

Dr. John M. DeGrove Webinar Series

# Florida's Rising Seas: Sea Level 2040 & Sea Level 2070



# IMPORTANT!



We only offer professional certification credits  
**for participants who attend the live webinar!**

# 1000 Friends of Florida

## Building Better Communities & Saving Special Places

Florida's leading nonprofit advocate for sustainable communities

Work with citizens, community and state leaders, conservation and business groups

Educate, advocate and negotiate to protect Florida's high quality of life







# Dr. John M. DeGrove

May 4, 1924 – April 13, 2012

Icon of comprehensive planning both  
in Florida and across the nation

Co-founder of 1000 Friends of  
Florida

To find out more, please visit:  
[1000friendsofflorida.org/dr-degrove](http://1000friendsofflorida.org/dr-degrove)



# Dr. John M. DeGrove Webinar Sponsors

## **NATHANIEL REED SOCIETY**

J. Crayton Pruitt Foundation

## **FRIEND**

Mr. Ronald L. Book, PA

Mr. Andy DeGrove

Ms. Kimberly A. DeGrove & Dr. Clyde Partin

Dickman Law Firm

William Howard Flowers, Jr. Foundation

Kitson & Partners/Babcock Ranch

The Perkins Charitable Foundation

Mr. Robert M. Rhodes

Ms. Susan Trevarthen



# Dr. John M. DeGrove Webinar Sponsors

## **SPONSOR**

Mr. William M. DeGrove

Dr. Jim Nicholas

## **ANNIVERSARY CLUB**

Anonymous

Mr. David M. Orshefsky

## **SUPPORTER**

Mr. Lester Abberger

American Planning Association, Florida  
Chapter

Mr. Sidney F. Ansbacher

Mr. Thomas J. Baird

Debra and Robert Bergstrom

C. David Coffey, PA

Mr. David Flinchum ASLA, AICP

Ms. Sara M. Fotopulos

Mr. Claude Gerstle

Mr. James Murley

Ms. Nancy Stroud

Treasure Coast RPC



# For those who attend the live event, this webinar has been approved for credits for:

- Planners (1.5 AICP CM including 1 credit for Resilience and Sustainability #9265385)
- Florida attorneys (2.0 General CLE #2301949N)
- Certified Floodplain Managers (1 CEC)
- Florida Certified Environmental Health Professionals 1.5 Contact Hours)

*1000 Friends has applied for professional certification credits for Florida DBPR landscape architects but cannot guarantee that credits will be approved. This event has not been approved for those who view the broadcast at a later time.*

*Find credits for past webinars at  
[1000fof.org/upcoming-webinars/credits](https://1000fof.org/upcoming-webinars/credits)*



# Follow up survey, certificate and credits:

*In the follow up email for the LIVE WEBINAR you will receive:*

A link to a **brief survey** to help us improve future webinars

A **certificate of attendance** (use Google Chrome to download)  
Please download your certificate right away if you need it

*Information on credits for past webinars are available at*  
***[1000fof.org/upcoming-webinars/credits](https://1000fof.org/upcoming-webinars/credits)***





# For DBPR Landscape Architects

(NOTE: This webinar has not yet been approved for credits)

1000 Friends is only approved for credits through the Florida Department of Business and Professional Regulations (DBPR)

Only those who attend the  
**LIVE WEBINAR**

Are eligible for DBPR credits

Due to changes in State requirements, 1000 Friends will submit your credits on your behalf, based on the information you submitted during registration



# Upcoming Webinars

- Wednesday, April 19, 2023, noon to 1:30 Eastern  
**2023 Florida Legislative Update**
- Wednesday, May 17, 2023, from noon to 1:30  
**2023 Florida Legislative Wrap Up**



# Support 1000 Friends!

## DONATE

at [www.1000fof.org/donate](http://www.1000fof.org/donate)

(you may designate it for DeGrove Education Fund if you wish)

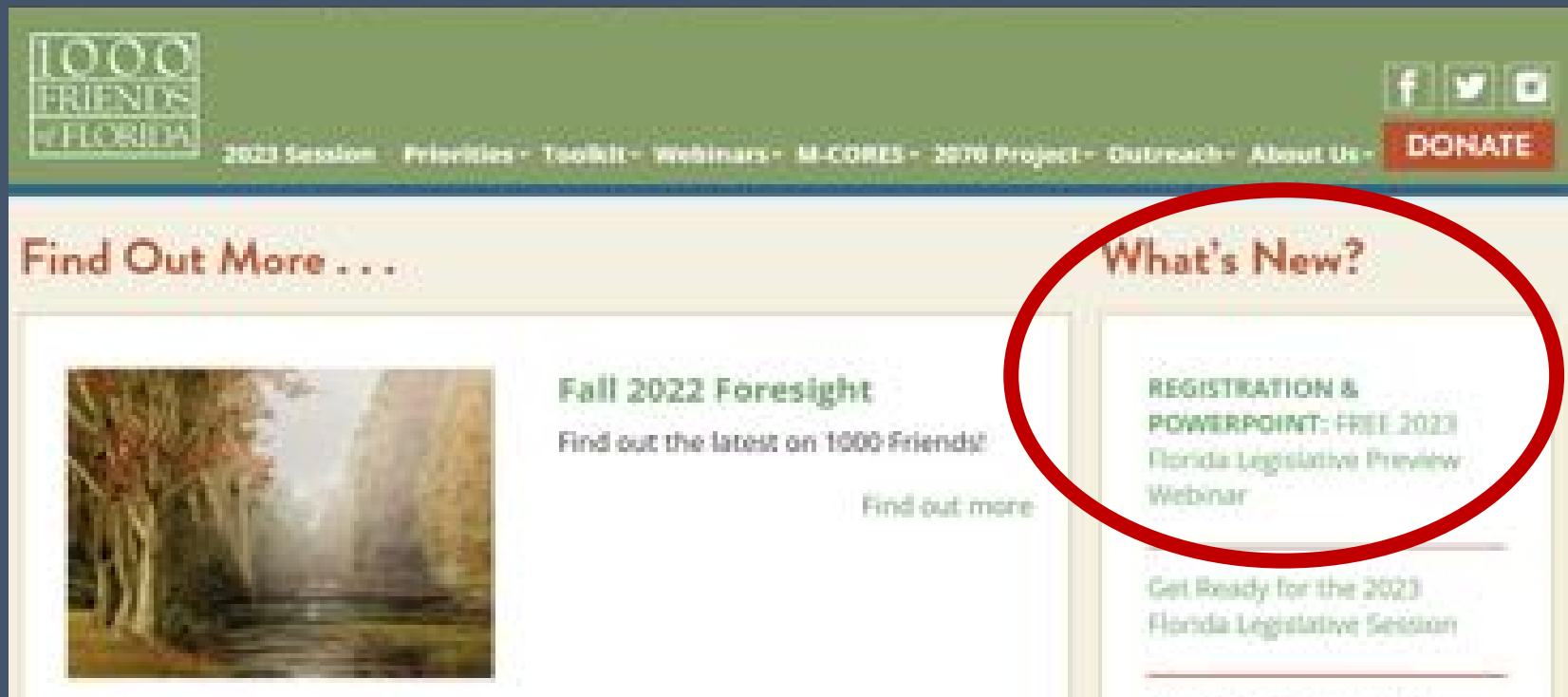


## SPONSOR

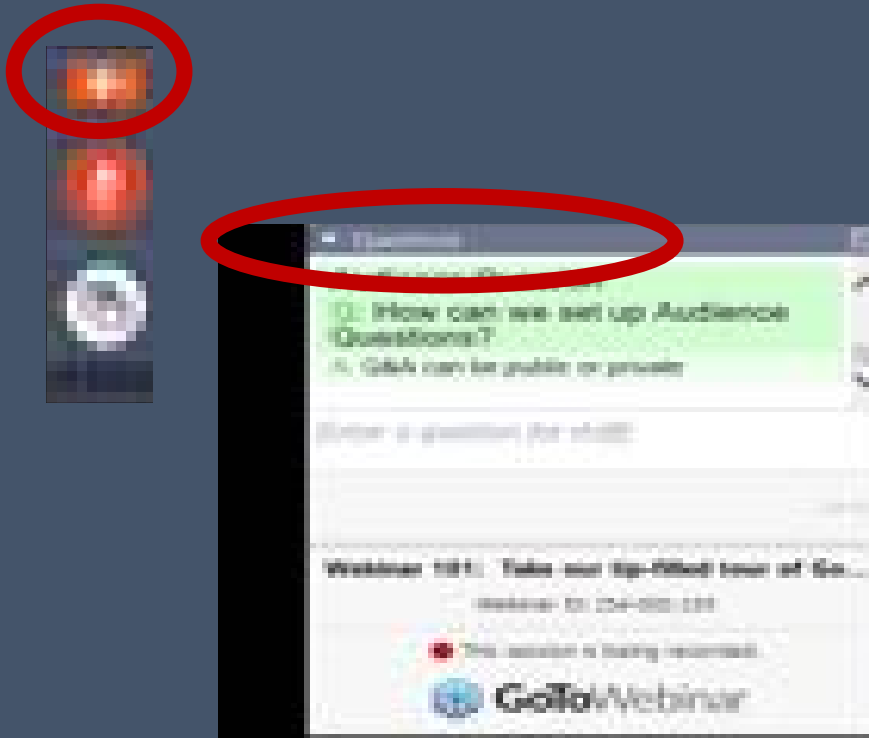
the DeGrove webinars by emailing  
[vyoung@1000fof.org](mailto:vyoung@1000fof.org) to find out more



Follow up information will be posted under  
“What’s New” at [1000fof.org](http://1000fof.org)



# Please ask questions!



- Click on arrow at top right of your screen to maximize control panel
- Click arrow next to “Questions” to maximize the questions box
- Please 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



Paul Owens

1000 Friends of Florida



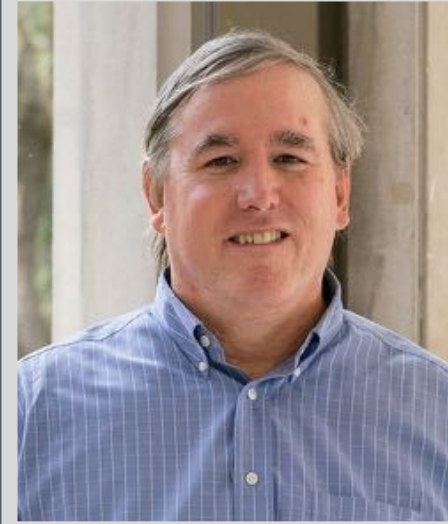
Dan Farrah

UF CLCP



Mike Volk

UF CLCP



Tom Hctor

UF CLCP



Vivian Young

1000 Friends of Florida





**Paul Owens**

**Paul Owens** has been President of 1000 Friends of Florida since 2018.

He was previously with the Orlando Sentinel, serving as Opinions Editor, writing extensively on growth management, environment and quality of life issues facing Florida.

