

Agriculture & Natural Resources Subcommittee

**Tuesday, January 25, 2011
12:30 PM
Reed Hall**

**Dean Cannon
Speaker**

**Steve Crisafulli
Chair**



AGENDA

Agriculture and Natural Resources Subcommittee

January 25, 2011

12:30 p.m. – 3:30 p.m.

Reed Hall

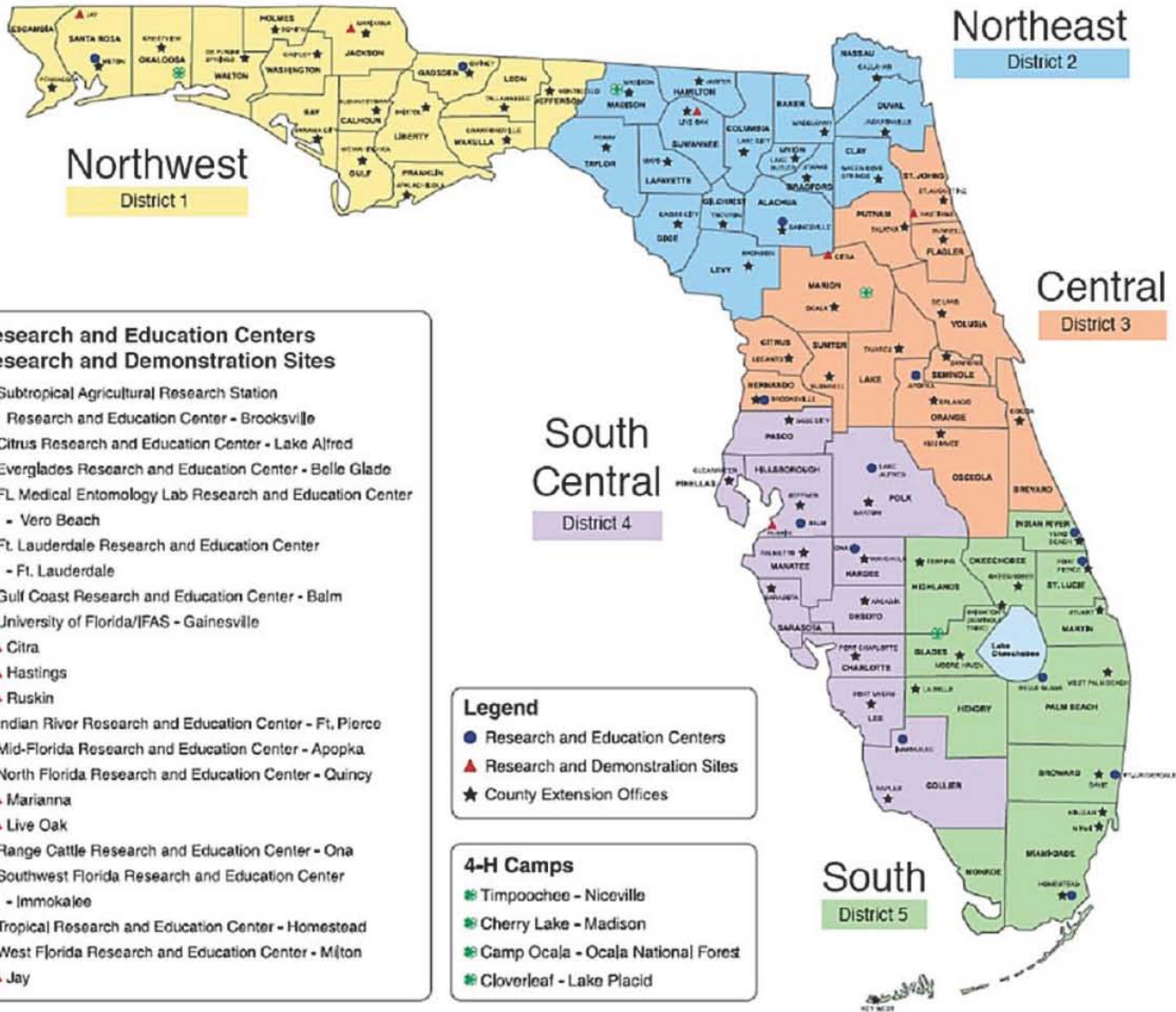
- I. Chair Opening Remarks
- II. Presentation by the Institute of Food and Agricultural Sciences (IFAS) on the role IFAS plays with respect to agriculture and citrus in Florida
- III. Agriculture in Florida – Challenges and Opportunities
 - Presentation the Department of Agriculture and Consumer Services
 - Presentations by private stakeholders within the agriculture and citrus industries
 - Danny Johns, Blue Sky Farms
 - Halsey Beshears, Simpson Nursery
 - Mike Sparks, Florida Citrus Mutual, and Vic Story, Story Companies
 - Wilton Simpson, Simpson Egg Farm
 - Billy Kempfer, Kempfer Cattle Company
 - Eric Jacobsen, General Manager, Deseret Ranch
- IV. Closing Remarks by Chair
- V. Adjournment

