

# This presentation premiered at WaterSmart Innovations

[watersmartinnovations.com](http://watersmartinnovations.com)





**moulton niguel** water district

# Direct Install Turf Replacement Program: Changing an Old Concept

Elaina Hurst – Water Efficiency

# Moulton Niguel Water District

- Water, recycled water & wastewater services to around 170,000 people and 65,000 connections
- 14 billion gallons average annual demand
- 28 Potable water reservoirs
- 12 Recycled water reservoirs
- 700 miles of potable water pipelines
- 148 miles of recycled water pipelines
- 537 miles of sewer pipelines

***Serving five south Orange County cities in California:***

- 1. Aliso Viejo**
- 2. Dana Point**
- 3. Laguna Hills**
- 4. Laguna Niguel**
- 5. Mission Viejo**





# Orange County Turf Removal Program

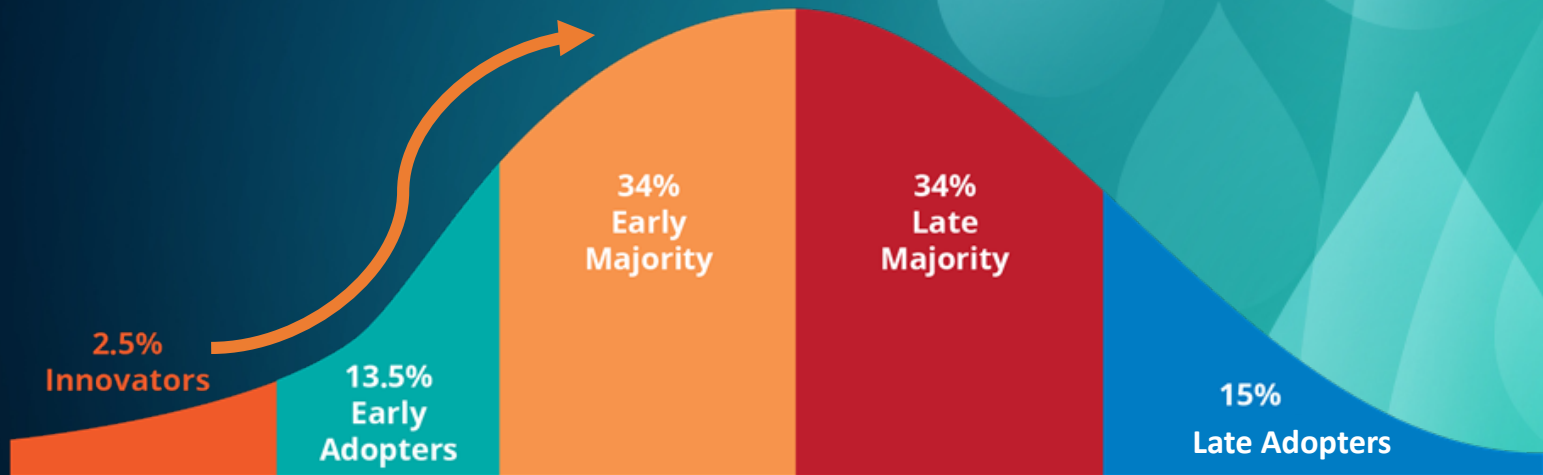


- Participating in program since 2011
- 5 million square feet of turf removed
- 2,477 Residential and 268 Commercial Rebates
- Do-It-Yourself Approach
- Quality Control Measures
- Submit Project Receipts
- Customers wait for rebate check



# Need Landscape Market Transformation

- Turf replacement neighborhood effect
- IRWD study shows 1 : 2 ratio (rebate : no rebate)
- Opportunities still available to the District
- Support market transformation with quality landscapes



# MNWD Demand Management Approach

- Using market research for program development
- Incorporate educational elements
- Iterative, measured approach
  - Focus on pilots
  - Proof of Concept/Effectiveness
  - Responsible with Public Funds