Paul also served as the Sentinel's Florida Forward Moderator, organizing and moderating public forums on topics including transportation and affordable housing.

He has a Bachelor of Arts in History with honors from Swarthmore College and a Master of Arts in Journalism from Stanford University.

**Dr. Dan Farrah** is a development and land use analyst for the Center for Landscape Conservation Planning at the University of Florida. His research focuses on the development of future land use scenario models and methods to analyze the associated environmental impacts.

This research involves suitability analysis, future population scenarios, and models to quantify the loss of natural resources such as agricultural land, water resources, and habitats for various species. His current work focuses on future development scenario modeling and the impacts on agricultural and conservation lands.

Dan has taught landscape architecture courses at Louisiana State University, Chatham University, and the University of Florida including environmental planning and design, GIS, digital representation, construction, grading, and landscape planning.

Dan has a bachelor's and master's degree in Landscape Architecture from Louisiana State University and a Ph.D. in Urban and Regional Planning from the University of Florida.



**Dan Farrah**



Mike Volk

**Michael Volk** is Associate Director of the University of Florida's Center for Landscape Conservation Planning. In that capacity he conducts applied research with conservation partners throughout Florida on land use, regional conservation planning, and urban green infrastructure; the impacts of sea level rise on natural resources and coastal communities; and climate change adaptation strategies and information needs for landscape architecture students and professionals.

Michael currently teaches courses in planting design, landscape management and ecology, environmental and ecological policy, and ecological issues and sustainability in collaboration with faculty in the Departments of Landscape Architecture and Urban and Regional Planning. Michael is also a partner with Florida Resilient Cities, an initiative which works with communities across Florida to be more prepared for and resilient to increased risk and future changes.

He has a master's degree in Landscape Architecture from the University of Florida and a degree in Architecture from the Frank Lloyd Wright School of Architecture.

**Dr. Thomas Hctor** is director of the Center for Landscape Conservation Planning at the University of Florida. He is an expert on GIS applications for identifying conservation priorities and implementation actions for maintaining biodiversity and ecosystem services including focal species habitat modeling, reserve design, wildlife corridors, recommendations for expanding protected lands to address climate change impacts, and conservation strategies for ensuring effective conservation in a future with continuing conflicts with land use change and habitat loss.

He has served as principal or co-principal investigator on many regional-scale conservation analysis and planning projects in Florida and the U.S. His current projects include the Florida Ecological Greenways Network and Florida Wildlife Corridor, the Critical Lands and Waters Identification Project, the Identification of Florida Air Force Installation Conservation Priorities project, and working with the National Wildlife Refuge Association and the U.S. Fish and Wildlife Service on Regional Landscape Conservation Design projects in Florida and the Gulf Coast.

He has an undergraduate degree in History and Science from Harvard University and a Masters and Ph.D. in Conservation Biology and Landscape Ecology from the University of Florida.



Tom Hctor





## Vivian Young

**Vivian Young, AICP**, is Communications Director of 1000 Friends of Florida. She handles communications and special planning projects, leading 1000 Friends' successful outreach campaign to curtail M-CORES, the proposed 330-mile system of tolled roads through rural Florida.

She spearheaded *Florida 2070/Water 2070* which reveals the devastating impact 15 million new residents on Florida's lands and waters; building on that she is now focusing on the release of *Sea Level 2040 & 2070*.

She launched and coordinates the monthly *Dr. John M. DeGrove Webinar Series* which has attracted more than 34,000 attendees since 2011 and now averages close to 600 participants per event.

Additionally, she manages 1000 Friends' website, administers e-mail alerts, coordinates publication of the newsletter and annual report, authors and edits special reports, and undertakes other communications endeavors. Vivian served as Interim President in both 2014 and 2018.

She received her Master of Urban Planning degree with honors from the University of Illinois at Urbana-Champaign, and her Bachelor of Arts with thesis honors from Washington College in Chestertown, Maryland, and is a member of the American Institute of Certified Planners.

# FLORIDA'S RISING SEAS

## *Mapping Our Future*

The logo for 'SEA LEVEL 2040' features a blue silhouette of the state of Florida. The Florida map is positioned over the word 'SEA' and partially over 'LEVEL'. The word 'SEA' is in a lighter blue, while 'LEVEL' and '2040' are in a darker blue. The entire logo is set against a light blue background that includes a faint, stylized graphic of a rising sun or wave.The logo for 'SEA LEVEL 2070' is identical in design to the 2040 version, featuring a blue silhouette of Florida over the word 'SEA', with 'LEVEL' and '2070' in a darker blue. It is set against a light blue background with a faint rising sun or wave graphic.

A joint project of ...



**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

[1000fof.org/sealevel2040/](http://1000fof.org/sealevel2040/)

# FLORIDA'S RISING SEAS

## *Mapping Our Future*

### Outline:

Introduction

Sea Level 2040

- Methodology
- Major Statewide Results

Sea Level 2070

- Methodology
- Major Statewide Results

The Florida Wildlife Corridor

Recommendations

The Future is Now

Q & A

### Presenters:

Paul Owens, *1000 Friends of Florida President*

Dan Farrah, *UF CLCP Development and Land Use Analyst*

Tom Hocht, *UF CLCP Director*

Mike Volk, *UF CLCP Associate Director*

Vivian Young, *AICP, 1000 Friends Communications Director*



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



It is clear our changing climate brings new challenges to Florida.



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



While there are many impacts, this study focuses specifically on the interrelationship between sea level rise, population growth, and development patterns, and how our state and communities can better plan for these impacts.



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING





This project is intended to guide Floridians to a clearer understanding of the vulnerability of our state's lands, waters, and communities to the combined impacts of population growth, sea level rise, and development patterns.



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



**The time is now for Florida and its communities and counties to commit to sound and fiscally responsible planning for what will be a more challenging future.**



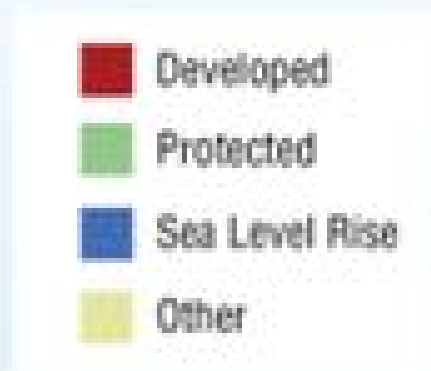
**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



Both Sea Level 2040 and Sea Level 2070 reflect potential impacts of population growth, development patterns, and sea level rise on Florida over the coming decades.





**Sprawl  
2040**



**Conservation  
2040**



Each includes Future Scenarios, which are a planning tool for envisioning potential futures based on reasonable assumptions to examine the potential impacts of trends and policy decisions.



David Moynahan

**Sea Level 2040 includes nearer term future scenarios that could be used for conservation and other planning, including for the Florida Wildlife Corridor.**



**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING





**Sea Level 2070 includes longer-term future scenarios to reflect the cumulative effects of many decisions over decades.**



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

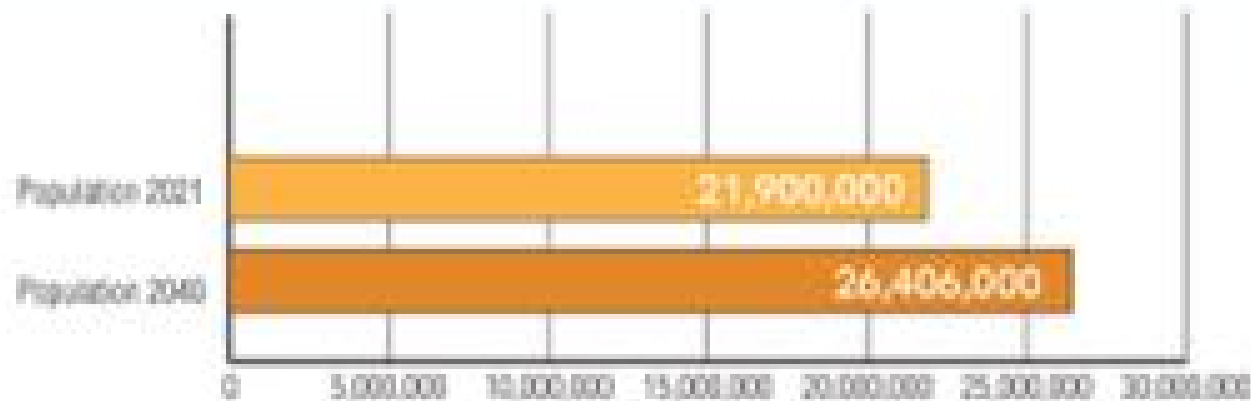




**Methodology**

# Sea Level 2040 Rests on Four Assumptions:

---



1. Florida's population will grow to 26,406,000 residents in 2040, a 21% increase over 2021

*(Based on 2021 Florida Bureau of Economic and Business Research (BEBR) medium projections)*



2040



**2. Sea Level will rise by  
0.25 meters**

*(Based on the 2022 NOAA  
Intermediate sea level rise  
projection)*



**UF**

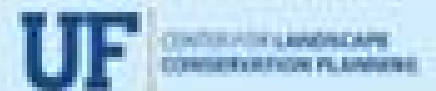
CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



### 3. Residents on lands to be lost to sea level rise will relocate:

- Half will stay in the same county
- If there isn't sufficient land, the balance will be allocated to adjacent counties.
- The other half are assumed to move out of state.