University of Florida Institute of Food and Agricultural Sciences

Solutions for Your Life....

Solutions for All Floridians

Mary Ann Gosa
Director, UF/IFAS Governmental Affairs
House Agriculture & Natural Resources Subcommittee
January 25, 2010



Research

- IFAS is the first line of defense to any threat or challenge to the agriculture and natural resources industries, be it pest, disease, drought, or remaining globally competitive.
- Ranked 1st by the National Science Foundation in agricultural research and development (R&D), IFAS sets a world-class standard for innovative research.

Inventions Boosting Florida's Economy

From 2001-2009

- 214 new cultivars
- 255 new inventions
- 211 patents
- 888 licenses



In the past 5 years we have doubled our grant awards.

- 931 research grants awarded from 1,157 proposals

Citrus Greening

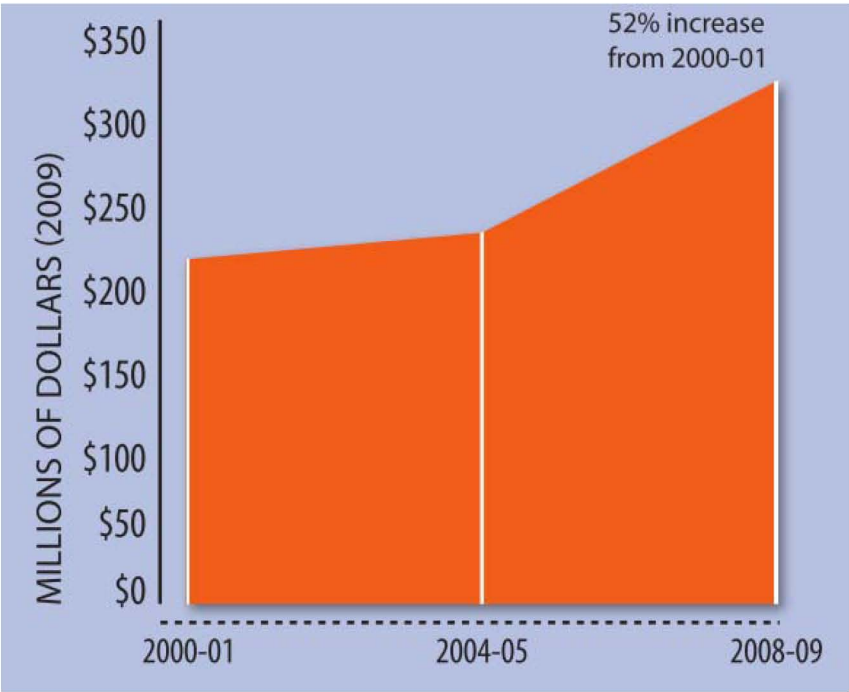
- A group of international scientists led by **UF/IFAS** has assembled the genome sequences for two citrus varieties.
- This breakthrough is expected to help scientists unravel the secrets behind citrus diseases such as greening, a deadly threat to the state's \$9 billion citrus industry.

