

# This presentation premiered at WaterSmart Innovations

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COLLEGE OF AGRICULTURE  
AND LIFE SCIENCES

COOPERATIVE EXTENSION  
Maricopa County

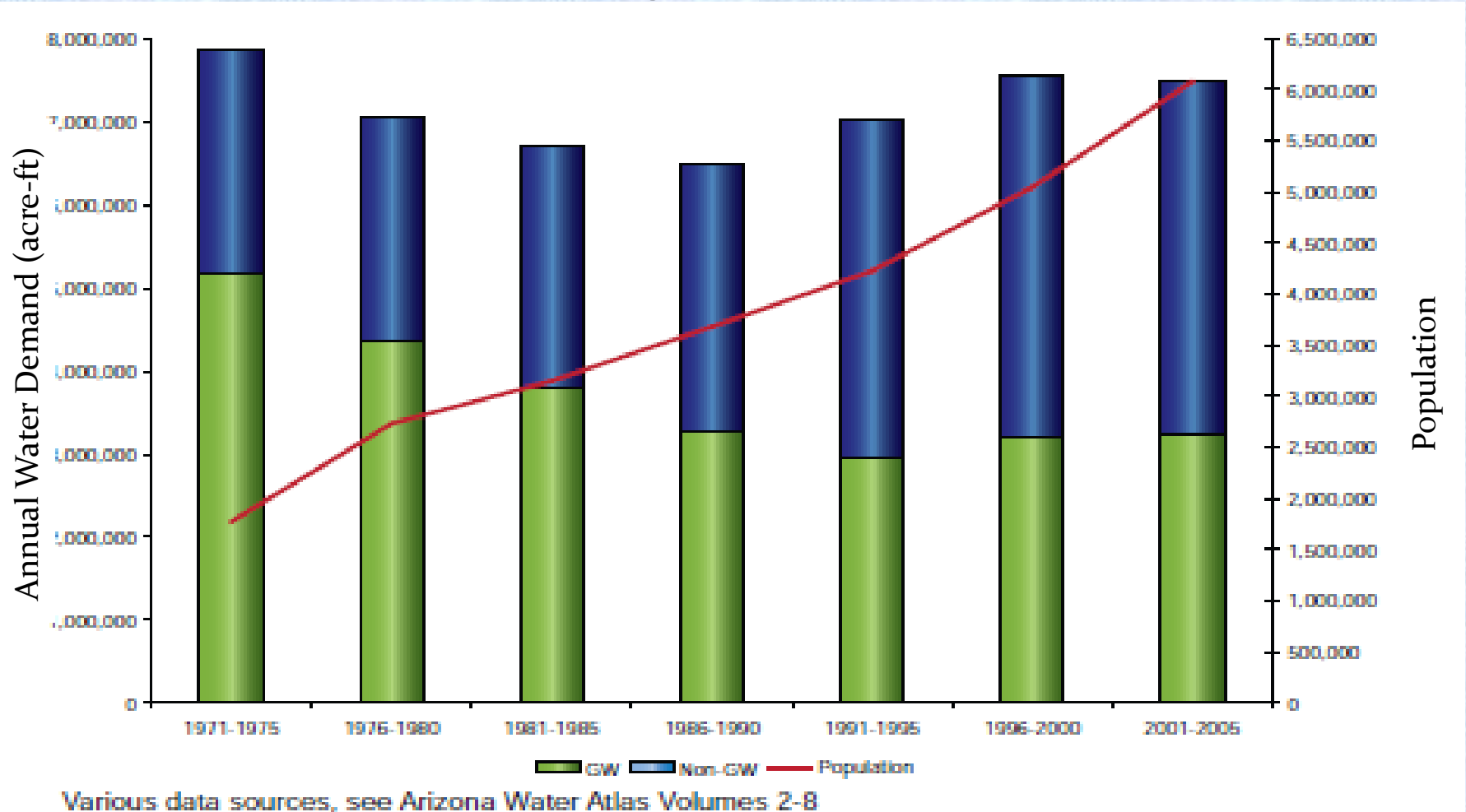
# Linking Landscape Professional Training to Water Conservation - 20 Years of Smartscape

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# Arizona's Population and Water Demand

## Comparison of Arizona's Average Annual Demand vs. Population



# Arizona Residential Use

- About 25% of the water supply is for municipal use.