*(Based on the 2022 NOAA Intermediate sea level rise scenario and a Florida State University (FSU) study on population impacts (Hauer 2016))*





4. Some lands (closer to cities and major roads) are more likely to develop than others (wetlands)

*(Based on Likelihood of Development assessment)*



**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# Sea Level 2040 Has Two Future Scenarios:

---



## 1. Sprawl 2040

Assumes 2019 densities and patterns of development will continue over the next two decades as the population grows

Factors in the impacts of sea level rise on Florida's lands and the resulting need for population relocation



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING





## 2. Conservation 2040

Assumes the same population growth and sea level rise as in the Sprawl Scenario

But also assumes that:

- Florida's priority natural lands will not be developed
- Any new development will be 30% more compact

# Land Use Categories:

---

- **Developed:** Residential, Commercial, Industrial and other lands that are developed
- **Protected Natural:** Florida's priority natural lands (excluding protected agricultural lands) that have been protected through federal, state, local and private programs
- **Protected Agriculture:** Agricultural lands that may be protected for their natural values, such as wetlands, habitat, and the like
- **Unprotected Agriculture:** Lands that are used for croplands, livestock, aquaculture and other agricultural uses
- **Other:** All lands not included in the above categories of developed, protected natural, agriculture, or protected agriculture, including timberlands, mining lands, and other miscellaneous land uses





David Moynahan

## What are “state priority natural lands?”

Lands that are either currently protected or are high priorities for protection (through public purchase, easement, zoning or some other means) for Florida’s biodiversity, water, or other ecosystem services, including:



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

## Baseline Protected Lands

■ Baseline Protected Lands



## Future Protected and Priority Lands

■ Baseline Protected Lands  
■ Priority Lands



1. Current Florida Managed Lands (FLMA)

2. Future priority natural lands including:

- Florida Forever conservation land protection projects
- Priorities 1, 2, and 3 in the Florida Ecological Greenways Network (FEGN), otherwise known as the Florida Wildlife Corridor



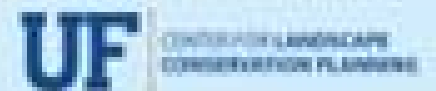
CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



## What is “protected”?

Some are owned by Federal, State or Local Government

Some are protected through “conservation easement” where the land remains under private or public ownership with some restrictions on how the property is used to protect its conservation or agricultural value.



# Florida Counties with Local Land Referenda

---



Alachua

Brevard

Collier

Flagler

Hillsborough

Indian River

Lee

Manatee

Martin

Miami-Dade

Nassau

Palm Beach

Pasco

Pinellas

Polk

Sarasota

Seminole

St. Lucie

Volusia



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# How Do We Protect These Lands?

---

## State Resources:

- Florida Forever
- Rural and Family Lands
- Florida Communities Trust
- Water Management Districts

## Federal Resources:

- Natural Resources Conservation Service (NRCS)
- United States Fish and Wildlife Service (USFWS)
- United States Department of Agriculture (USDA)

## Local Resources:

- County Conservation Referenda
- Planning Process
  - Future Land Use Maps (FLUM)
  - Local Comprehensive Plans
  - Zoning
  - Local Government Easements

## Private Resources:

- Land Trusts/Conservation Easements
- Foundation Funding



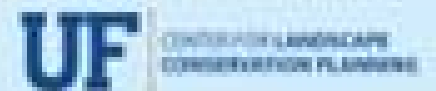
# Possible State Funding Protection Scenarios:



**GOAL:** Protect 6 million acres (3/4 of the unprotected acreage in the Florida Wildlife Corridor) of the highest state priority lands

**ASSUMPTION:** A very approximate average of \$4,000 an acre, with the total cost \$24 billion in today's dollars.

- 800-year scenario - If the Legislature and Governor approved \$30 million a year (as it did on average between 2009 and 2020) for Florida Forever and Rural and Family Lands programs)
- 80-year scenario - If \$300 million a year were split between the two programs (historic funding and approximate average for 2021 and 2022)
- 48-year scenario - If \$500 million a year were evenly split between the two programs







**Greenways and Trails**

# Protected Lands Can Have Multiple Natural and Economic Values

---

- Resource-based recreation & ecotourism
- Wildlife habitat & biodiversity
- Storm protection
- Flood control
- Water storage and cleansing
- Carbon sequestration
- Food & fiber security

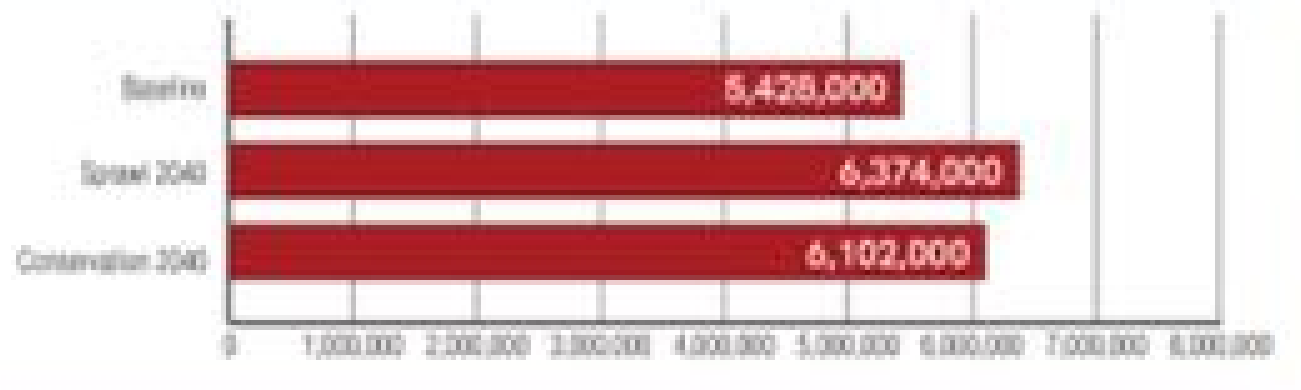


CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



## **Major Statewide Results**

# STATEWIDE Developed Lands



## Baseline:

About 5.4 million acres or close to 15% of Florida's acreage

## Sprawl Scenario:

Almost 6.4 million acres or almost 18% of Florida's acreage

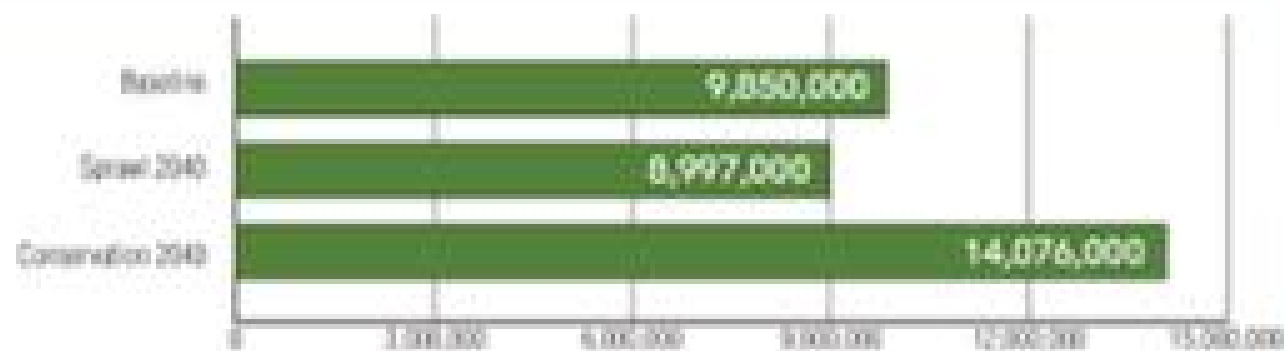
## Conservation Scenario:

6.1 million acres or almost 17% of Florida's acreage

# STATEWIDE Natural Conservation Lands



*(Excluding Protected Agriculture)*



## Baseline:

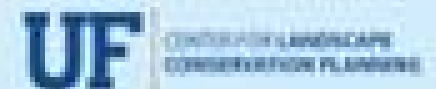
Close to 10 million acres or 27% of Florida's acreage

## Sprawl Scenario:

Approximately 9 million acres of state priority natural lands remain undeveloped, or 25%

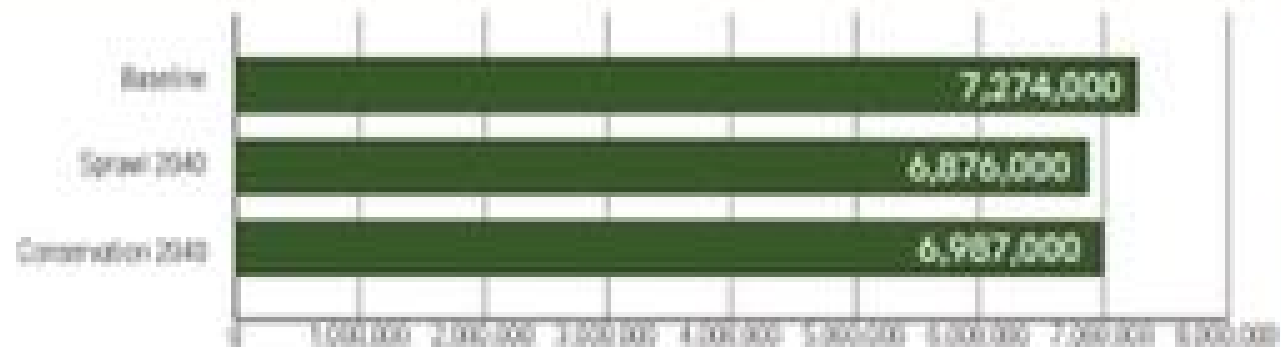
## Conservation Scenario:

14 million acres of state priority natural lands remain undeveloped, almost 39% of Florida's acreage



# STATEWIDE Total Agricultural Lands

*(Including Protected Agriculture)*



## Baseline:

7.3 million acres of agricultural lands or 20% of Florida's acreage

## Sprawl Scenario:

6.9 million acres or slightly less than 19% of Florida's acreage

## Conservation Scenario:

7 million acres or slightly more than 19% of Florida's acreage

# STATEWIDE Agricultural Lands Separate



## Baseline:

856,000 acres or a little more than 2% of Florida's acreage

## Sprawl Scenario:

854,000 acres with 2,000 acres lost due to sea level rise

## Conservation Scenario:

3,236,000 acres or close to 9% of Florida's acreage

# STATEWIDE Other Lands

*(Timber, Mining, Unprotected Natural, etc.)*



## Baseline:

11.8 million acres or more than  
32% of Florida's acreage

## Sprawl Scenario:

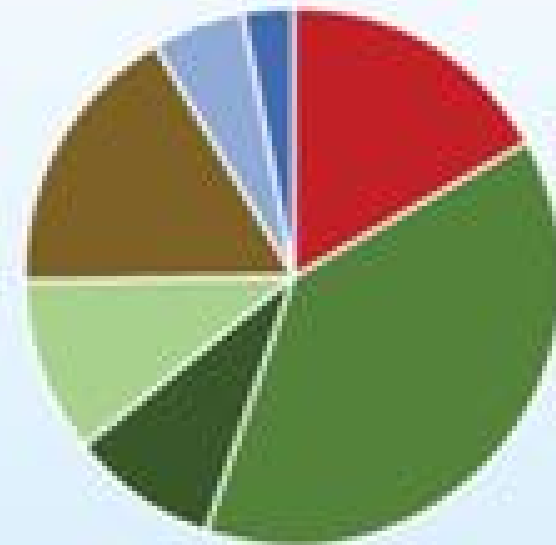
11 million acres or more than  
30% of Florida's acreage

## Conservation Scenario:

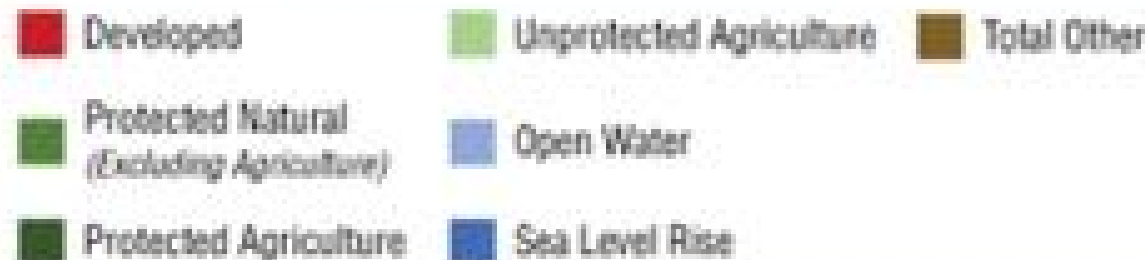
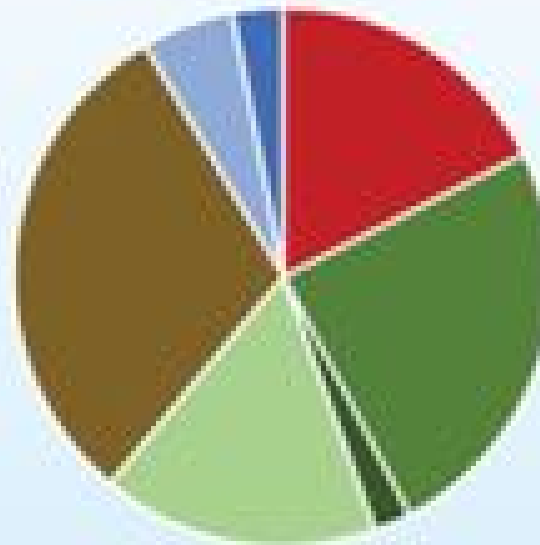
6.1 million acres or about 17% of  
Florida's acreage

# Comparing the Conservation and Sprawl Scenarios:

Conservation 2040



Sprawl 2040



270,000 fewer acres of developed lands

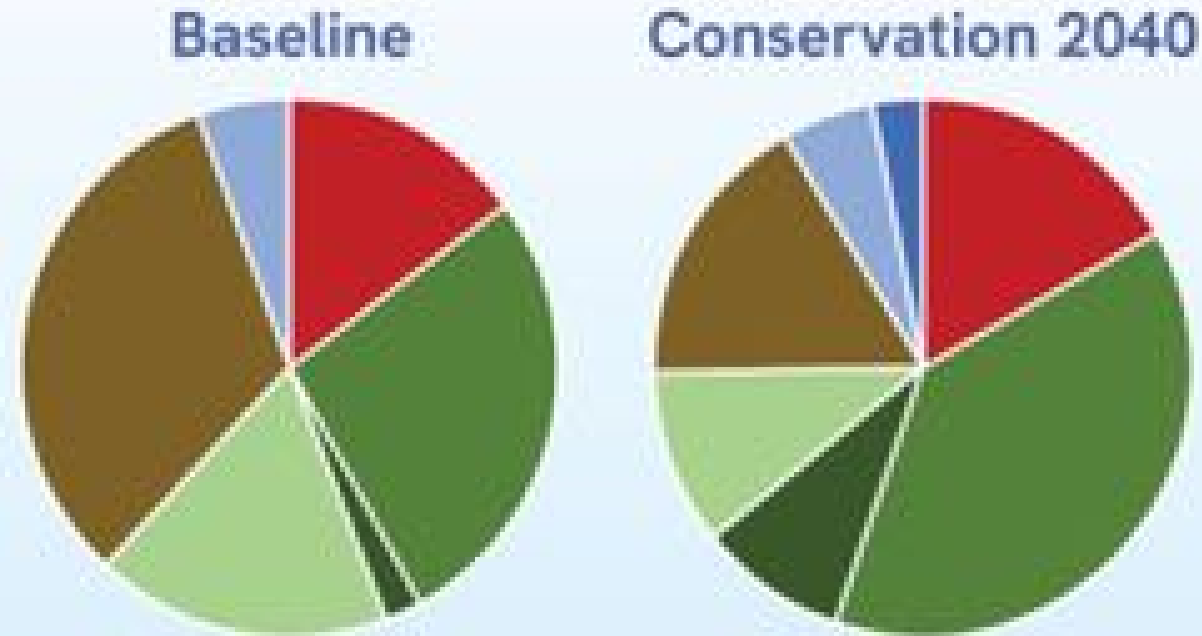
5 million more acres of undeveloped priority natural land

2.4 million more acres of protected agricultural lands





# Under the Conservation 2040 Scenario:



14 million acres of protected natural lands

3.2 million acres of protected agricultural land

3.8 million acres of unprotected agricultural lands

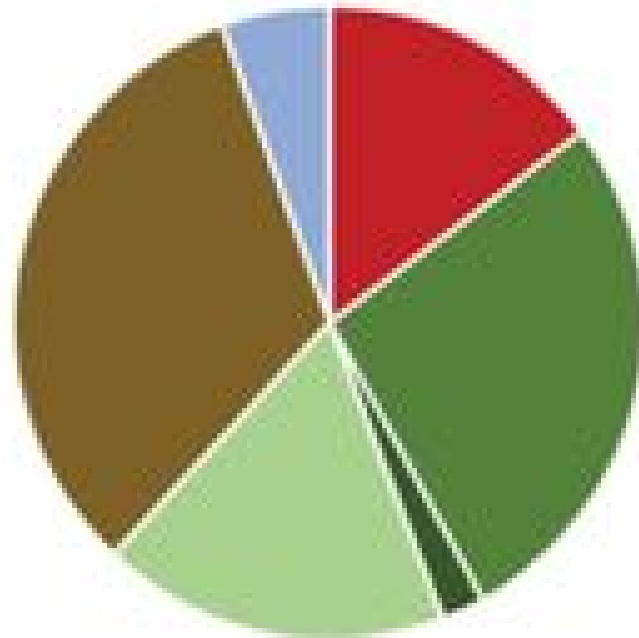


UF

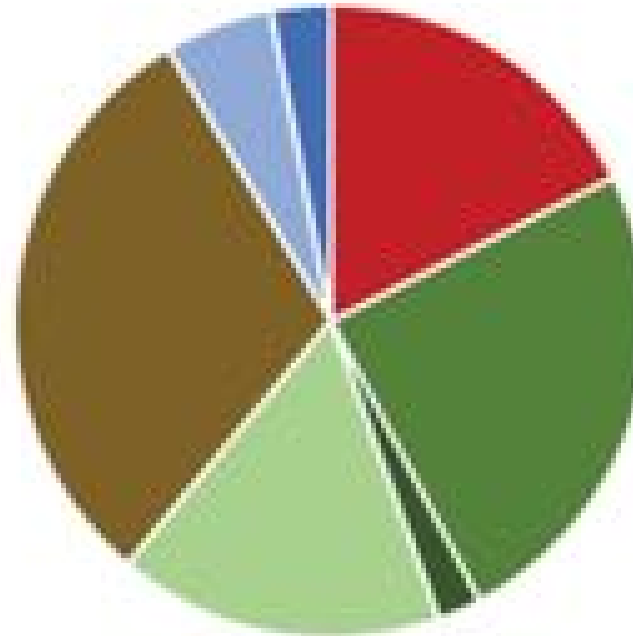
CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# STATEWIDE Pie Charts

