



# Sustainable Landscaping Principles and Practices

## Audio Options

### **TO USE YOUR COMPUTER'S AUDIO:**

When the Webinar begins, you will be connected to audio using your computer's microphone and speakers (VOIP).

### **TO USE YOUR TELEPHONE:**

If you prefer to use your phone, select "Use Telephone" after joining the Webinar.

## About 1000 Friends of Florida:

- Founded in 1986, 1000 Friends of Florida is a 501(c)(3) nonprofit membership organization.
- We work to save special places and build better communities.
- We educate, advocate and negotiate to protect Florida's high quality of life.
- Our bipartisan board of directors includes advocates and experts from across the state.
- Visit [www.1000friendsofflorida.org/alerts/](http://www.1000friendsofflorida.org/alerts/) to sign up for email alerts!
- Please join us at [www.1000friendsofflorida.org/donate-now/](http://www.1000friendsofflorida.org/donate-now/)
- Follow 1000 Friends on [Facebook](#) and [Twitter](#)!



# Dr. John M. DeGrove Webinar Series



- May 4, 1924 – April 13, 2012
- Icon of comprehensive planning both in Florida and across the nation
- One of the founders of 1000 Friends of Florida
- First Secretary of the Florida Department of Community Affairs
- His accomplishments recognized with the John M. DeGrove Eminent Scholar Chair in Growth Management and Development at Florida Atlantic University
- To find out more, please visit:  
[www.1000friendsofflorida.org/dr-degrove/](http://www.1000friendsofflorida.org/dr-degrove/)



# Thank you to the Dr. John M. DeGrove Webinar Sponsors:

## **FLORIDA STEWARD**

Archibald Foundation

## **FLORIDA GUARDIAN**

Mosaic

## **FRIEND**

Mr. Ronald Book, PA  
Codina Management, LLC

Ms. Kimberly A. DeGrove and Dr. William Partin  
Dickman Law Firm

William Howard Flowers, Jr. Foundation, Inc.  
Kitson & Partners

The Perkins Charitable Foundation

Mr. Robert M. Rhodes





# Thank you to the Dr. John M. DeGrove Webinar Sponsors:

## SPONSOR

Thomas J. Baird

Mr. William M. DeGrove

## SUPPORTER

American Planning Association, Florida Chapter

Charlotte Harbor Estuary Program

Doug Crowley Insurance Services

Mr. Russell DeGrove

David M. Orshefsky

Ms. Nancy Ellen Stroud

Synovus -- Tallahassee State Bank

Thomson Brock Luger & Company

Ms. Susan Trevarthen



## Upcoming FREE events:

- **FREE NOVEMBER WORKSHOP** — **Tuesday, November 27** from 6:00 to 7:30 p.m.  
**Palm Beach County 2070: What's Next?** Nova's Palm Beach Campus, 11501 North Military Trail, Palm Beach Gardens. **No registration is required.**
- **FREE NOVEMBER WORKSHOP** — **Wednesday, November 28** from 6:00 to 7:30 p.m.  
**Martin County 2070: What's Next?** Susan H. Johnson Auditorium, Wolf High-Technology Center, 2400 SE Salerno Road, Stuart. **No registration is required.**
- **FREE DECEMBER WEBINAR** — **Thursday, December 6, 2018** from noon to 1:30  
**Recycle Right to Meet Industry Challenges.** Registration info. below.
- **FREE JANUARY WEBINAR** — **Tuesday, January 22, 2019** from noon to 1:30  
**2019 Florida Legislative Preview.** Registration info. below.

Register or find out more at  
[www.1000friendsofflorida.org/webinar/](http://www.1000friendsofflorida.org/webinar/)



# Seeking additional sponsors to offer future webinars for free!

Please consider donating to 1000 Friends. Even \$10 gifts are appreciated!

Or, consider becoming a program sponsor:

Florida Guardian -- \$5,000

President's Club -- \$2,500

Friend -- \$1,000

Sponsor -- \$500

Supporter -- \$250

You may donate on-line at [www.1000friendsofflorida.org/donate-now/](http://www.1000friendsofflorida.org/donate-now/)

(Designate it for DeGrove Education Fund)

OR

Email [vyoung@1000fof.org](mailto:vyoung@1000fof.org) for more information



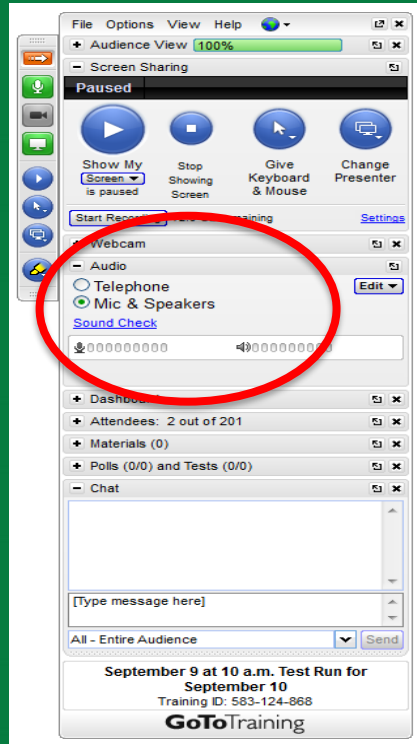
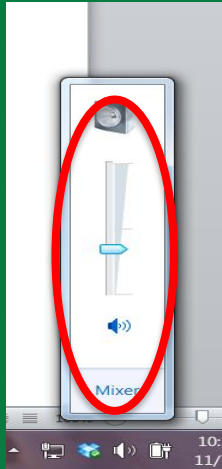
## This webinar has been approved for:

- 1.5 AICP CM for planners (#9158111)
- 1 CEC for Certified Floodplain Managers
- 2 CLE for Florida attorneys (#1806919N)
- 1.5 CEUs (certified under 381.0101, FS) for Florida Environmental Health Professionals
- 1.5 credit hours for Landscape Architecture by Florida DBPR (#0011370)

There is a link to a **BRIEF SURVEY** in the follow-up email you will receive. Please take a few minutes to give us feedback!



# If you have sound issues:



- Make sure the speaker on your computer is turned on
- Adjust the volume on your computer
- On Go-to-Webinar control panel click on Audio box and do sound check and adjust accordingly

OR

- On Go-to-Webinar control panel click on Audio box and then Telephone and follow directions to call in



The PowerPoint is available at [www.1000friendsofflorida.org](http://www.1000friendsofflorida.org)

The screenshot shows the homepage of the 1000 Friends of Florida website. The header features the organization's logo and a navigation bar with links: About Us, Building Better Communities, Saving Special Places, Planning Tools, Outreach, and Donate Now. A large banner image shows a person kayaking on a lake with lily pads, with the text "Saving Special Places" and "Photo Credit: Mac Stori". Below the banner, there are several article teasers. One article is titled "How will Florida accommodate 15 million new residents?" and includes a map of Florida showing population projections for 2010 and 2020. Another article is titled "Trouble in Paradise" and mentions toxic green algae. A third article is titled "Martin County 2070: What's Next?" and mentions a webinar. A red circle highlights the "What's New ..." section, which lists "Sustainable Landscaping Principles and Practices" as a "Webinar PowerPoint available now".

**1000 FRIENDS of FLORIDA**

Receive Email Alerts

Search

Gallery

Member Login

Contact Us

Join Us

About Us | Building Better Communities | Saving Special Places | Planning Tools | Outreach | Donate Now

**How will Florida accommodate 15 million new residents?**

Moderate projections indicate that by 2070, Florida's population will reach approximately 33.7 million residents, close to 15 million more than in 2010.

**What's New ...**

**Sustainable Landscaping Principles and Practices**

Webinar PowerPoint available now

**Martin County 2070: What's Next?**

Join us in Stuart from 6 to 7:30 on November 28

**Palm Beach County 2070: What's Next?**

Join us in Palm Beach Gardens from 6 to 7:30 on November 27

**Trouble in Paradise**

Toxic green algae. Massive fish kills. Serious economic impacts. Now more than ever, there is trouble in paradise. Spearheaded by the late Nathaniel Pryor Reed, the Trouble in Paradise report identifies six key environmental issues facing Florida and overarching strategies to address them.

**Trouble in Paradise**

Watch the broadcast and view the report

The screenshot shows the GoToTraining software interface. The top menu bar includes File, Options, View, and Help. The main window displays the "Audience View" at 100% zoom. The "Screen Sharing" section is active, showing a "Paused" status. Below this, there are buttons for "Show My Screen" (which is highlighted with a red circle), "Stop Showing Screen", "Give Keyboard & Mouse", and "Change Presenter". The "Start Recording" button is also visible, along with a "72.9 GB remaining" indicator. The "Webcam" section shows the "Audio" settings, including "Telephone" and "Mic & Speakers". The "Dashboard" section shows "2 out of 201" materials. The "Materials" section is highlighted with a red circle and shows "0" materials. The "Tests" section shows "0/0" tests. The "Chat" section is at the bottom, with a text input field and a "Send" button. The bottom status bar displays the date and time: "September 9 at 10 a.m. Test Run for September 10", the training ID: "583-124-868", and the "GoToTraining" logo.

File Options View Help

Audience View 100%

Screen Sharing

Paused

Show My Screen (highlighted with red circle)

Stop Showing Screen

Give Keyboard & Mouse

Change Presenter

Start Recording 72.9 GB remaining

Webcam

Audio

Telephone

Mic & Speakers

Sound Check

Dashboard

Materials (0) (highlighted with red circle)

Tests (0/0)

Chat

[Type message here]

All - Entire Audience

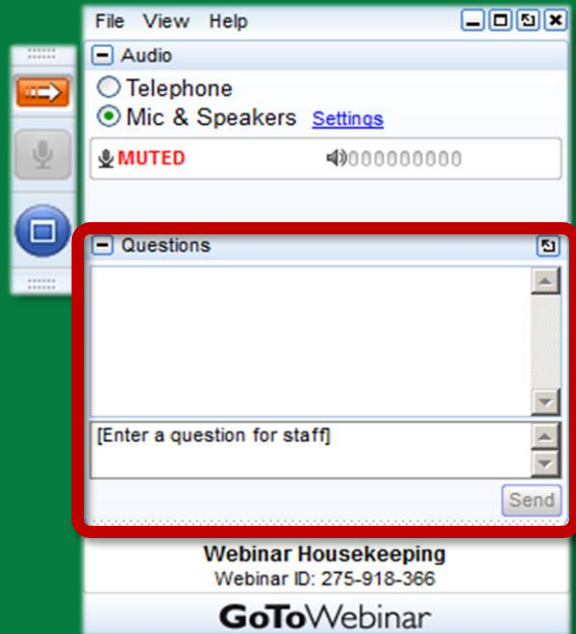
September 9 at 10 a.m. Test Run for September 10

Training ID: 583-124-868

GoToTraining



## If you have questions:



- Your webinar control panel includes a “Questions” box
- Please click on “+” sign and type any questions in this box
- Please refer to the slide number and/or speaker when you post your question
- Please keep your questions succinct!
- Staff will ask the presenters questions, as time permits

# Presenters



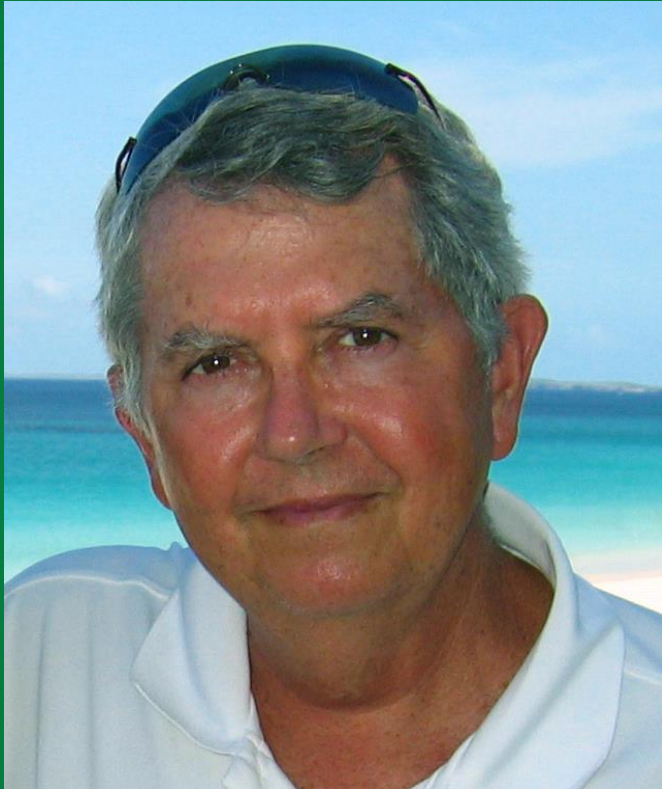
# Timothee Sallin



- Actively involved in water conservation, sustainable landscaping and responsible agriculture in Florida over the past 15 years through role as President of Cherrylake.
- Cherrylake is a vertically integrated landscape company providing commercial landscape and irrigation construction and maintenance services and is the largest grower of ornamental trees, palms and shrubs in the State of Florida.
- Cherrylake and sister company IMG Citrus manage over 6,000 acres of land in Florida and have a long track record of sustainable land management and stewardship.
- Passionate about connecting people to plants and promoting healthy ecosystems within our urban environments.
- Actively involved in promoting environmental best practices across diverse industries through collaboration with industry associations such as ULI, ASLA and FNGLA as well as through research and development partnerships with UF IFAS and the SJRWMD.
- A graduate of New College in Sarasota Florida earning a degree in Economics and International Studies.
- Lives in Clermont with wife Ellen and daughter Aria; son Tristan is an undergraduate student at Georgia Institute of Technology.