"The publication of the sweet orange and tangerine genomes will accelerate the discovery of innovative solutions to a myriad of pest and disease problems that threaten citrus production."

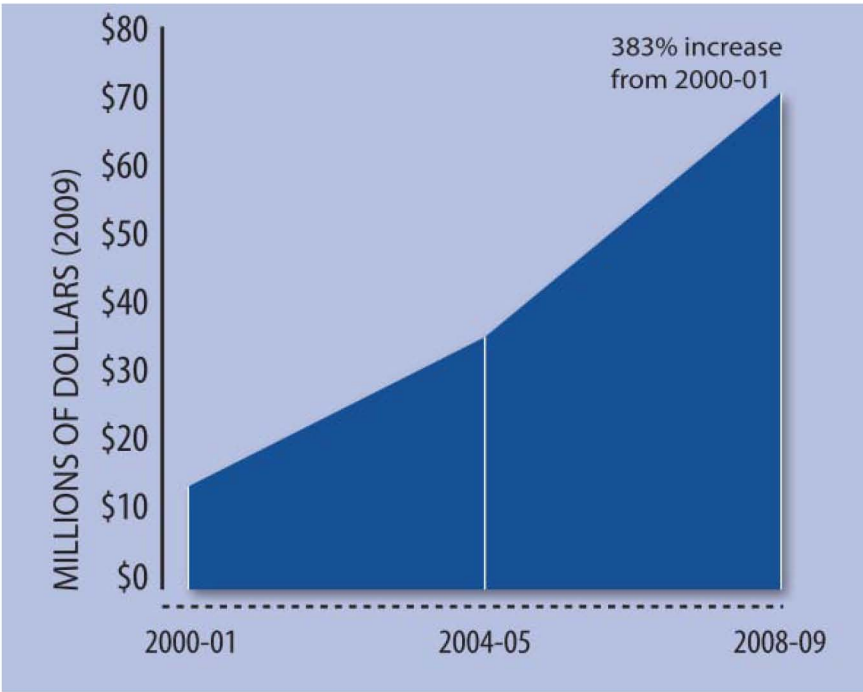
-Dan Gunter, chief operating officer of the Citrus Research and Development Foundation Inc.