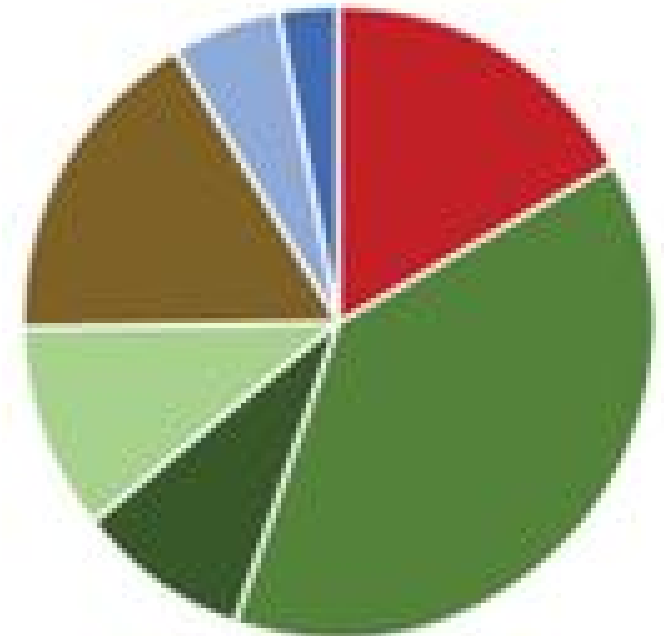
Baseline



Sprawl 2040



Conservation 2040



A joint project of



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# STATEWIDE MAPS 2040



Developed

Protected

Sea Level Rise

Other

A joint project of



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



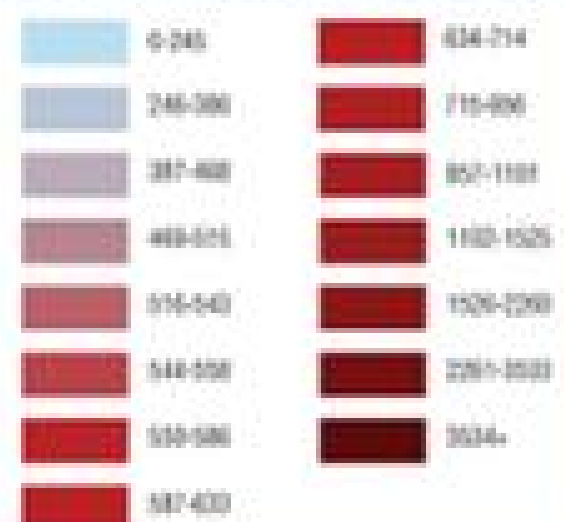


## STATEWIDE 2070 Trend



## STATEWIDE 2070 Trend

(Total demand by census block in gallons per day per acre)



Sea Level 2070 is more comparable to the 2016 Florida 2070/Water 2070 reports, and is intended to provide a comparison with the previous 2070 scenarios that did not include SLR.

## Sprawl 2040

- Developed
- Protected
- Sea Level Rise
- Other



## Sprawl 2070

- Developed
- Protected
- Sea Level Rise
- Other



Sea Level 2070 is based on different baseline information and assumptions than Sea Level 2040. The Sea Level 2040 and Sea Level 2070 maps have different colors to reflect this.

# Sea Level 2070 Rests on Four Assumptions:



1. Florida's population will grow to 33,721,828 residents in 2070, an increase of more than 12.2 million residents, or a 57% increase over 2019

*(Based on 2015 Florida Bureau of Economic and Business Research (BEBR) medium projections)*

2. Sea Level will rise by 0.9 meters

*(Based on the 2017 NOAA Intermediate High sea level rise projection)*







### 3. Residents on lands to be lost to sea level rise will relocate

*(Based on the 2017 NOAA Intermediate High sea level rise scenario and a Florida State University (FSU) study on population relocation (Hauer 2016))*

### 4. Some lands (closer to cities and major roads) are more likely to develop than others (wetlands)

*(Based on Likelihood of Development assessment)*



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# Sea Level 2070 Has Two Scenarios:

---



## 1. Sprawl 2070

Assumes 2010 densities and patterns of development will continue over the next five decades as the population grows. Factors in the impacts of sea level rise on Florida's lands and the resulting need for population relocation.



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



## 2. Conservation 2070

Accounts for the same population growth and sea level rise as in the Sprawl Scenario

But also assumes that:

- Florida's identified priority natural lands will be protected
- Any new development will be 20% more compact
- Greater redevelopment will occur





## **Major Statewide Results**

# Population Growth and Sea Level Rise Impacts:

---



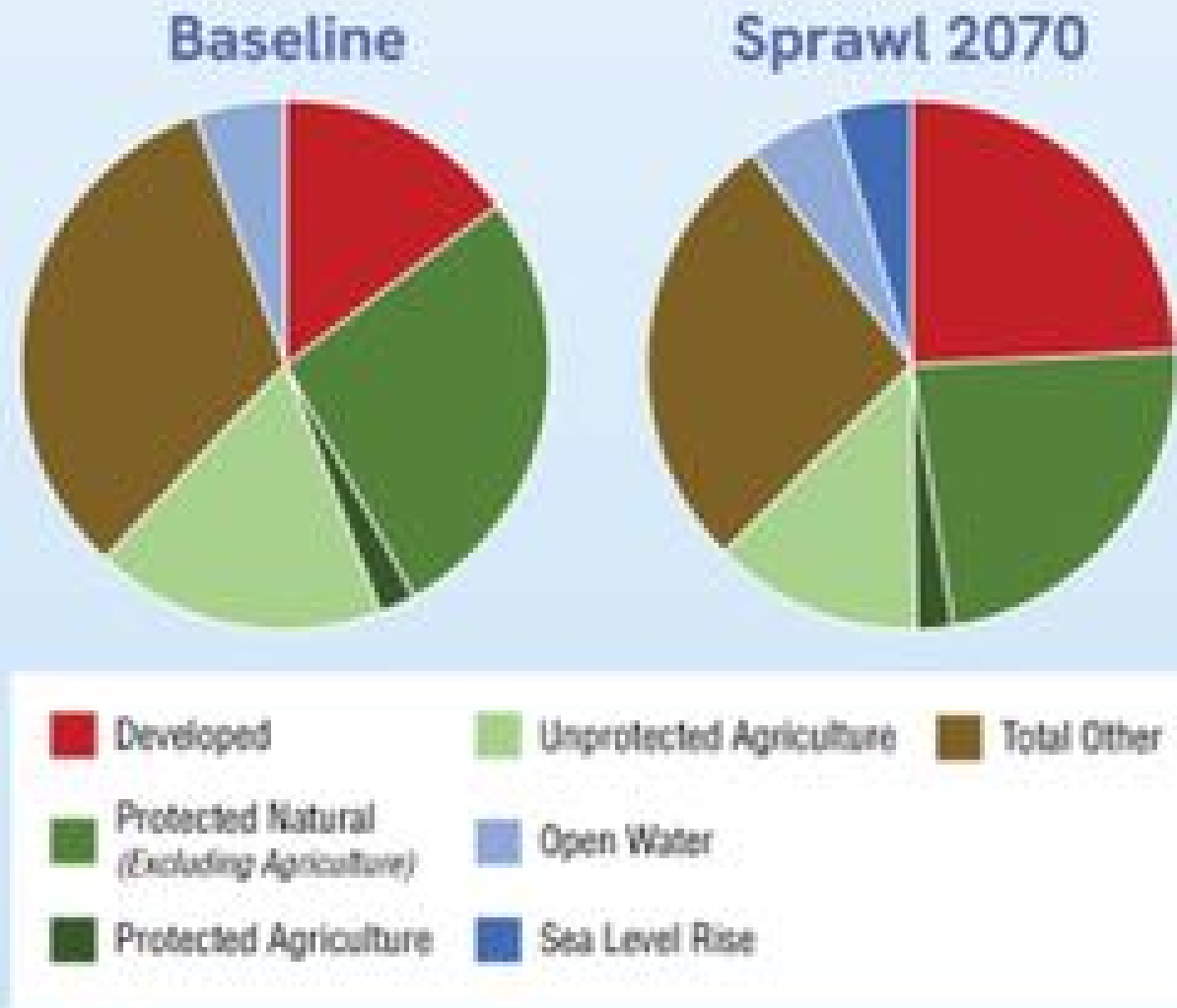
12.2 million more residents,  
a 57% increase

1.7 million acres of land lost  
due to sea level rise,  
including 1.4 million acres of  
protected conservation land

906,000 residents relocated  
due to sea level rise



# Comparing the Baseline and Sprawl Scenarios:



Nearly 3.5 million more acres of developed land, an increase of 64%

1.8 million acres of agricultural lands lost

1.9 million acres of "other" lands lost

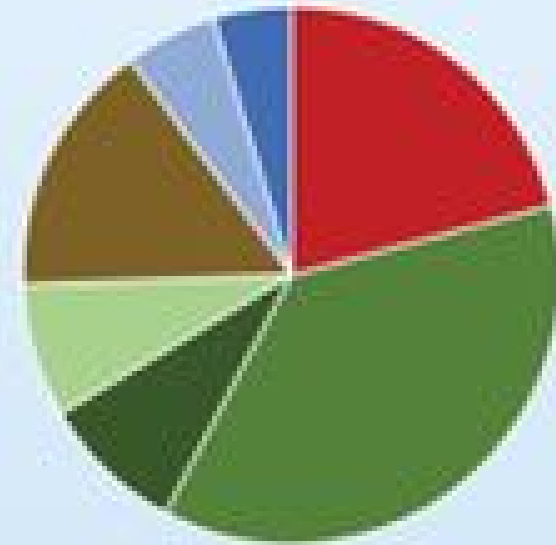


UF

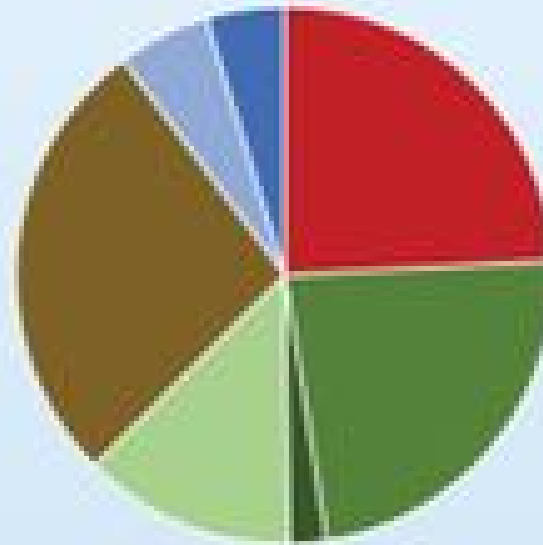
CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# Comparing the Conservation and Sprawl Scenarios:

Conservation 2070

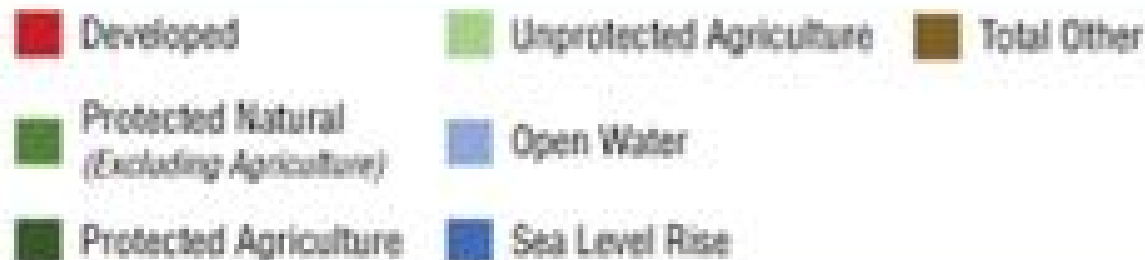


Sprawl 2070

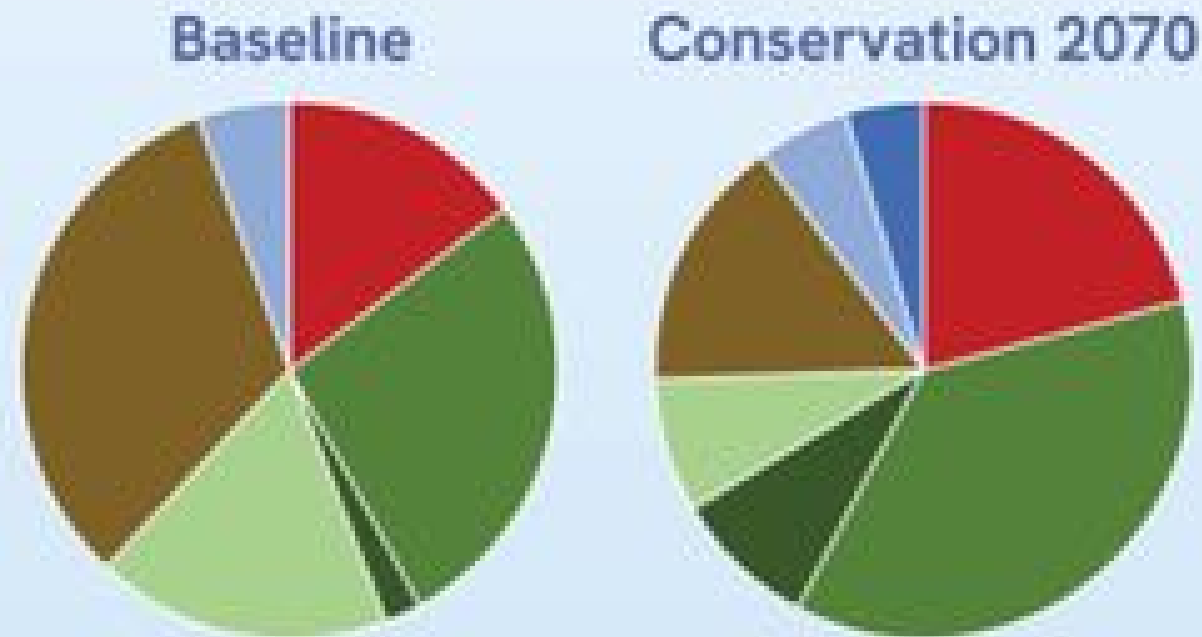


1.3 million fewer acres of developed lands

7.3 million more acres of protected natural and agricultural lands



# Under the Conservation 2070 Scenario:



14 million acres of protected natural lands

3.2 million acres of protected agricultural land

3 million acres of unprotected agricultural lands



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

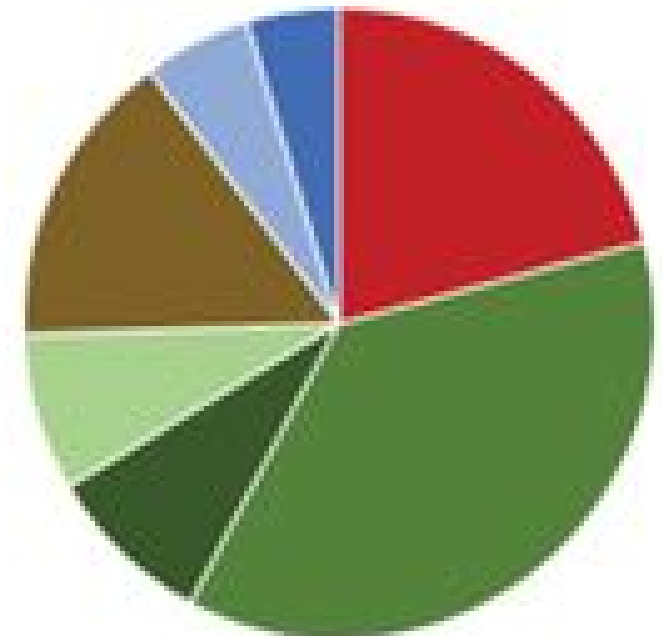
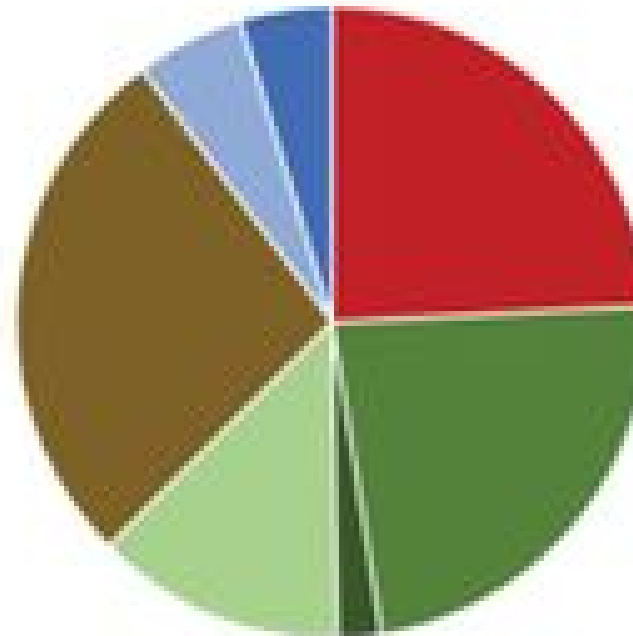
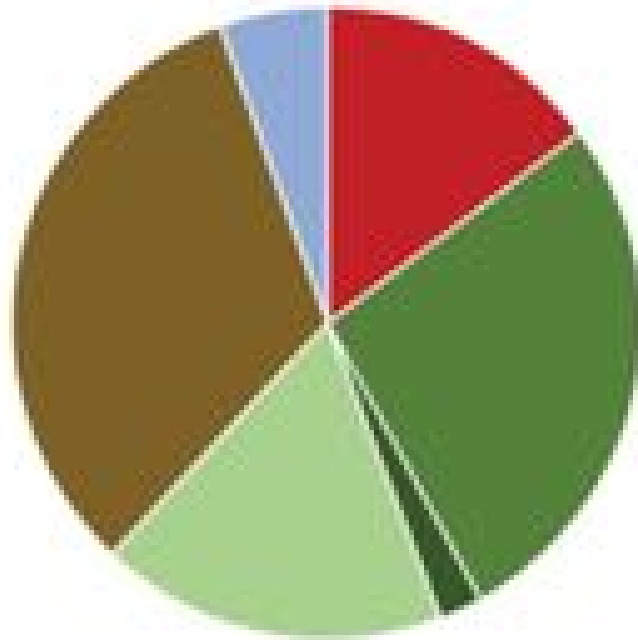


# STATEWIDE Pie Charts

Baseline

Sprawl 2070

Conservation 2070



A joint project of



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# STATEWIDE MAPS 2070



■ Developed    ■ Protected    ■ Sea Level Rise    ■ Other

A joint project of



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



## The Florida Wildlife Corridor (FWC)



Many of Florida's priority lands for conservation are in the Florida Wildlife Corridor (FWC), which has been a state legislative focus in the last few years

The FWC lays out a vision to protect a landscape-scale ecological corridor throughout much of the state



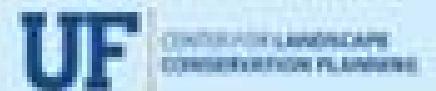


*Florida Office of Greenways & Trails*

**The FWC builds on two major state initiatives launched in the 1980s:**

**1. Greenways Planning:**

Large-scale planning for a statewide system of greenways and trails linking these protected lands, which resulted in the creation of the Florida Ecological Greenways Network (FEGN)





David Moynahan

## 2. State Land Acquisition: Statewide conservation and recreation lands acquisition programs known as Preservation 2000 and Florida Forever



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



**Both the Sprawl 2040 and 2070 Scenarios point to significant development of state priority lands over the coming decades if critical lands are not protected.**