**As much as 70% of residential water use may be used outdoors (landscaping, pools, etc.)**



# Smartscape

- For landscape professionals
- 2 courses per year
- 20 hours of training
- 8 classes per course
- Smartscape certification
- International Society of Arboriculture (ISA) CEUs



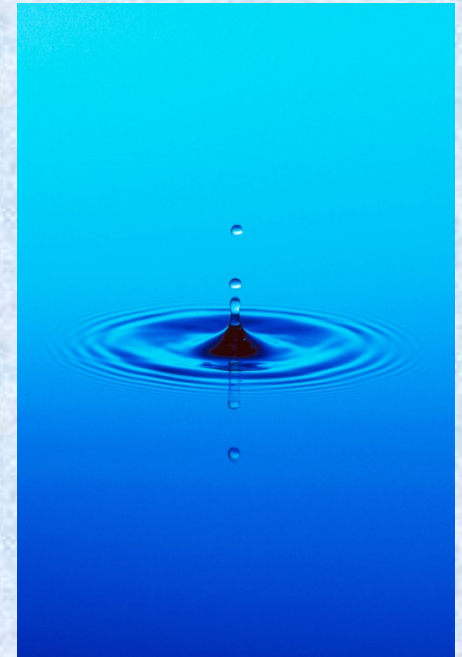
# The Driving Force Behind Smartscape

- Educating landscape Professionals regarding the critical role they play in the efficient use of water resources.
- Reversing groundwater dependence.



# Arizona's Outdoor Water Conservation Efforts

- AZ leader in water management
  - Groundwater Management Act (1980)
- Collaboration of municipalities to send collective message of water conservation
- Adopting desert adapted landscapes and improving exterior water use efficiency
- Ensuring there is affordable, quality training
  - SMARTSCAPE!!





# History of Smartscape

- Developed in the early 90s
- Groups who were involved: Tucson Water, Arizona Municipal Water Users Association (AMWUA), University of Arizona Cooperative Extension, ANA, ALCA, & Green Industry Representatives
- Smartscape Program launched in 1994 in Phoenix and Tucson

