

Water Reduction Strategies

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**PRESENTATION TO THE
BALBOA PARK COMMITTEE**

SEPTEMBER 3, 2015

**OUTLINE FOR DETERMINING
HIERARCHY OF WATER AND
TURF REDUCTIONS**

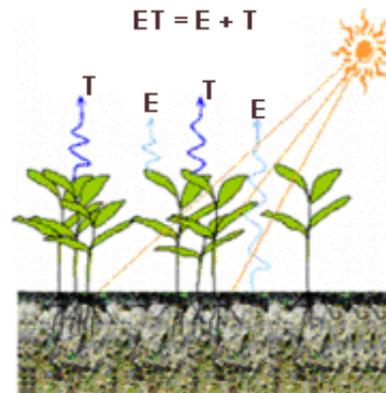
CIMIS Data

(California Irrigation Management Information System)

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Since the beginning of the CIMIS weather station network in 1982, the primary purpose of CIMIS was to make available to the public, free of charge, information useful in estimating water use for irrigation scheduling.

Evapotranspiration (ET)



Evapotranspiration (ET) is the loss of water to the atmosphere by the combined processes of evaporation (from soil and plant surfaces) and transpiration (from plant tissues).

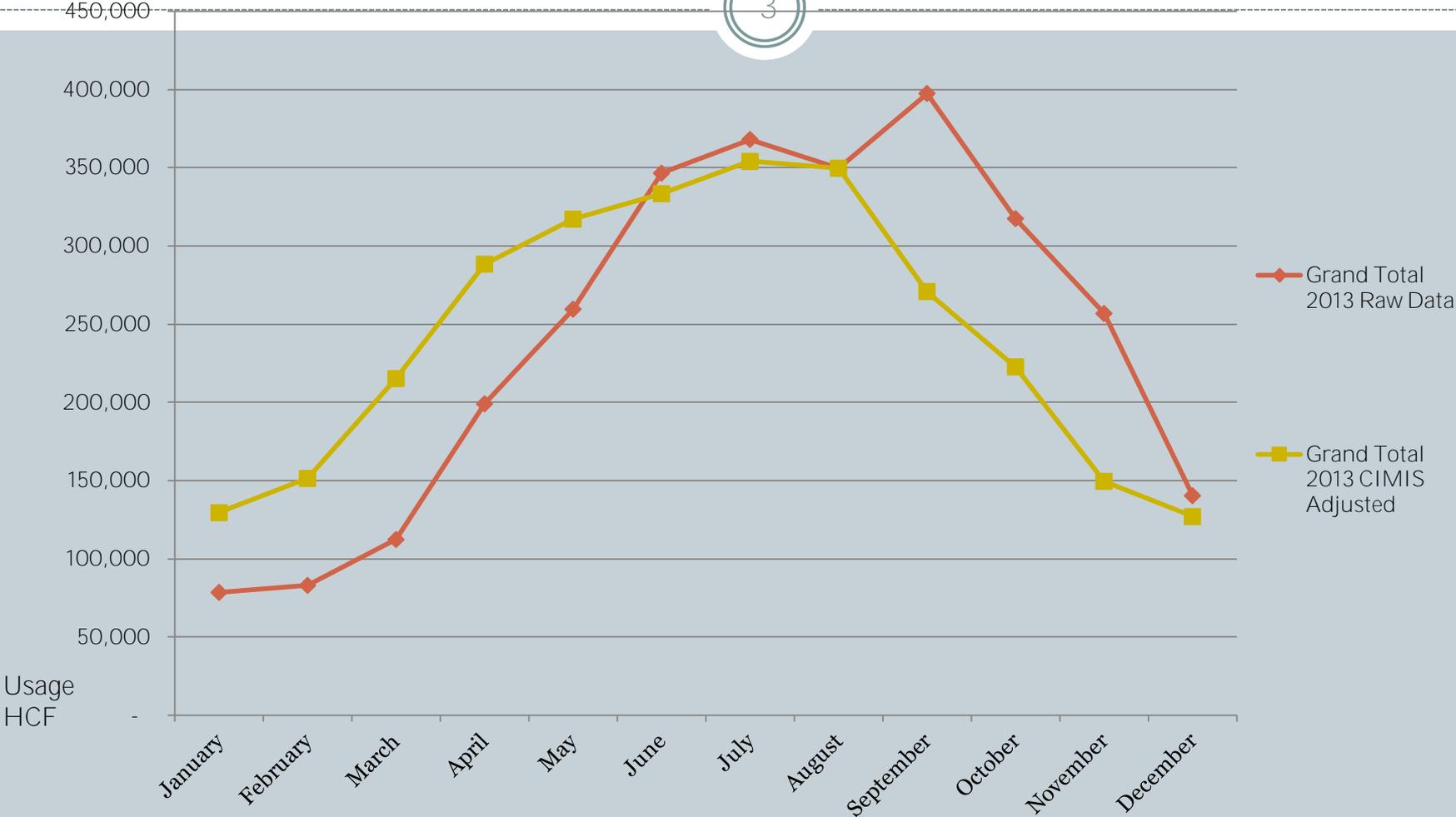
Historical ETo For San Diego

Monthly Average Reference Evaporation by ETo (inches /Month)

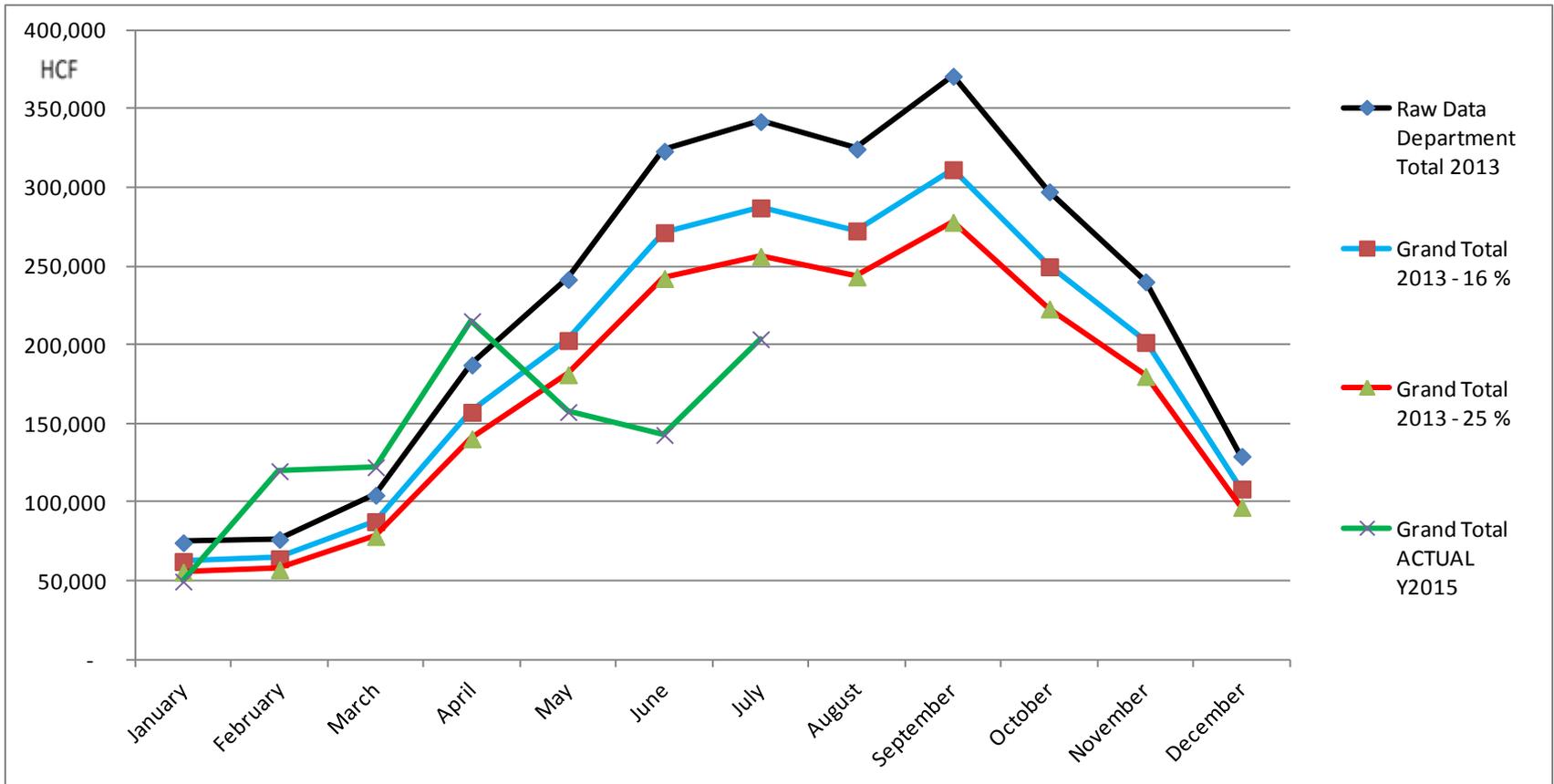
January	February	March	April	May	June	July	August	September	October	November	December	Grand Total
2.07	2.42	3.44	4.61	5.07	5.33	5.66	5.59	4.33	3.56	2.39	2.03	46.5