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



**By 2040, roughly 206,000 acres in the FWC could be lost to development or sea level rise**

**By 2070, 1.2 million acres of state priority lands within the FWC could be lost**



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



# FLORIDA'S RISING SEAS

*Mapping Our Future*

## Recommendations

# 1. Conserve Florida's Priority Natural Lands, Including Those in the Florida Wildlife Corridor

---



*David Moynahan*

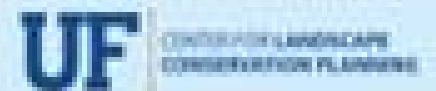
Florida must recommit to  
significant investment in  
land conservation



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

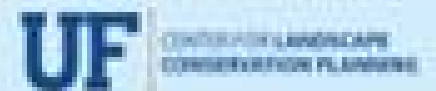


Florida must become even more strategic in the way it protects lands through acquisition, conservation and agricultural easements, local zoning or other means:





- Which lands are most vulnerable to development?
- Which are needed to prevent fragmentation of larger landscapes that protect wildlife habitat for endangered panther and black bear, or water supply and quality?
- Which could provide important ecosystem services including water filtration, flood storage, or storm protection?
- Which could protect important recreational lands and waters and support eco-tourism and the economy



## 2. Encourage Future Development to be More Sustainable and Fiscally Responsible

---



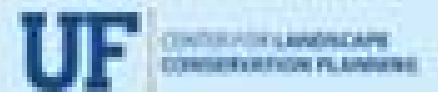
Redirect development away from vulnerable areas (including inland areas vulnerable to flooding)



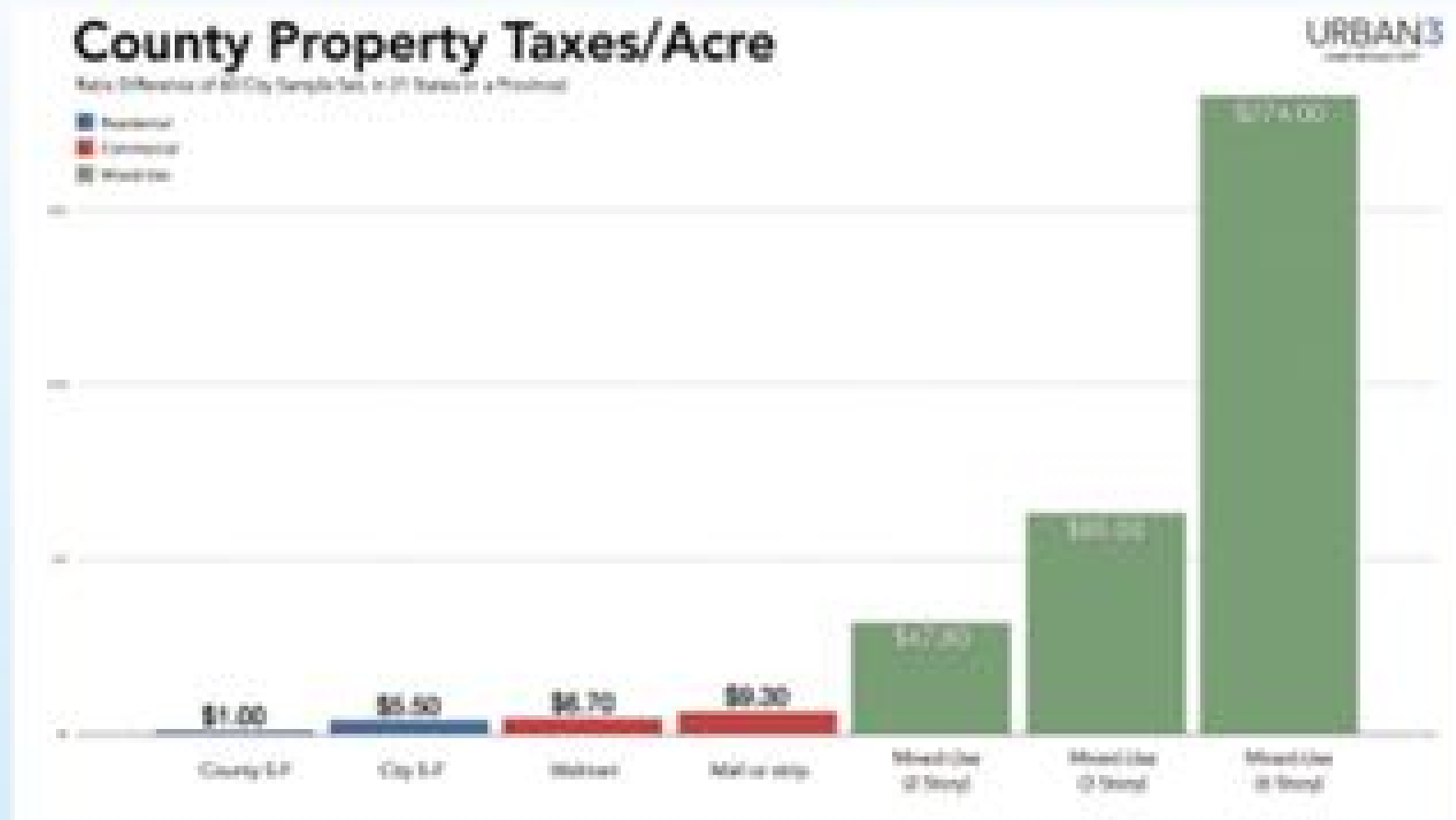
CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



Promote more compact development patterns and include shops, schools, and offices nearby to create more livable communities while protecting Florida's rural lands and waters



Recognize that more compact development does not need to be high-rise, as 4 to 6 story development can be more livable and cost effective



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

## Develop tools to promote fiscal responsibility in state and community planning





**THE FUTURE STARTS NOW**

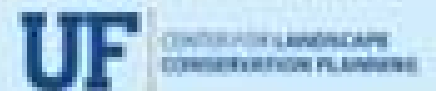


**By 2040, Florida is projected to have:**

- 4.9 million more residents, a 23% increase over 2019
- Almost 1 million acres lost to sea level rise
- More than 200,000 residents needing to relocate

**Even with population growth and sea level rise, with significant land conservation and more sustainable development patterns instead of continued sprawl, Florida could have:**

- More than 5 million more acres of protected natural land
- Almost 2.4 million more acres of protected agricultural land
- 272,000 fewer acres of developed land





**By 2070, Florida is projected to have:**

- 12.2 million more residents, a 57% increase over 2019
- Almost 1.7 million acres lost to sea level rise
- Almost 1 million residents needing to relocate

**Even with population growth and sea level rise, with significant land conservation and more sustainable development patterns instead of sprawl, Florida could have:**

- Almost 1.3 million fewer acres of developed land
- More than 5 million more acres of protected natural land
- Almost 2.3 million more acres of protected agricultural land



# Major Takeaways:

---

## Accelerate protection of state priority natural lands

1

We are starting to reach a threshold where we can expect more rural impacts from sprawling development including on areas important for protecting Florida's biodiversity, ecosystem services, and natural capital.

2

We still have time to protect the most strategically important resources, but it will require a multi-decade commitment to conservation land protection (Florida Forever and Rural and Family Lands programs and other initiatives) as well as the use of other tools to reduce greenfield development.



# Major Takeaways:

---

Focus on better planned and fiscally responsible development to protect natural and agricultural lands, taxpayer dollars, our quality of life, and support Florida's diverse economy


3

If Florida could concentrate development and lessen sprawl, more land could be set aside for conservation, and our communities would be more livable. While Florida's development has become slightly more compact over the last decade, much more needs to be done and at a faster pace.

4

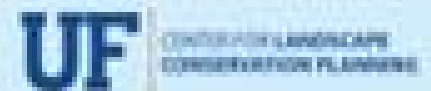
We must start now to prevent our state's most important natural and agricultural lands - so essential to Florida's economy, quality of life, and more - from being converted to the "final crop" of rooftops and asphalt.





Each and every day, our  
state, counties, and  
municipalities make decisions  
– both large and small – on  
where, how, and what type of  
development should take  
place and where land  
conservation should occur

*David Moynahan*



# The Time is Now to Start Making Better Choices



Developed



Protected



Sea Level Rise



Other

A joint project of



UF

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# FLORIDA'S RISING SEAS

## *Mapping Our Future*

The logo for 'SEA LEVEL 2040' features a blue silhouette of the state of Florida positioned over the word 'SEA'. To the right of the Florida map is a light blue circular graphic containing a white wave. The words 'SEA' and 'LEVEL' are in a light blue sans-serif font, while '2040' is in a larger, bold, dark blue sans-serif font.

SEA LEVEL  
2040

The logo for 'SEA LEVEL 2070' is identical in design to the 2040 version, featuring a blue silhouette of Florida, a light blue circle with a white wave, and the text 'SEA LEVEL' in light blue and '2070' in a larger, bold, dark blue sans-serif font.

SEA LEVEL  
2070

A joint project of ...



**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

[1000fof.org/sealevel2040/](http://1000fof.org/sealevel2040/)





# Coming Soon!

*In partnership with the  
Florida Conservation Group:*

## Agriculture 2040 and 2070



**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# We Gratefully Acknowledge the Following Funders:

Florida Department of Agriculture and  
Consumer Services (FDACS)

Natural Resources Conservation Service  
(NRCS)

Cornelia T. Bailey Foundation



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



# About 1000 Friends of Florida

- Florida's leading nonprofit advocate of growth management since 1986
- Working with citizens, community and state leaders, conservation and business groups to advance our goals
- Building better communities - walkable neighborhoods with affordable housing and alternatives to automobiles
- Saving special places - protecting Florida's environment, unique communities, heritage
- Fighting sprawl - low-density, automobile-dependent development
- Connecting people with planning

[www.1000fof.org](http://www.1000fof.org)



**UF**

CENTER FOR LANDSCAPE  
CONSERVATION PLANNING



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# About the Center for Landscape Conservation Planning

University of Florida Dept. of Landscape  
Architecture

Tom Hootor, Director

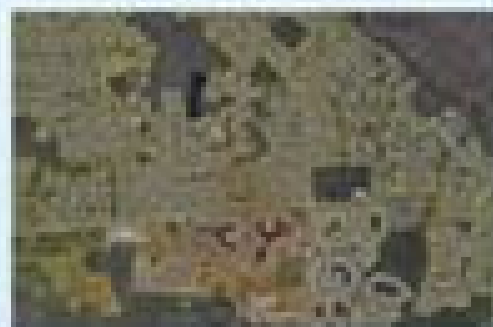
Michael Volk, Associate Director

**Mission:** Conduct applied research on the relationship between conservation and land use, learning opportunities for students, and expertise on biodiversity and green infrastructure design and planning to facilitate resilience and sustainability of natural, rural, and built environments.

