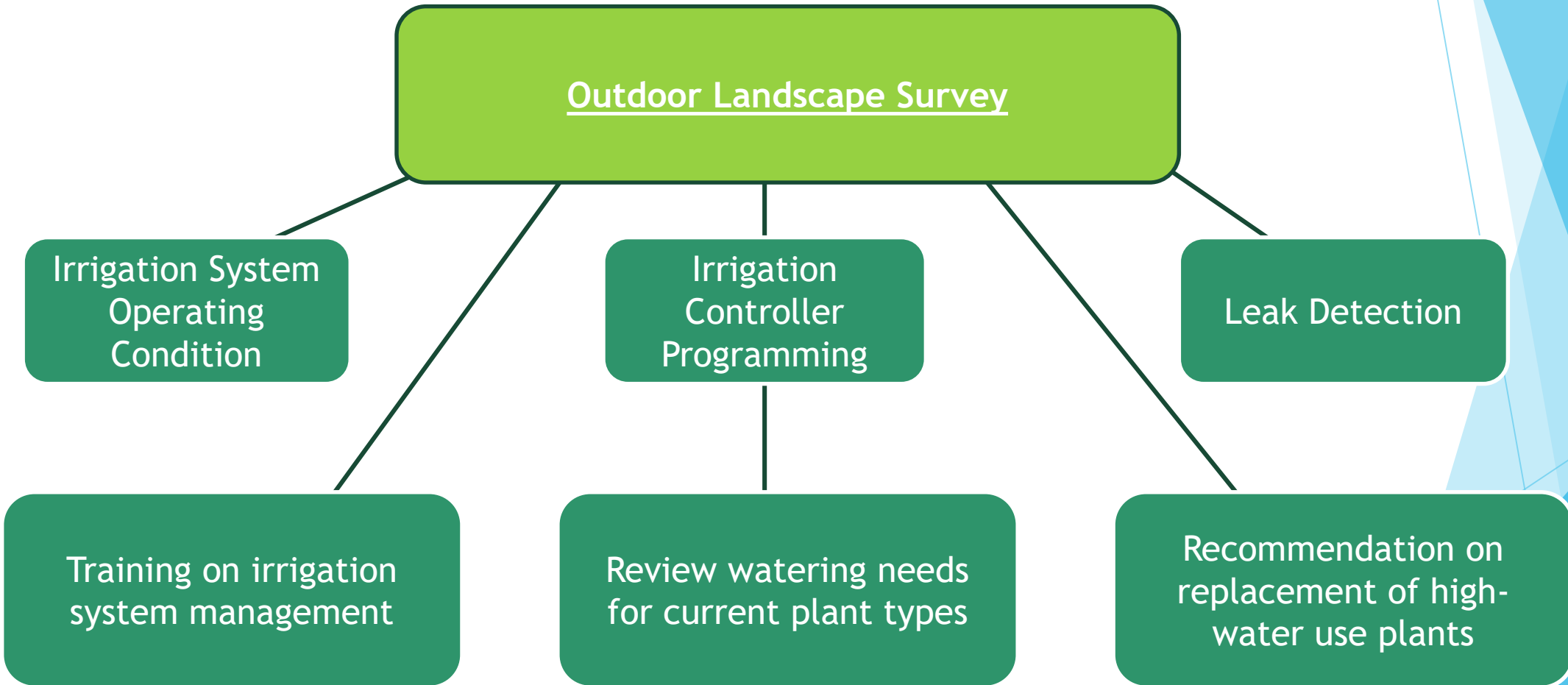
Schedule an  
appointment



### STEP 3:

Review outdoor water  
usage with licensed tech

# Water Audit Program: Landscape Survey Scope



# Water Audit Program

Current program offered by Monrovia and funded by USGVMWD

## Funding Type:

MWD Grant

## Available Funding:

\$20,000

## Eligibility:

Denied Penalty Appeal

## Current Reach

114 residents

72 appeals denied to-date

## Pros

- ▶ Targets customer's who reached out to City for assistance
- ▶ Provides additional resources to those denied adjustments/credit
- ▶ Direct outreach to decrease water consumption

