

# Rain Catcher Pilot Program Overview

LCRA Water Quality Advisory Committee –  
8/25/2020



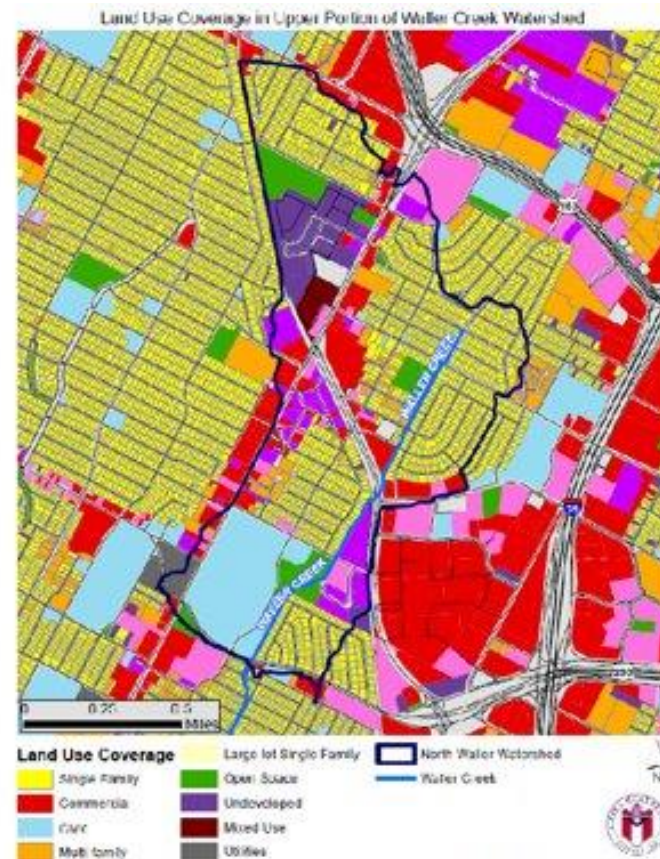
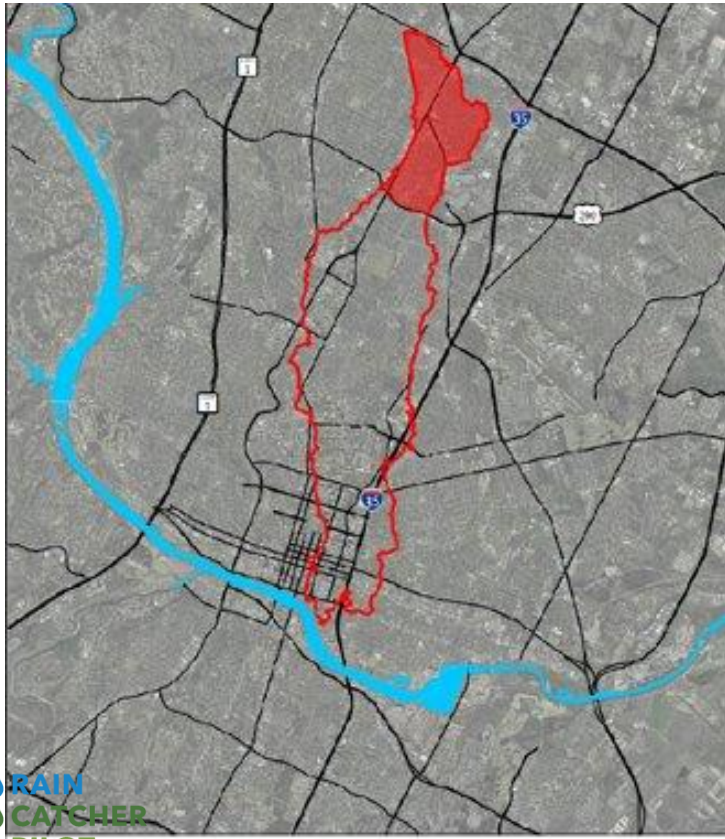
🌧️ RAIN  
🌧️ CATCHER  
🌧️ PILOT  
🌧️ PROGRAM