2013 Raw Data Vs. Adjusted Data

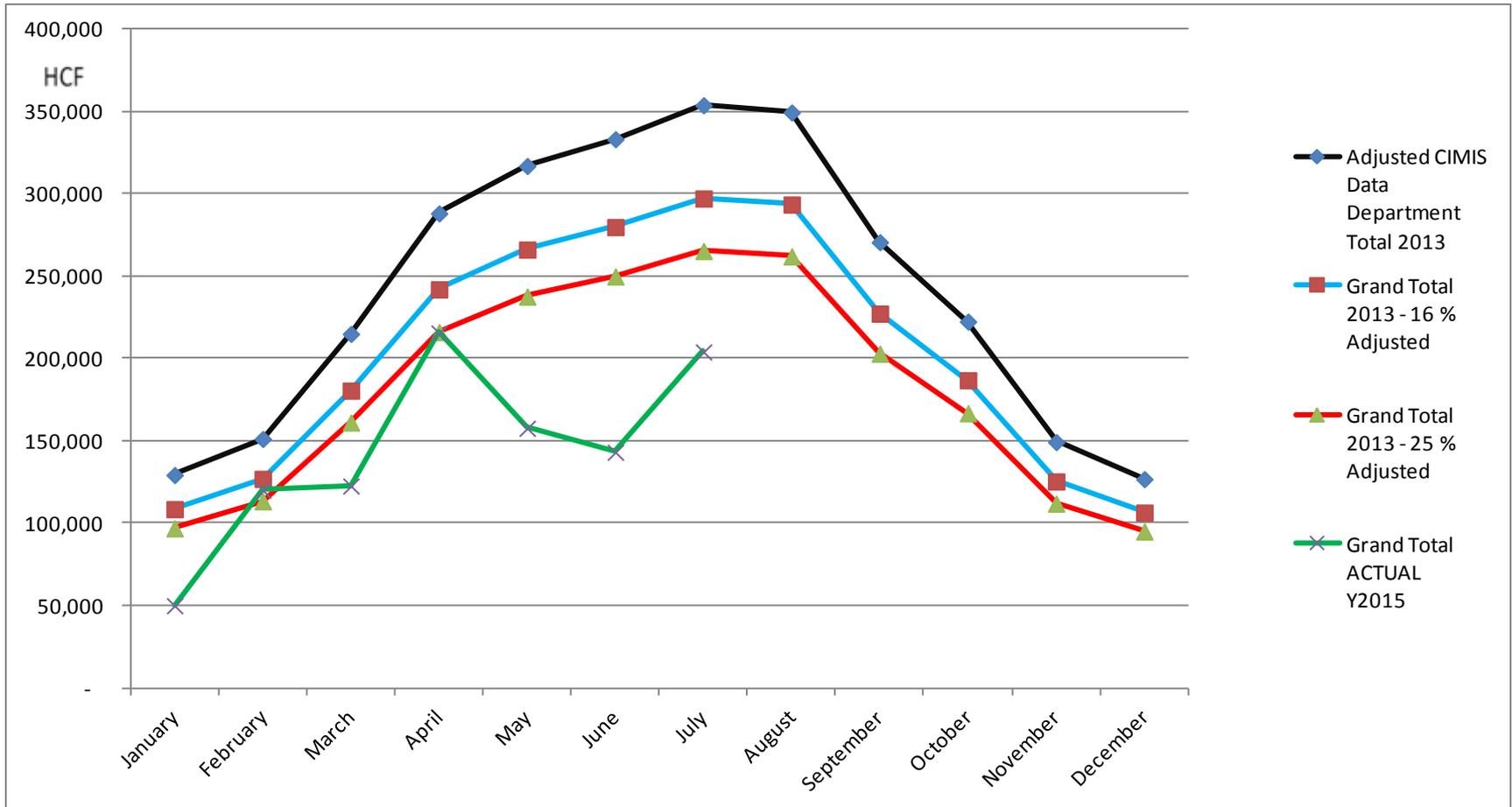
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Raw Data Department Total



