This presentation premiered at WaterSmart Innovations

watersmartinnovations.com







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

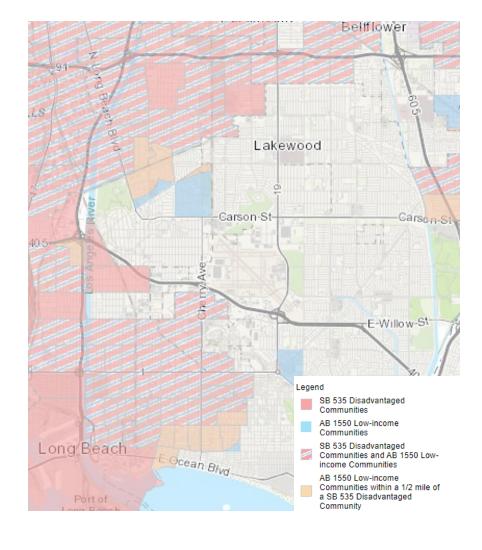
3. DIG Program and Process

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: 1,000 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.



First DIG installation



Cameron Property







Cameron Property



After



Baltic Property





Before After



Daisy Property





Before After





Thank You

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