By: Jessica Wilson

# What happens if we retrofit a highly developed area to get water to soak into the ground?



# Pilot Program Area



## Upper part of Waller Creek watershed

- North Central Austin
  - Near Koenig, Lamar, 183, Airport Blvd
- 2.8 square kilometers
- 47% impervious cover
- Heavily Residential

Public Property

# Demonstration Projects

- Reilly Elementary School
- Highland Park – Reznicek Field Water Quality Retrofit
- West Skyview Neighborhood Partnering Program
- Traffic Calming Triangles



Public Property

# Demonstration Projects

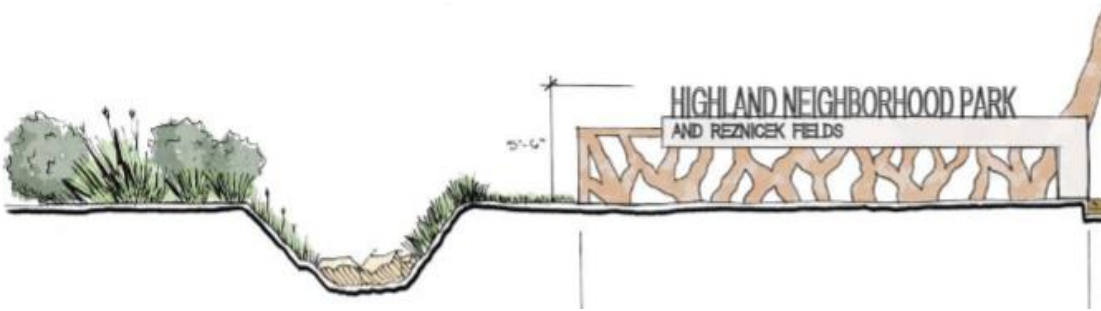
- **Reilly Elementary School**
  - 12 cisterns
  - 5 rain gardens
  - 76K square feet of impervious cover
  - 621K gallons of water infiltrated annually
  - Programming by Partners for Environmental Awareness



# Public Property Demonstration

## Projects

- Highland Park – Reznicek Field Water Quality Retrofit
  - Meadow to capture rainwater from 76 acres of roads and rooftops around the park
  - Drainage area has 72% impervious cover
  - Continuing to look for opportunities for