Adjusted CIMIS Data Department Total



Raw Data Department Total

	Raw Data Department Total 2013	Grand Total 2013 - 16 %	Grand Total 2013 - 25 %	Grand Total ACTUAL Y2015
January	74,787	62,821	56,090	50,123
February	76,872	64,572	57,654	120,291
March	104,970	88,175	78,728	122,791
April	187,769	157,726	140,827	215,693
May	242,117	203,378	181,588	157,853
June	323,713	271,919	242,785	143,284
July	342,525	287,721	256,894	204,178
August	325,048	273,040	243,786	
September	371,393	311,970	278,545	
October	297,899	250,235	223,424	
November	240,653	202,149	180,490	
December	129,688	108,938	97,266	
Grand Total	2,717,434	2,282,645	2,038,076	1,014,213

Percentage of Savings Per Governors Mandate			
	Raw Data Department Total 2013	Grand Total ACTUAL Y2015	Percentage
June	323,713	143,284	- 55.74%
July	342,525	204,178	- 40.39%

TYPES OF PARK LANDSCAPE

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- A) ACTIVE TURF AREAS (GREEN)**
- B) PASSIVE TURF AREAS AND PLANTER BEDS (YELLOW)**
- C) ORNAMENTAL TURF AREAS (ORANGE)**
- D) NON-IRRIGATED AND OPEN SPACE AREAS (BLACK)**

AREAS OF NO CHANGE

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A) ACTIVE TURF AREAS (GREEN)

NO CHANGE TO IRRIGATION (3X/WEEK)

A) ACTIVE TURF AREA

No change to irrigation (3x/wk): *Sports Fields*

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Ocean Air:
Multi-Purpose Fields

A) ACTIVE TURF AREA

No change to irrigation (3x/wk): *Historically Designated Areas*

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Balboa Park (central mesa):
Historically designated & high-tourism area

A) ACTIVE TURF AREA

No change to irrigation (3x/wk): *High-Tourism Areas*

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E.B. Scripps Park:
High-tourism area

A) ACTIVE TURF AREAS:

No change to irrigation (3x/wk): *Active/Passive Turf Area*



ITEM	QUANTITY	ITEM	QUANTITY
ST. DRIVE MARKS	10,800 SF	SECURITY LIT.	1 STD.
ST. PARK ROADS	SF	BALL FIELD LIT.	1 STD.
ST. PARKING LOT	SF	TENNIS CT. LIT.	1 STD.
ST. STALLS STD.	1	SHAWT PARADE LIT.	1 STD.
ST. STALLS HOOP	1		
ST. BENCH TABLES	2 EA.	SHOWER PORTALS	1 EA.
ST. BENCHES	3 EA.	BIKES RACKS	1 EA.
ST. LAWN EDGING	1,028 LF		
PERSON	T.R. 4/10/95		

CITY OF SAN DIEGO PARK and RECREATION DEPARTMENT

THE GENERAL DEVELOPMENT PLAN

KENSINGTON

MINI - PARK

COUNCIL DIST. NO. 3 COMM. PLAN AREA MID-CITY 4121 ADAMS AVE. PSD BY LAMBERT COORDINATES 218-1736 THOMAS BROS. PG. 1269, 9-3 601

B) PASSIVE TURF AREAS (YELLOW)

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**REDUCE IRRIGATION:
2X/WEEK**

B) PASSIVE TURF AREA

Reduce irrigation from 3x/wk to 2x/wk: Passive turf that abuts active turf (no clear border or delineation)

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Linda Vista CP:
Passive Turf Area where picnic area, playground and ball-field
(active turf area) intersect

