

Water Reduction Strategies

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**PRESENTATION TO THE
PARK AND RECREATION BOARD**

JUNE 18, 2015

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

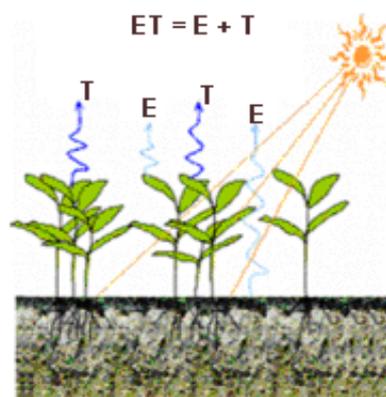
CIMIS Data

(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).

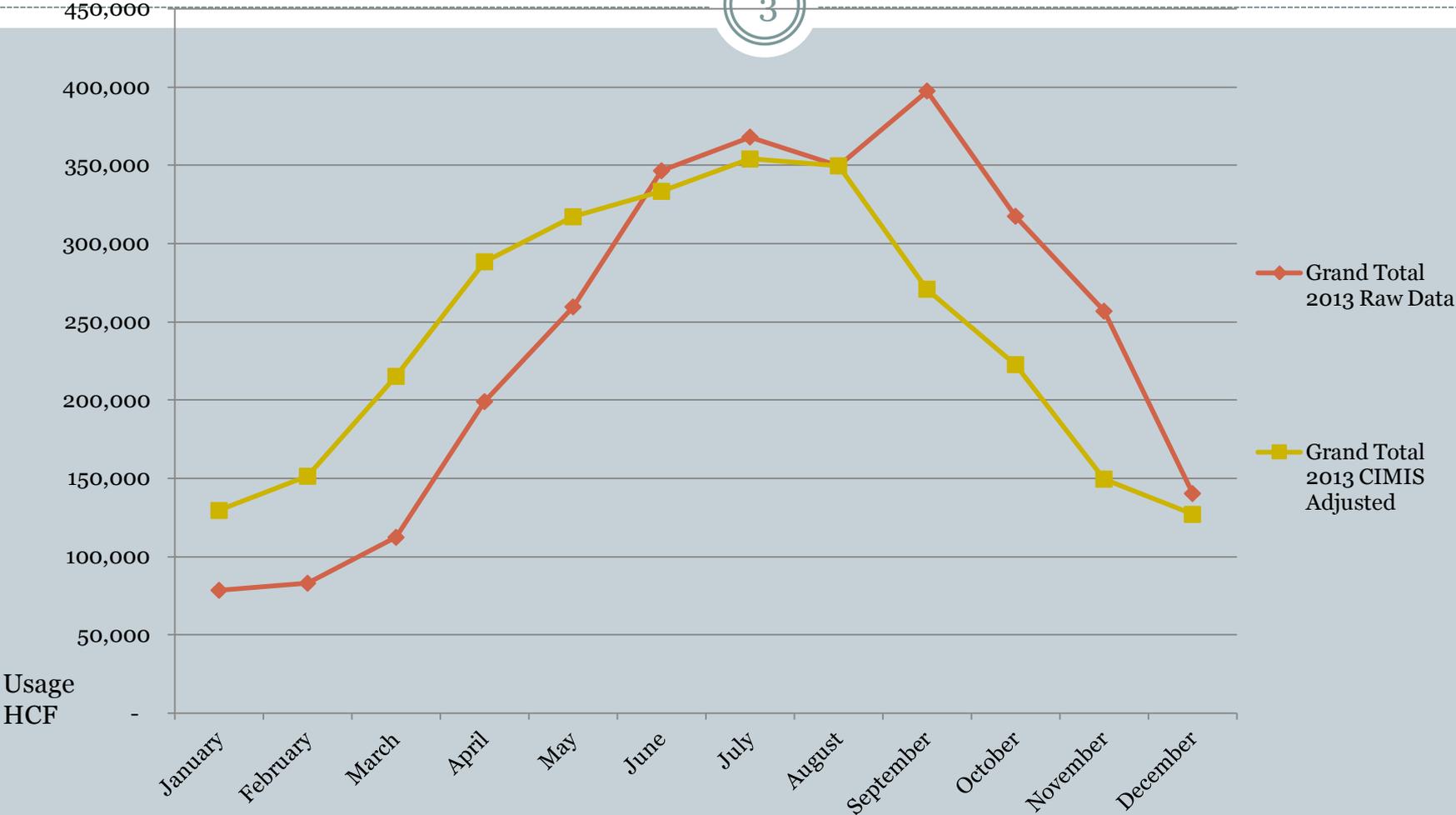
Historical ETo For San Diego

Monthly Average Reference Evaporation by ETo (inches /Month)