# UC Riverside Study Findings

- UCR reviewed rebate and consumption data
- Online survey in October 2016
- Focus on outdoor programs
- Customers want easy programs
- Annual average savings of 45.7 gallons per ft<sup>2</sup>



# Increasing Participation

## Removing barriers to participation

- Care & maintenance of new landscapes
- Plant, designer, & contractor selection
- Receipt management
- 10-12 week wait for rebate check





# Multi-Benefit Landscapes

- Watershed Quality Improvements
  - Reduce dry weather runoff
  - Keep stormwater on-site
  - Mitigate impact to streams and ocean
- Regionally native plant species
  - Climate appropriate
  - Requires more customer education
  - Requires knowledgeable contractors



# Design of Pilot Program

- Residential Landscape Workshop (District Pays)
- Pre-Qualifying Irrigation & Site Assessment (District Pays - \$175)
- Landscape Design (50/50 cost share – Total \$550, District pays \$275)
- Turf Removal
- Landscape Installation (\$2/sqft rebate applied upfront as discount)
- Post-Installation Site Assessment (90 days after, customer pays)
- Administered by Program Manager within Contractor Network





# Pilot Direct Install Turf Replacement Program

## Residential Landscape Workshop (District Paid)

- Regionally native plant species
- Care & maintenance of natives
- SoCal climate
- Watershed Wise
- Healthy soils
- Irrigation





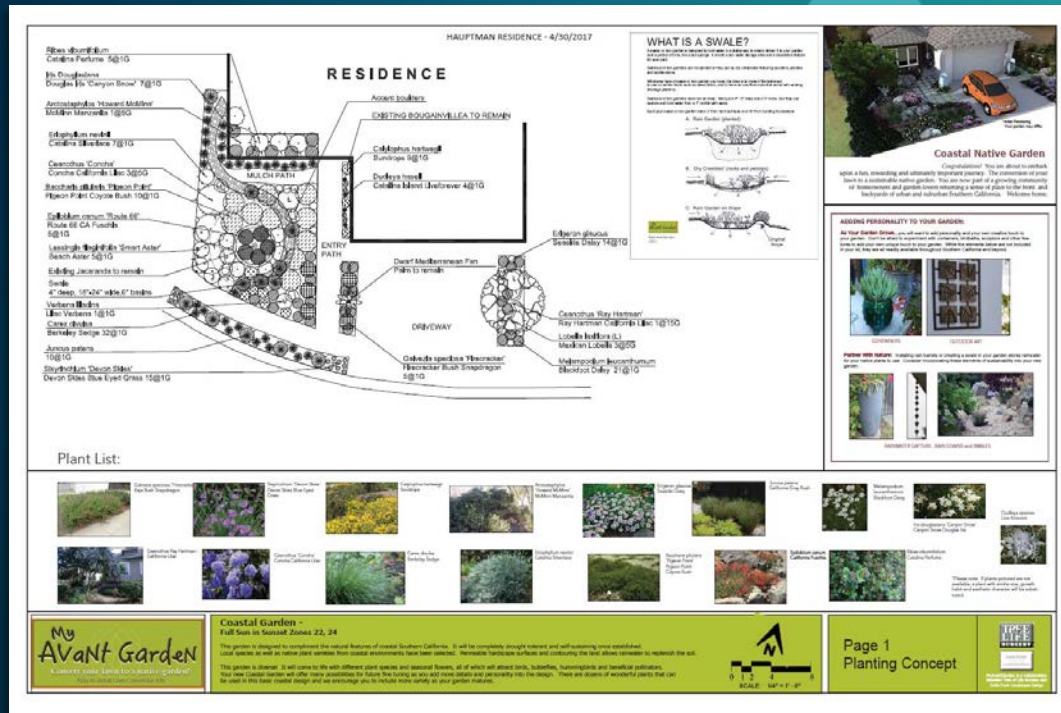
# Pilot Direct Install Turf Replacement Program