B) PASSIVE TURF AREA

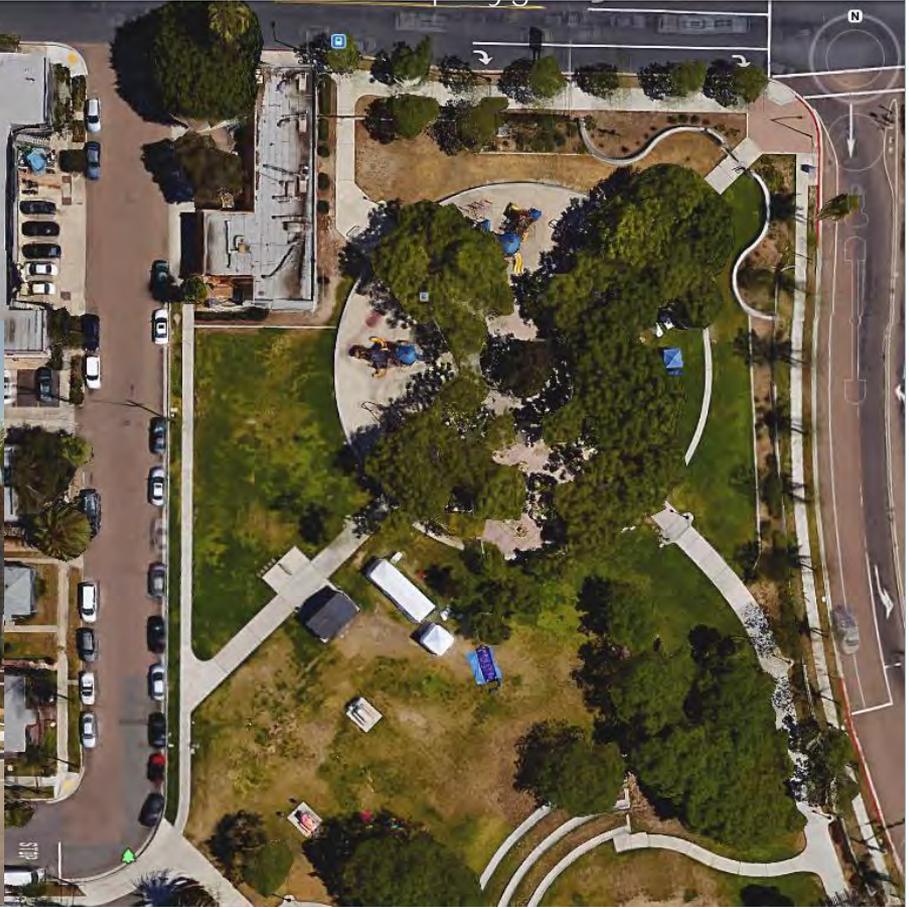
Reduce irrigation from 3x/wk to 2x/wk: Areas adjacent to playgrounds; should be well utilized and/or area with trees (shade) or seating

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Ward N.P.

Well utilized turf associated with playground



C) ORNAMENTAL TURF AREA (ORANGE)

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**NO IRRIGATION *EXCEPT*
*SIMULATED RAIN EVENTS (1-
2X/MO FOR TREES)***

C) ORNAMENTAL TURF AREA

Turn off irrigation: Under-utilized areas and slopes, preferably bordered by hardscape and/or fence-line

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Emerald Hills Park

Sloped turf in narrow unusable area. Bordered by hardscape & fence-line.

C) ORNAMENTAL TURF AREA

Turn off irrigation: *Off Leash Dog Parks*

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C) ORNAMENTAL TURF AREA

Turn off irrigation: Narrow unusable strips

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Miramar Overlook:
Narrow strip of turf adjacent to playground



Linda Vista CP:
Narrow turf area with poor view of ball-field (unusable)