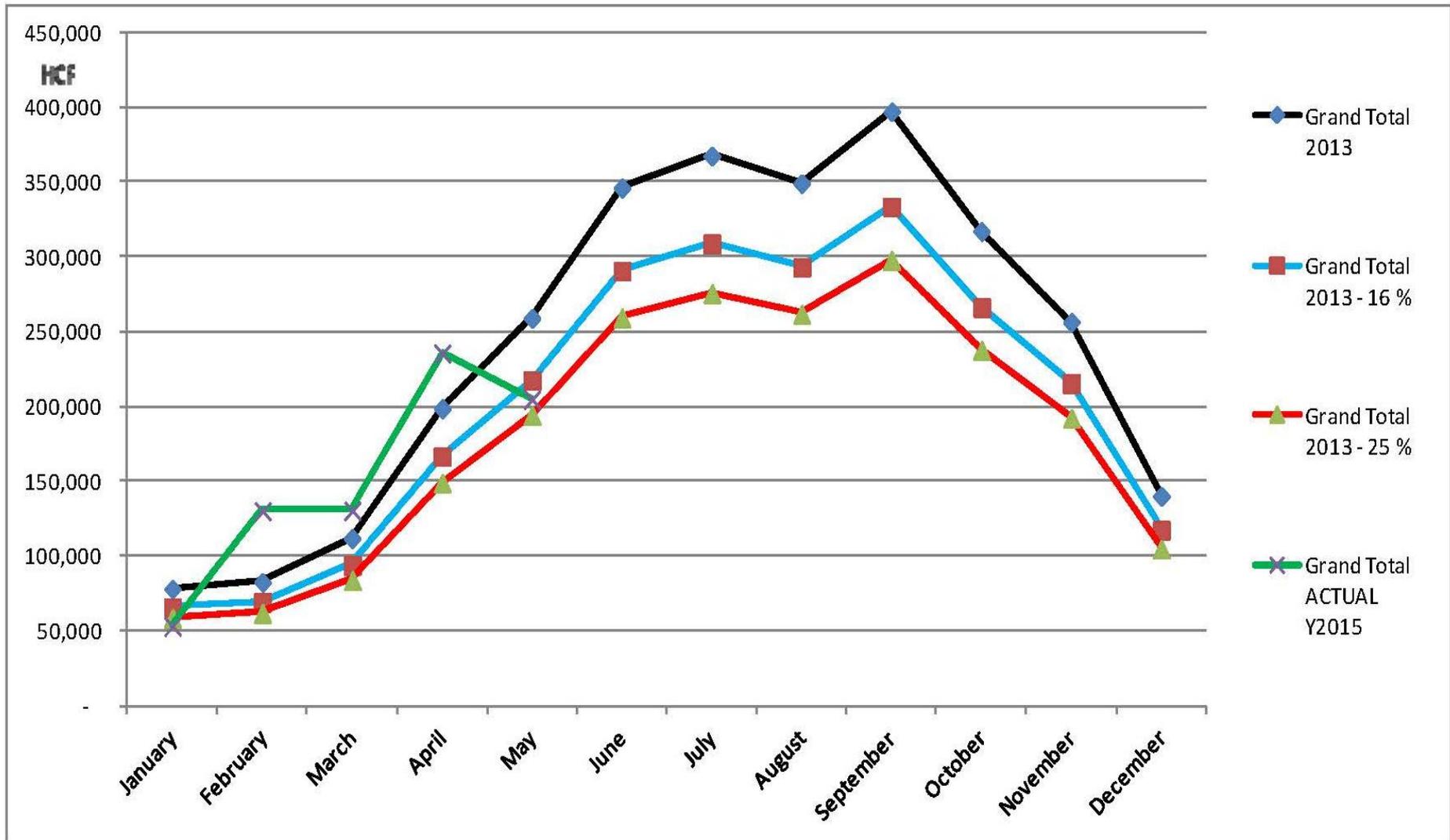
January	February	March	April	May	June	July	August	September	October	November	December	Grand Total
2.07	2.42	3.44	4.61	5.07	5.33	5.66	5.59	4.33	3.56	2.39	2.03	46.5