- Pre-Qualifying Irrigation & Site Assessment (District Paid - \$175)
- Non-refundable deposit on design (\$275)



# Pilot Direct Install Turf Replacement Program

- Landscape Design
- Customer signs Contractor agreement  
(50/50 cost share – Total \$550, MNWD pays \$275)





# Pilot Direct Install Turf Replacement Program

- Turf Removal
- Landscape Installation





# Pilot Direct Install Turf Replacement Program

- Post-Installation Site Assessment
- Customer questions and education



A screenshot of the Moulton Niguel Water District website. The header features the Moulton Niguel Water District logo on the left, which includes a stylized 'm' and the text 'moulton niguel water district'. To the right of the logo is a 'Translate' button. Further right is a 'Select Language' dropdown menu with a flag icon. Below the header is a navigation menu with the following items: Home, About Us, Services, Rates, Contact Us, and a link to 'View All'. The main content area below the menu is currently blank.



**moulton niguel**  
water district

## Turf Replacement Pre-Qualifying Audit

Submitted On: September 25th, 2017 @ 8:09am

Submitted By: Elaine Hurst

Inspection Date	June 01, 2017
Full Name	Bob McTester
Account Number	22022
Service Address Street Number and Name	22 Drought Street
City	Laguna Niguel
Zip Code	92677
Phone Number	949-555-8989
Email	test@test.com
plugin_uboiCi	Customer Signed Particip
Total landscape area (sqft)	927
House isolation valve present	No
Irrigation isolation valve present	No
Number of active irrigation valves in front yard	2
Solenoids in good condition	Yes
Dominant sprinkler type in front yard	Spray

Dominant soil type in front yard	Clay loam
Dominant landscape type in front yard	Turf grass Shrubs
Overall irrigation system condition (1 being excellent, 5 being terrible)	3
Quallified turf area to be removed (sqft)	964
Attach 3-5 photos of the turf grass that is to be removed.	<a href="https://s3.amazonaws.com/attachments/2FC017041000025896256%2Ftest%20PreQualifyingAudit_19525-Before+C.jpg">https://s3.amazonaws.com/attachments/2FC017041000025896256%2Ftest%20PreQualifyingAudit_19525-Before+C.jpg</a>
Number of irrigation zones in turf replacement area	2
Mixed sprinkler heads present in turf replacement area	Yes
Irrigation system and site details	Rachis system. All spray, overspray, spraying too far, mixed nozzles.
Current state of LEFT neighbor's landscape (when facing the house)	Hardscape
Attach a photo of LEFT neighbor's landscape	<a href="https://s3.amazonaws.com/attachments/2FC017041000025896256%2F15ySpLxvP4H4yBx8HGG_IMO_0060.JPG">https://s3.amazonaws.com/attachments/2FC017041000025896256%2F15ySpLxvP4H4yBx8HGG_IMO_0060.JPG</a>
Current state of RIGHT neighbor's landscape (when facing the house)	Hardscape
Attach a photo of RIGHT neighbor's landscape	<a href="https://s3.amazonaws.com/attachments/2FC017041000025896256%2F4yH4pCpJ2XWwBzGfHs_McCabeOvergray1.JPG">https://s3.amazonaws.com/attachments/2FC017041000025896256%2F4yH4pCpJ2XWwBzGfHs_McCabeOvergray1.JPG</a>
Current state of neighbor's landscape ACROSS the street	Low water use
Attach photos of neighbor's landscape ACROSS the street	<a href="https://s3.amazonaws.com/attachments/2FC017041000025896256%2F9hX9XG2NRYqhgQ7m6G2_shubertback_422078516-%2B17%2B.jpg">https://s3.amazonaws.com/attachments/2FC017041000025896256%2F9hX9XG2NRYqhgQ7m6G2_shubertback_422078516-%2B17%2B.jpg</a>
Checkbox:Radio Group	Customer signed Pre-Qualifying Audit Form.
Checkbox:Radio Group	Customer completed W9 (when area greater than 295 sqft)
Checkbox:Radio Group	Deposit collected from customer
Date of deposit collection	June 01, 2017



