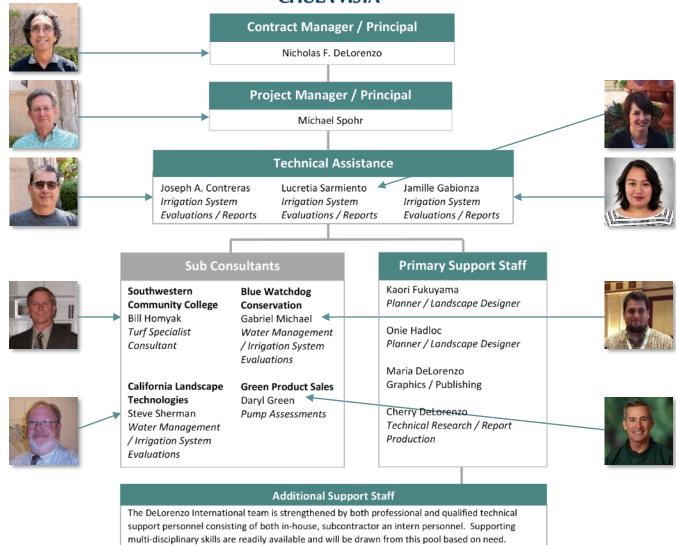




#### **PROJECT TEAM**









#### **PROJECT EXAMPLES**



#### **San Diego County**

- MCAS Miramar
- Replacement Naval Hospital Camp Pendleton
- Barona Resort and Casino
- San Diego Gas & Electric
- San Diego County Water Authority –
   WaterSmart Landscape Makeover
   Series (County-wide)

#### **Orange County**

Municipal Water District of Orange
 County – California Friendly
 Landscape Program