2013 Raw Data Vs. Adjusted Data

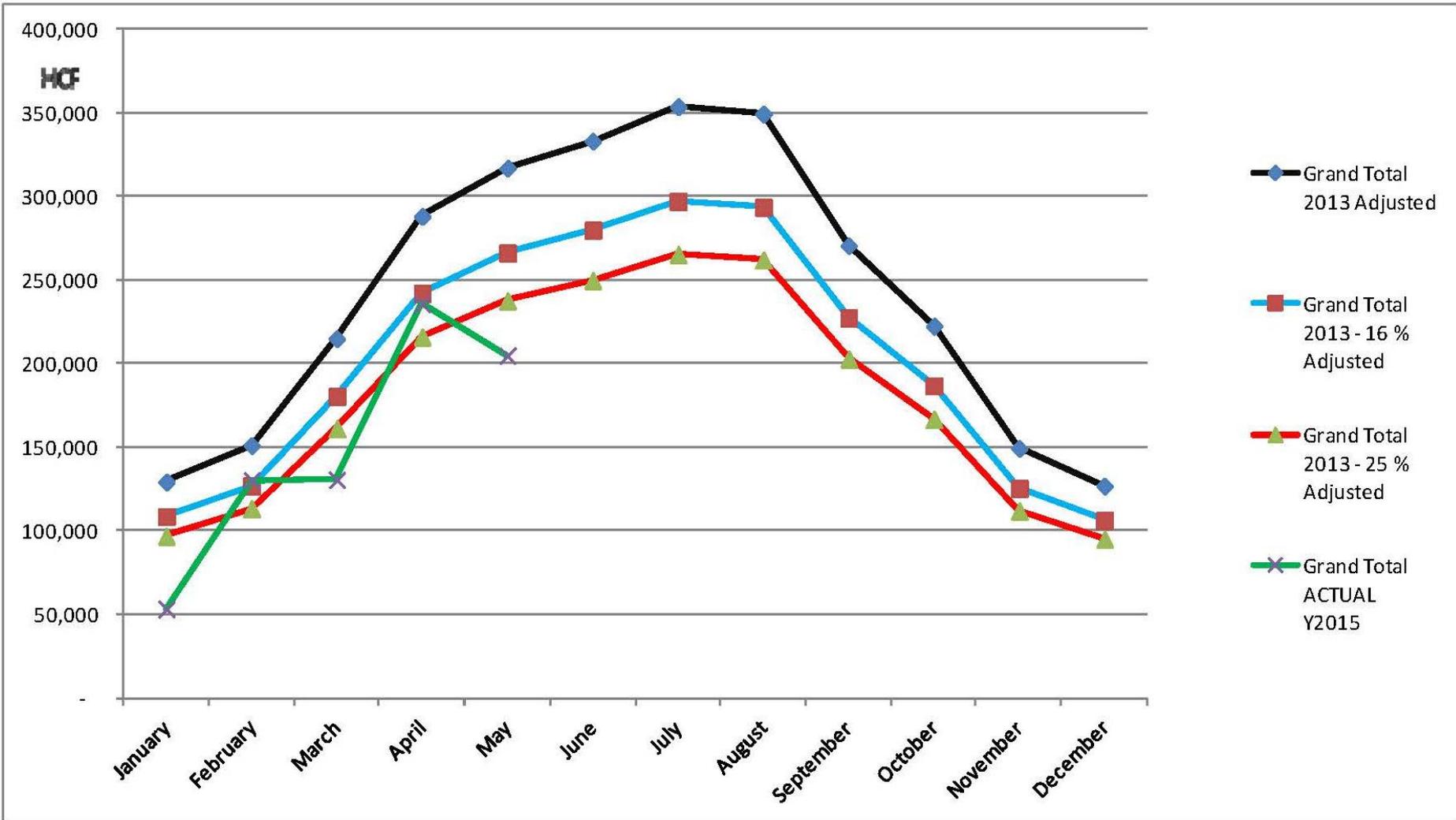
3



Raw Data Department Total



Adjusted CIMIS Data Department Total



TYPES OF PARK LANDSCAPE

6

- 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*

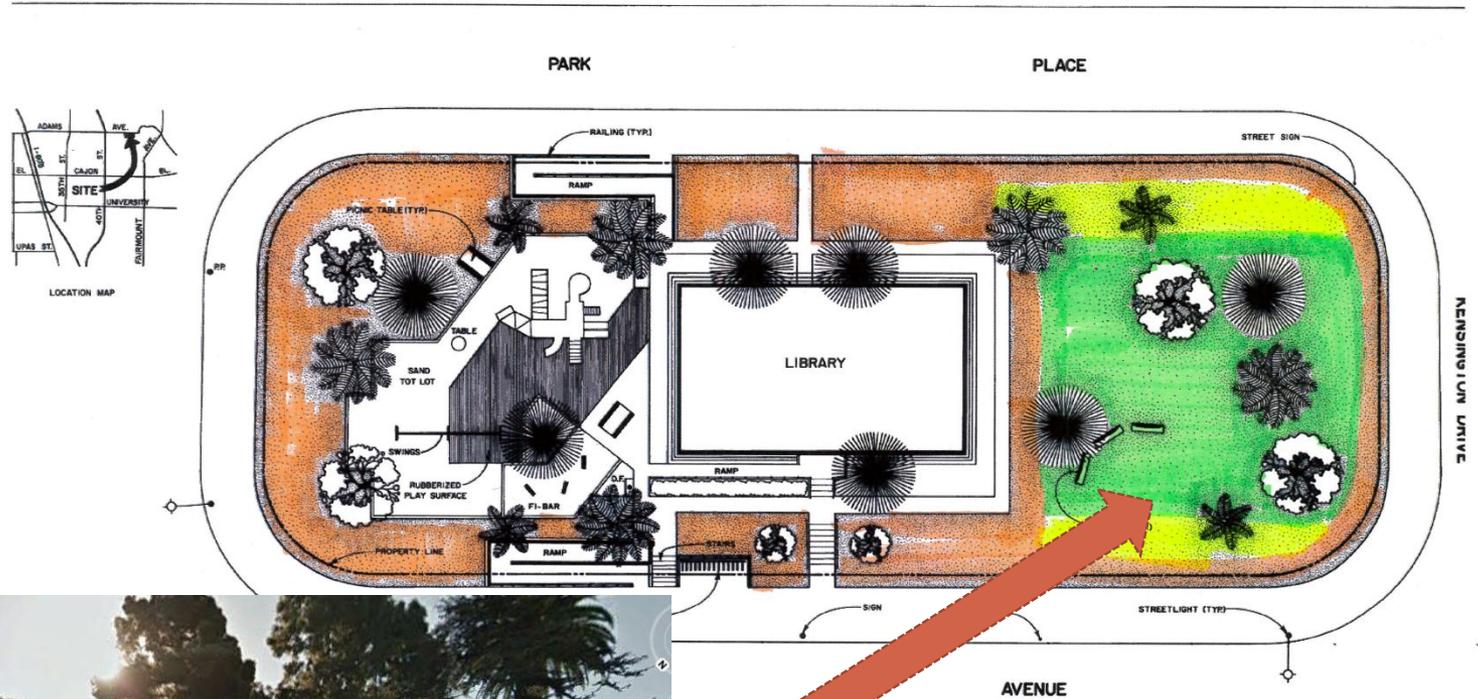
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E.B. Scripps Park:
High-tourism area

A) ACTIVE TURF AREAS:

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



ITEM	QUANTITY	ITEM	QUANTITY
PAVE MARKS	10,900 SF	SECURITY L/S	5700
PAVE ROADS	SF	BALL FIELD L/S	5700
PARKING LOT	SF	TENNIS CT L/S	5700
STALLS STD		SHAWT PAPERLIKE CT	5700
STALLS HOOP			
PICNIC TABLES	2 EA	SHOWER PORTAL/SH	1 EA
BENCHES	3 EA	BENCHES RAGRS	1 EA
LAWN EDGING	1,028 LF		

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 218-1738 THOMAS BROS. PG. 1269, 9-3 601

REVISION T.R. 4/10/95

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



DATA LOG FOR ACTION	REFERENCE DOCUMENTS	DATE	ACRES
SITE DESIGNER	REV. NO. 0-15898	15.50	15.50
DATE	NAME	STAFF (C.N.A.)	
ST. BR. APPROVAL			
INITIAL DEVELOPMENT	EXP. NO.	21295	2820-D
REC. BLDG. ADD.	EXP. NO.	21974	3755-D
KITCHEN ADD.	EXP. NO.	21295	12700-L
IMPROVEMENTS	EXP. NO.	17204	10507-D
IRRIGATION	EXP. NO.	17281	10508-D
LIGHTING	EXP. NO.	17570	12292-D
IMPROVEMENTS	EXP. NO.	17687	12706-D
TENNIS CT. LTD.	29-811.0	17746	13024-D
PARKING LOT	29-812.0	11250	13024-D
		11251	27385-D

