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# Water Efficiency Update Park Operations

Presented by Park Superintendent David Garrard

**Public Works Commission** 

August 11, 2021



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- Program background

- Water conservation efforts



## <u>Background</u>

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Park Operations Bureau:

- Maintains the landscape of the City parks and facilities, historic Greystone Park, medians/traffic islands/easements, parking facilities, reservoir sites, Business Triangle, and Cityowned properties.
- Provides support services to other Departments.



## Background

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- Responsible for landscape maintenance of:
  - 101.5 landscaped acres
  - 97 irrigation controllers
  - 1578 irrigation valves
  - 1000's of irrigation supply devices



## Background

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- Expectations of landscape and irrigation:
  - Keep landscape clean and green
  - Manage landscape with moderate plant health in mind (low-moderate water-use plants selected)
  - Continue adding flow meter/master valves
  - Response time to leaks and repairs is within 24 hours
  - Partner with Water Conservation to reduce water use





- Reasons for additional watering
  - Establish new plants/turf
    - Replanted 1,500 plants at Beverly Gardens Park in FY 2021/22
  - Reseed turf (e.g. athletic fields)
  - Unhealthy plants/turf

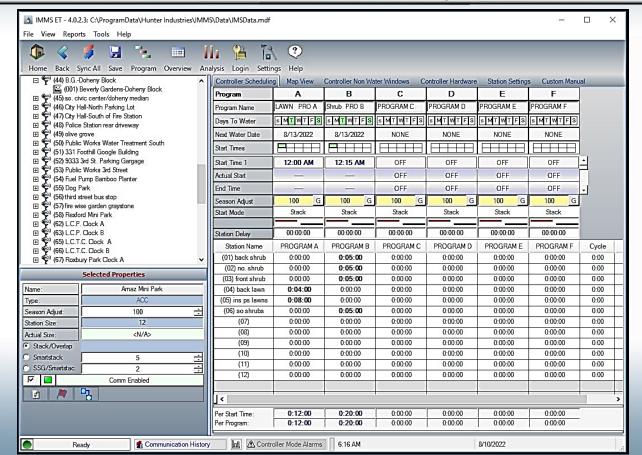


### Examples of Water Conservation efforts

- Adjust watering schedules
- Reseed grass only when necessary
- Avoid replanting large areas, whenever possible
- Replace with drought tolerant plants, whenever possible
- Upgrade aging irrigation components
- Water medians with non-potable water
- Removal of annual color and replace with perennial color in certain locations

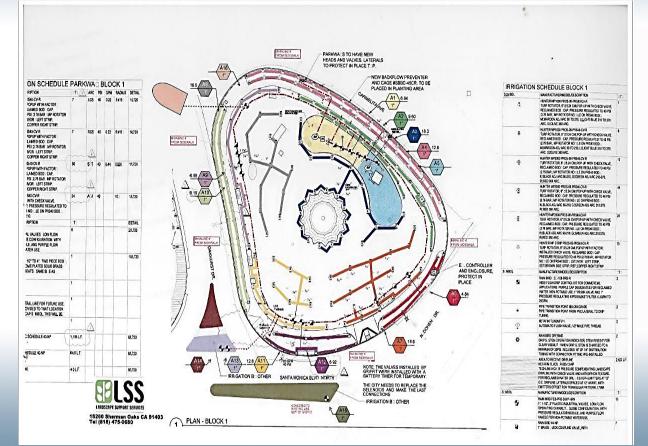














Products and Materials

Block 13: Hunter and Hounds Garden at Crescent Drive to Canon Drive

2017-11-03 16:22

78.62 gpm

BLOCK 13: CRITICAL ANALYSIS

DESIGN ANALYSIS Maximum Station Flow:

31.48 gpm 78.62 gpm

Flow Available at POC: Residual Flow Available: 47.14 gpm

Generated: P.O.C. NUMBER: 01 Water Source Information: site measurement-remeasurement 11/3/17 FLOW AVAILABLE

Point of Connection Size: Flow Available:

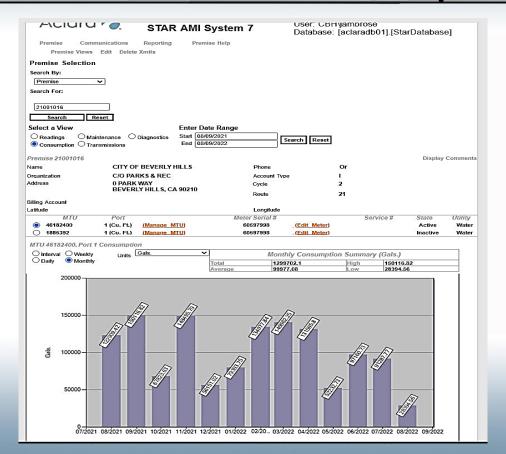
PRESSURE AVAILABLE

Static Pressure at POC: 60.00 psi Pressure Available: 60.00 psi

Critical Station:	4
Design Pressure:	40.00 psi
Friction Loss:	5.21 psi
Fittings Loss:	0.52 psi
Elevation Loss:	0.00 psi
Loss through Valve:	0.48 psi
Pressure Req. at Critical Station:	46.21 psi
oss for Fittings:	0.05 psi
oss for Main Line:	0.53 psi
oss for POC to Valve Elevation:	0.00 psi
oss for Backflow:	11.30 psi
oss for Master Valve:	0.80 psi
Critical Station Pressure at POC:	58.89 psi
Pressure Available:	60.00 psi
Residual Pressure Available:	1.11 psi

BL	OCK 13 WATER EF	-ICIENT LAND	SCAPE WOR	KSHEET						
Landscape Area (LA)			Reference Evapotranspiration (Eto)			Conversion Factor (to Gallons/SF)		Evapotranspiration Adjustment Factor (ETAF)		
Regular	8,763		Reference Site	Eto		0.62		0.45		
Special			Los Angeles	50.1						$\overline{}$
TOTAL	50,933									
	2		Estimate	d Applied Water U	Jse (EAWU):	y		-		
	REGULAR LANDSCAPE AF									
Hydrozone No.	Hydrozone Description	Hydrozone Area (FT <sup>2</sup> )	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	(ETAF x Area)	Estimated Total Water Use (Gallons) (ETWU)		
1	Shrubs	8,763	0.2	Drip Area	0.81	0.25	2,163.70	67,208.96		-
	Total Area	8,763			TOTALS	8763	2,163.70	67,208.96		
	SPECIAL LANDSCAPE ARE	AS - IRRIGATED B	Y <source/>							+
Hydrozone No.	Hydrozone Description	Hydrozone Area (FT <sup>2</sup> )	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	(ETAF x Area)	Estimated Total Water Use (ETWU)		
	Turf	42.170	0.7	Spray	0.75	0.93	39.358.67	1,222,558,90		$\overline{}$
	Total Area	42,170			TOTALS	42,170	39,358.67	1,222,558.90		
	ETAF Calculations				ESTIMATED TOTAL WATER USE			4.000 700	GALLONS	
	Regular Landscape Areas Average ETAF	0.25				(ETWU)		1,289,768	GALLONS	
	All Landscape Areas Sitewide FTAF	0.82			MAXIMUM ALLOW WATER ALLOWANCE (MAWA)			1,432,373	GALLONS	







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## **Comments/Questions**