C) ORNAMENTAL TURF AREA

Turn off irrigation: Ornamental turf at Recreation Centers

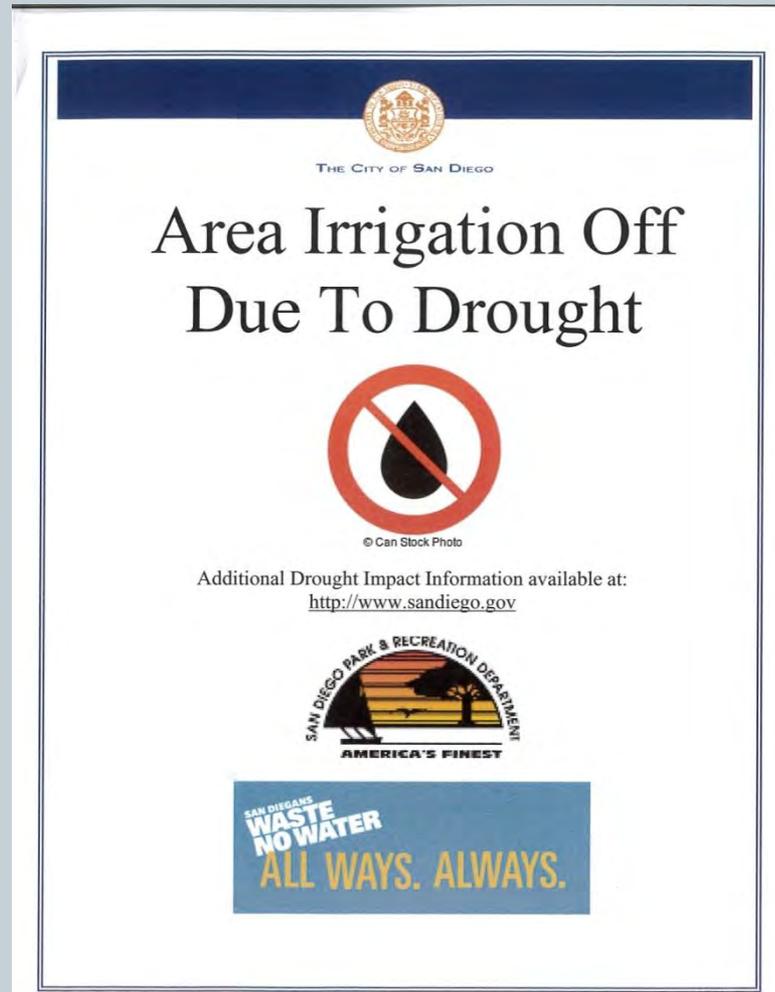
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Pacific Beach Recreation Center
Turf adjacent to recreation center

Drought Signage for Decommissioned Areas

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Irrigation Savings Reinvested into Parks

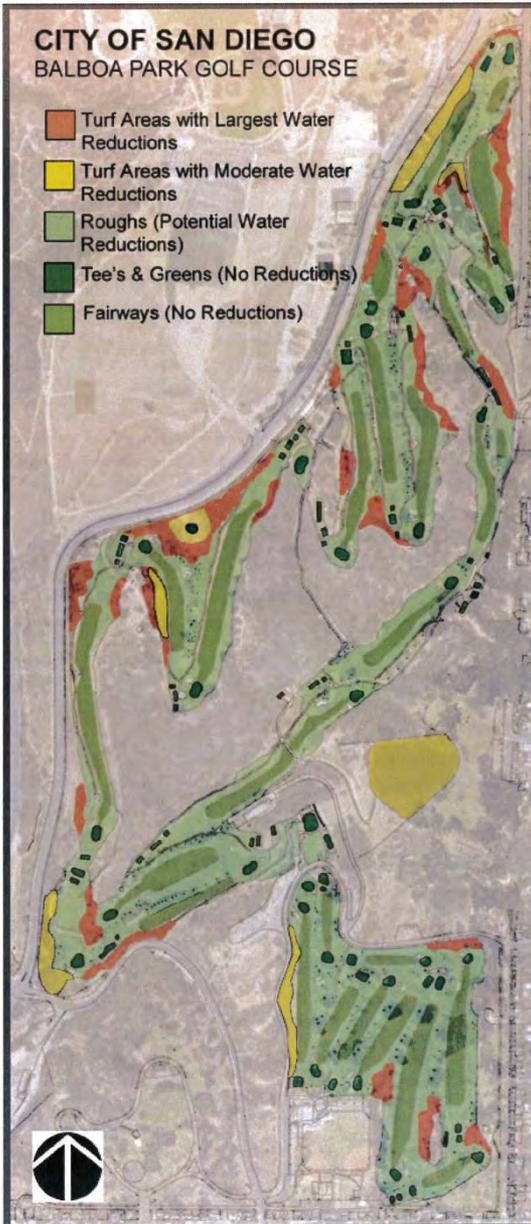
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- Drought Tolerant Plantings
- Smart Controllers
- Irrigation Head Replacement
- Irrigation Renovations
- Fertilization for Athletic Fields



Golf

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DECOMMISSIONED TURF

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- Staff will take five (5) photos of each turf area to be decommissioned. Photos should be taken before turf dies.
- Staff will not remove dead, or dying, turf unless there is a plan and funding for replacement. This will reduce erosion and landfill concerns.
- Staff will ensure that trees within decommissioned turf are irrigated as outlined above.

