

IZONA STATE UNIVERSITY

Readily available statistics on water savings come in many forms that are often incomparable.

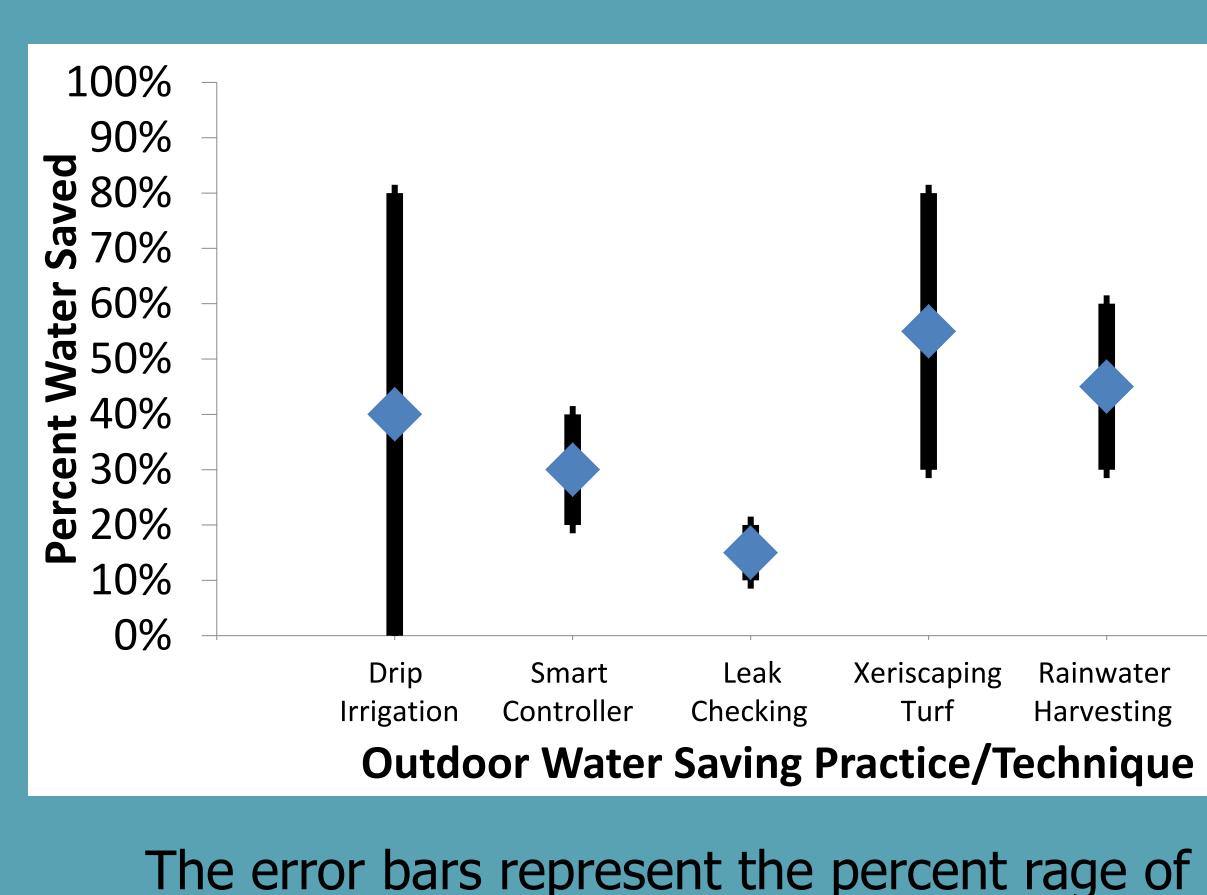


Drip Irrigation: "Can save 30,000 gallons a

Smart Controller: "Savings of 20-50% over traditional time based irrigation control"—EPA

Leak Checking: "Save homeowners 10 percent on their water bills"—EPA

Percent ranges of water saved from broad national statistics do not provide usable information to the consumer.



The error bars represent the percent rage of water saved by implementing low-water use practices. Many of them overlap, making it difficult to determine which one is best.

## **CALCULATING GALLONS OF WATER SAVED BY IMPLEMENTING** LOW-WATER USE PRACTICES IN MARICOPA COUNTY Amy Umaretiya, Summer Waters (University of Arizona Cooperative Extension), Dr. Ray Quay (Faculty Mentor)

Harvesting

Performing dimensional analysis on existing statistics using localized data allows for comparable, applicable outputs of gallons saved per practice.