# Pierce Jones



- Professor at the University of Florida
- Directs Program for Resource Efficient Communities
- An interdisciplinary group that promotes the adoption of “best design, construction and management practices” in master planned developments
- Program directly participates in land development and building projects that adopt and demonstrate “green” practices
- PhD in Mechanical Engineering from the University of Florida in 1980





# Sustainable Landscaping Principles and Practices



# 1. Sustainable Landscaping:

To provide equivalent value to society with landscaping while minimizing the use of inputs, primarily: water, nutrients, horticultural chemicals, labor, fuel and equipment.





## 2. Sustainable Landscaping:

To increase the societal value landscaping provides by incorporating functional and environmental goals such as: stormwater management, water quality, wildlife habitat, heat reduction, energy efficiency, economic development and human health and well being.



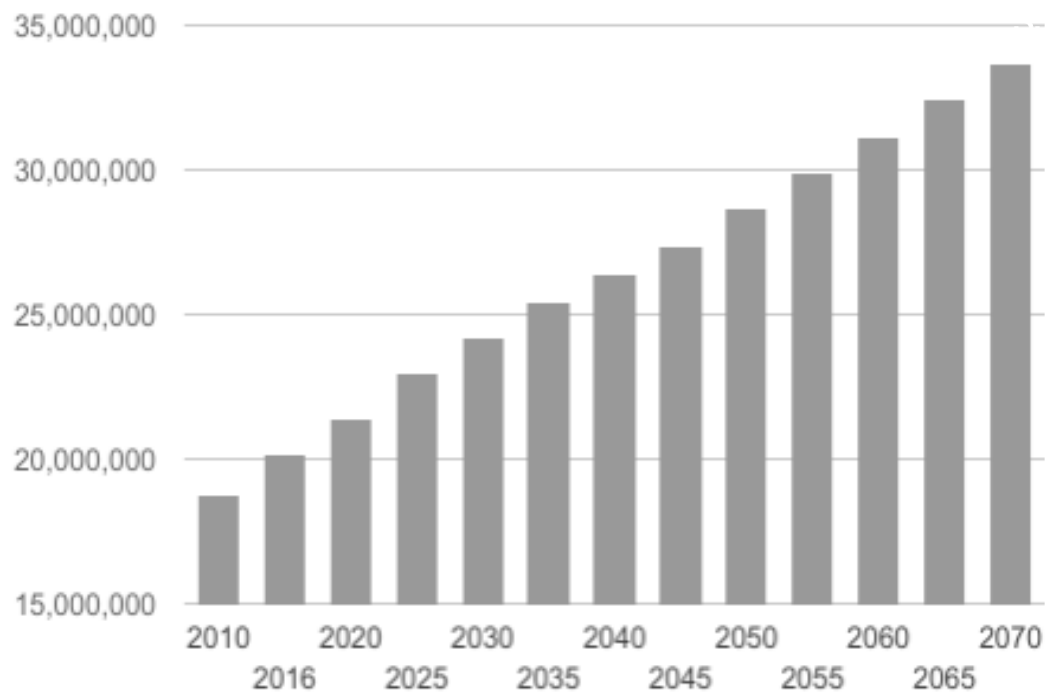
# THE FUTURE IN FLORIDA



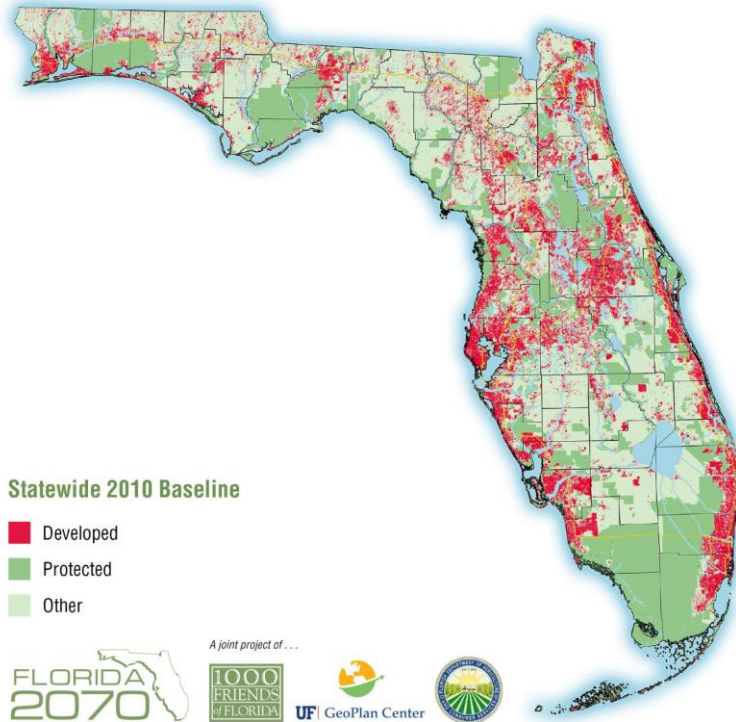
For more information, visit: [1000friendsofflorida.org/florida2070/](http://1000friendsofflorida.org/florida2070/)



