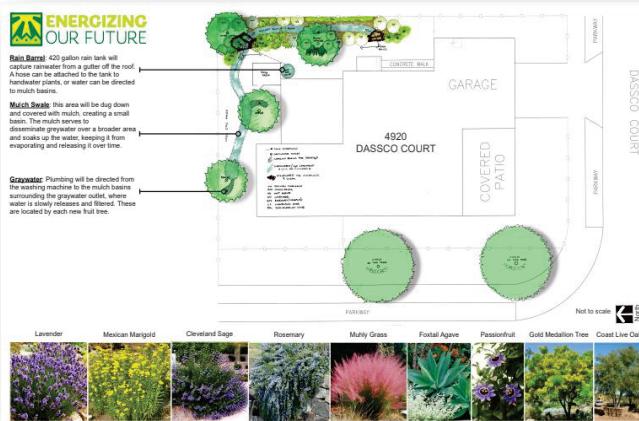


Groundwork
SAN DIEGO
Chollas Creek



Conservation Home Makeovers Chollas Creek Watershed

Projection Completion: September 5, 2018



Promoting Environmental, Economic, and Social Well-Being through Community-Driven Action



Project Objectives

Design and build drought, pollution, food insecurity, and climate change response/resiliency in SE San Diego.

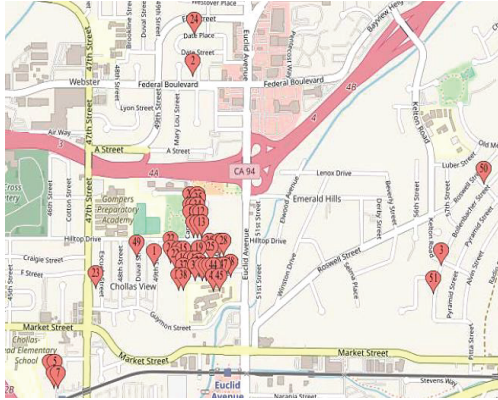


1 Outreach to Community

**2 Installation
Rain Barrel/Gutters
Greywater Systems
Waterwise Landscape
Conservation Retrofit Devices**



3 Education to Youth and Families



1 Outreach to Community

Encanto

(Disadvantaged/Underserved Community)

- **Program Information sent to over 1,000 Neighbors and Influencers**
 - ❖ Highlighted benefits to family on water conservation and “Home Makeover”
- **50 Families Enthusiastically Signed Up**
 - ❖ Water Survey assessed present knowledge and educated on Topic
 - ❖ Conservation Ambassadors: Hosted walking tours, neighborhood coffee stop, and workshops to display results and benefits to others.



2 Installation

Rain Barrels

- ❖ 50 Systems
- ❖ 450 – 800 gallon sizes





2

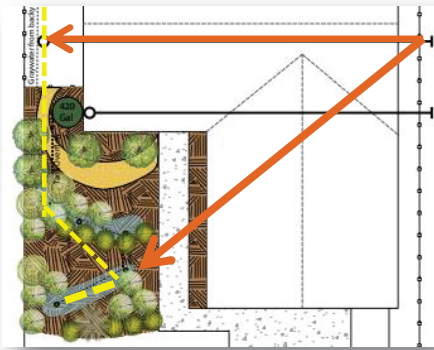
Installation



Greywater Systems

❖ 50 Systems

Greywater: Plumbing will be directed from the washing machine to the mulch basins surrounding the greywater outlet, where water is slowly released and filtered. These are located by each new fruit tree.



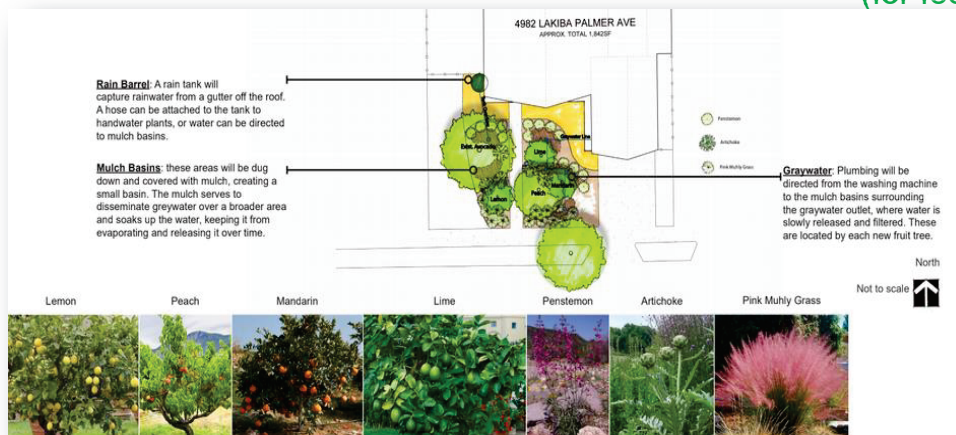
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Installation