## Area of Focus



Applied regional  
conservation planning  
and research



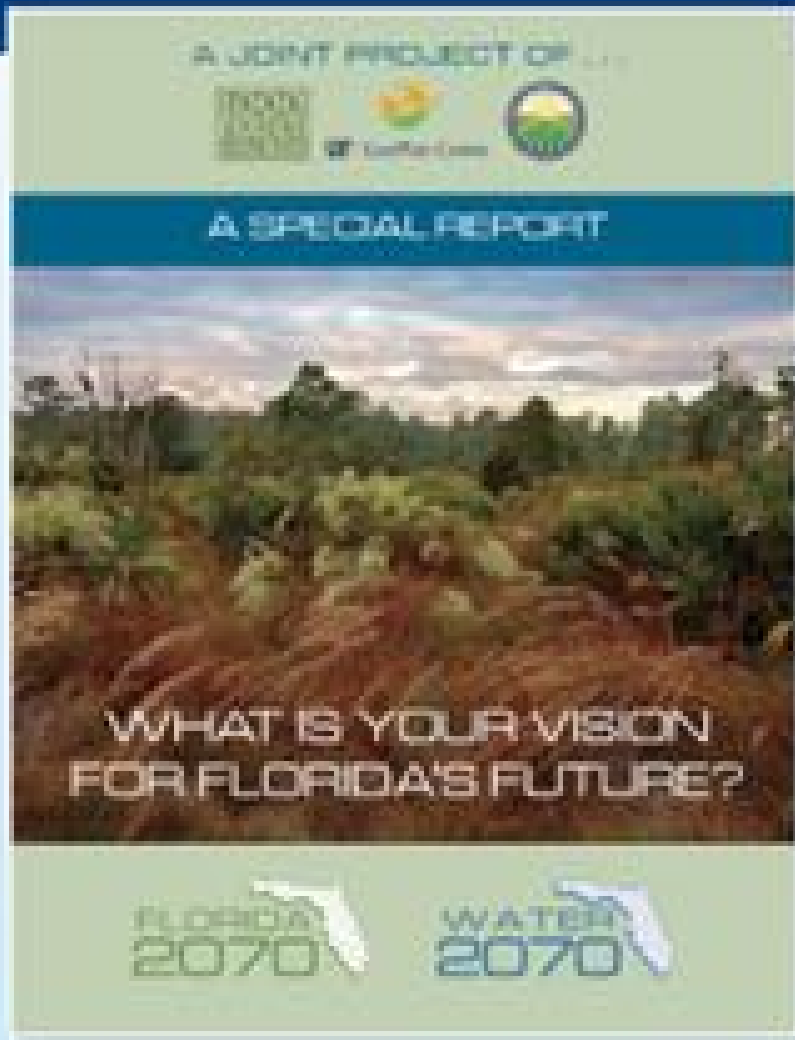
Urban Green  
Infrastructure and  
Climate-wise Design

[conservation.dcp.ufl.edu](http://conservation.dcp.ufl.edu) & [www.facebook.com/UFCLCP](https://www.facebook.com/UFCLCP)



CENTER FOR LANDSCAPE  
CONSERVATION PLANNING

# About Florida 2070/Water 2070



2016 joint study with 1000 Friends and UF GeoPlan Center (under Paul Zwick and Peggy Carr) examining the impact of projected population growth on land and water use in Florida over the next 50 years

Showing the land, water that can be saved through more compact development and conservation

Workshops focusing on 8 counties thus far:  
Palm Beach, Martin, Walton, St. Johns, Brevard,  
Seminole, Volusia, Lake

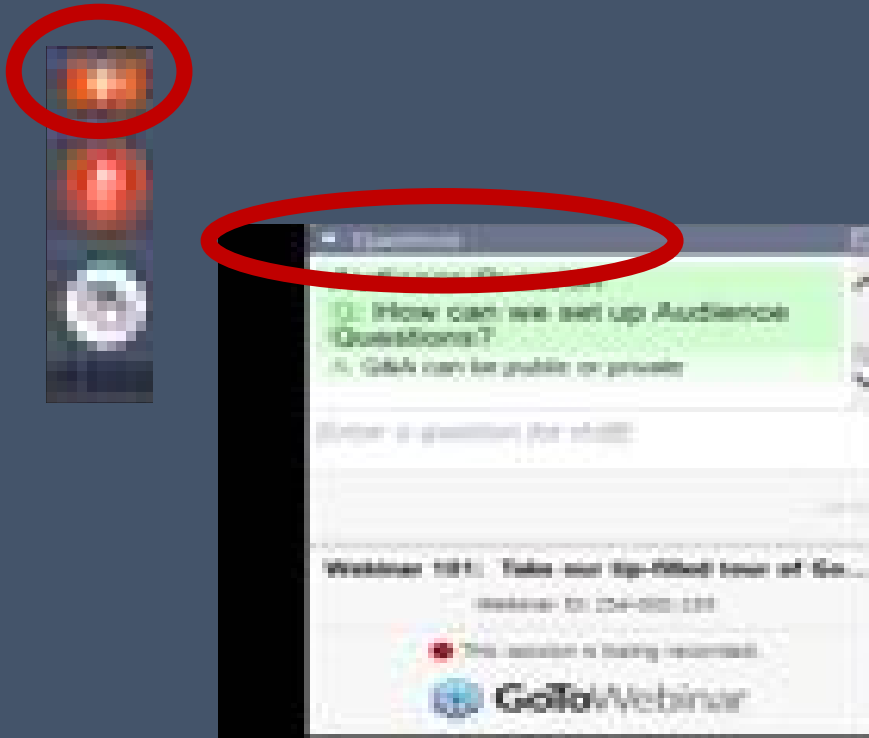
[1000fof.org/florida2070](http://1000fof.org/florida2070)





1000  
FRIENDS  
*of* FLORIDA

# Please ask questions!



- Click on arrow at top right of your screen to maximize control panel
- Click arrow next to “Questions” to maximize the questions box
- Please 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

# For those who attend the live event, this webinar has been approved for credits for:

- Planners (1.5 AICP CM including 1 credit for Resilience and Sustainability #9265385)
- Florida attorneys (2.0 General CLE #2301949N)
- Certified Floodplain Managers (1 CEC)
- Florida Certified Environmental Health Professionals 1.5 Contact Hours)

*1000 Friends has applied for professional certification credits for Florida DBPR landscape architects but cannot guarantee that credits will be approved. This event has not been approved for those who view the broadcast at a later time.*

*Find credits for past webinars at  
[1000fof.org/upcoming-webinars/credits](https://1000fof.org/upcoming-webinars/credits)*





# Follow up survey, certificate and credits:

*In the follow up email for the LIVE WEBINAR you will receive:*

A link to a **brief survey** to help us improve future webinars

A **certificate of attendance** (use Google Chrome to download)  
Please download your certificate right away if you need it

*Information on credits for past webinars are available at*  
***[1000fof.org/upcoming-webinars/credits](https://1000fof.org/upcoming-webinars/credits)***



# For DBPR Landscape Architects

(NOTE: This webinar has not yet been approved for credits)

1000 Friends is only approved for credits through the Florida Department of Business and Professional Regulations (DBPR)

Only those who attend the  
**LIVE WEBINAR**

Are eligible for DBPR credits

Due to changes in State requirements, 1000 Friends will submit your credits on your behalf, based on the information you submitted during registration



# Upcoming Webinars

- Wednesday, April 19, 2023, noon to 1:30 Eastern  
**2023 Florida Legislative Update**
- Wednesday, May 17, 2023, from noon to 1:30  
**2023 Florida Legislative Wrap Up**



# Dr. John M. DeGrove Webinar Sponsors

## **NATHANIEL REED SOCIETY**

J. Crayton Pruitt Foundation

## **FRIEND**

Mr. Ronald L. Book, PA

Mr. Andy DeGrove

Ms. Kimberly A. DeGrove & Dr. Clyde Partin

Dickman Law Firm

William Howard Flowers, Jr. Foundation

Kitson & Partners/Babcock Ranch

The Perkins Charitable Foundation

Mr. Robert M. Rhodes

Ms. Susan Trevarthen



# Support 1000 Friends!

## DONATE

at [www.1000fof.org/donate](http://www.1000fof.org/donate)

(you may designate it for DeGrove Education Fund if you wish)



## SPONSOR

the DeGrove webinars by emailing  
[vyoung@1000fof.org](mailto:vyoung@1000fof.org) to find out more



# Presenters



Paul Owens

1000 Friends of Florida



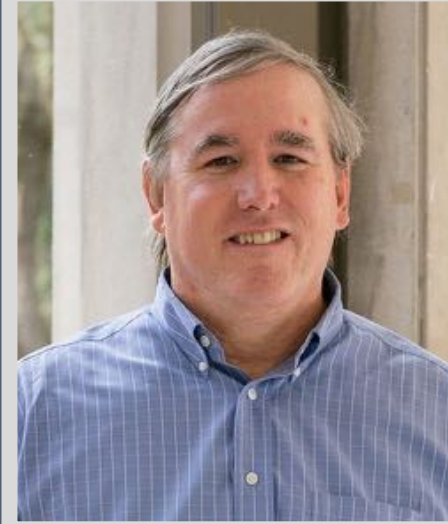
Dan Farrah

UF CLCP



Mike Volk

UF CLCP



Tom Hctor

UF CLCP



Vivian Young

1000 Friends of Florida