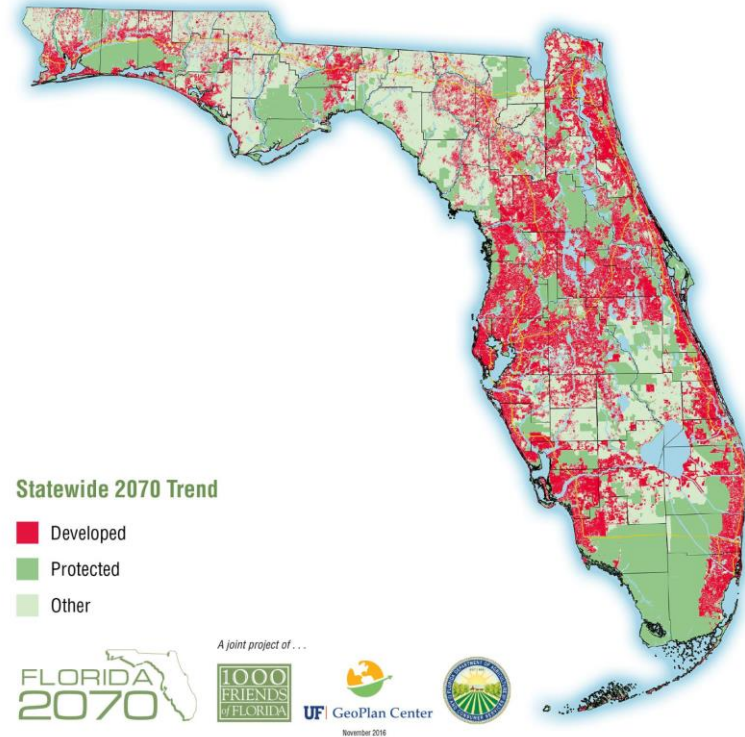
# BEBR: FLORIDA POPULATION FORECAST



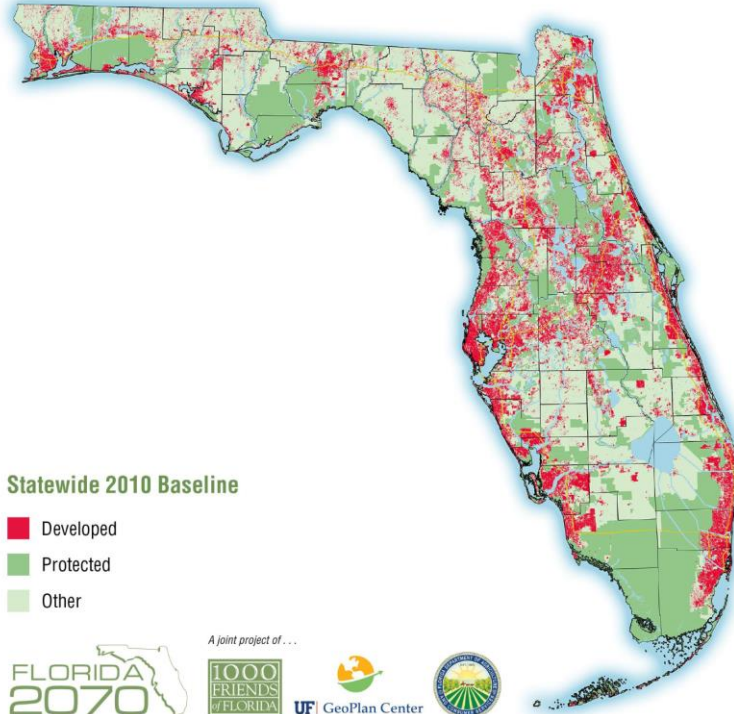
# 2010 BASELINE



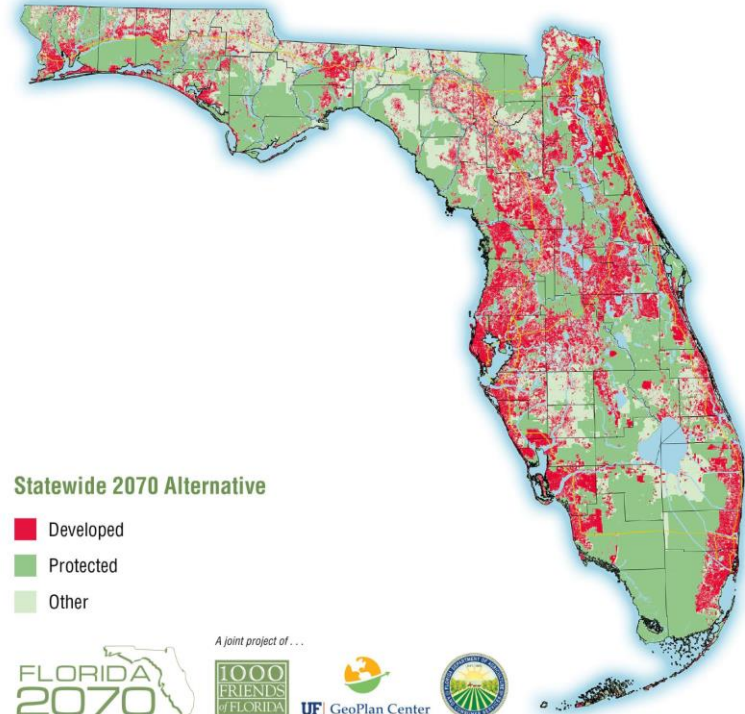
# 2070 TREND



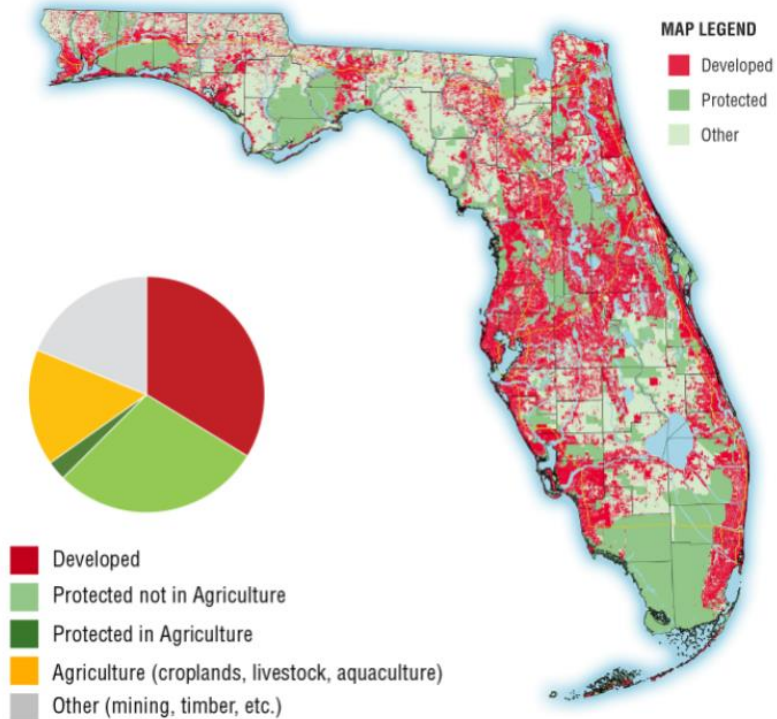
# 2010 BASELINE



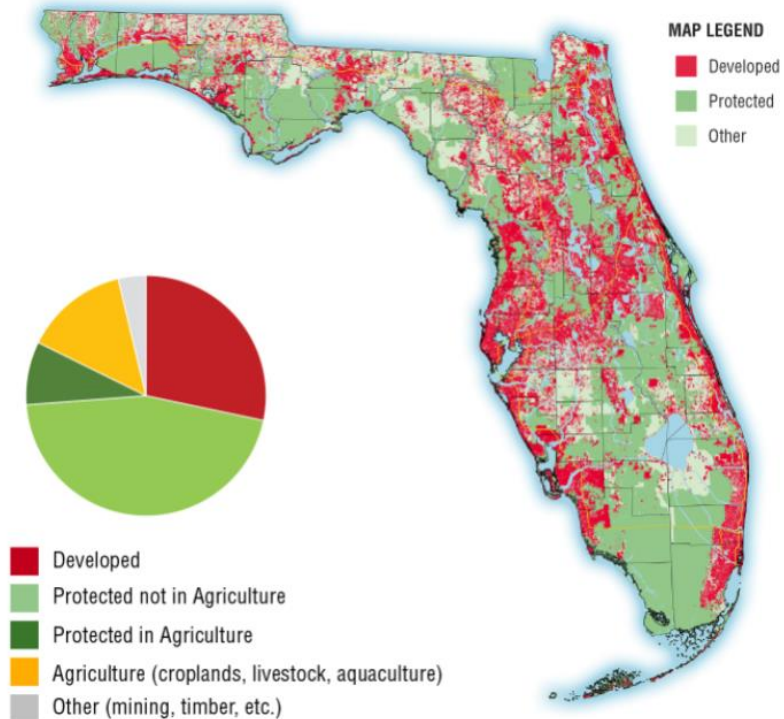
# 2070 ALTERNATIVE



## 2070 TREND



## 2070 ALTERNATIVE







# *Context*

*Florida Land Development:*

Current Conventional Practice

# *Florida Land Development* Conventional Practice



# *Florida Land Development* Conventional Practice



# St. Petersburg Times

## Man jailed for brown lawn gets help from neighbors

By Erin Sullivan, Times Staff Writer  
In print: Monday, October 13, 2008

BAYONET POINT — "He's in prison for God knows how long because we can't afford to sod the lawn," said his sobbing daughter, Jennifer Lehr.

Prudente has owned a home in the deed restricted community since 1998. The covenants require homeowners to keep their lawns covered with grass.



*Free from jail, Joseph Prudente, 66, inspects his new lawn with pride Sunday. Prudente, who says he barely has enough to pay the mortgage, was jailed for having a brown lawn.*

*Development Impacts:*  
Water Supply



# St. Petersburg Times

## Tampa Bay Water makes last withdrawal from tapped out reservoir

*By Craig Pittman, Times Staff Writer  
In Print: Saturday, March 14, 2009*

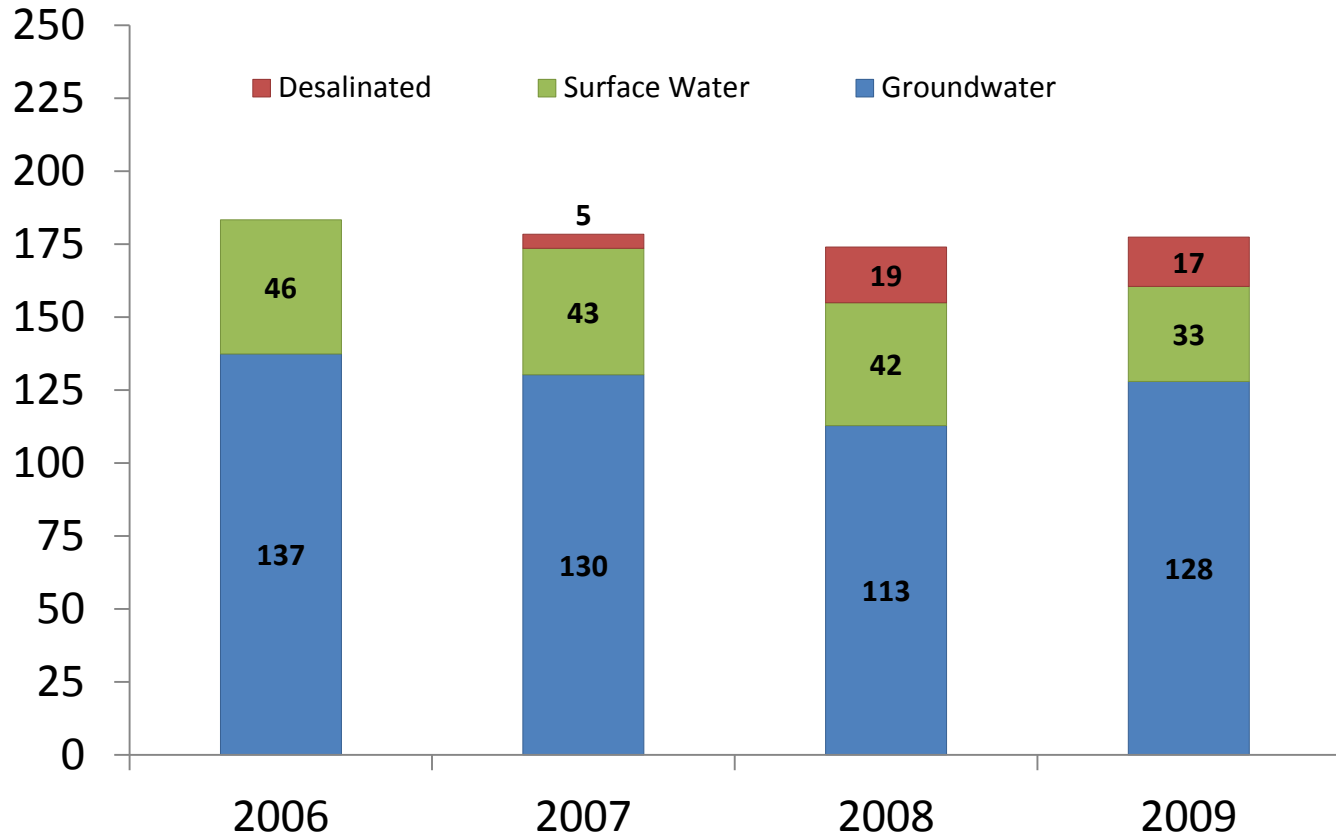
Get used to having a brown lawn for a while. As of this week, Tampa Bay Water has virtually drained its 15 billion-gallon reservoir.



From now until the summer rainy season, it must rely on its two remaining sources of water: its sometimes troubled desalination plant and the dwindling supply in the underground aquifer. "It's going to be a long couple of months waiting for the rainy season," Tampa Bay Water spokeswoman Michelle Robinson said Friday.

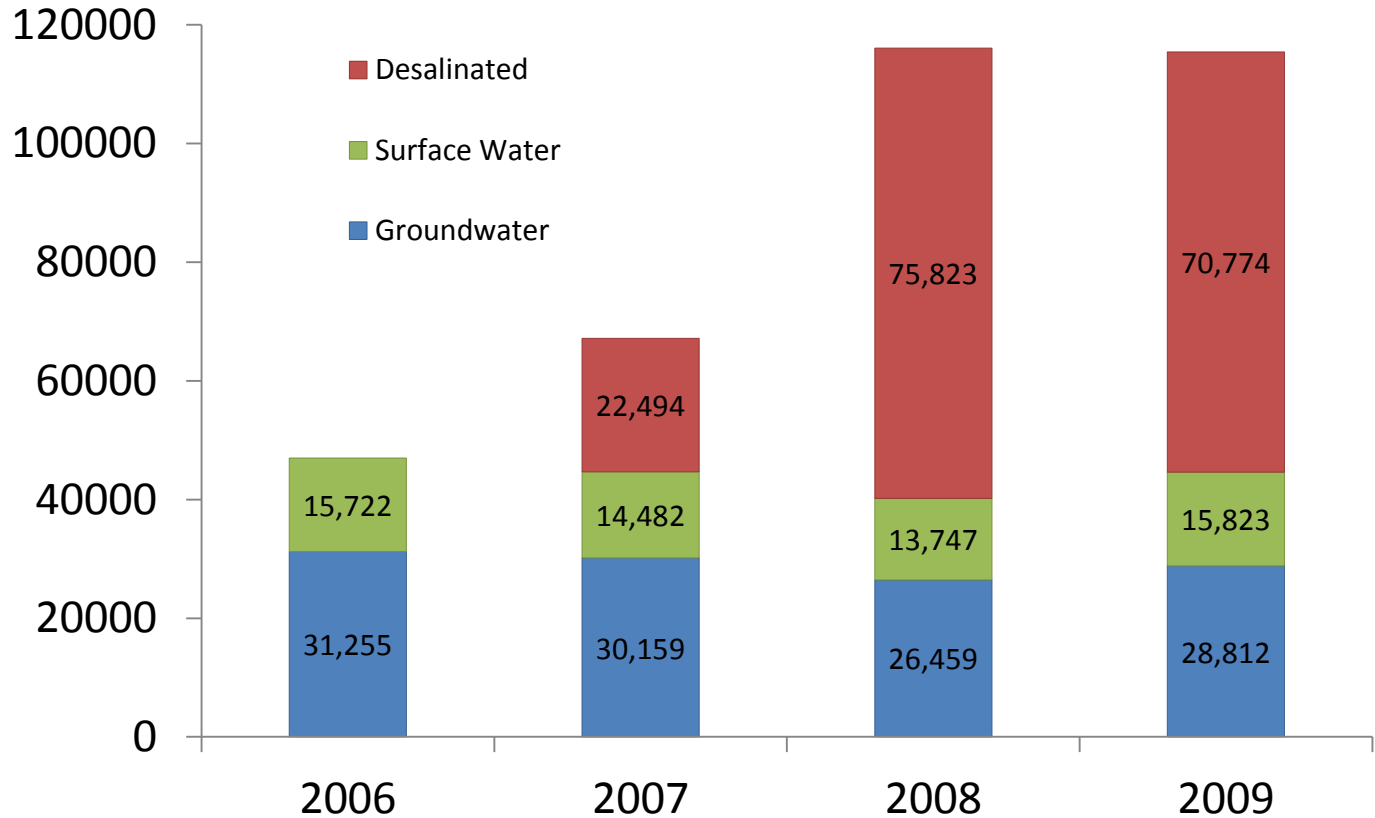
## *Water Supply*

TBW Annual Production by Supply Type (MGD)



## Water Supply

TBW Carbon Footprint by Supply Type (mtons CO<sub>2</sub>e)



*Development Impacts:*  
Water Quality

## Controlling Eutrophication: Nitrogen and Phosphorus

Daniel J. Conley, Hans W. Paerl, Robert W. Howarth, Donald F. Boesch, Sybil P. Seitzinger, Karl E. Havens, Christiane Lancelot, Gene E. Likens

The need to reduce anthropogenic nutrient inputs to aquatic ecosystems in order to protect drinking water supplies and to reduce eutrophication, including the proliferation of harmful algal blooms and “dead zones” in coastal marine eco-systems has been widely recognized. ...a cascading set of consequences has been set in motion, arising from massive increases in fixed N additions to the biosphere, largely through the production of fertilizers and increases in fossil fuel emissions. P levels have also significantly increased because of fertilizer use, as well as from wastewater.