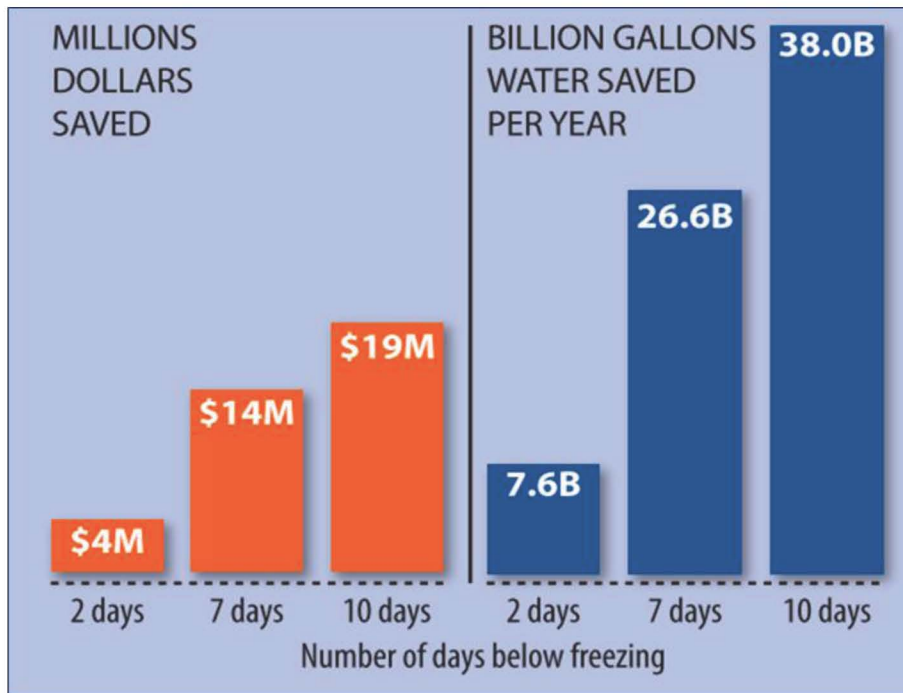
Value of Florida Strawberries, 2000-09



Value of Florida Blueberries, 2000-09



Impacts of Florida Automated Weather Network (FAWN)





Bioenergy Feedstocks in Florida

15 million acres of forest land

10 million acres of farm land

- #1 in sugarcane and citrus
- #1 in forest residues
- #1 in urban wood waste
- #2 in vegetables

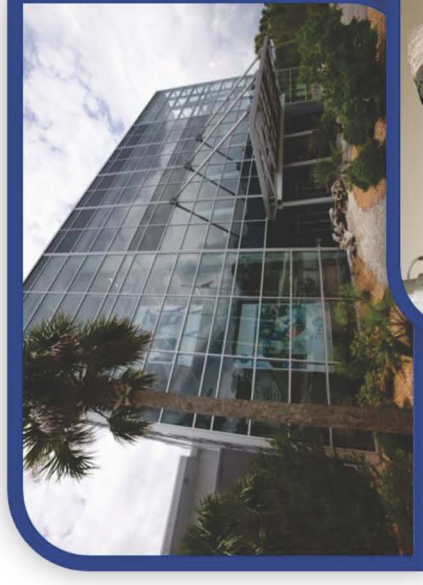


Space Life Sciences Laboratory

Planetary Analogs and Earth Applications

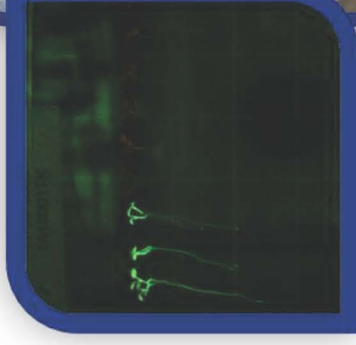
Exploring and developing analogs on Earth

- Technology for greenhouses that allow plants to grow on the Moon and Mars and that help meet production needs on Earth
- Understanding microbial life on, around and off the Earth, especially associated with agriculture and food production



Applying lessons learned in extreme environments to the home front

- Automation of nutrient delivery environmental conditions
- Remote monitoring of plant health and development
- Maximizing operational efficiency and produce return with limited resources
- Again, to connect the challenge of life support in space, and remote environments to the challenge of urban agriculture



Mission of the Extension System

UF/IFAS Extension is dedicated to developing knowledge in agriculture, human and natural resources, and the life sciences and to making that knowledge accessible to the public.

- Areas of Specialty
- Agriculture
 - Horticulture—Environmental/Commercial
 - Marine and Aquatic Sciences
 - Natural Resources
 - Family and Consumer Sciences
 - 4-H Youth Development
 - Community Development and Sustainability



Extension Sea Grant

UF/IFAS extension and Sea Grant agents played a critical role in the after-effects of the Deepwater Horizon oil spill.

- Food Safety Task Force
- Ag Communications Task Force
- Damage Assessment Task Force
- Limit misinformation through websites, workshops, flyers, etc.
- Solutions for Your Life, Extension Disaster Education Network
- Explore financial assistance for impacted businesses
- Explore legal issues for oil impacts
- Pre/post assessments of water quality, sediments and biota along gulf coast



Youth Programs

- Florida 4-H creates supportive environments for diverse youth and adults to reach their fullest potential.
- Operation Military Kids: OMK is a program to support the youth of guard and reserve military members. Our mission is to help children with the stress of their parents being deployed through various activities and educational programs.