#### **Monterey County**

Monterey Bay Military Housing

#### **Santa Clara County**

- Moffett Field
- Camp Parks
- El Rancho Verde

CITY OF CHULA VISTA

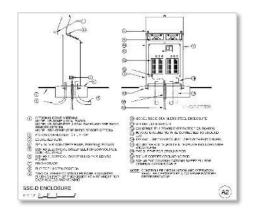
CITY-WIDE SMART IRRIGATION SYSTEM



### **PROJECT EXAMPLE – MCAS Miramar**



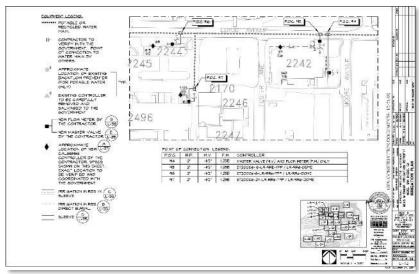
| MCAS Miramar Irrigation Retrofit- POC 1  |      | heret L-6)  | 166% Cost Opinion 3    |               | lubmitted<br>25-0x5-07         |  |
|--|------|---|------------------------|---------------|--------------------------------|--|
| ben  | Unit | Oswelly   | Unit God               | Cost          | Total Cost                     |  |
| His Improvements and introduct World Confedence to our   |      |   |                        |               |                                |  |
| 1 wearator to notal historyaha & Hon Mater   | -    | 123   | 53.00                  | 5500.00       |                                |  |
| Parameter on over 51 years 2011 from   |      | 123   | 20.00                  | 3300.00       |                                |  |
| 2 Marter Valve (RV)  | Fe   | 2.80  | \$700.00               | 9750-00       |                                |  |
| 2 Calcond How Sensor (HML*1265   | ba   | 22  | 41,000,00              | \$1,000 DC    |                                |  |
| 4 Ort Title 3 Persis for 60' \$ 70   | 125  | 0.2   | 3700.00                | 3300.00       |                                |  |
| 5 Descript Centralization violation  | 4.00 |   | 4.00                   |               |                                |  |
| Considerance 25 to 2 free Consideration  |      |   |                        |               |                                |  |
| a Cretilla W FT2330a15   | 200  | 106   | V3.000.00              | \$3,000.00    |                                |  |
| 2 COMMAND A PLEASURE   | 100  | 5.7   | ALMEST                 | \$1,0000      |                                |  |
| o Lond Chata Oxion (US)  | 100  | 100   | \$3,500.00             | 53,650.00     |                                |  |
| 1 6/00/2 companie Attacerca 440  | 83   | 2   | 840000                 | NAME OF       |                                |  |
| onnanced radio remote recover (seed difference)  | 933  | (6)   | 100                    |               |                                |  |
| or Intramental Radio Remote Receiver Certain (RRG)   | Fa   |   | \$475.00               | 2400.00       |                                |  |
| <ul> <li>IPP Well most analysis with my seek IP 1, IPB,<br/>and TP-110 A present.</li> </ul>   | La   | 2   | \$1,960.00             | \$1,000.00    |                                |  |
| € Mastera Carrestona   | 1.35 | 2   | \$300.00               | 70.00         |                                |  |
| <ul> <li>7 f 14 UF hazalor firms Landscare faces<br/>declarate converse, initial decelerated with<br/>applifulgible associates. Nota structure.</li> </ul> | U    | 1,540   | 89.00                  | 81,920-00     |                                |  |
| # Who i News ride Province   |      |   |                        |               |                                |  |
| Assume an assume all video TDE   |      |   |                        |               |                                |  |
| e Sex Culing   | M    | 110   | 52.50                  | \$275.00      |                                |  |
| <ul> <li>Scawalichatelitor (inchess familiers,<br/>remove), having à et ete desposa;</li> </ul>  | -51  | 223   | 10.00                  | \$1,100.00    |                                |  |
| <ul> <li>Two 1 PMC Sets 10 Silvey 8 Wiles habitations<br/>(mainths cade visites, habitating 6 corresponding)</li> </ul>                                    | S    | 223   | 98.00                  | \$1,520.00    |                                |  |
| d New Sicolatic Controls saveners  Plan gary secrets reconsing the continuent.   | *    | 223   | 57.00                  | \$1,640,00    |                                |  |
| & Planto lipino lico   | Fo   | - 4   | \$20.00                | 2200.00       |                                |  |
| 10. Was Gorda's opinist or diabove Dublings  | u    |   | 912.00                 | 00:00         |                                |  |
|  |      | Herd Cost Sabbriel  Derest Conclions, Overhead & Profit (25%)  Herd Cost Contingency (1974) |                        | 1000          | \$29,218<br>\$5,640<br>\$0,002 |  |
|  |      | Forbil Caret Ope  | nice per Point of Core | rection (POC) | \$85,680                       |  |



**MCAS Miramar Calsense Retrofit and Reclaimed Water Conversion Project** 

- San Diego, CA
- **82** Points of connection





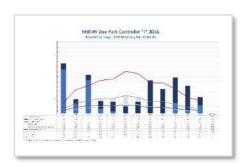
# **PROJECT EXAMPLES – Monterey Bay Military Housing**