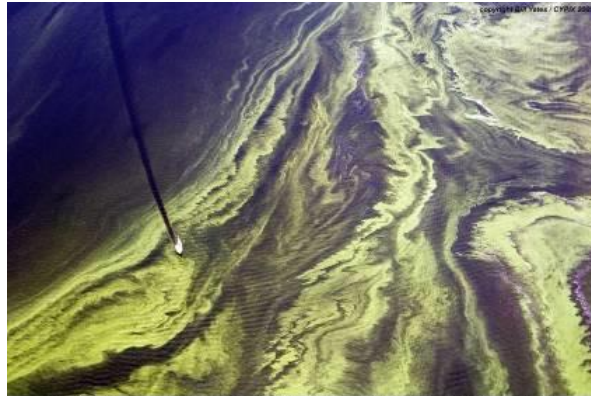


# *Florida Land Development* Conventional Practice



# *Water Quality (2005)*

## St Johns River, FL



Microcystis Bloom - St. Johns River mid-channel south of the Buckman Bridge - 08.19.05 - 2:04pm  
copyright DSI Yates / CYPHX 2005 all rights reserved



Microcystis Bloom - East bank of the St. Johns River - Mandarin - 08.19.05 - 2:42pm  
copyright DSI Yates / CYPHX 2005 all rights reserved

# *Water Quality*

## 2005 Fertilizer Consumption (Tons/yr):

■ Clay	1,190	5,230
■ Nassau	1,540	2,040
■ Duval	3,970	23,500
■ St Johns	22,780	3,480





# Water Quality (2018)

## Southwest Florida



The Great Red Tide Outbreak of 2018 - Sarasota Bay, FL photo by John Moran



*Development Impacts:*  
Landscaping



# *Landscaping Impacts*

## Conventional Practices



# Landscaping Impacts

## UF Recommended Practices

### A Guide to Florida-Friendly Landscaping



**Florida Yards &  
Neighborhoods Handbook**

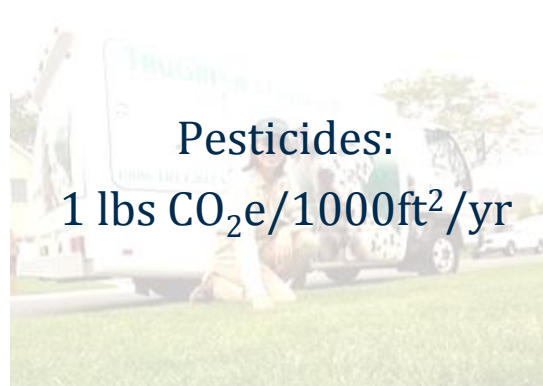
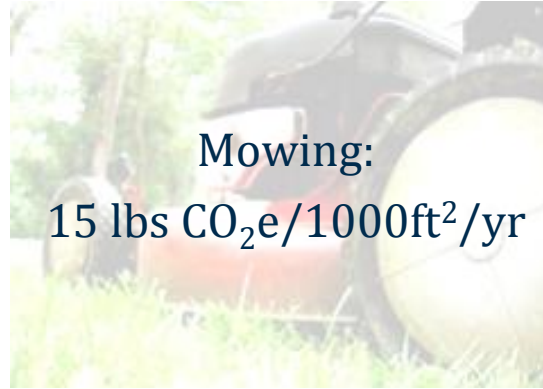
Table 2. Fertilization Guidelines for Established Turfgrass Lawns in Three Regions of Florida

Species	Nitrogen recommendations (lbs N/1000 ft <sup>2</sup> /year)*		
	North	Central	South
Bahiagrass	2-3	2-4	2-4
Bermudagrass	3-5	4-6	5-7
Centipedegrass	1-2	2-3	2-3
St. Augustinegrass	2-4	2-5	4-6
Zoysiagrass	3-5	3-6	4-6

\* Homeowner preferences for lawn quality and maintenance will vary, so the UF Turfgrass Science program recommends a range of fertility rates for each grass species and location. Also, effects within a localized region (for instance, shade, drought, soil conditions and irrigation) will require using a range of fertility rates. FYN generally recommends applying no more than the lowest of the recommended fertilizer ranges. These recommendations assume that grass clippings are recycled.

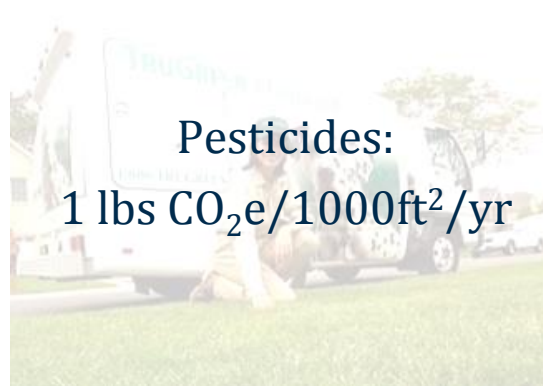
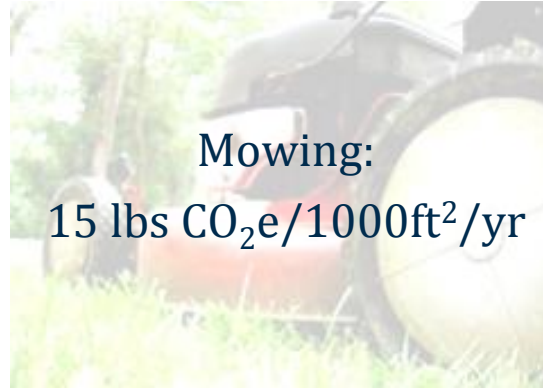
# *Landscaping Impacts*