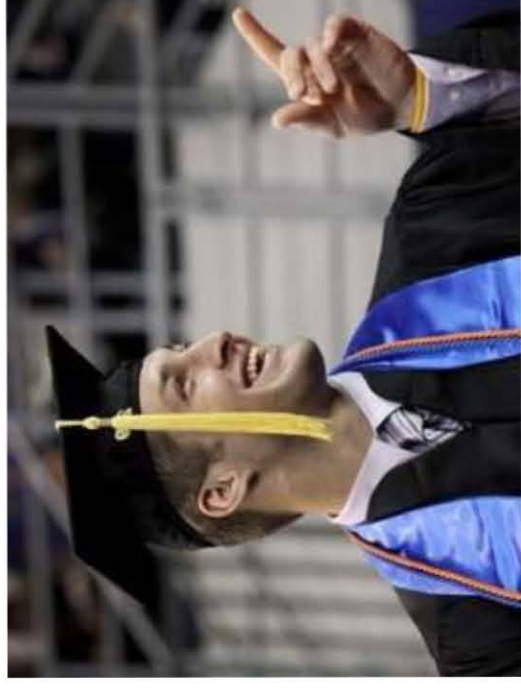


- Nutrition programs: Research-based information, resources, and tips for families, consumers, and educators; provided by the faculty of the UF/IFAS Department of Family, Youth and Community Sciences



College of Agricultural and Life Sciences (CAL S)

- An educational leader in the areas of food, agriculture, natural resources and life sciences
- Over 5,000 students—2nd in overall graduate enrollment and 1st in PhD in nation among allied colleges
- Tim Tebow, one of our most famous graduates, majored in Family, Youth and Community Sciences

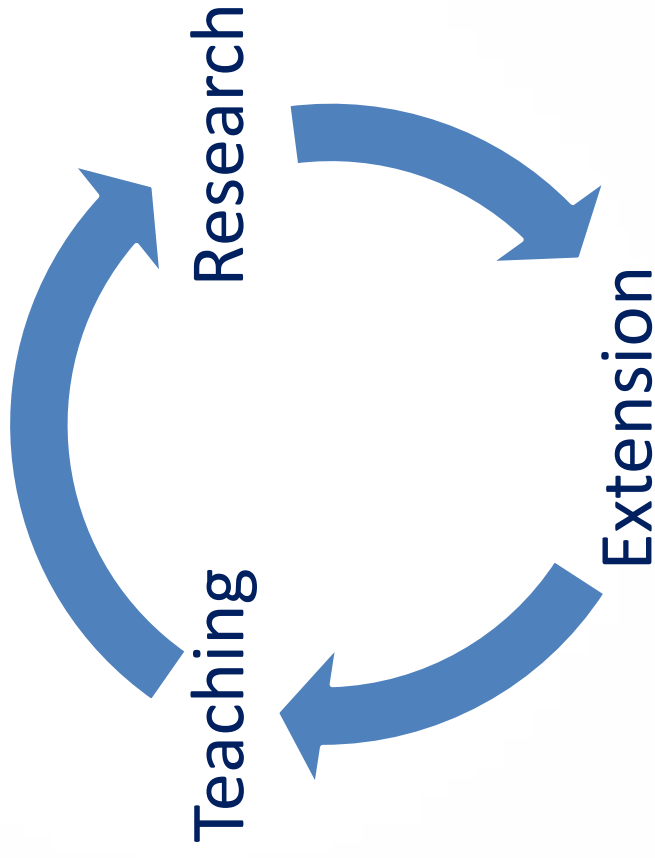


CALS

24 undergraduate majors and 23 graduate majors with more than 50 areas of specialization. Students are offered a variety of majors that lead to diverse job opportunities such as:

- Toxicologist
- Hydrologist
- Agricultural Engineer
- Epidemiologist
- Biological Scientist
- Dietician
- Foster Care Worker
- Wetlands Ecologist
- Golf Course Superintendent
- Parks Superintendent
- Soil Scientist
- Wildlife & Fisheries Biologists
- Bacteriologist
- Reforestation Manager
- Geneticist
- Precision Agriculture Specialist