% of water saved water savings practice x water savings practice number of gallons used -x lot size (square foot) square foot = number of gallons saved

An example of a percent statistic turned into an exact number of gallons saved.

Xeriscaping turf saves the most gallons per year in Maricopa County; rainwater harvesting saves the least.

> Gallons Saved Per **Outdoor Water Saving Practice/Technique** Year 4000 Drip Irrigation Smart Controller 1000 Leak Checking 3000 Xeriscaping Turf 6350 Rainwater Harvesting 150

Potential savings for a homeowner in Maricopa County using 40,000 gallons of water per year and a roof size of 30 feet.

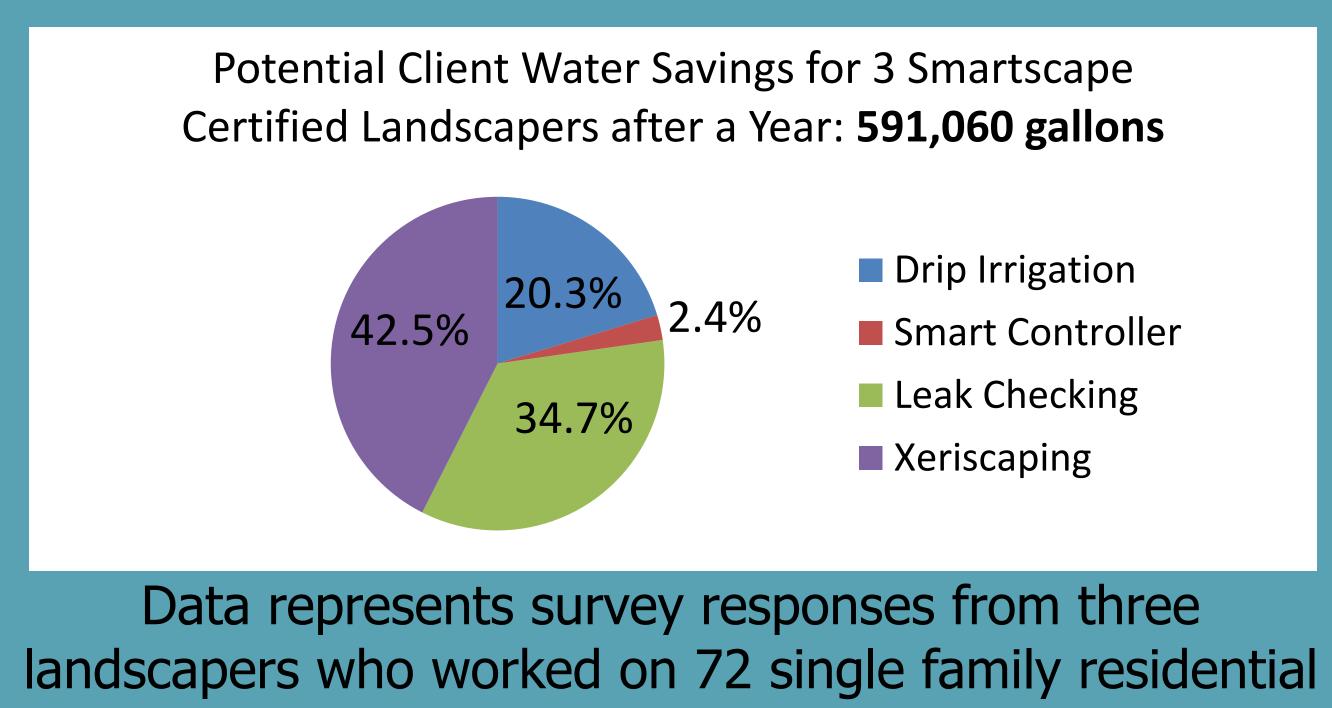
This material is based upon work supported by the National Science Foundation under Grant No. SES-0951366 Decision Center for a Desert City II: Urban Climate Adaptation (DCDC). Any opinions, findings and conclusions or recommendation expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation (NSF).

Individualized statistics provide consumers with a more accurate prediction of the water saved by implementing low-water use practices.

water conservation.



Landscapers will be able to justify lowwater use practices taught in classes, such as Smartscape, to their clients.



## Acknowledgment



80% of landscapers who go through Smartscape say that they do not see cliental demand for their techniques due to a lack in knowledge and understanding from the consumer's perspective on

homes.