Waterwise Landscape

- ❖ Removed Impervious Surfaces
- ❖ Installed Drought-Tolerant Plants- Bushes, Trees, and Fruit Trees (for food source)

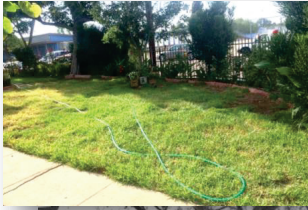


Improved Groundwater, Erosion and GHG sequestration



2

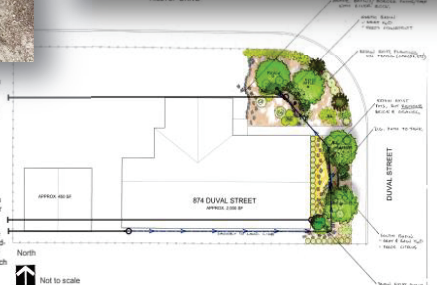
Makeovers



Mulch Basins: These areas will be dug down and covered with mulch, creating a small basin. The mulch serves to dissipate greywater over a broader area and soaks up the water, keeping it from evaporating and releasing it over time.

Rain Barrel: The rain tank will capture rainwater from a gutter off the roof. A hose can be attached to the tank to handwater plants, or water can be directed to mulch basins.

Graywater: Plumbing will be directed from the washing machine to the mulch basins surrounding the graywater outlet, where water is slowly released and filtered. These are located by each new fruit tree.



874 Duval St



2

Makeovers



ENERGIZING OUR FUTURE

Rain Barrel: 420 gallon rain tank will capture rainwater from a gutter off the roof. A hose can be attached to the tank to handwater plants, or water can be directed to mulch basins.

Mulch Basins: This area will be dug down and covered with mulch, creating a small basin. The mulch serves to dissipate greywater over a broader area and soaks up the water, keeping it from evaporating and releasing it over time.

Graywater: Plumbing will be directed from the washing machine to the mulch basins surrounding the graywater outlet, where water is slowly released and filtered. These are located by each new fruit tree.





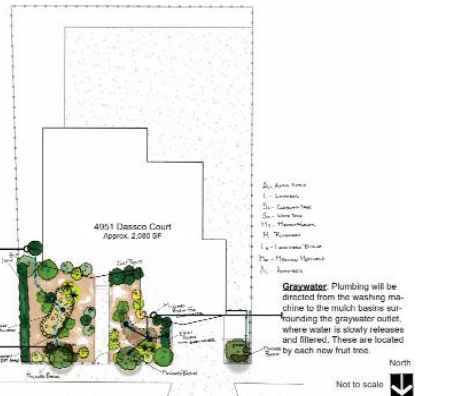
2 Makeovers



Rain Barrel: A rain tank will capture rainwater from a gutter off the roof. A hose can be attached to the tank to handwater plants, or water can be directed to mulch basins.

Mulch Basins: these areas will be dug down and covered with mulch, creating a small basin. The mulch serves to disperse graywater over a broader area and soaks up the water, keeping it from evaporating and releasing it over time.

Makeovers



2 Installation

Conservation Retrofit Devices

- ❖ Low Flush Toilets – 40 units
- ❖ Low Flow Showerheads- 30 units
- ❖ Faucet Aerators- 33 units





3 Education to Youth and Families

- ❖ **882 Students-** Trips to Earthlab and Homes
 - ✓ Pre/Post Lesson Evaluations = Informed on Conservation
- ❖ **Conservation Ambassador Activities**
- ❖ **Additional Outreach:** Newsletters, Social Media, Neighborhood Coffee Stops, Meetings and Presentations to Others



Value Added



Photovoltaics

➤ **6 Solar Installations Completed**

- No project funding used
- ~\$550/year Est Savings per Home

Recognition

- **SD Regional Climate Collaborative** (award nominee)
 - The Atlas Marketplace: Digital Showcase Best Practices in US

Forward Outreach

- **City of SD Sustainability Office & Public Utilities**
 - Low Income Areas: Best Practices for Outreach and Incentives



Project By The Numbers

Program Item	Outcome	Notes
Grant Funds	\$542,000	94% Spent on Construction and Implementation
<u>Water Captured</u>		
Rain Barrels	63,874 Gal	Amounts less than expected due to low rainfall in 2017/2018
Downspout (Additional)	32,583 Gal	
Earthworks Capture	134,705 Gal	
<u>Potable Water Savings</u>		Based on average use of washing machine (greywater), toilets (127,986 gal), shower heads (513,920 gal), aerators (90,520 gal).
Greywater Systems	382,200 Gal	
Low-Flow Plumbing	732,426 Gal	
CO2 Sequestration	96,894 lbs	Based on 30 years by trees planted
Impervious Surfaces Removed	66,941 sq ft	Stormwater runoff captured, improving groundwater and erosion control



Groundwork
SAN DIEGO
Chollas Creek

Thank You For Supporting Change



4964 Carolina Pl