

# WATER ISSUES

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# Externalities

## *Affecting Water Availability & Quality*

Global Climate Change  
Growing Urban Population  
Increasing Interest in **SUSTAINABLE PRACTICES**  
Increasing local, state and federal regulations  
???



# Urban Use

**vs.**

# Commercial Use

The Texas GREEN Industry is significantly impacted by the availability of landscape irrigation water. It is in the best interest of the GREEN industry for consumers to use water wisely.



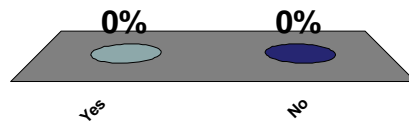
# What can you do?

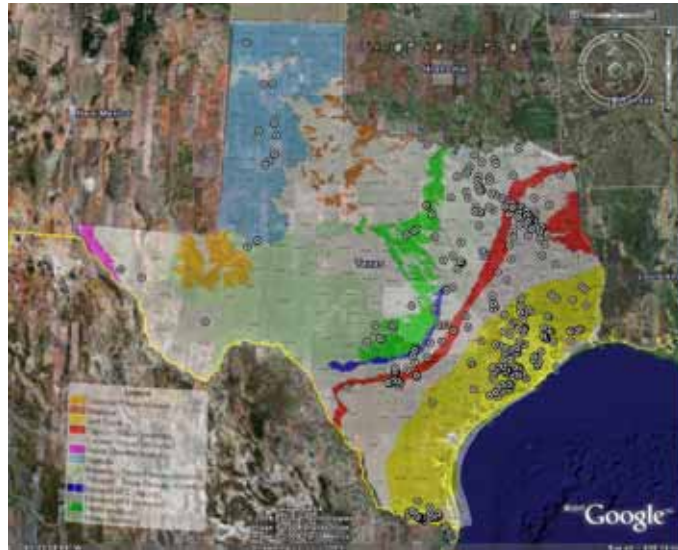
*5 Suggestions to Address  
Water Conservation & Quality*



## Do you know your aquifer?

1. Yes
2. No





**Aquifer Distribution of TDA Class 3 and 4 Nurseries**

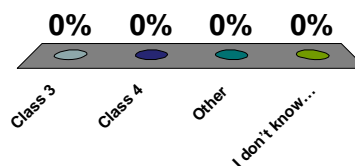
**To find your location on Google Earth using the image overlays go to:**

<http://aggie-horticulture.tamu.edu/greenhouse/googleearth.html>



## Are you Class 3 or 4?

1. Class 3
2. Class 4
3. Other
4. I don't know...



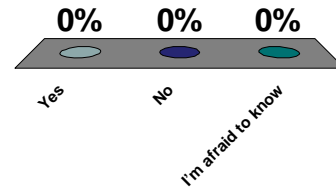
**Class 3 - includes permanently located businesses who sell, lease or distribute nursery products and/or floral items and have a growing area of 435,601-871,200 square feet (in excess of ten acres to less than twenty acres).**

**Class 4 - includes permanently located businesses who sell, lease or distribute nursery products and/or floral items and have a growing area of 871,201 square feet or more (over twenty acres).**



## Do you know how much water you use/month?

1. Yes
2. No
3. I'm afraid to know



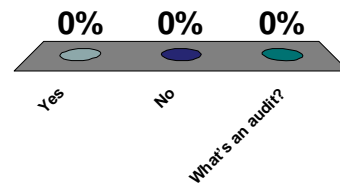
Survey results indicate that the average Class 3 nursery annually utilizes approximately 52 gallons of water/sq ft of production area.

Class 4 nurseries average 56 gallons/sq ft/year. However, it should be noted that, generally speaking, production practices and associated water use/sq ft do not differ between Class 3 and 4 operations.

Based on a series of assumptions and calculations it is estimated that the statewide water use by Class 3 container nursery crop producers is approximately 3,147.37 acre feet per year. Class 4 producers utilize approximately 117,134.83 acre feet per year, bringing the combined annual water use of Class 3 and 4 container nursery crop producers to approximately 120,282.20 acre feet.

## Have you conducted a DETAILED AUDIT of your irrigation system?

1. Yes
2. No
3. What's an audit?

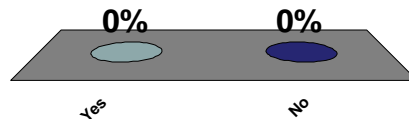


**Audits have been shown to be the most EFFECTIVE means of conserving water and protecting surface and groundwater resources.**

***They are also relatively inexpensive to conduct.***

## Have you developed a water management plan

1. Yes
2. No



A water management plan details current **BEST MANAGEMENT PRACTICES (BMP's)** and prioritizes implementation of future BMP's.

### Structural BMP's

- Irrigation Systems
- Controllers
- Capture & Recycle Systems

### Cultural BMP's

- Fertilizers
- Integrated Pest Management
- Plant Selection



## **Additional Resources**

**Texas Groundwater Conservation Districts**  
<http://www.tgwa.org/survey.html>

**Texas Green Industry Water Conservation Project**  
<http://urbanlandscapeguide.tamu.edu>