IMPROVEMENTS SUMMARY (DATA FROM AS-BUILT DRAWINGS)			
ITEM	QUANTITY	ITEM	QUANTITY
TOTAL SITE	15.50 AC	PLAY AREA	10,150 SF
IMPROVED AREA	13.09 AC	MULTI-PURPOSE CT.	8,188 SF
DRIVE	8.65 AC	TENNIS, ETC.	27,024 SF
SHRUB BED	.31 AC	RESTROOM	900 SF
NATURAL	2.41 AC	REC. BLDG.	6,812 SF
OTHER LANDSCAPING	.01 AC	POOL BLDG.	—
DIST. INFIELDS	2.08 AC	— BEEN	—
		— WATER	—
		FINISHED	6,893 SF
		ST. LAWN EDGING	8,830 LF
		HANDBALL COURTS	3,052 SF
		DRIVED WALKS	40,988 SF
		PAV. ROADS	7,200 SF
		PARKING LOT	30,157 SF
		— STALLS, STD.	132
		— STALLS, MCK.	3
		SECURITY LVS.	9 STOPS
		BALL FIELD LVS.	8 STOPS
		TENNIS CT. LVS.	10 STOPS
		MULTI-PURPOSE CT.	3 STOPS
		BACKSTOP	2 EA.
		TENNIS CT.	4 EA.
		REVISION	T.R. 4/5/95

CITY OF SAN DIEGO PARK and RECREATION DEPARTMENT

THE GENERAL DEVELOPMENT PLAN LINDA VISTA COMMUNITY PARK

COUNCIL DIST NO 5 COMM PLAN AREA LINDA VISTA - 12 7064 LEVANT ST
 LANSBET COORDINATES 229-1717 THOMAS BROS. PG 1228, 3-6

B) PASSIVE TURF AREA

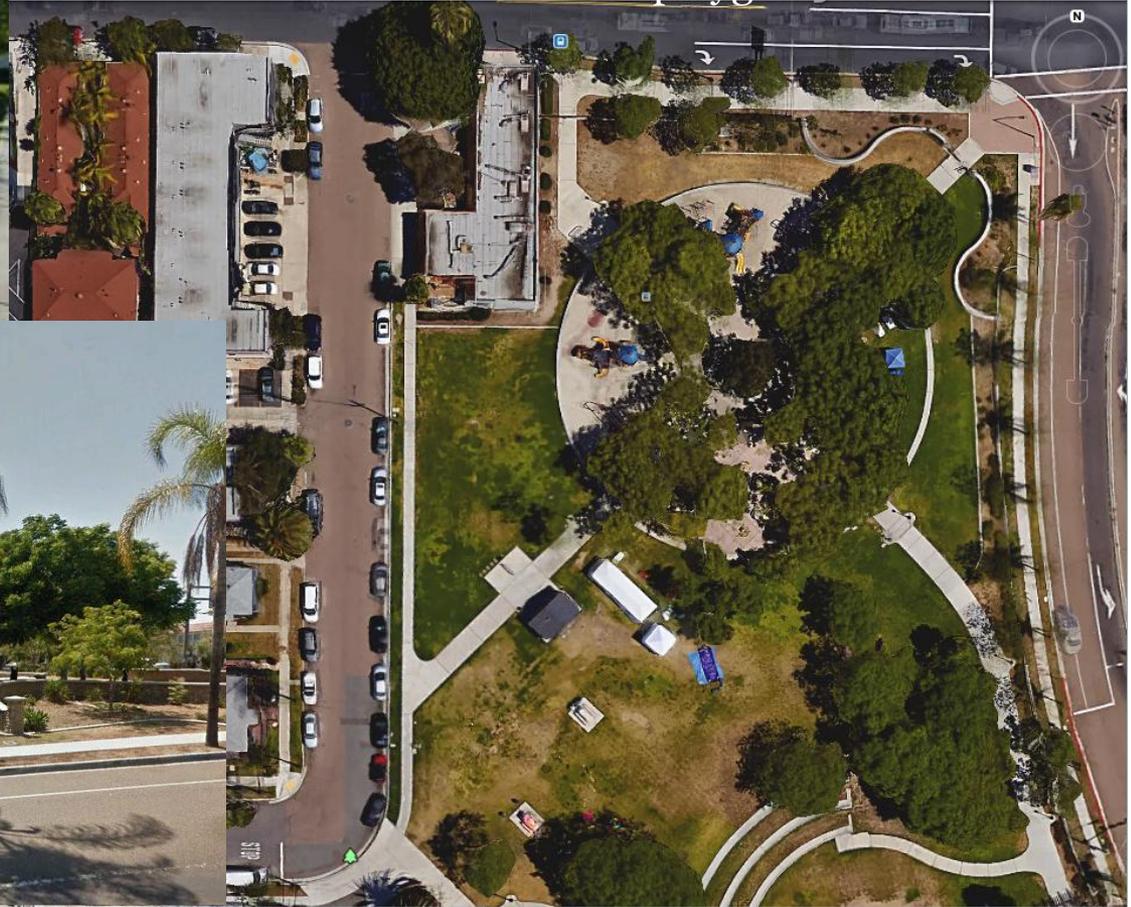
Reduce irrigation from 3x/wk to 2x/wk: Areas adjacent to playgrounds; should be well utilized and/or area with trees (shade) or seating