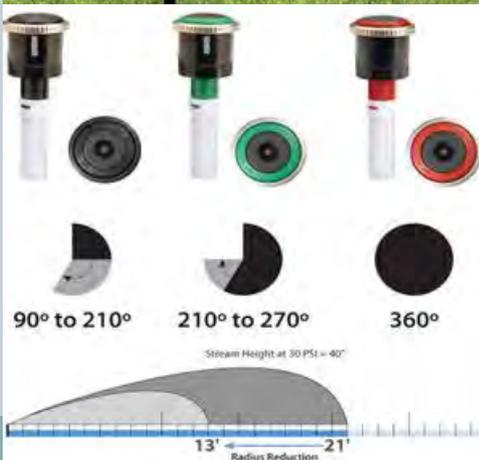


**Pop up Spray Head
Limited in days and
times by SDMC
Drought Levels.**

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**POP UP STREAM
HEAD
NOT LIMITED IN TIME
BY SDMC DROUGHT
LEVELS. **DAYS OF
OPERATING ARE
LIMITED.****

**Conversion is easy but
run times
will increase.**





Pop-Up (Stream) Rotor Heads:

NOT Limited in run time by SDMC Drought Level 2.

Days of the week are!

PARK AND RECREATION WILL REDUCE WATER USE BY THE MANDATED AMOUNT!

Proposed Amendments to City Drought Ordinance (SDMC)

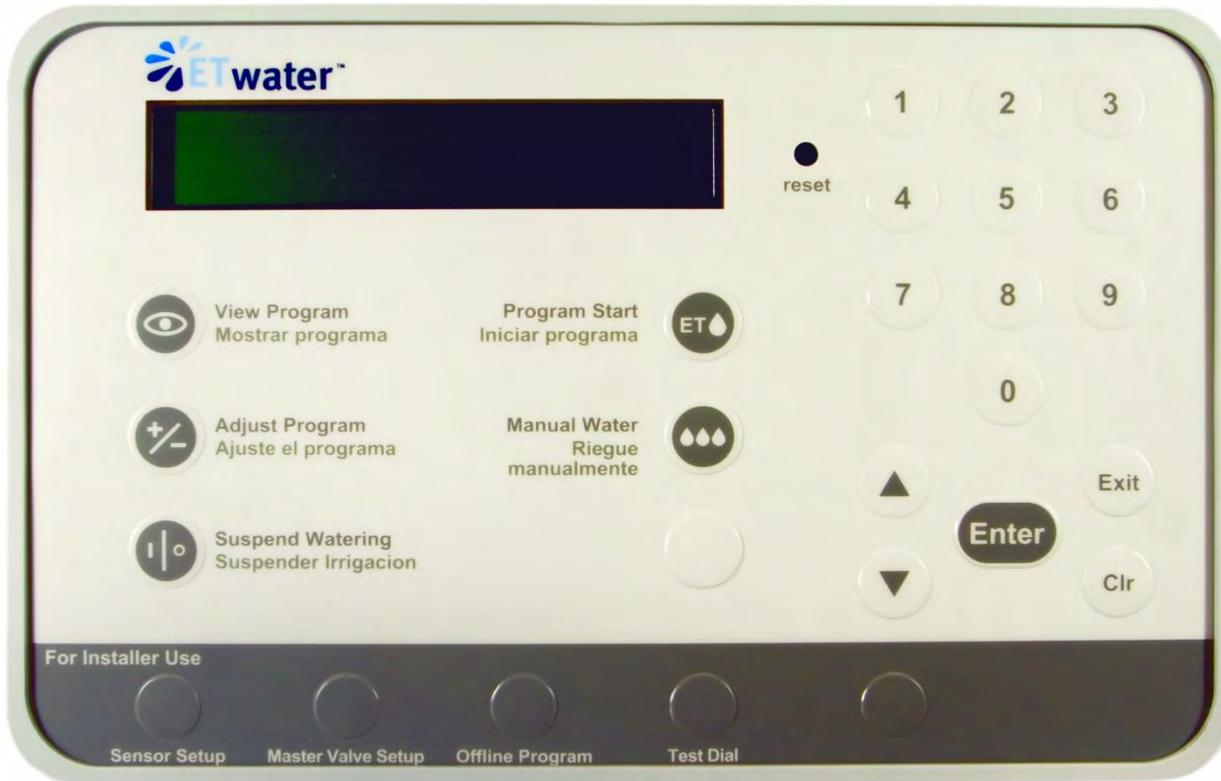
Parks are exempt from watering time restrictions but must comply with targeted water use reductions.