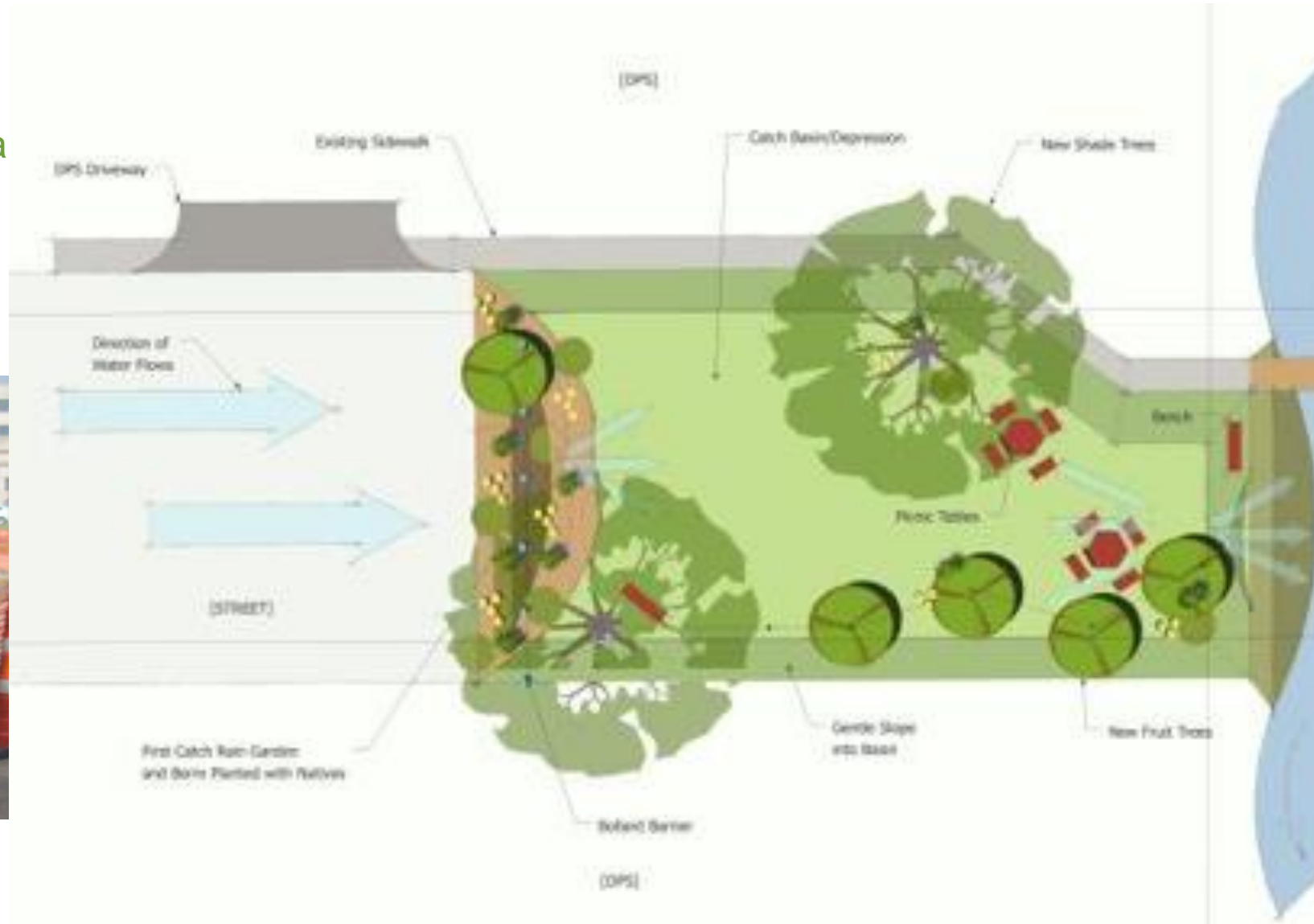


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# Public Property Demonstration Projects

- West Skyview
  - Initiated by neighbors via the Neighborhood Partnering Program
  - De-paved a dead-end street
  - City construction complete
  - Opportunities for more native plants



# Public Property Demonstration

## Projects

- Traffic Calming Triangles
  - Meadowview Triangle
    - West Crestland Drive & Meadowview Lane
    - 83K gallons of water infiltrated annually 
  - Crestland Triangle
    - West Crestland near North Lamar
    - Not pursuing due to low infiltration rates





# Private Property

- Residential Incentive Package
- Initial results
- The Pacific Institute
- The Nature Conservancy
- Upcoming Behavioral Study
- WPD QAPP's



# Residential Incentive Package



**One hour site assessment and design recommendations.**



**Urban Patchwork will streamline the design, installation, and payment processes for program participants.**



- **Reduced drainage charge**
- **Existing Rainwater Harvesting and Rainscape Rebates**
- **\$1,000 per tree with passive irrigation system.**
- **PLUS an additional \$1 per gallon.**