Importance of Research, Teaching and Extension Linkage



Return on Investment

- Annual state contribution to agricultural research and extension approximately: \$133 million
- Translates in approximately: \$1.3 billion in economic benefits to the state
- For every dollar of state general revenue invested, IFAS leverages over one dollar in non-state funds



Economic Impacts

Agricultural and related industries generate

161,550 jobs (13.20% of total) in House District 32.
\$12.1 billion in revenues.
8.4% contribution to gross regional product.
Based on a 2008 UF study

It is estimated that for every **1** invested in agricultural research and extension, there is a return of **10** to the community.
Based on a 2007 USDA study

Funding

State funds for extension **\$1,673,066**
 Federal funds for extension **\$1,664,764**
 County funds for extension **\$3,901,517**

Volunteers

Number of volunteers **1,146**
 Hours worked **50,017**
 Dollar value of hours worked **\$1,042,854**

Giving

Recent donors residing in HD32 **27,457**
 FY 2010 donors residing in HD32 **12,145**
 Gifts to UF from HD32 residents **\$10,856,045**
 Gifts to IFAS from HD32 residents **\$551,800**

Statewide Client Satisfaction

Quality

95% Residents who used Extension services and were satisfied with the service provided.

Effectiveness

79% Clients who had an opportunity to use the information received, and...

86% Said it solved their problem or answered their question.

Leverage

74% Clients who shared the information with someone else.

Clientele Contacts

Field and office consultations **12,656**
 Participants at group learning events **65,279**
 Phone and email consultations **43,698**
 Educational materials created **624**

Statewide Clientele Outcomes

Clients reporting an increase in knowledge or skill **87%**
 Clients reporting a change in behavior or attitude **76%**
 Clients adopting best practices resulting in societal, economic, or environmental benefits to community **63%**

Students and Alumni

UF students from HD32 **4,012**
 CALS students from HD32 **358**
 UF alumni residing in HD32 **21,841**
 IFAS alumni residing in HD32 **1,390**

EXTENSION: 4-H youth; Personal & family well-being; Nutrition, food safety & health; Livestock production, Marine sciences; Residential & commercial horticulture; Urban forestry

COMMODITIES: Tropical foliage, Cut foliage, Woody ornamental,

Grape, Vegetables

RESEARCH: Plant development, production and protection of environmental horticulture, vegetables, fruit crops

Brevard Cooperative Extension Service
 Cocoa
 Web: <http://brevard.ifas.ufl.edu>

Orange Cooperative Extension Service
 Orlando
 Web: <http://ocextension.ifas.ufl.edu>

Mid-Florida Research and Education Center
 Apopka
 Web: <http://mrec.ifas.ufl.edu/>

Thank you

Visit our website at : www.ifas.ufl.edu

County Reports: <http://ifas.ufl.edu/reports.html>

Mary Ann Gosa, Director
UF/IFAS Office of Governmental Affairs
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The Role of Agricultural Lands in Water Resource and Habitat Protection

Water Quality

- Watershed Restoration Act (s.403.067 F.S.)
- Northern Everglades & Estuaries Protection Act (s. 373.4595 F.S.)
- Nitrogen Control (s. 576.045 F.S.)

BMP Implementation Status-

- Forestry – 5.3 Million acres
- General Agriculture – 3 Million acres

Water Quality BMPs – What are they?