## Greenhouse Gas Accounting (Groundwater)



# *Landscaping Impacts*

## Greenhouse Gas Accounting (Desal)



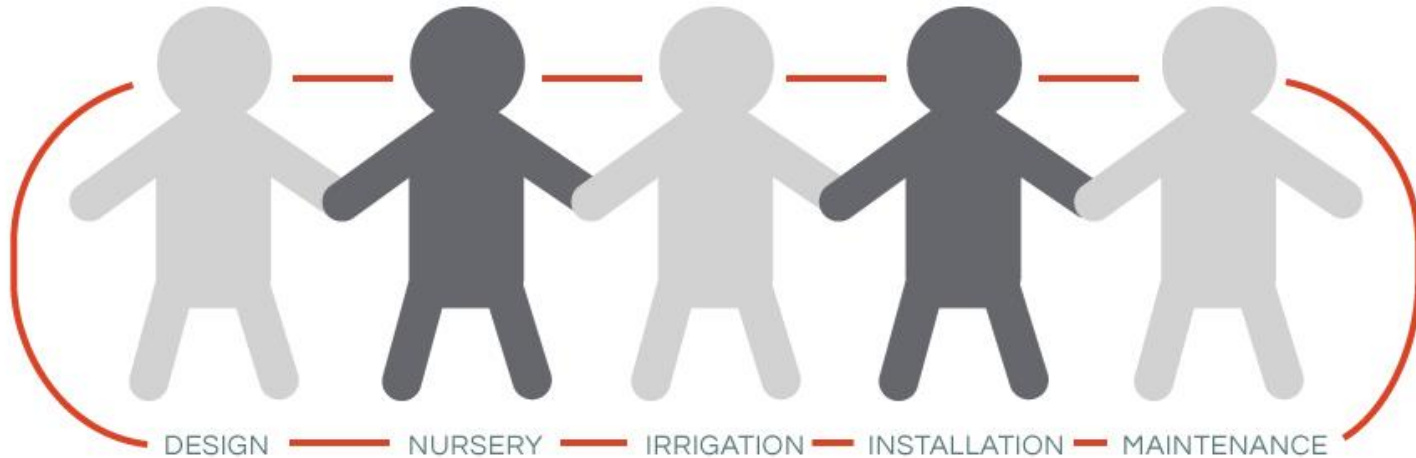






# CHAIN OF CUSTODY

Integrity



Continuity

Accountability

# Design

Soils

Hydrology

Habitat Types

Plant Communities

Florida Friendly Principles



# Design

Species Selection

Irrigation Design

Specifications and Standards

Construction Observation





# Nursery

Root Systems

Genetics

Trunk & Crown

Inventory Availability



# Irrigation

Pressure Regulation

Low Volume

Flow Sensors

Check Valves



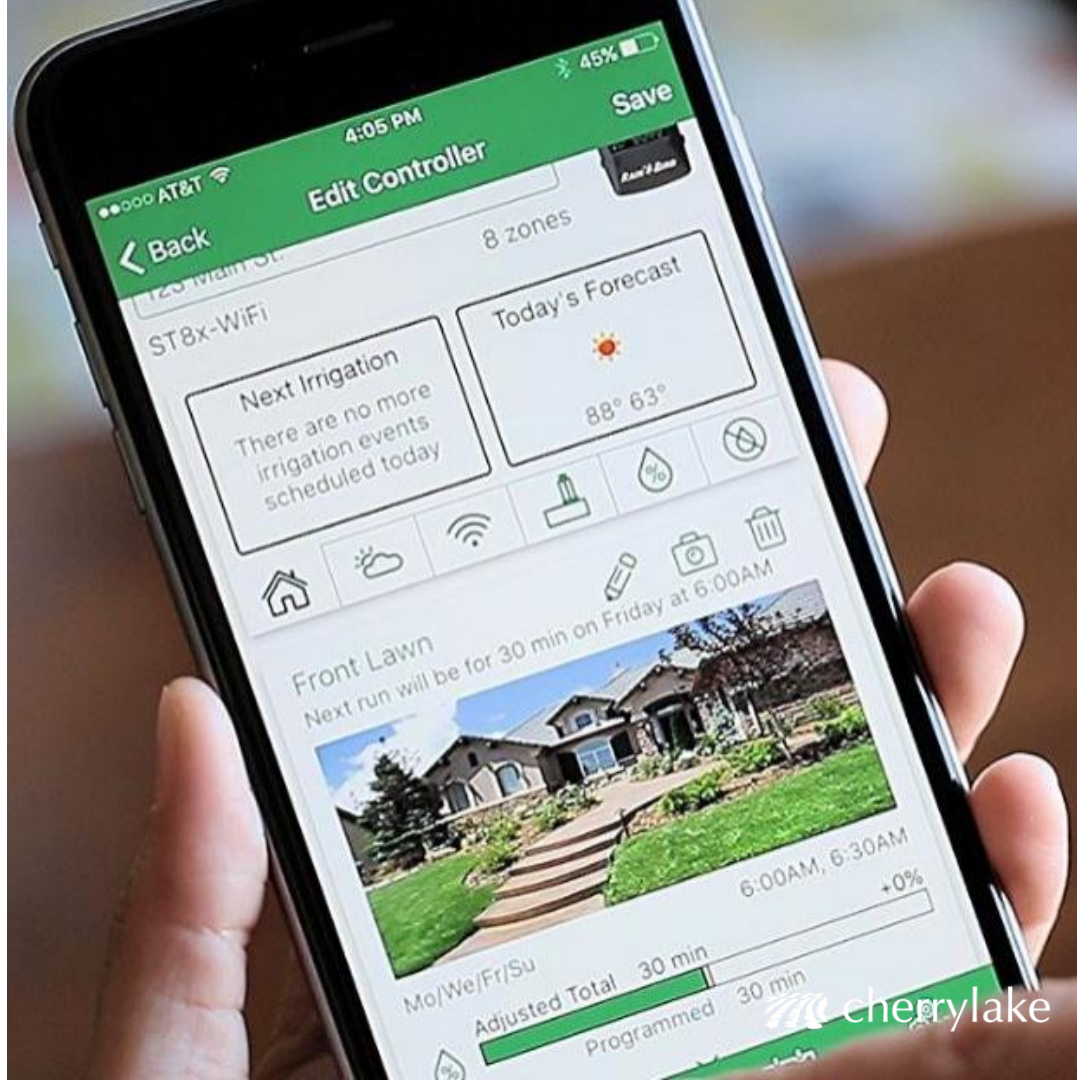
# Irrigation

Smart Controllers

Central Control

Climatic Conditions

Quantitative Feedback





# Installation

Promote Optimal Establishment

Minimize Stress

Secure Quality Nursery Stock

Adhere To Design Intent



# Installation

Follow Best Practices

Focus on the Future

Turnover to Maintenance Team





# Maintenance

Minimize Inputs

Optimize Plant Health

Quantify & Document

Employee Growth & Training



# Maintenance

Landscape Asset Management

Long Term Planning

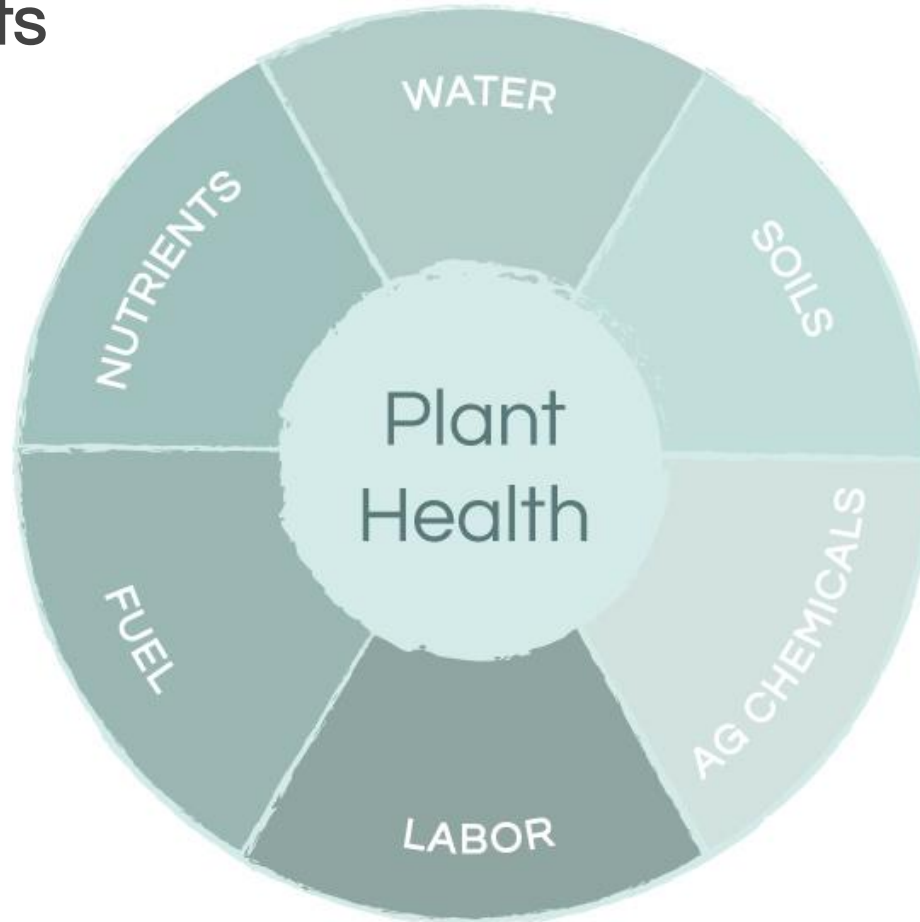
Community Engagement

Property Certification





# Circle of Inputs



# Victory Pointe Park



**STAGE 5**  
LAKE MINNEOLA

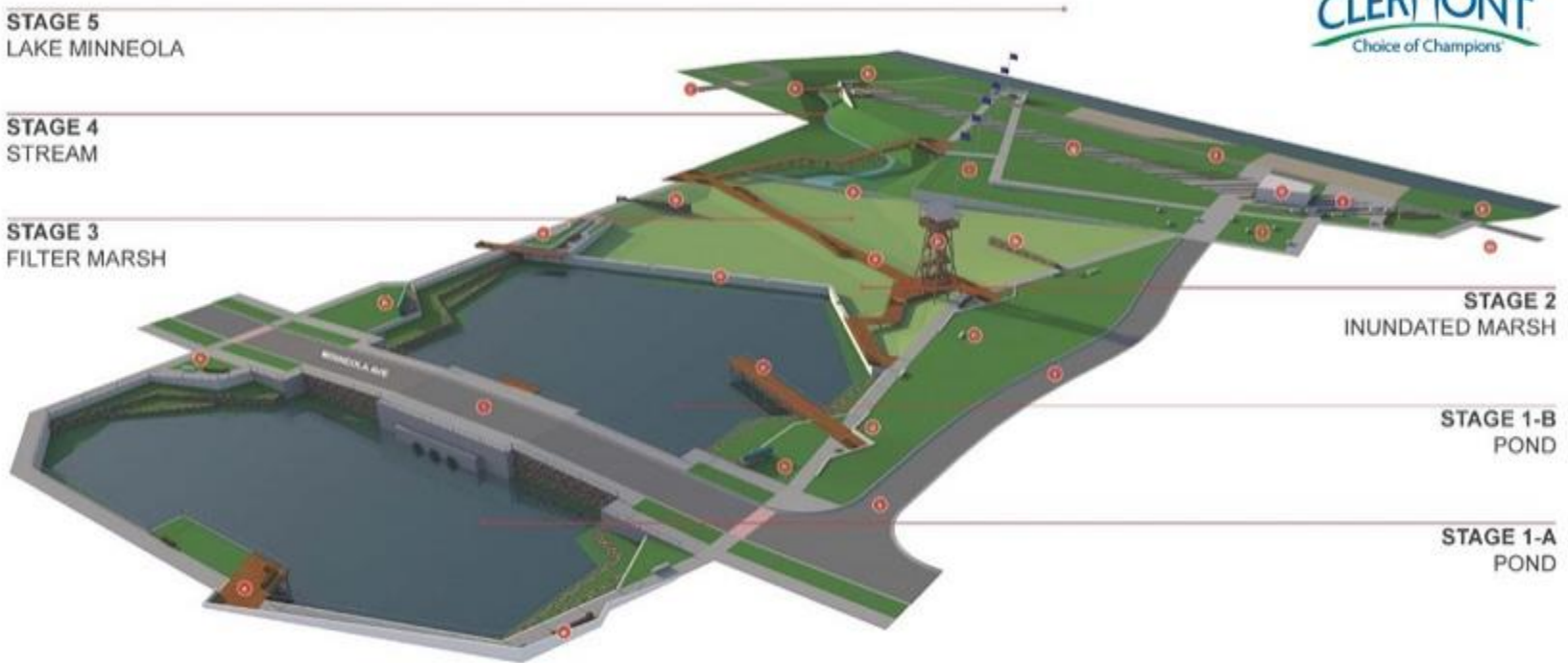
**STAGE 4**  
STREAM

**STAGE 3**  
FILTER MARSH

**STAGE 2**  
INUNDATED MARSH

**STAGE 1-B**  
POND

**STAGE 1-A**  
POND



















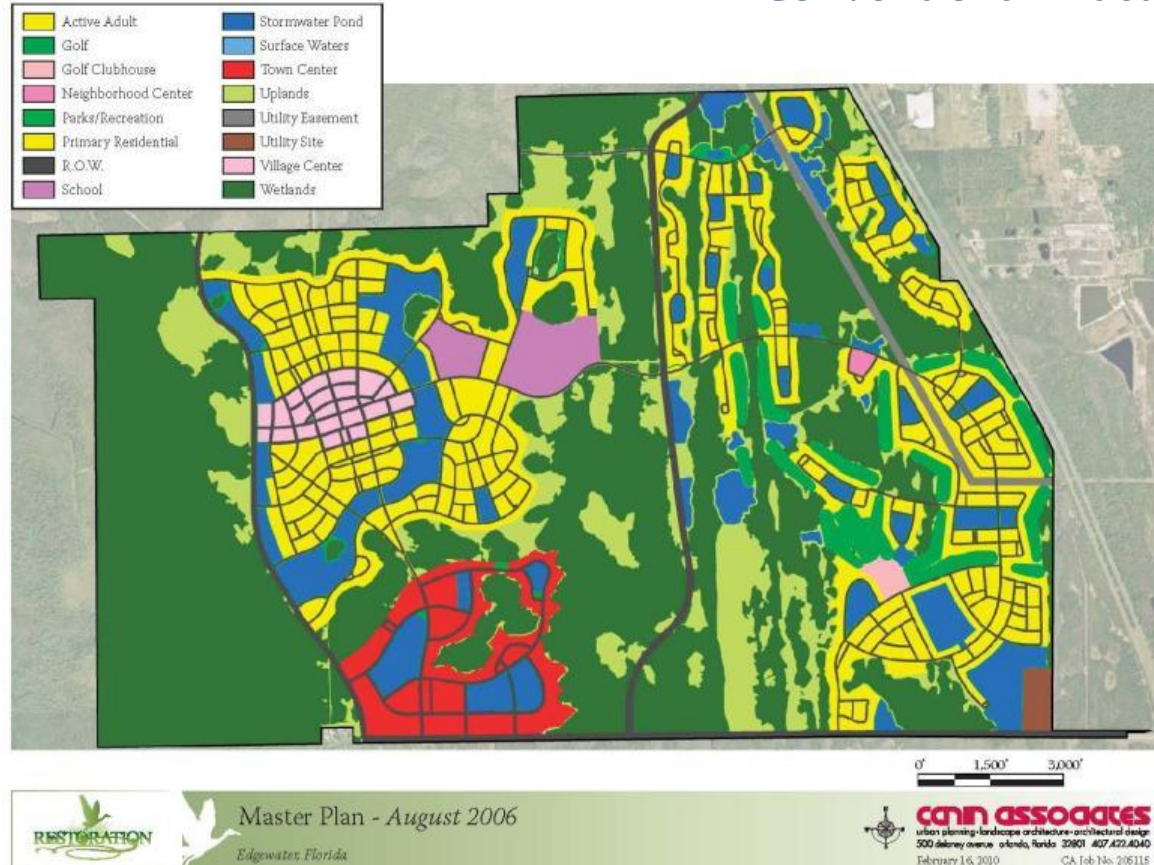
# *Case Studies:*

## *Restoration*



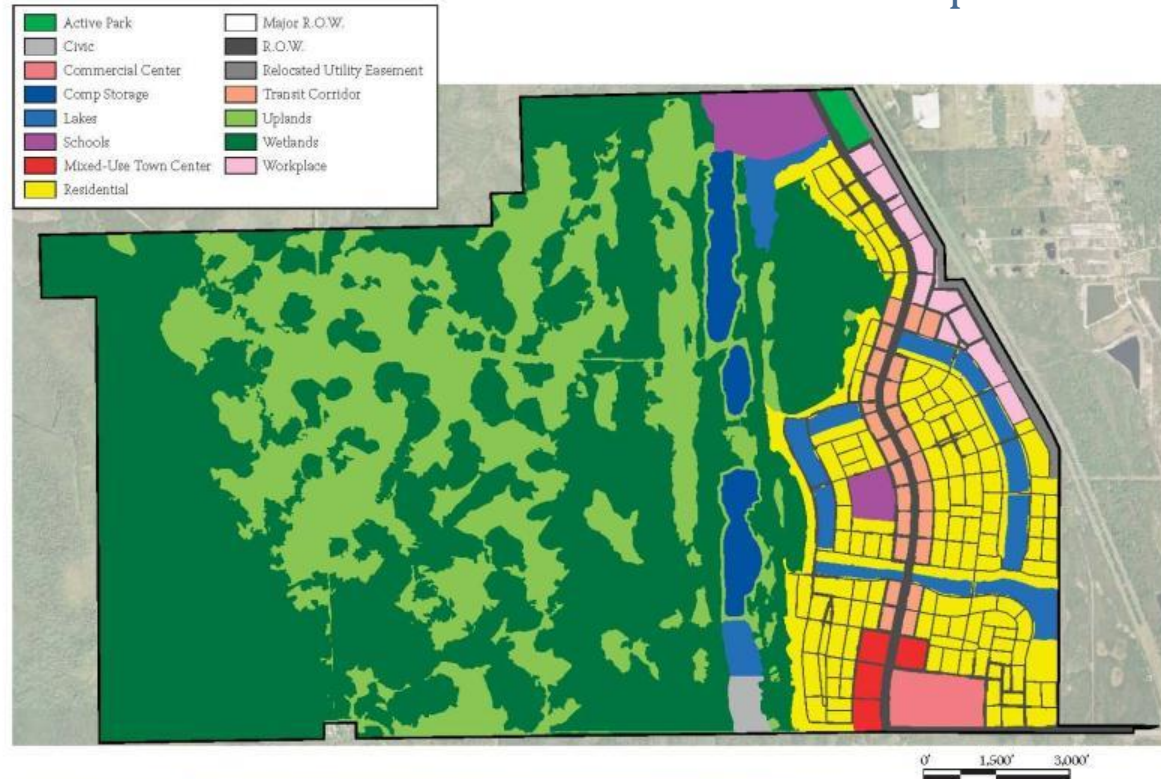
# Restoration 2006

## Conventional Practice



# Restoration 2009

## Reduced Impact Practice



Master Plan - December 2009

Edgewater Florida



**cmh ASSOCIATES**  
urban planning-landscape architecture-architectural design  
500 delaney avenue orlando, florida 32803 407.422.4040  
February 16, 2010 CA Job No. 208115

*Quantifying Impacts:*  
Roads

# *Restoration's Road Infrastructure*

## Life Cycle Analysis (50 year life)

### *Inputs*

	2006 Plan	2009
• Miles:	Plan 72	39
• Lane miles:	186	103
• Impervious area, ft <sup>2</sup>	17,000,000	10,000,000
• Landscaped area, ft <sup>2</sup>	6,000,000	3,000,000
• Cost	\$383,623,680	\$238,180,800

### *GHG Emissions*

• Mtons CO <sub>2</sub> e/yr:	13,031	7,176
-------------------------------	--------	-------

Metric tons CO<sub>2</sub>e/yr avoided: **5,855**

Initial costs avoided: **\$145,442,880**

*Quantifying Impacts:*  
Landscaping



# Restoration 2009

## Reduced Impact Design

- The largest lots are 60' wide
- Compact homes (45'x 70' lot) 375 ft<sup>2</sup> landscaped area
- Less than 25% of residences with lots designed for any turf



# Landscaping Impacts – Restoration Designs

## Resources Accounting

### *Inputs*

- Landscaped Area - acres
- Pesticides - lbs
- Fertilizer - lbs N
- Mowing - gal gas
- Irrigation - mgal

### 2006 Plan

988

2,240

135,000

33,000

988

### 2009 Plan

428

345

18,400

4,460

63

### *GHG Emissions*

- Mtons CO<sub>2</sub>e/yr:

11,685

798

Metric tons CO<sub>2</sub>e/yr avoided:

**10,900**

*Madera:*  
Quantifying Impacts

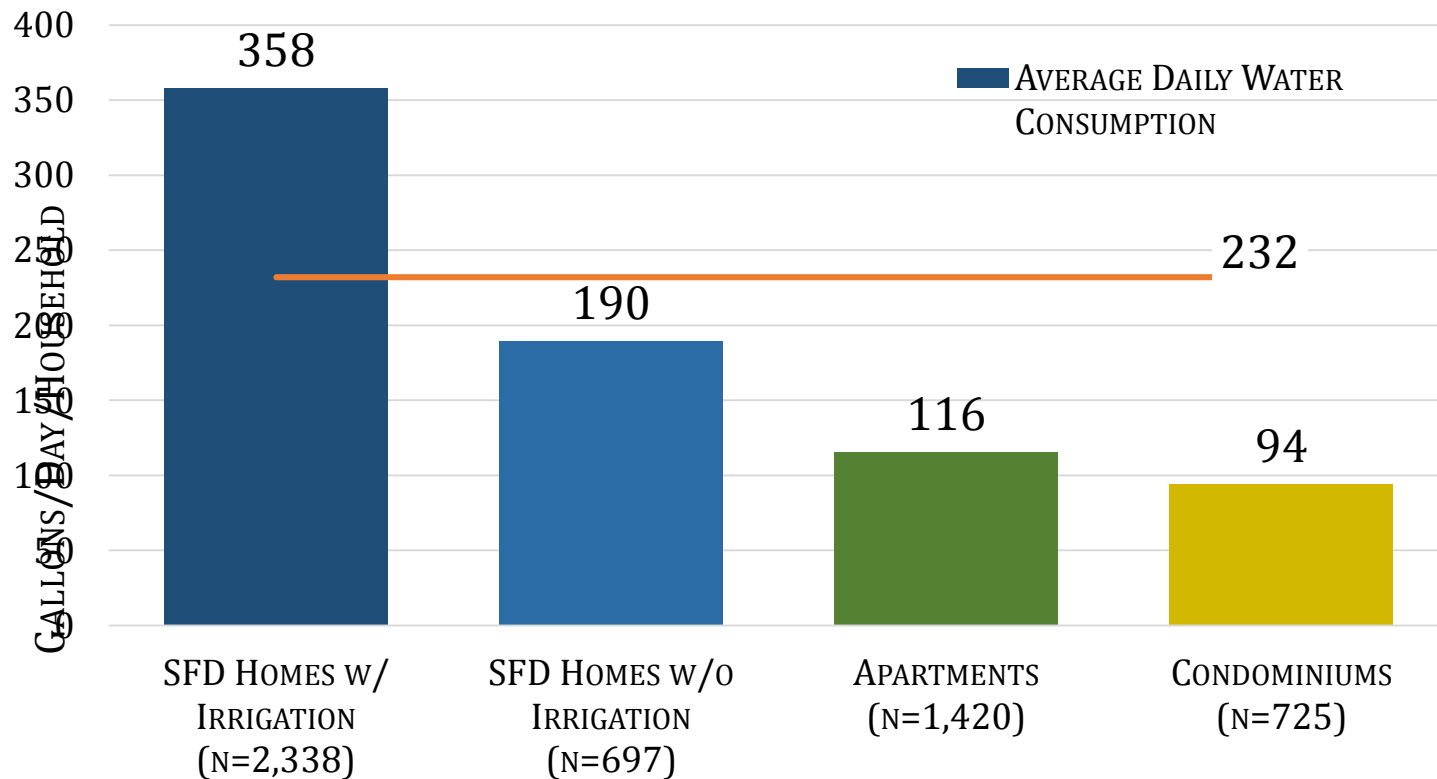
*Landscaping (2007)*  
Madera – Gainesville, FL





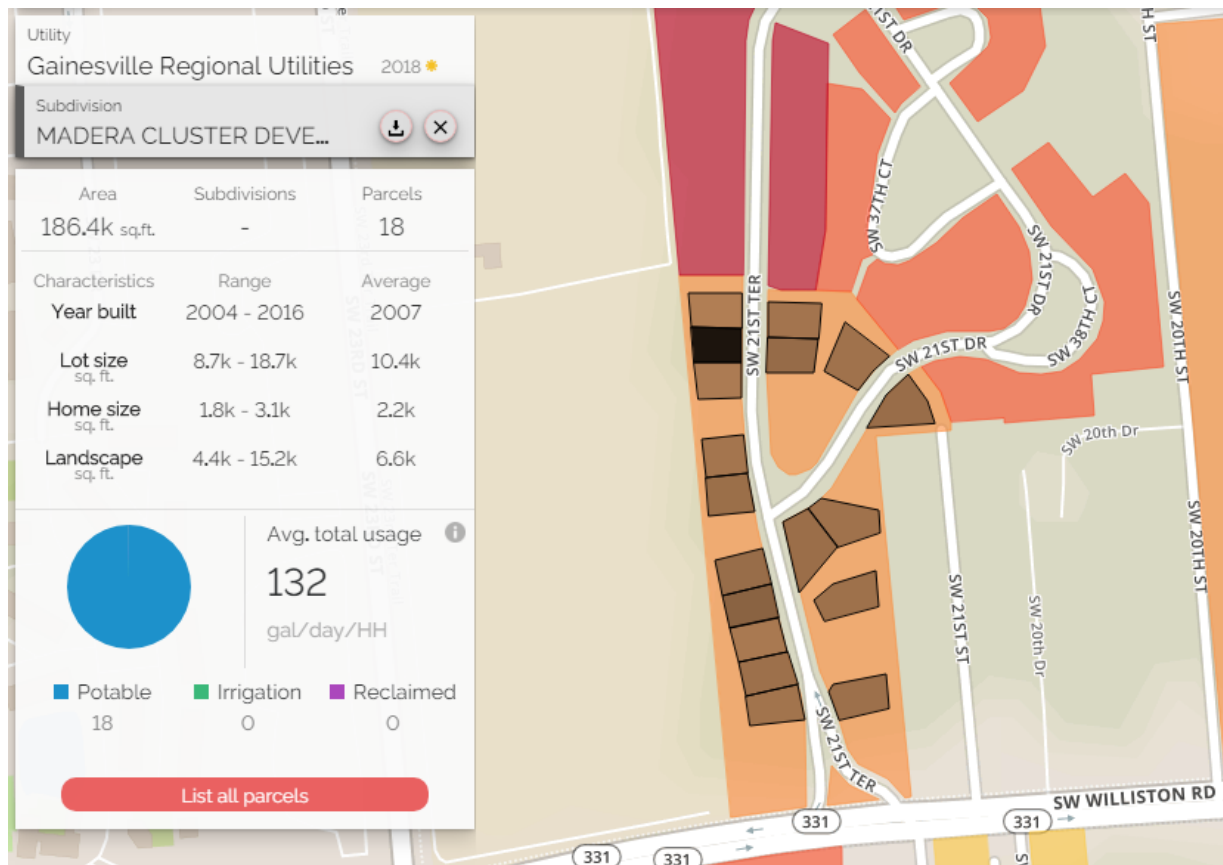
# *Water Consumption by Dwelling Unit Type*

## Gainesville Regional Utilities (2009 – 2013)



# Water (2018)

## Madera – Gainesville, FL



*TWA & Florida Water Star:*  
Quantifying Impacts

## Toho Water Authority

Average Daily Outdoor Water Savings for FWS Homes  
with Owner-Maintained Landscapes

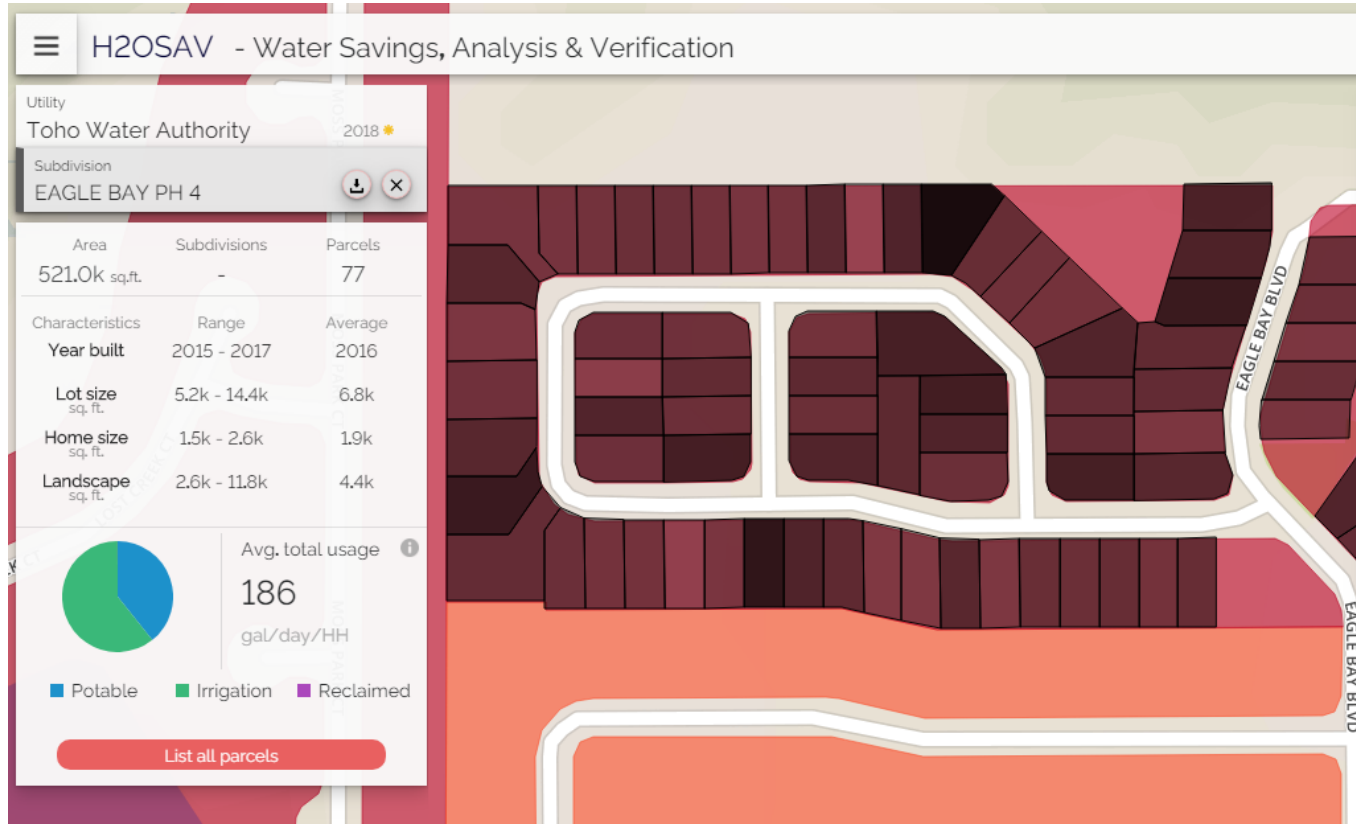


	FWS-Owner Maintained 2014-2015	FWS-Owner Maintained 2015-2016	FWS-Master Maintained 2015-2016
Number of Homes	38	145	84
Daily Consumption	181.1 gal/day	184.5 gal/day	525.0 gal/day
Percentage Savings	47.0%	39.1%	-23.7%
Daily Savings	150.6 gal/day	118.7 gal/day	-73.1 gal/day