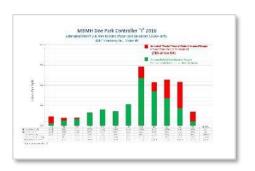


**Monterey Bay Military** Housing (MBMH) Water **Tracking** 

- Monterey, CA



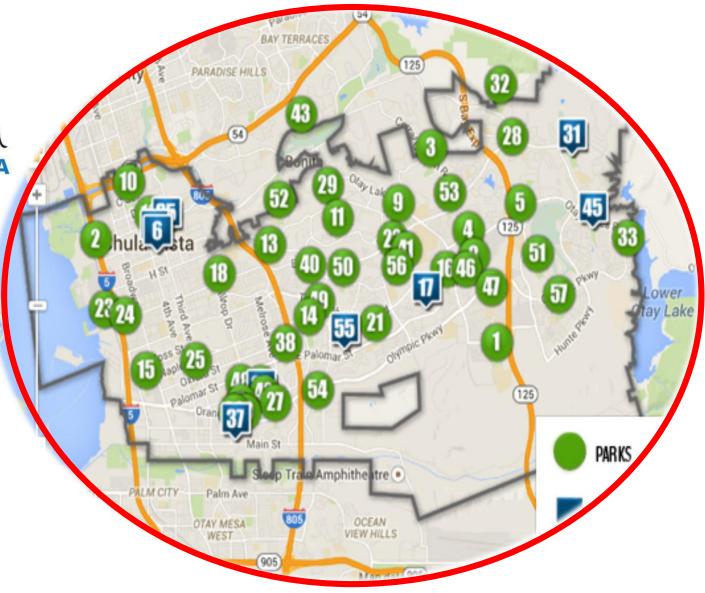








Valuation and Recommendation for controllers on City Parks, Fire Stations, Libraries and Median Strips

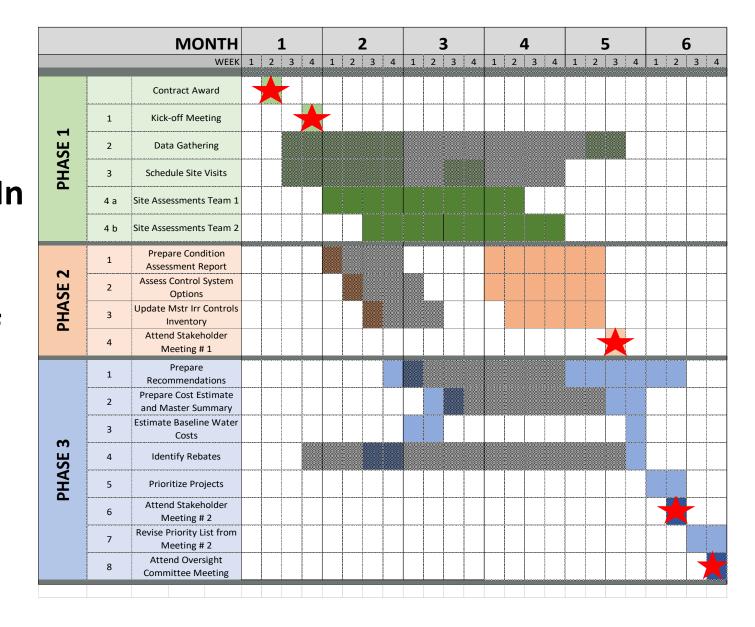


**City of Chula Vista Parks and Recreation Map** 

CITY OF CHULA VISTA **CITY-WIDE SMART IRRIGATION SYSTEM** 



Expedite schedule to complete In 6 months to take advantage of rebates





### APPROACH AND METHODOLOGY

#### Phase I

- 1. Site Assessments:
  - 1 or 2 teams of 1 irrigation assessment specialist, 1 assessment recorder and a knowledgeable city maintenance staff member (certified recycled water site supervisor).

### Phase 2

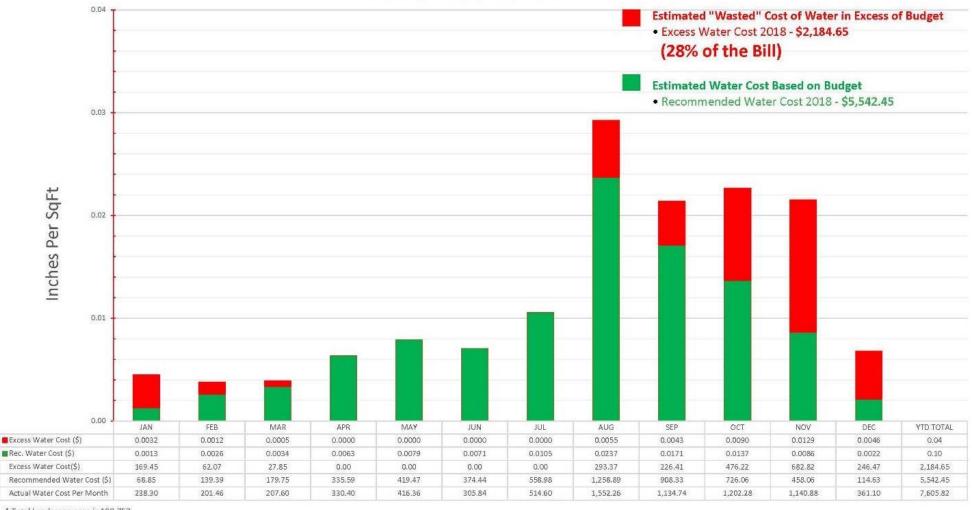
- 1. Prepare condition assessment report.
- 2. Assess control system options and recommendations.
- 3. Update Master Irrigation Controls Inventory.
- 4. Attend Stakeholder Meeting # 1.