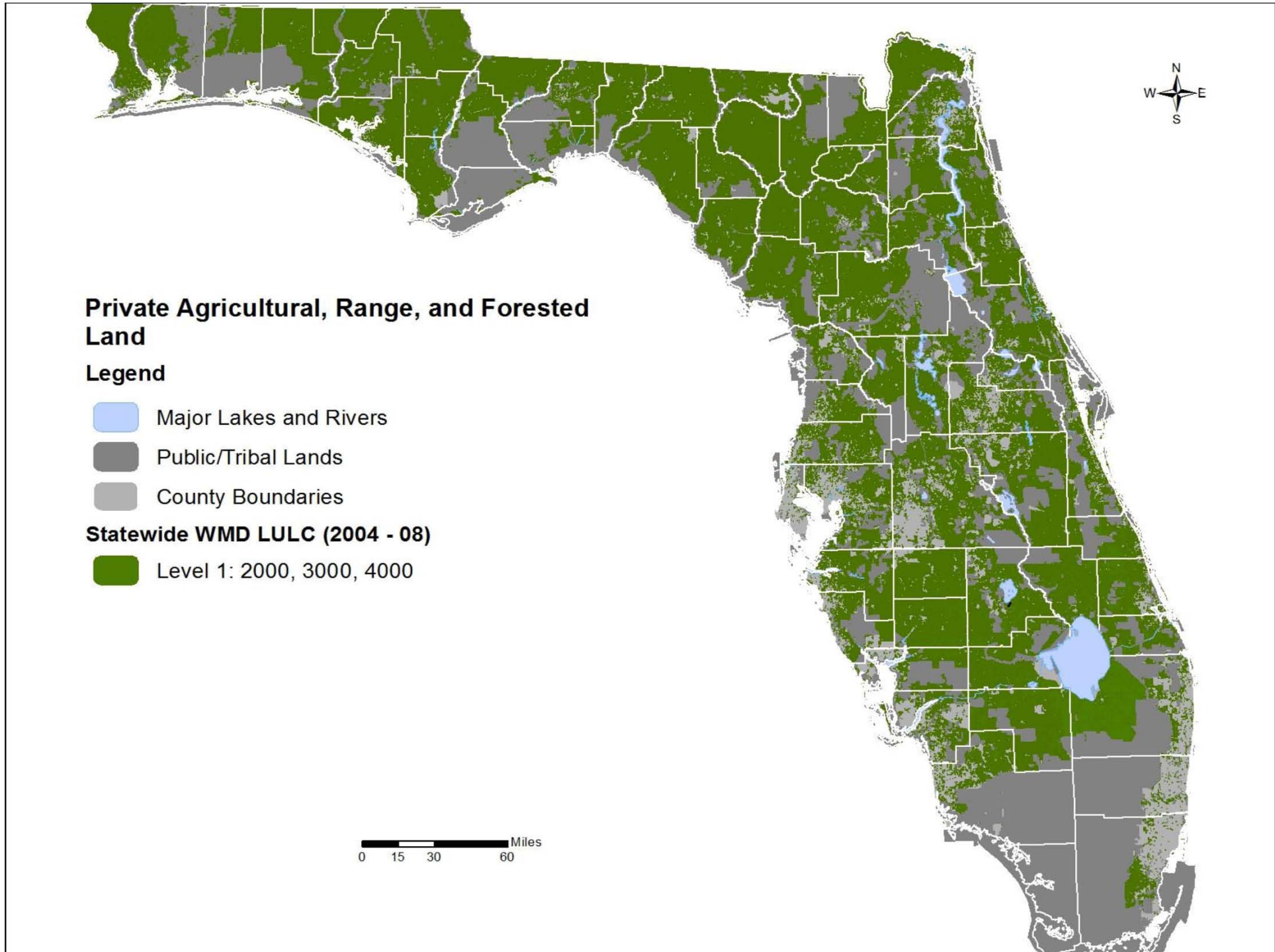
- Practice or combination of practices based on research, field-testing and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges.
- Nutrient (nitrogen & phosphorus) Management
- Stormwater Management
- Irrigation Management
- Fencing / Buffers near Waterways