# Toho Water Authority

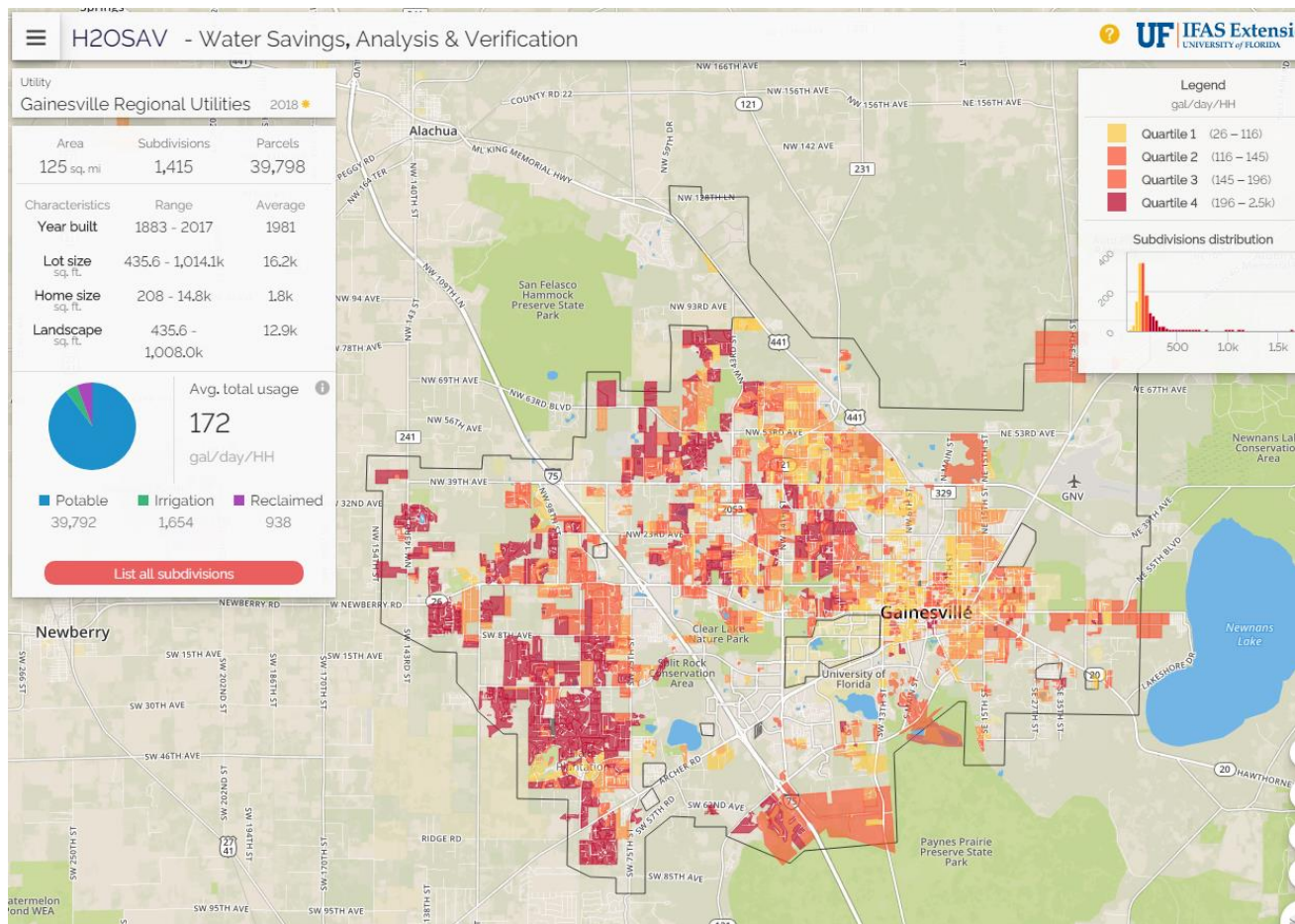
## Eagle Bay – Osceola County, FL



# *Current Research*

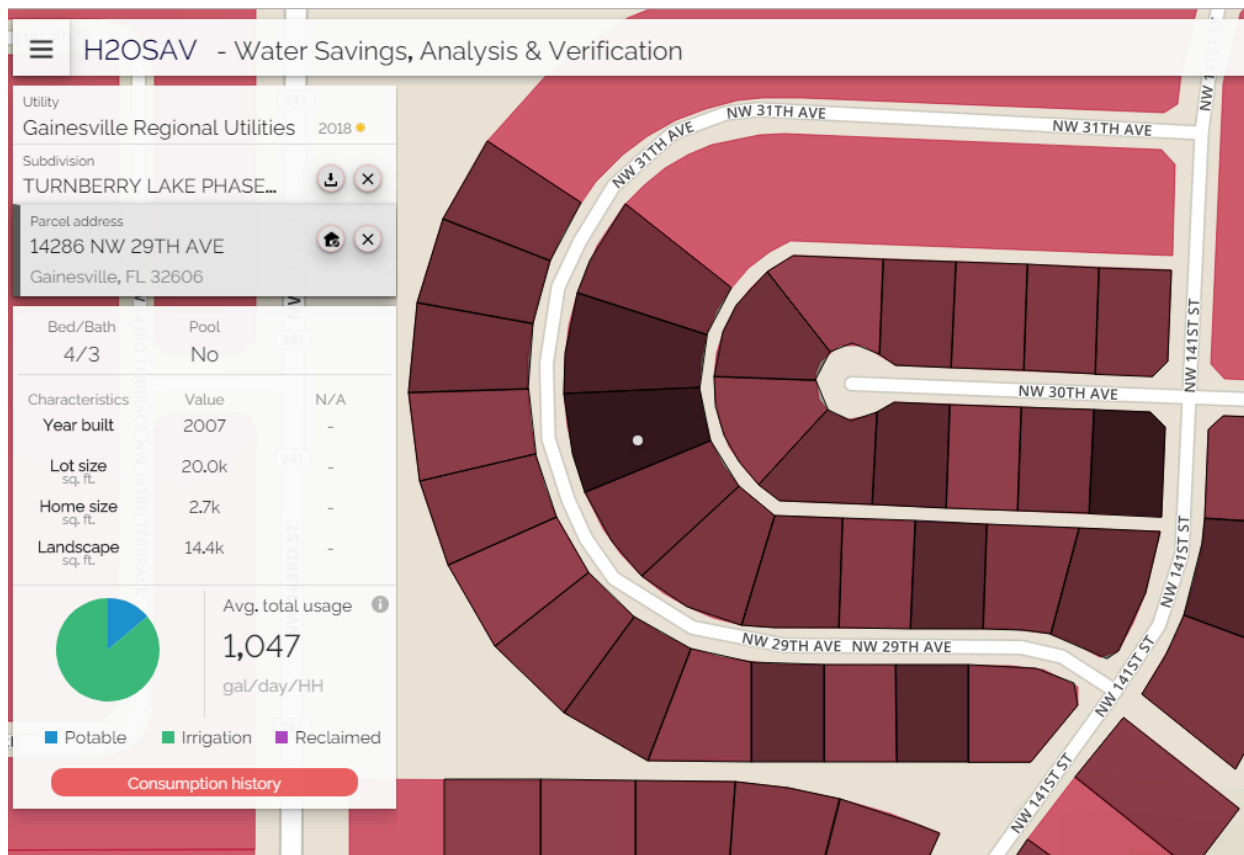
H2OSAV

# Gainesville Regional Utilities



# Gainesville Regional Utilities

## Turnberry Lake – Alachua County, FL





**H2OSAV - Water Savings, Analysis & Verification**

Parcel consumption (gal/day)

Zoom **Year** All

From  To

gal/day/HH

Oct '17 Jan '18 Apr '18 Jul '18

● Potable ● Irrigation  
● Reclaimed — Total subdivision average  
..... Total utility average

# *Current Research*

## Compost

# *Compost*

LifeSoils (Comand) – Sumter County, FL



*LifeSoils (Comand)*

On Top of the World – Marion County, FL







# Certification

Certified Trees

Maintenance Professionals

Irrigation Professionals

Buildings and Sites





# IMG CITRUS FOOD SAFETY



# CHERRYLAKE WILDERNESS PRESERVE

Panther Habitat Conservation and Wetlands Compensatory Mitigation Bank





# REASON7

Reason 7 believes that consistent and great outcomes are the result of following superior processes. All Reason 7 trees are grown following a strict, documented process, are certified by the nursery and routinely audited to provide buyers with confidence and accountability.



# POOR ROOT SYSTEM

**Poor root system:** Liner root ball was not root pruned as it was shifted into a #1 container.

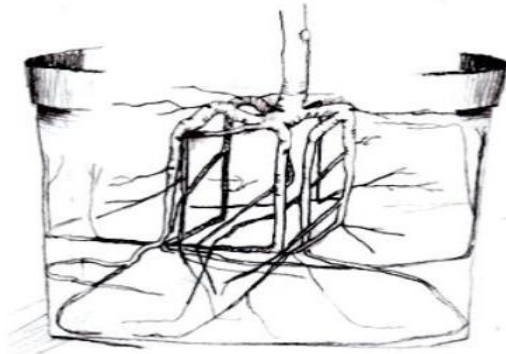


Figure 8b. Two months after shifting, roots that grew down and around the sides of the liner pot became woody and grew in diameter. These woody roots retained their original orientation, and many of the new roots produced in the #1 container grew from the bottom of the liner root ball.

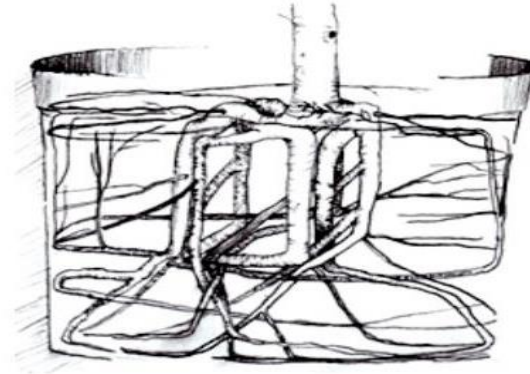


Figure 8c. Six months after shifting, the main woody roots that had been originally deflected by the liner pot continued to grow in diameter. Many roots that grew near the surface of the root ball originated near the bottom of the liner. The #1 container wall deflected a second set of roots up, down, and around. Some of these roots will become woody and grow into a second set of defects.

# GOOD ROOT SYSTEM

**Good root system:** Liner root ball was shaved (Fig. 7) when shifted into a #1 container.

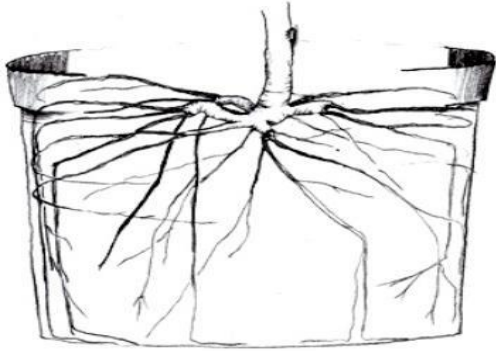


Figure 8d. Two months after root pruning and shifting, the new roots grew horizontally and downward. The roots at the top of the container originated from the top of the liner root ball, providing greater stability for the tree.

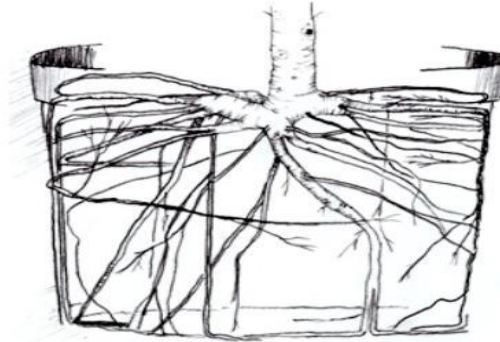


Figure 8e. Six months after root pruning and shifting, the main woody roots were oriented in a more natural form. Some main roots grew horizontally, while others grew downward. Both horizontal and vertical roots are needed for tree stability. The inner root ball was free from defects such as circling, stem-girdling, and kinked roots. However, this plant should be root pruned again when it is shifted to the next container size or planted in the ground.

Good root systems start in the nursery at propagation in the liner stage and require attention each time the tree is shifted into a larger container. Large main mother roots should grow straight from the trunk without circling the trunk or deflecting downwards...

Most defects such as circling roots in the root ball interior, can be mostly eliminated with appropriate and timely management in the nursery.

**Gilman:** Strategies for Growing a High-Quality Root System, Trunk and Crown in a Container Nursery





# THE PROCESS

Because what is essential is invisible to the eye, Reason 7 has adopted a series of certified processes to give you the peace of mind that you are purchasing the best possible tree on the market - from the tip of its roots, to the top of its canopy.