## Cons

- ▶ Small community reach
- ▶ Strict grant guidelines

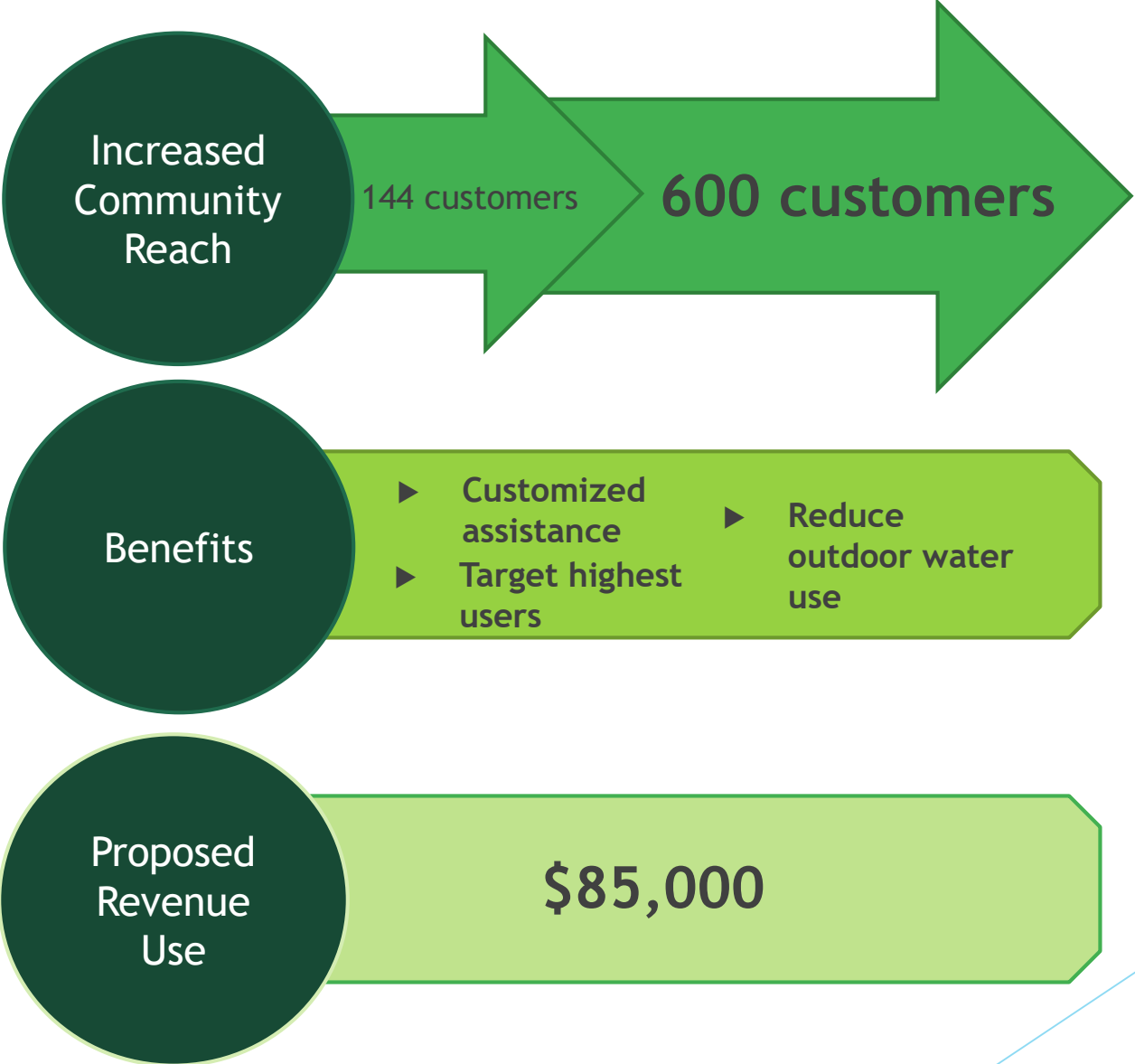


# Water Audit Program

Proposed expansion of program

Services	Eligibility	Cost
<ul style="list-style-type: none"><li>• <u>External Audit Program</u><ul style="list-style-type: none"><li>• Leak Detection</li><li>• Irrigation Controller test</li><li>• Analysis of plant type</li><li>• Customer training</li></ul></li><li>• <u>Internal Audit (optional add-on)</u><ul style="list-style-type: none"><li>• Indoor Leak Detection</li><li>• Inspection of water fixtures</li><li>• Water use per fixture</li></ul></li></ul>	<ul style="list-style-type: none"><li>• <u>All residents/businesses</u> who have ever received a penalty on their water bill</li><li>• Target highest water users</li><li>• Must have working irrigation controller/system</li></ul>	<ul style="list-style-type: none"><li>• <u>External Audit Program</u> \$175.00/address</li><li>• <u>Internal Audit Program</u> \$35.00/Address</li></ul>

# Water Audits



# Conservation Devices Rebate Program

- ▶ **Goal:** Expansion of this program to provide additional incentives for residents and commercial businesses to use low-flow fixtures.
- ▶ The City of Monrovia has partnered with the Upper San Gabriel Water District to provide incentives for residents and businesses to replace their eligible devices and fixtures with water smart items.
- ▶ The City currently offers various rebates based on fixtures.