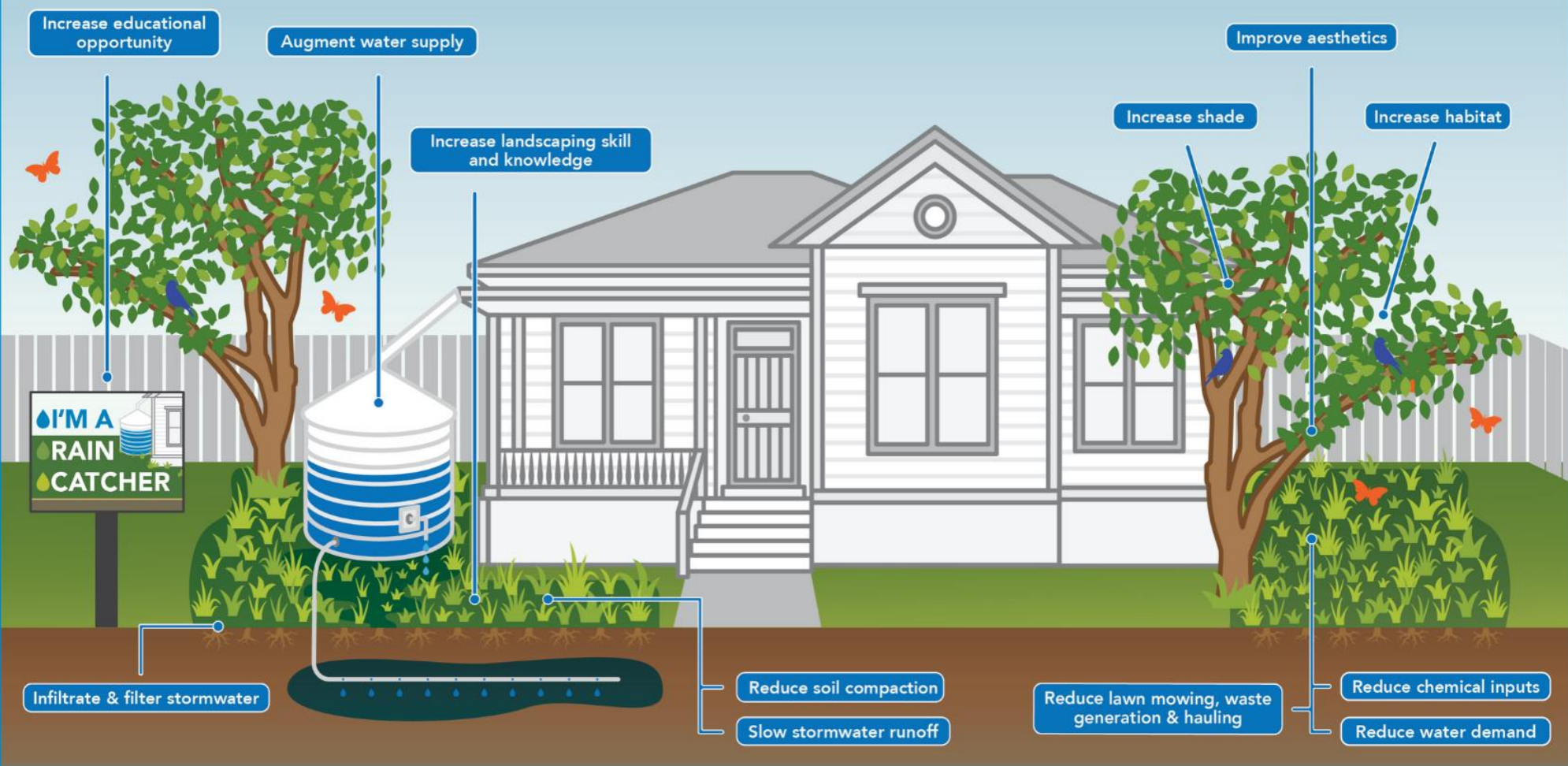
# Residential Incentives

## INITIAL RESULTS

- **Phase 1**
  - Offered to 25 Properties
  - 2 fully installed
  - 6 expressed interest (*2 of those would need more incentives to participate*)
  - 8/25 = 32% expressed interest
- **Phase 2**
  - Offered to 448 Properties
  - Later roll out than anticipated & modification due to Covid-19
  - Letters mailed out early July 2020
  - 44 interested so far
    - 40 from Phase 2
    - 4 from future Phases
  - 8.9 % expressed interest