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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

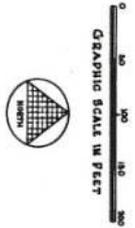
Turn off irrigation: Under-utilized areas and slopes, preferably bordered by hardscape and/or fence-line

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Emerald Hills Park

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



COUNCIL DIST. 3 COMM. PLAN AREA, S.E. SAN DIEGO 37 P.S.D. 671

DATA LOG FOR:			
DATE	ACTION	REFERENCE DOCUMENTS	
1969	SITE ACQUIRED	RESO. NO. E-11140-D	COST # ACRES: 9.59
1982	SITE DEDICATED	ORD. NO. 0-15672	ACRES: 9.59
1969	ESP CONSULTANT HIRE	ESP. NO.	NAME: STAFF (C.N.A.)
1-71	P&R BOARD APPROVAL	P&R APPROVAL	DATE
04-12-81	INITIAL DEVELOPMENT	ESP. NO.	JO. NO. 11953 DRWG. NO. 14580-D
1-20-77	ADD. IMPROV'TS	ESP. NO.	JO. NO. 10680 DRWG. NO. 11401-D
		ESP. NO.	JO. NO. DRWG. NO.
		ESP. NO.	JO. NO. DRWG. NO.
		ESP. NO.	JO. NO. DRWG. NO.

IMPROVEMENTS SUMMARY (DATA FROM AS-BUILT DRAWINGS)							
ITEM	QUANTITY	ITEM	QUANTITY	ITEM	QUANTITY	ITEM	QUANTITY
SOIL SITE	9.59 AC	PLAY AREA	9,520 SF	PAVED WALKS	39,076 SF	SECURITY LIT.	0 STPS
IMPROVED AREA	9.07 AC	MULTI PURPOSE CT	3,260 SF	PARK BENCHS	5,200 SF	BALL FIELD LIT	0 STPS
SURF	5.41 AC	TENNIS CTS	15,200 SF	PARKING LOT	11,519 SF	TENNIS CT LIT	0 STPS
SHRUB BED	60 AC	RESTROOM	525 SF	" STALLS STD.	41	MULTI PURPOSE CT	3 STPS
NATURAL	1.52 AC	REC. BLDG.	525 SF	" STALLS WOOD			
OTHER LANDSCAPING	AC	POOL BLDG.	SF	COURT SHAW AREA	SF	BACKSTOP	EA
DIRT INFIELDS	AC	" DECK	SF	" WATER	SF	TENNIS CTS	2 EA
		" WATER	SF	LAWN EDGING	9,990 LF		