# WaterSmart Rebates

## ▶ Residential Rebates:

- ▶ Turf Replacement
- ▶ Toilets
- ▶ Washing Machines
- ▶ Rain Barrel
- ▶ Weather-based Irrigation Controllers
- ▶ And More!

## ▶ Commercial Rebates:

- ▶ Turf Replacement
- ▶ Plumbing Fixtures
- ▶ Toilets/Urinals
- ▶ Weather-based Irrigation Controllers
- ▶ Ice-Making Machines
- ▶ And More!



**Smart Watering.  
Customized.**

Rebates for Weather Based Irrigation Controllers are available!

Properties less than one acre are eligible to receive up to \$100 per unit (limit 2 units)

Properties bigger than one acre are eligible to receive \$35 per station (limit 100 stations)

MONROVIA CONSERVES  
A COMMUNITY EFFORT



**Save Water. Save Money.  
Improve Performance.**

Receive an \$80 rebate when you make the switch to a High Efficiency Toilet!

The largest amount of indoor water use goes toward flushing the toilet! Make the switch today!

MONROVIA CONSERVES  
A COMMUNITY EFFORT

# Residential Devices Rebates

- ▶ Monrovia currently offers additional rebates for some devices.
- ▶ MWD provides varying incentives for different devices.

Res Devices Requested	
FY 2021-2022	58 total
FY 2022-2023	49 (to-date)

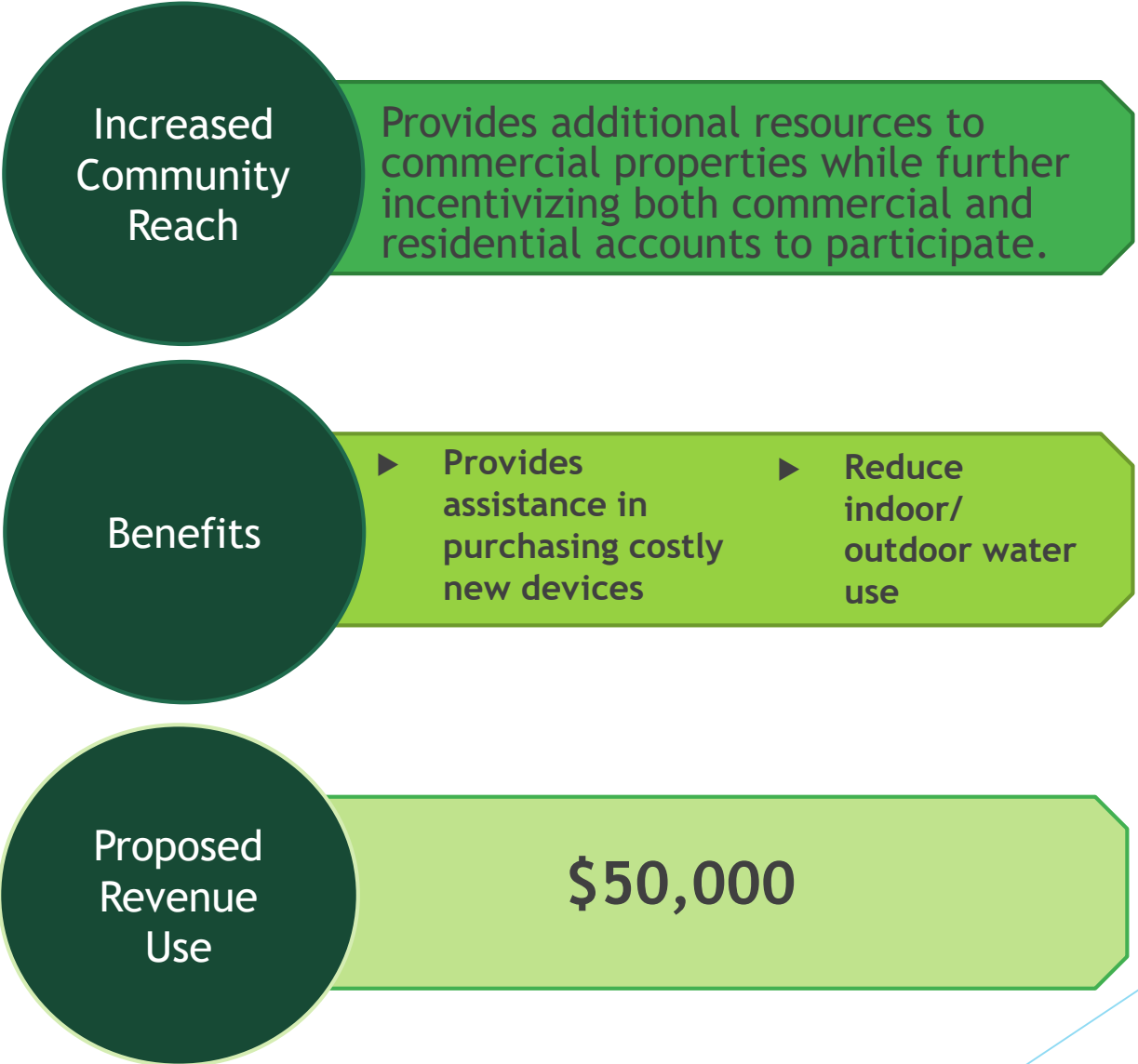
Regional Incentive Program	Metropolitan Incentive	Member Agency Incentive	Retail Agency Incentive	Total Incentive
<b>High Efficiency Clothes Washer (HECW)</b>	\$85	\$	\$50	\$135
<b>Premium High-Efficiency Toilet (PHET) 4 Liter (single-family)</b>	\$40	\$	\$40	\$80
<b>Rotating Nozzles</b>	\$2	\$	\$2	\$4
<b>Weather Based Irrigation Controller (WBIC)</b> WBIC – <i>Less than one irrigated acre</i>	\$80		\$20	\$100
WBIC – <i>One irrigated acre or larger</i>	\$35 per station			
<b>Soil Moisture Sensor System (SMSS)</b> SMSS – <i>Less than one irrigated acre</i>	\$80	\$	\$	\$
SMSS – <i>One irrigated acre or larger</i>	\$35 per station	\$	\$	\$
<b>Hose Bib Irrigation Controller</b>	\$35 each	\$	\$	\$
<b>Rain Barrel (max 2 per home)</b>	\$35	\$	\$	\$
<b>Cistern (200-500 gallons)</b>	\$250	\$	\$	\$
<b>Cistern (501-999 gallons)</b>	\$300	\$	\$	\$
<b>Cistern (1000+ gallons)</b>	\$350	\$	\$	\$
<b>Flow Monitoring Device – Meter attached device (flume)</b>	\$100	\$	\$100	\$200
<b>Flow Monitoring Device – all other devices</b>	\$100	\$	\$100	\$200