### **APPROACH AND METHODOLOGY**

#### Phase 3

- 1. <u>Prepare biddable specifications</u> for repair, renovation, retrofit and/or installation of controllers, master-valves, flow meters & pumps.
- 2. Prepare cost estimates and master summary.
- **3. Estimate baseline water costs**, future water use and potential water savings, if any. (How is this affected by water budgeting?)
- 4. Identify rebates.
- 5. Prioritize projects.
- 6. Attend Stakeholder Meeting # 2.
- 7. Revise priority list per direction from Stakeholder Meeting # 2.
- 8. Attend Oversight Committee Meeting.

# **ESTIMATED BASELINE WATER COSTS**



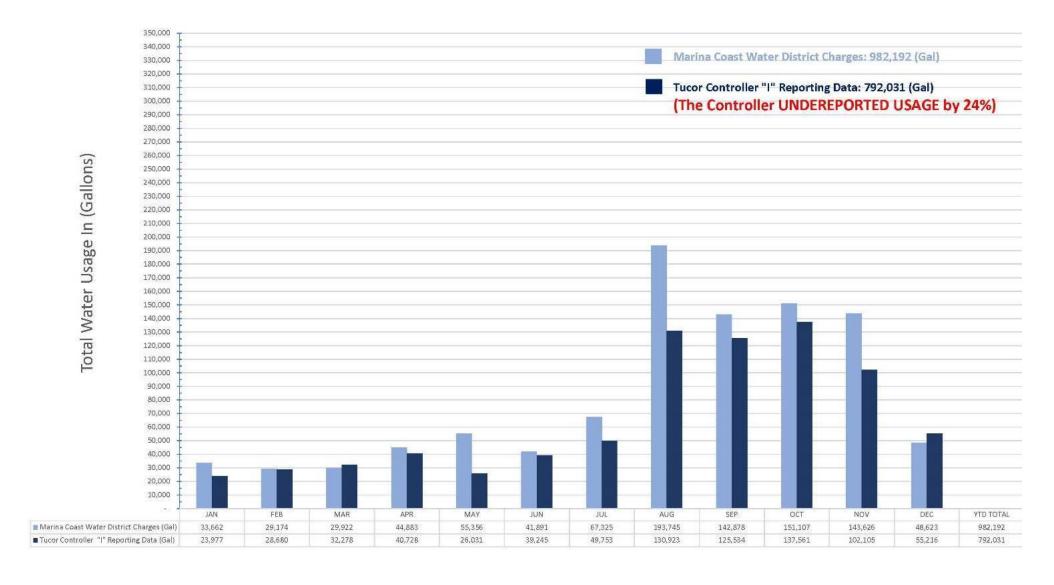
<sup>\*</sup> Total Landscape area is 190,757

CITY OF CHULA VISTA

CITY-WIDE SMART IRRIGATION SYSTEM



# Water Meter vs. Smart Controller Comparison



# PRIORITIZE PROJECTS

- 1. Identify locations where **maximum water savings** can be achieved.
  - Facilities where <u>no</u> smart controller currently installed.
  - Facilities where smart controller require <u>upgrading</u>.

(May not all be the same manufacture)

- 2. Identify locations where smart controller currently working and connected.
  - No need to expend \$\$ on these.
- 3. Identify remaining locations where <u>upgrading and/or repair will</u> <u>result in additional savings</u>.