



# Best Practices Development Guide *for* The City of Goodyear

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# Agenda



- Problem and Task
- Process and Discovery
- Our Suggestions:
  - +Proposed Standards
  - +Public Awareness Campaign
  - +Proposed Incentives
- Possible Resources and Revenue



# The Problem & Assigned Task

- ✦ Unsustainable/Excessive water use within the city.
- ✦ Create list of Recommendations/Set of standards for “best practices” targeted at Developers





# Our Process

- ✦ **Stakeholder Meeting:** Mark Holmes, Phone and In-Person
- ✦ **Site Visit:** Public Spaces and Neighborhoods
- ✦ **Online Researched:** Documents from the Goodyear and other scholarly articles
- ✦ **WaterNow Summit:** Attended and met with Municipal Water Leaders about Innovative and Affordable Water solutions



# Basic Discoveries

- ✦ 60-70% of water use goes towards outdoor landscaping
- ✦ Currently: No turf removal program/ Landscaping Preference/Suggestion from the City
- ✦ Currently: No targeted approach to water conservation
- ✦ Popular support for the Preliminary Tree Plan





We propose going after three different targets

Developers

Individuals

Neighborhoods



# Suggested Set of Standards

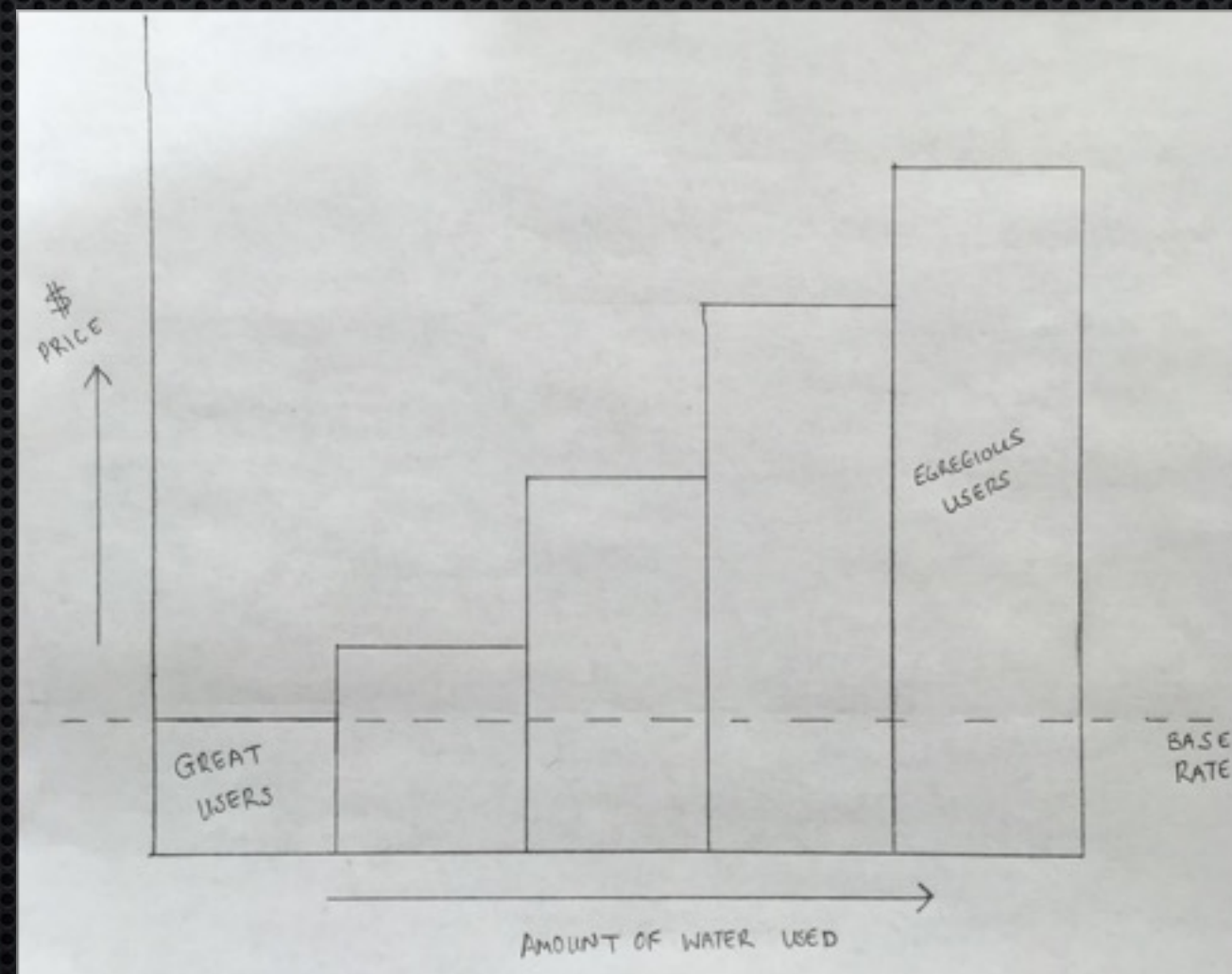
## The Target: Developers

- ✦ Platinum: <1% or Zero Augmented Water (Storm Water Capture)
- ✦ Gold: 10% of Lowest Water Use
- ✦ Silver: >10%-25% of Lowest Water Use
- ✦ Bronze: >25%-50% of Lowest Water Use
- ✦ +50% non certificate-holder