CITY OF SAN DIEGO PARK and RECREATION DEPARTMENT

THE GENERAL DEVELOPMENT PLAN
**EMERALD HILLS
 PARK**

BETHURE CT.
 REVISION S.M. 12/28/04

LAMBERT COORDINATES 205-11647 THOMAS BROS. Pg. G1-EG

H-434

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

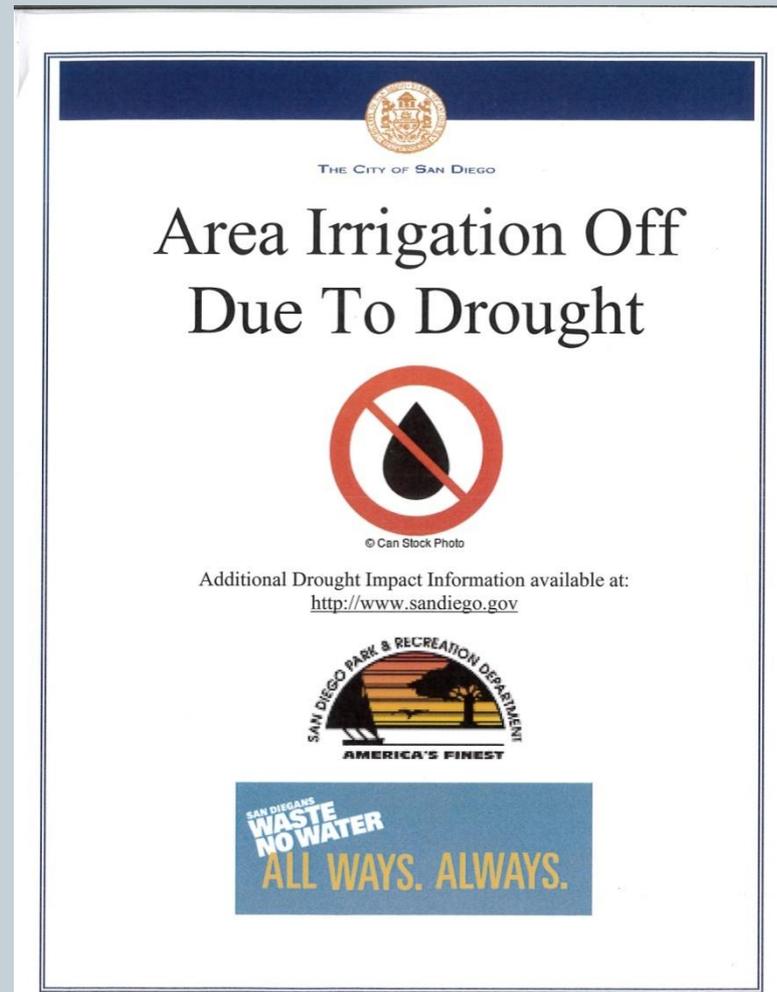
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Pacific Beach Recreation Center
Turf adjacent to recreation center

Drought Signage for Decommissioned Areas

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Irrigation Savings Reinvested into Parks

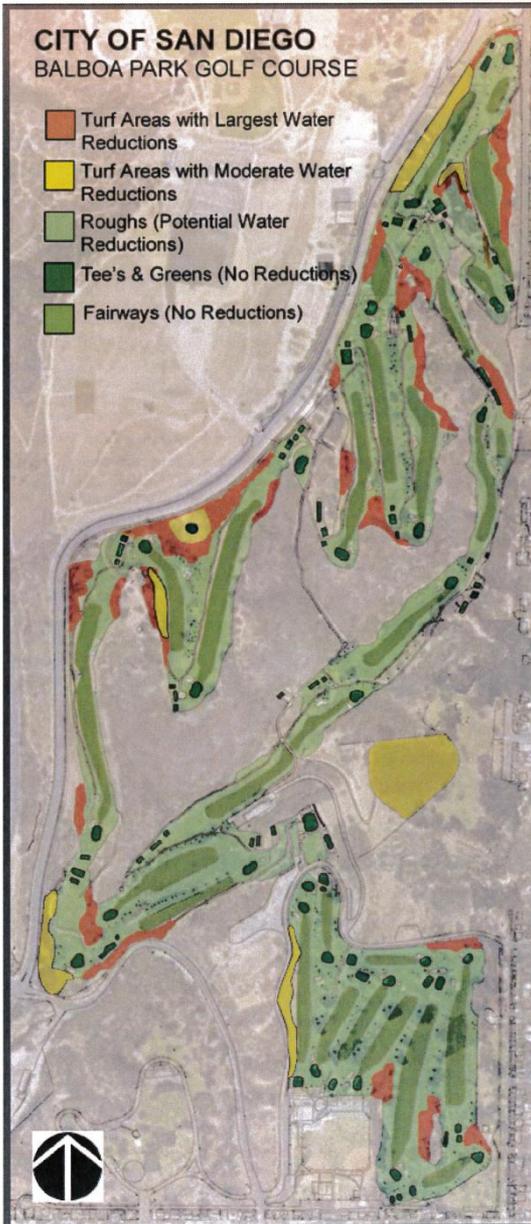
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- Drought Tolerant Plantings
- Smart Controllers
- Irrigation Head Replacement
- Irrigation Renovations
- Fertilization for Athletic Fields



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.