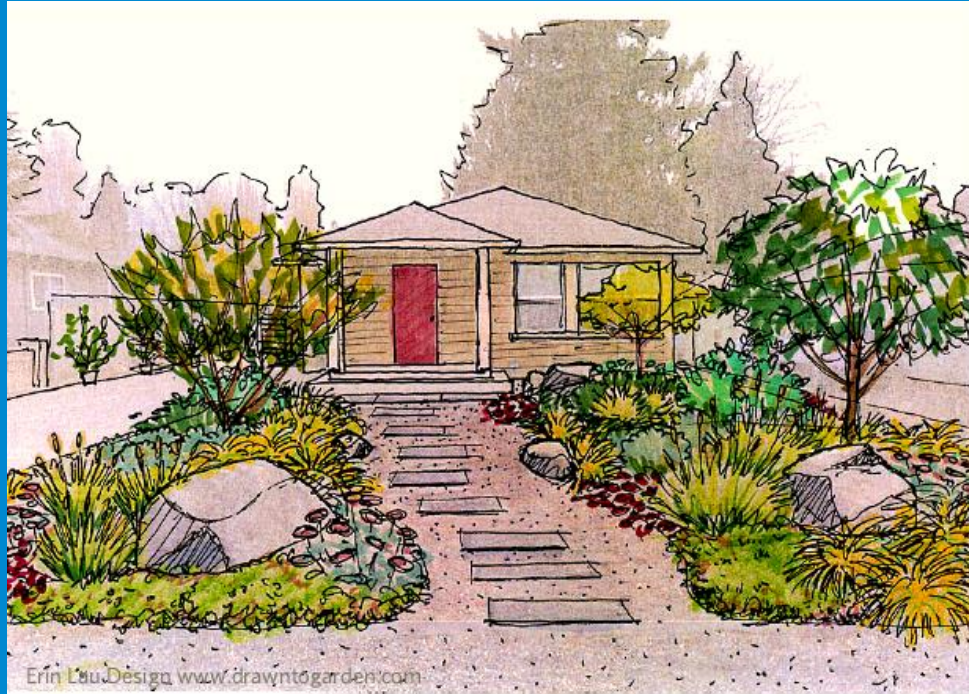


# Pacific Institute Multiple Benefits Case Study



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# The Nature Conservancy Behavioral Nudge(s)



Erin Liu.Design www.drawntogarden.com

SKYVIEW  
NEIGHBORHOOD  
RESIDENTS

Tell us about  
**nature in your yard  
& neighborhood**





# City-wide Behavioral Study

## High Level Details

- Examine attitudes about pro-environmental behavior by demographics across the City
- Informed by the smaller scale Rain Catcher Pilot Program
- City-wide study & will include equity lens and gathering feedback from community members in all 10 council districts, demographics that align with the city-wide demographics, Community Assistance Program participants, and more.
- ~ 2 years
- Will include Structural Equation Modeling and Agent Based Modeling to predict attitudes and nudge pro-environmental behavior through focused Education & Outreach efforts in any neighborhood in the City.

# Quality Assurance Project Plans (QAPPs)

- Sewershed Study
  - Impact of distributed small scale gsi on flow and soil moisture at a small-catchment scale
- Cistern Study
  - 3 different passive drawdown methods
  - Runoff capture efficiency
  - Soil infiltration dynamics
- TNC Behavioral Nudge
- Rain Garden Infiltration (in development)
  - Does infiltration rate change over time & with different vegetation management?



# More Info & Contacts

- **General & Residential Pilot Program**
  - Jessica Wilson, [Jessica.Wilson@austintexas.gov](mailto:Jessica.Wilson@austintexas.gov)
  - 512-974-2446
- **Environmental Studies & Public Demonstration Projects**
  - Mateo Scoggins, [Mateo.Scoggins@austintexas.gov](mailto:Mateo.Scoggins@austintexas.gov)
  - 512-974-1917
- **Upcoming Behavioral Study**
  - Abel Porras, [Abel.Porras@austintexas.gov](mailto:Abel.Porras@austintexas.gov)
  - 512-974-2811
- **Useful Links**
  - [www.austintexas.gov/RainCatcherPilot](http://www.austintexas.gov/RainCatcherPilot)
  - [www.RainCatcherAustin.org](http://www.RainCatcherAustin.org)
    - [instagram.com/raincatcheraustin](https://www.instagram.com/raincatcheraustin)
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