- ✦ **Existing Development:** Less water through bracket tier system
- ✦ **New Development:** Xeriscaping on all new developments or raise rates on turf coverage





# Launch Public Awareness Campaign

The Target: Individuals

- ✦ A handful of Powerful Quotations and a #hashtag
- ✦ Change the Functional Unit -> Water bottles
- ✦ Measure it to Manage it and Gentle Shaming 😊 😞



# Make it Fun with Tangible Rewards

Target: Neighborhoods

- ✦ **Cash For Grass Program:** \$ per square foot of turf removed and discounted rate for xeriscape transition
- ✦ **Neighborhood with least total water** use gets rewards towards “their” (inferred ownership) park

*\*Preliminary Tree plan comes in here!\**



# Preliminary Tree Plan

- ✦ Vast majority want more trees
- ✦ Can save \$\$\$ and more than double return on investment
- ✦ Many more societal benefits



Black Brush Acacia



- ✧ Most effective form of shade coverage
- ✧ Combats UHI Effect
- ✧ Increases walkability
- ✧ Reduced Soil Erosion



Foothills Palo Verde

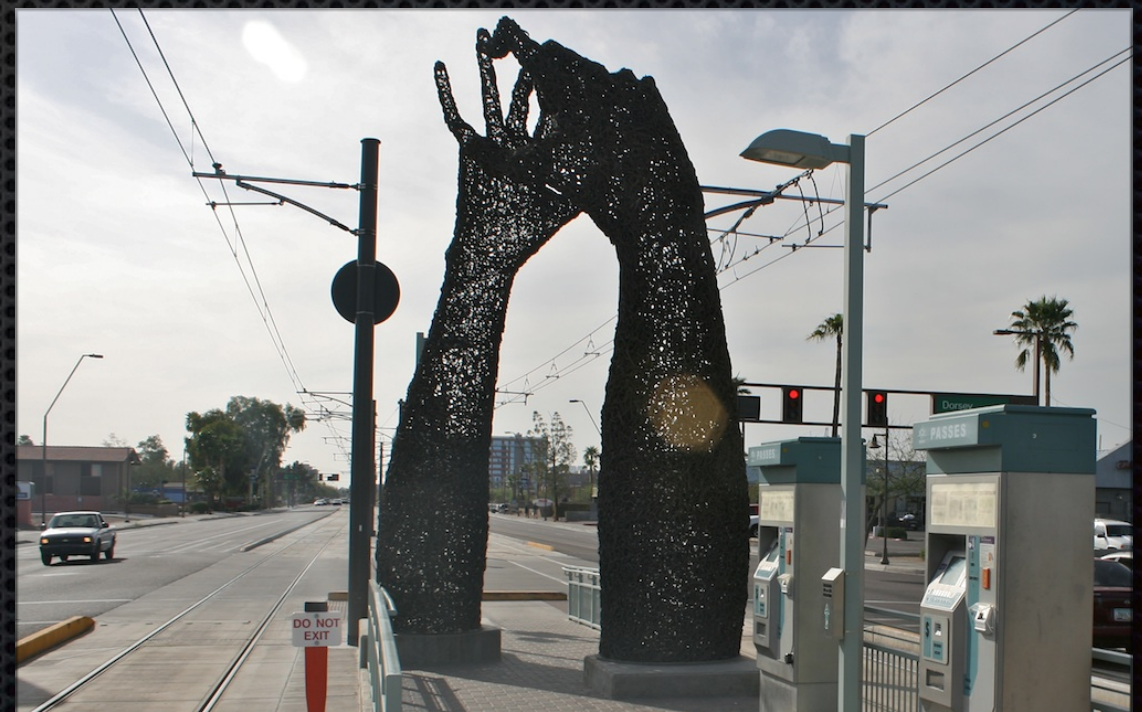
*Water saved can be relocated to the tree project and still have a lower net water use through smart tree management*



Blue Palo Verde



Actual park in Goodyear



3D shade structure (Tempe)



# Potential Resources and Opportunity

- ✦ **The Water Index:**  
Produces scorecards on the water resilience of cities and towns in the Southwest
- ✦ **The New Arizona Prize:**  
*Water Innovation Challenge*  
(\$250,000 Available)





- ✦ **Financing**  
**Sustainable Water:**  
Alliance for Water  
Efficiency



- ✦ **WaterSmart**  
**Software:** Connecting  
Utility Data to External  
Data





# Thank You

And  
Good Luck!