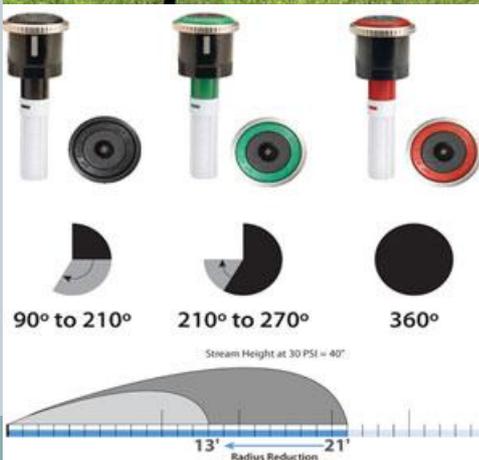


**Pop up Spray Head
Limited in days and
times by SDMC
Drought Levels.**

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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.**



Short Range (Orange, Lime Green)



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)

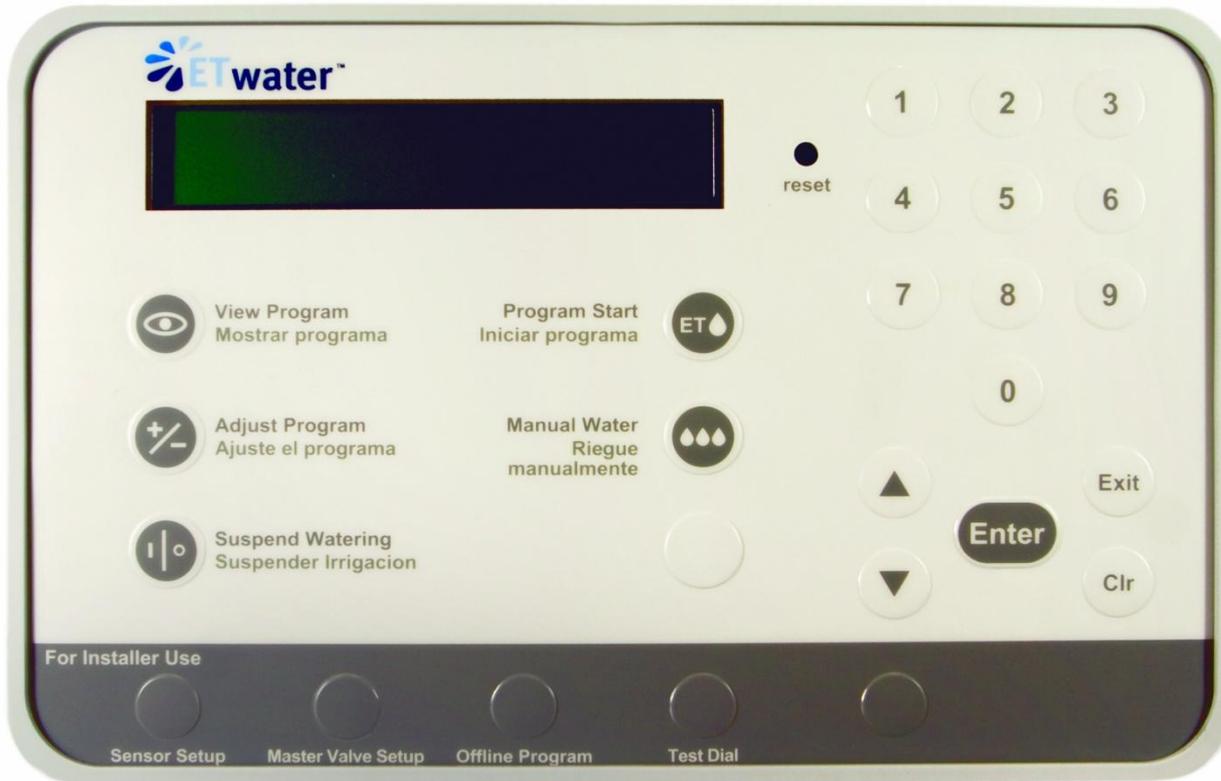
Parks are exempt from watering time restrictions but must comply with targeted water use reductions.

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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

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

