# This presentation premiered at WaterSmart Innovations

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#### Meet the Long Beach Water Department

Located 25 miles south of Los Angeles

500,000 customers in a 50 square mile service area

#### 90,000 water accounts

- 2/3 water used by residential
- 1/3 water used by commercial, industrial, and institutional

Operate and maintain 1,600 miles of water and sewer pipelines





#### "DIG" ging to a More Inclusive & Sustainable Long Beach

I. DAC & LI in Long Beach

2. Lawn to Garden Participation within DAC & LI

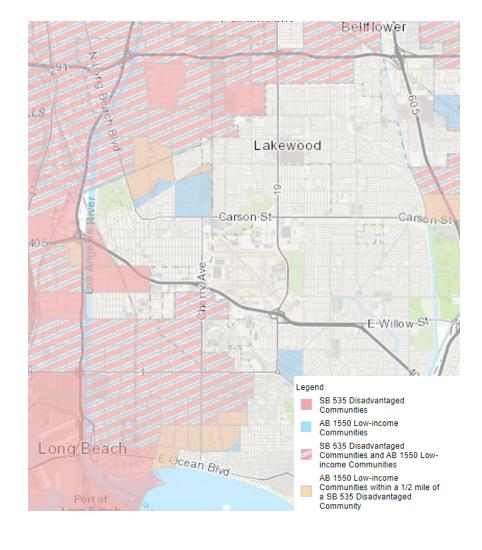
3. DIG Program and Process

4. Pilot Installations



### DAC & LI in Long Beach

- ➤ DACs-Typically communities are burdened by multiple sources of pollution and with population characteristics that make them more sensitive to pollution. Identified by (CalEPA)\* as the top 25% most impacted census tracts in CalEnviroScreen 3.0.
- Low Income- area at or below 80% of statewide median income or below the threshold established by the CA Dept. of Housing and Community Development
- Approximately 50% of the population of Long Beach resides in DAC & Low Income areas





#### Participation in TR Program – DAC & LI

- Disadvantaged Communities and Low Income Communities (DACs & Lls) have historically been underrepresented in incentive program
- Landscape projects require a large upfront investment.
- Lawn-to-Garden provides a dollar amount per square foot of turf lawn transformed into drought-tolerant landscaping <u>after</u> the project is completed.
- ➤ DAC & LI are an integral and large portion of the population whose participation in conservation programs is essential in making sustainability the Long Beach way of life.





#### **DIG Goals**





#### DIG Overview

- > DIG installs drought tolerant gardens and plants trees in those DAC & LI neighborhoods identified to be severely affected by environmental pollution.
- The DIG Program is sustainably and inclusively modeled with community capacity building at its core.
- Landscape installation and maintenance education would be completed by CCLB, an organization that provides job training and education to at-risk youth in the community.
- Each garden includes a storm water retention feature which mitigates flooding and ocean contamination by preventing storm water runoff.
- The program will install trees to promote carbon sequestration and contribute to the urban forest.
- ➤ DIG will increase DAC & LI participation in LBWD's L2G program though multi-lingual outreach, local garden examples and the multiplier effect.



#### Process

- I. Customer Applies
  - Income Verification
    - CA H&CD
  - Homeowner occupied
- 2. Pre-Assessment
  - Lawn & Irrigation
- 3. Design Selection
  - Template
  - Mediterranean,
     Groundcover, Native,
     Succulents
  - Modifications for scaling

- 4. Site Prep & Installation
  - By CCLB
  - Overseen by Designer

- 5. Periodic Maintenance
  - 6 month, I2 months and 24 months
  - Balance of support for homeowner and self sufficiency with maintenance



#### Funding & Partners

- Climate Ready Grant
- > \$236,388
  - ▶ Replace 25+ lawns in DAC homes qualified as Low Income by CA H&CD
  - Work with Conservation Corps of Long Beach
  - Plant 24 Coast Live Oak Trees

    Quercus agrifolia
  - >DAC track 06037570602
  - ➤ To be completed by Spring 2022

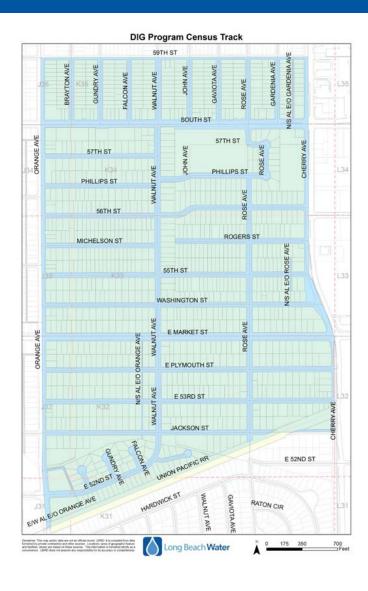








### Target Tract



- Located in North Long Beach
- Within the Coastal Los Angeles River Watershed and the Los Angeles River riparian corridor
- Total population: 6,695
- Approximately: I,000 homes
- Average Front Lawn Size
  - > 750 sq. ft. Non Corner Lots
  - > 1800 sq. ft. Corner Lots



#### DIG vs L2G

| Lawn-to-Garden                                   | Cost    |
|--|---------|
| \$3 per sq. ft. Front Yard: Average 1245 sq. ft. | \$3735  |
| \$2 per sq. ft. Back Yard: Average 925 sq. ft.   | \$1850  |
| Design Reimbursement                             | \$1500  |
| Average Total                                    | \$7,035 |

| DIG  | Cost       |
|--|------------|
| Design: Altered from Template                        | \$500      |
| Installation: Average 1000 sq. ft.                   | \$3915     |
| Materials: Equipment, Plants, Hardscape & Irrigation | \$3000     |
| Estimated Total                                      | \$7,415    |
| Estimated Cost to LBWD                               | \$3,707.50 |



#### **HOPE** Projects

- Between 2018 and 2019, LBWD conducted an initial pilot for the DIG program, and directly installed three drought tolerant landscapes at HOPE homes.
- Figure 3 Given the success of these installations, staff pursued grant opportunities to expand the pilot program.
- In December 2018, California Coastal Conservancy approved the LBWD DIG program for the Climate Ready Grant Round 5 awarding the program \$236,388 if matched by LBWD.







### **Cameron Property**







#### Cameron Property



After



## **Baltic Property**





Before After



## **Daisy Property**





Before After





## Thank You

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