# Commercial Devices Rebate

- ▶ No additional funding currently offered for commercial devices from the City of Monrovia.
- ▶ MWD provides varying incentives for different devices.

Regional Incentive Program	Metropolitan Incentive	Member Agency Incentive	Retail Agency Incentive
Plumbing Flow Control Valve	\$ 5 per valve	\$ ----	\$ 0
Laminar Flow Restrictors	\$ 10 per restrictor	\$ ----	\$ 0
Commercial Premium HET	\$ 40	\$ ----	\$ 0
Multi-Family Premium High Efficiency Toilet	\$ 40	\$ ----	\$ 0
Zero Water Urinals (ZWU)	\$ 200	\$ ----	\$ 0
Ultra-Low Water Urinal (ULWU)	\$ 200	\$ ----	\$ 0
Weather-Based Irrigation Controller (WBIC)	\$ 35 per station	\$ ----	\$ 0
Central Computer Irrigation Controller (CCIC)	\$ 35 per station	\$ ----	\$ 0
Soil Moisture Sensor System (SMSS)	\$ 35 per station	\$ ----	\$ 0
Hose Bib Irrigation Controller	\$35 each	\$ ----	\$ 0
Large Rotary Nozzles	\$ 13 per set	\$ ----	\$ 0
Rotating Nozzles for Pop-up Spray Heads Retrofits	\$ 2 per nozzle	\$ ----	\$ 0
In-Stem Flow Regulator	\$ 1 per regulator	\$ ----	\$ 0
pH-Cooling Tower Controller (pH-CTC)	\$1,750	\$ ----	\$ 0
Cooling Tower Conductivity Controller (CTCC)	\$ 625	\$ ----	\$ 0
Dry Vacuum Pump	\$ 125 per 0.5 HP	\$ ----	\$ 0
Connectionless Food Steamers	\$ 485 per compartment	\$ ----	\$ 0
Ice-Making Machines	\$1,000	\$ ----	\$ 0

# Conservation Devices Rebates



# Summary Fund Allocation Request

Remaining funds will be unallocated for future programs or projects



\$150,000

Commercial/Residential  
Turf Replacement  
Program



\$85,000

Water Audit Program



\$50,000

Conservation Devices  
Rebate Program

Total Funds  
Requested:  
**\$285,000**