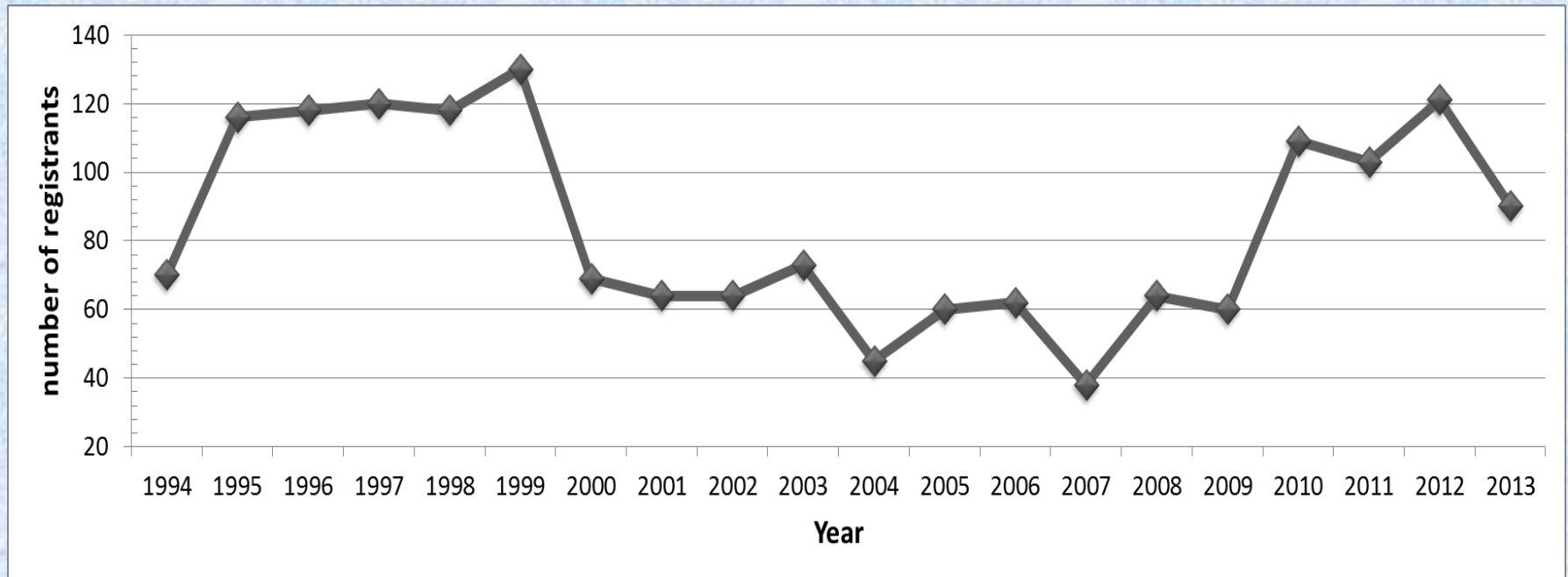


# 20 Years of Smartscape

- Program was unique and first of its kind in 1994
- Developed collaboratively
- Much of the green industry has embraced the program
- More than 1360 graduates

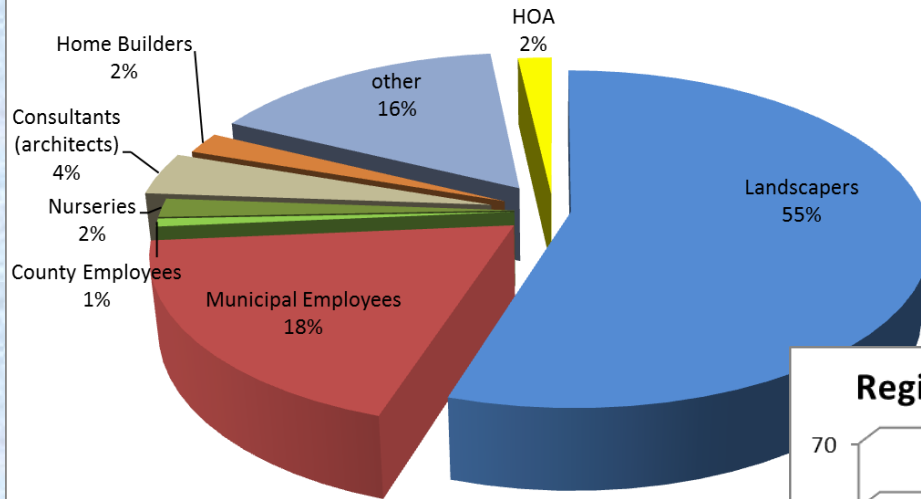
# Number of Registrants (1994 – 2014)