# SeamlessGov Form and Workflow Manager

Administered by Program Manager within Contractor Network

**Moulton Niguel Water District** Submit Elaine Hurst

**Citizen Adjustment Form** Private Search... Filter

Create Revised New Conversation

12 All Received Pri-approved Approved Final Review: Pending Final Review: Back in budget Batched

Submitted On	Record	Signature Status	Tags	Assign	Translate	Add Image	Full Name	3 Digit Account Number	Phone Number
Thu Aug 31 2017		no signers	Received	Add...			Tony McTeater	56555	949-886-8585
Thu Aug 31 2017		no signers	Received	Add...			Katie Piane	02836	949-555-1111
Thu Aug 31 2017		no signers	Pri-approved	Elaine Hurst	Add...		Mary Jane Paul	80372	949-555-1234
Thu Aug 31 2017		no signers	Pri-approved	Elaine Hurst	Add...		Jamie Joplin	11043	949-397-8114
Thu Aug 31 2017		no signers	Final Review: Pending	Gregg Piroper	Add...		Carol Lee	93745	949-555-4321
Thu Aug 31 2017		no signers	Batched		Add...		Emily Wagner	44771	949-717-9772
Thu Aug 31 2017		no signers	Pri-approved	Shane Kemp	Add...		Shirley Archer	29112	691-294-549
Thu Aug 31 2017		no signers	Final Review: Back in budget		Add...		Brook Oberoma	81392	326-790-2388
Thu Aug 31 2017		no signers	Approved		Add...		Ernest Greene	45372	959-234-1334
Thu Aug 31 2017		no signers	Approved		Add...		Steven Glensburg	24134	878-778-9977
Thu Aug 31 2017		no signers	Final Review: Pending	Lindsay Sharck	Add...		Joe Smith	12845	444-444-4444
Thu Aug 31 2017		no signers	Batched		Add...		Ann Thai	12345	123-456-7890

**Stages**

- Received  
Approved by: Elaine Hurst  
08:32 August 31, 2017
- Pri-approved  
Approved by: Elaine Hurst  
08:32 August 31, 2017
- Approved  
Approved by: Elaine Hurst  
09:32 August 31, 2017
- Final Review: Pending  
Pending Approval  
Approve
- Final Review: Back in budget  
Approved by: Elaine Hurst  
08:32 August 31, 2017
- Batched  
Approved by: Elaine Hurst  
08:32 August 31, 2017



# Contractor Network and Program Management

- Required C-27 Landscape Contractor
- Subcontracted with Designer and Turf Removal contractor
- Created Program Manager function (Designer)
- Agreement configuration was determined by licenses





# Transformations





# Transformations





# Program Comparison

Orange County Partnership	VS	Direct Install Turf Replacement
Do-it-yourself		Vetted contractor Network
Do-it-yourself		Landscape Design with cost share
Rebate after install		Upfront discount No keeping receipts
Educational Website Optional to attend workshop		Owner must attend Workshop In-person consultation 90-Day Follow-up consultation
California Friendly or Artificial Turf or Gravel with a few plants		Regionally native plants Incorporating watershed-wise design

# Lessons Learned

- Education essential to success
- Provide customer with expected costs
- Legal elements – prevailing wage and bonding
- Modified program limitations
- Develop a clear workflow





# Full Scale Direct Install Turf Replacement Program

- Holding an internal contest to select a market-ready name
- Pre-solicitation survey to 300 OC Contractors
- Request For Proposal Process
- Will run concurrently with regional turf removal program
- Developing dedicated turf replacement website
- Ready to launch in late Fall



# Contact Us

ELAINA HURST  
ehurst@mnwd.com  
Water Efficiency Team  
949-448-4025

www.mnwd.com  
27500 La Paz Road Laguna Niguel, CA 92677