R7 approved plant



Plant quality & health



Root shaving



Identify defects



Correct defects



Planting depth



Audit

# Certifications

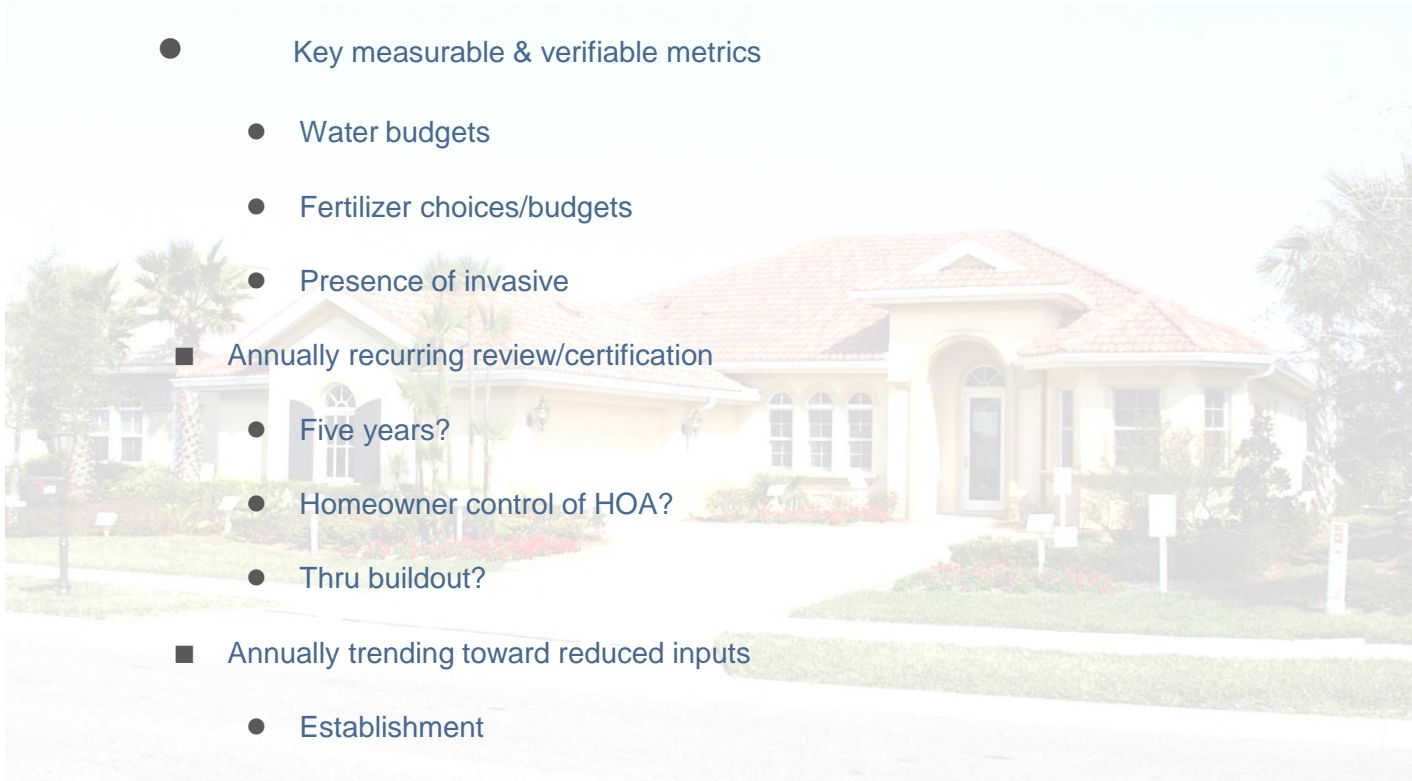
## Resilient and Sustainable Landscapes



# *Certifications*

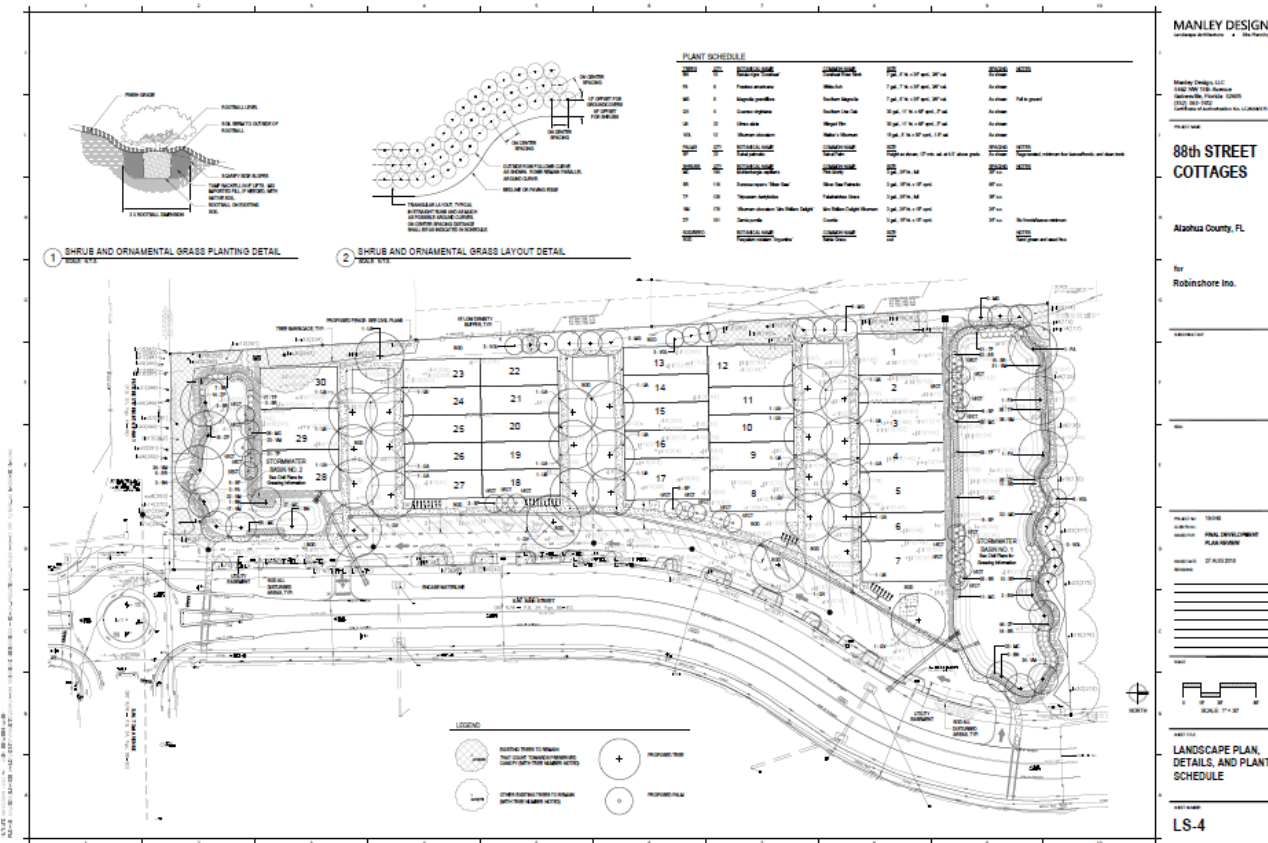
## Resilient and Sustainable Landscapes

- Key measurable & verifiable metrics
  - Water budgets
  - Fertilizer choices/budgets
  - Presence of invasive
- Annually recurring review/certification
  - Five years?
  - Homeowner control of HOA?
  - Thru buildout?
- Annually trending toward reduced inputs
  - Establishment
  - Mature



# Certifications

## 88<sup>th</sup> Street Cottages – Alachua County, FL





# Certifications

## Turtle Beach – Pinellas County, FL



# Incentives

Impact Fees Credit

Density Bonuses

Utility Rates

Tax Credits

Cost Share



# Gamification

Purposeful Goals

Immediate Feedback

Social Engagement

Reward Triggers

Leaderboards

Social Engagement





# 1000 TREES FOR 1000 YEARS



cherrylake



# Dr. Pierce Jones

[piercejones@ufl.edu](mailto:piercejones@ufl.edu)

352.392.8074

Program for Resource Efficient Communities  
Institute of Food and Agricultural Sciences



# Timothee Sallin

[timothee@cherrylake.com](mailto:timothee@cherrylake.com)

352.516.5992

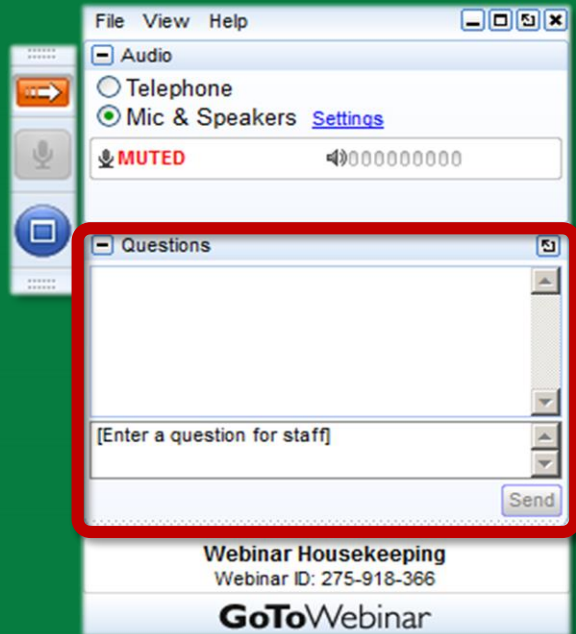
[cherrylake.com](http://cherrylake.com)



# Questions and Answers



## If you have questions:



- Your webinar control panel includes a “Questions” box
- Please click on “+” sign and type any questions in this box
- Please refer to the slide number and/or speaker when you post your question
- Please keep your questions succinct!
- Staff will ask the presenters questions, as time permits

The PowerPoint is available at [www.1000friendsofflorida.org](http://www.1000friendsofflorida.org)

The screenshot shows the homepage of the 1000 Friends of Florida website. The header features the organization's logo and a navigation bar with links: About Us, Building Better Communities, Saving Special Places, Planning Tools, Outreach, and Donate Now. A large banner image shows a person kayaking on a lake with lily pads, with the text "Saving Special Places" and "Photo Credit: Mac Stori". Below the banner, there are several featured articles and sections:

- Charity Navigator:** A star rating indicating the organization's charitable status.
- GuideStar:** A badge indicating the organization is a Gold Participant.
- How will Florida accommodate 15 million new residents?**: An article discussing population projections and the impact on Florida's special places. It includes a map of Florida showing population density and a link to "Read More".
- Trouble in Paradise**: An article about toxic green algae and its impact on Florida's environment. It includes a photo of a lake and a link to "Read More".
- Current Foresight**: A section with a photo of a landscape and a link to "Read More".
- What's New ...**: A section with a red circle around the heading, containing links to "Sustainable Landscaping Principles and Practices" and "Martin County 2070: What's Next?".
- Palm Beach County 2070: What's Next?**: An article about the impact of climate change on Palm Beach County, with a link to "Read More".
- Trouble in Paradise**: A link to watch a broadcast and view the report.

The screenshot shows the 1000 Friends of Florida website interface during a presentation. The top navigation bar includes links: File, Options, View, Help. The main content area displays a presentation slide titled "Audience View 100%". The slide content includes:

- Screen Sharing**: A section with a "Paused" status and buttons for "Show My Screen", "Stop Showing Screen", "Give Keyboard & Mouse", and "Change Presenter".
- Start Recording**: A button with a status of "72.9 GB remaining" and a link to "Settings".
- Webcam**: A section with a "Microphone" icon and a link to "Edit".
- Audio**: A section with a "Telephone" icon and a link to "Sound Check".
- Dashboard**: A section with a "Materials" link and a status of "2 out of 201".
- Materials**: A section with a "Tests" link and a status of "0/0".
- Chat**: A section with a "Send" button and a status of "All - Entire Audience".

At the bottom of the interface, there is a date and time stamp: "September 9 at 10 a.m. Test Run for September 10" and a training ID: "Training ID: 583-124-868". The "GoToTraining" logo is also visible.





## This webinar has been approved for:

- 1.5 AICP CM for planners (#9158111)
- 1 CEC for Certified Floodplain Managers
- 2 CLE for Florida attorneys (#1806919N)
- 1.5 CEUs (certified under 381.0101, FS) for Florida Environmental Health Professionals
- 1.5 credit hours for Landscape Architecture by Florida DBPR (#0011370)

There is a link to a **BRIEF SURVEY** in the follow-up email you will receive. Please take a few minutes to give us feedback!



## Upcoming FREE events:

- **FREE NOVEMBER WORKSHOP** — **Tuesday, November 27** from 6:00 to 7:30 p.m.  
**Palm Beach County 2070: What's Next?** Nova's Palm Beach Campus, 11501 North Military Trail, Palm Beach Gardens. **No registration is required.**
- **FREE NOVEMBER WORKSHOP** — **Wednesday, November 28** from 6:00 to 7:30 p.m.  
**Martin County 2070: What's Next?** Susan H. Johnson Auditorium, Wolf High-Technology Center, 2400 SE Salerno Road, Stuart. **No registration is required.**
- **FREE DECEMBER WEBINAR** — **Thursday, December 6, 2018** from noon to 1:30  
**Recycle Right to Meet Industry Challenges.** Registration info. below.
- **FREE JANUARY WEBINAR** — **Tuesday, January 22, 2019** from noon to 1:30  
**2019 Florida Legislative Preview.** Registration info. below.

Register or find out more at  
[www.1000friendsofflorida.org/webinar/](http://www.1000friendsofflorida.org/webinar/)



# Seeking additional sponsors to offer future webinars for free!

Please consider donating to 1000 Friends. Even \$10 gifts are appreciated!

Or, consider becoming a program sponsor:

Florida Guardian -- \$5,000

President's Club -- \$2,500

Friend -- \$1,000

Sponsor -- \$500

Supporter -- \$250

You may donate on-line at [www.1000friendsofflorida.org/donate-now/](http://www.1000friendsofflorida.org/donate-now/)

(Designate it for DeGrove Education Fund)

OR

Email [vyoung@1000fof.org](mailto:vyoung@1000fof.org) for more information



Please support 1000 Friends of Florida:

[www.1000friendsofflorida.org/donate-now/](http://www.1000friendsofflorida.org/donate-now/)

If you would like your donation to support 1000 Friends' webinars, please allocate your donation to the DeGrove Education Fund

### AMAZON SMILE

Amazon will make a donation to 1000 Friends every time you purchase through their site at <http://smile.amazon.com/ch/59-2761163>