**Total Number of Registrants Per Year**

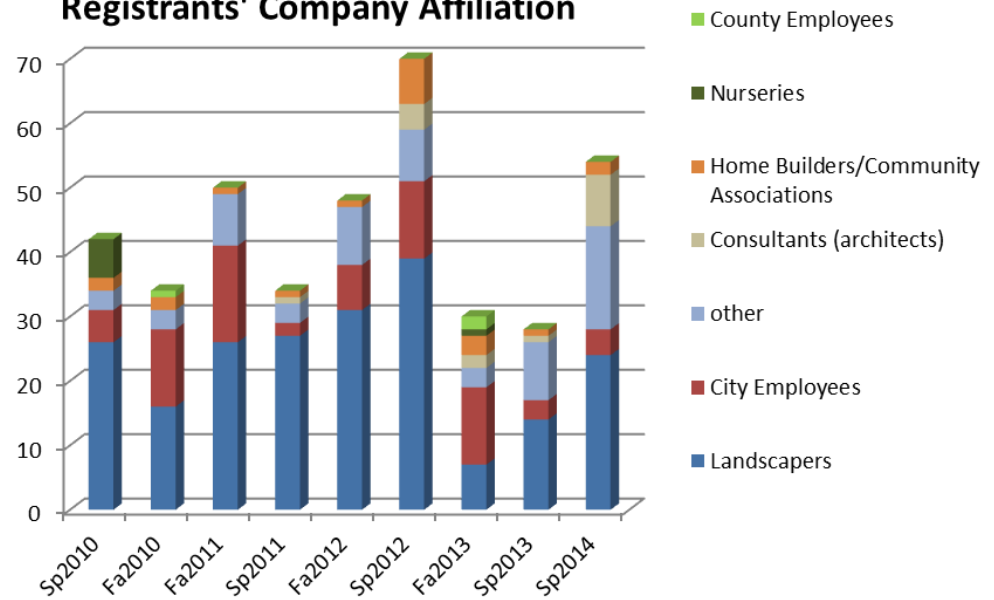


# Program's Students (2010-2014)

**Work Association of Smartscape Registrants (2010 - 2014)**



**Registrants' Company Affiliation**



# Advanced Smartscape

- Irrigation Module
- 1 course per year
- 15 hours of training
- 3 classes per course
- Advanced Smartscape certification
- Continuing Education Units
  - Irrigation Association (IA)
  - International Society of Arboriculture (ISA)





# Program Implementation through Extension

- Consistency
- Program evaluation
- Program standardization



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# Smartscape Statewide

- Offered in 3 Arizona Counties
  - Maricopa
  - Pima
  - Pinal
- Statewide curriculum



# Program Evaluation

- Used to gauge:
  - Success of program
  - Areas of improvement
  - Areas of expansion
- Utilize Likert Scale Questions:

Number	Meaning
5	Strongly agree
4	Agree
3	Neutral
2	Disagree
1	Strongly disagree

# Evaluation-Student Expectations

Student Expectations	
Evaluation Question: My expectations for this course were met.	
Smartscape Course	% of students that Agreed or Strongly Agreed
2014	97%
2013	97%
2012	99%
2011	92%
2010	91%
Average: 2010-2014	95%



# Evaluation-Student Knowledge Gained

Student Knowledge Gained	
Evaluation Question: After taking Smartscape, my knowledge about proper care of water-efficient landscapes has increased.	
Smartscape Course	% of students that Agreed or Strongly Agreed
2014	95%
2013	95%
2012	100%
Average: 2012-2014	97%

# We owe our success to...

- Tucson developers
- Sponsors
- Green Industry
- Trade Associations
- Landscaping Companies that realize the importance and benefit of training and education
- Expert presenters
- Smartscape graduates
- “Competitive” Associations



# Graduate Testimonials

- Anthony Paredes
- Desert View Landscape, LLC

Desert View Landscape, LLC Supports US Army Corps of Engineers With Innovative Technology To Capture All 5 LEED Water Efficiency Credits

-“The landscape professional will find it difficult to evolve to the next level without these core principles. Increased sales, successful marketing, business operations, financial management and professional growth in general would be difficult to realize without the foundational principles and practices taught in the Smartscape Program.”



# Graduate Impact

Bryan Condray

## **EPA WaterSense Excellence in Demonstrated Results Award**

Developed proprietary irrigation tracking methods that resulted in significant water savings.

-“I was an ‘irrigation tech’... and the class opened my mind to pursue a whole entire world of possibilities, opportunities, technology, and knowledge to start the path I am on today.”



# Landscaping Trends

- Landscapes look different than they did 20 years ago.
  - Still room for improvement - Education is key!
- New developments are mostly xeric.
- Conversions to xeriscape yards are increasingly popular.
- Some areas are using more reclaimed water



# Preliminary Research Results - City of Phoenix

- Residential landscaping in the city of Phoenix indicate:
  - Only 10% of single-family residences continue to maintain large areas of turf. 14-15% for those parcels that have access to untreated water not provided by the city. Only 6-7% of the homes that are irrigating solely with potable water provided by the city have turf.



# Conclusions

- The most effective way to have an impact upon the industry is to provide training and certification programs.
- The professionals we train are an excellent resource for providing first-hand knowledge directly to the consumer, and they have the potential to significantly influence landscape material selection and water management.



**Questions?**

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