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(G) This division does not apply to areas serviced by the **Park and Recreation Department**, including public rights-of-way, street trees, or areas with significant public benefit requiring enhanced irrigation schedules, such as **public parks**, schools and federal monuments or reserves. The aforementioned areas shall be irrigated, operated and maintained according to a schedule set by the City Manager.

Smart Controllers

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Smart
Controllers:

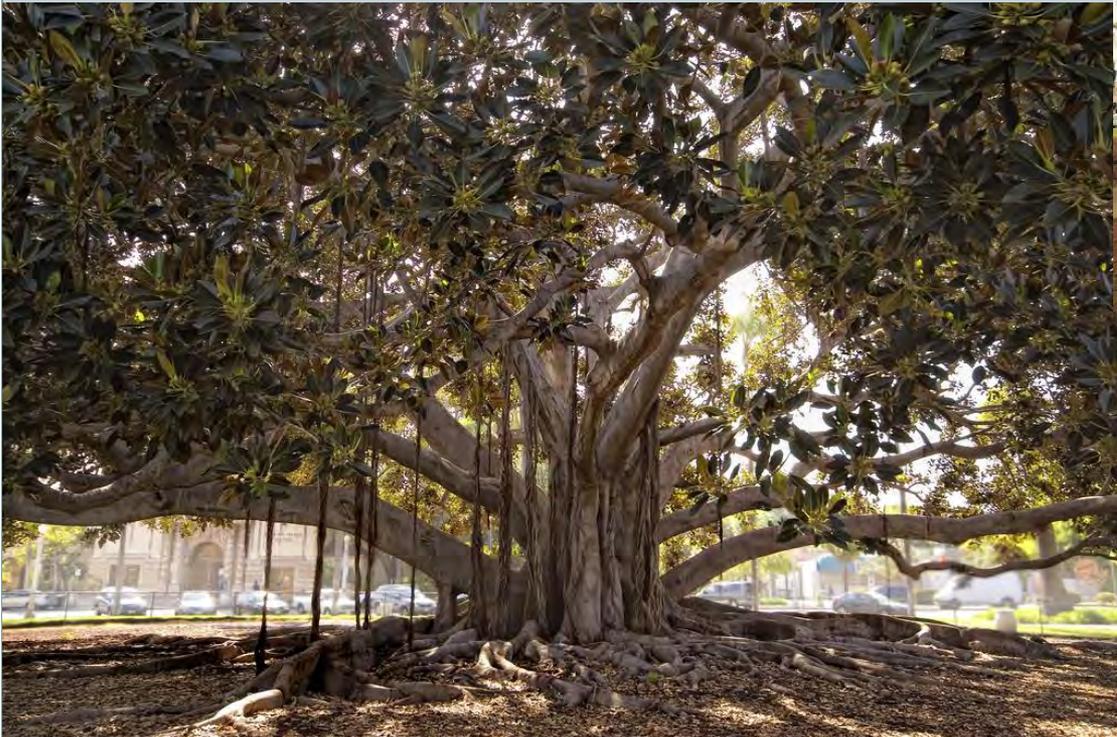
- Balboa Park
- Mission Bay Park
- Some MADs

Investment
needed to expand
use to other parts
of park system

Staff training

Trees

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Watering approach designed to preserve trees

Recycled Water

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Parks with Recycled Water



Black Mountain Ranch Community Park
Canyonside Community Park
Dingeman Elementary Joint Use
Doyle Community Park
Hourglass Community Park
Mandell Weiss Park
Nobel Athletic Area
Penasquitos Creek Neighborhood Park
Scripps Ranch Community Park
Spring Canyon Neighborhood Park
South Village Neighborhood Park
Thurgood Marshall Middle School Joint Use
Torrey Pines Golf Course
University Gardens Neighborhood Park
Wangenheim/Walker Joint Use
Westview Neighborhood Park

Maintenance Assessment Districts:

Camino Santa Fe

Campus Point

Eastgate

Genesee Ave and North Torrey Pines Rd

La Jolla Village Dr.

Miramar Ranch North

Mira Mesa

Park Village

Peñasquitos East

Scripps Ranch

Torrey Highlands