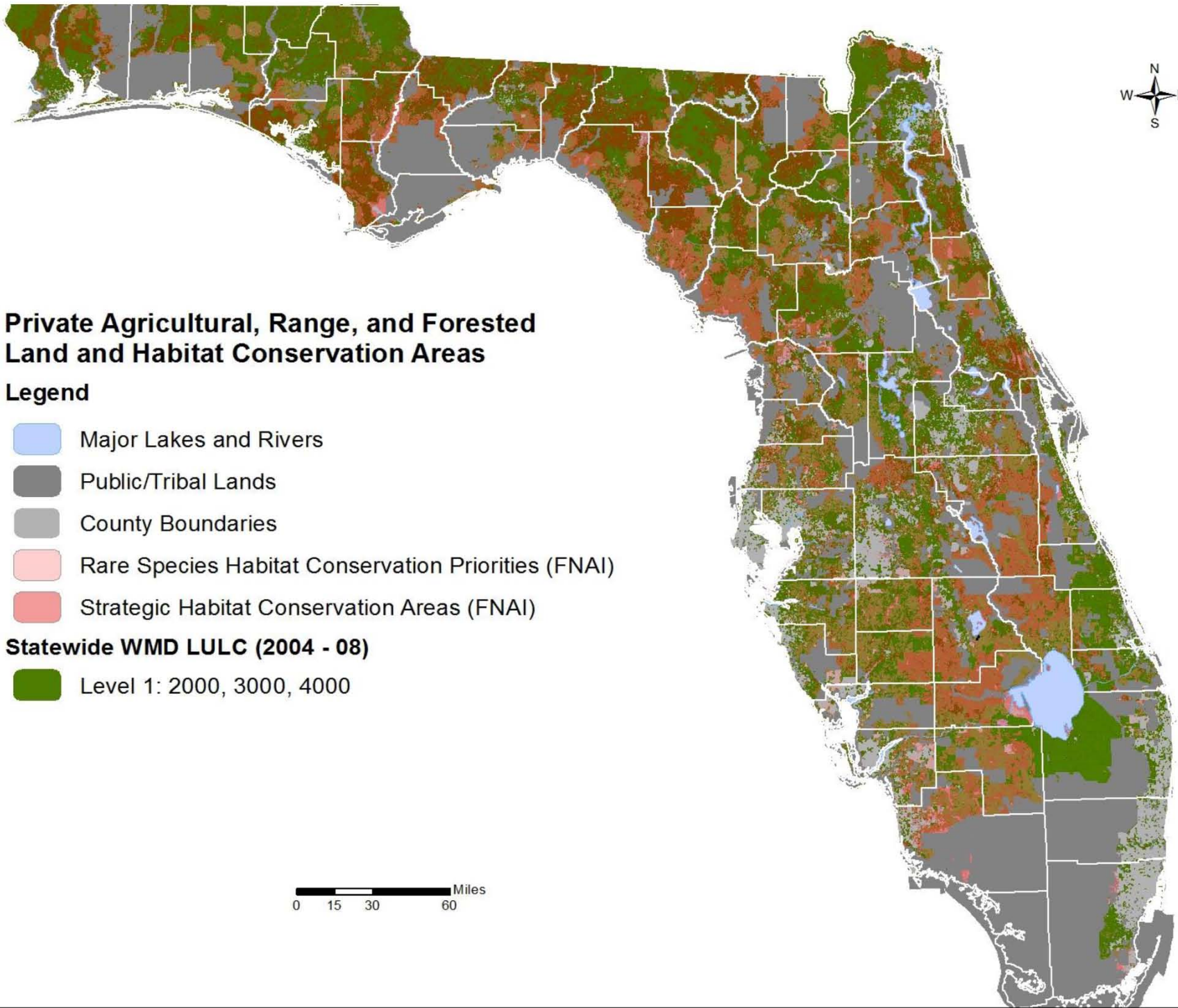
BMPs – What do they look like?



Water Quantity

- Agriculture is largest user of fresh water in Florida
- Access to adequate quantities of fresh water is critical
- Participation in long-range water supply planning
- Commitment to conservation/efficiency (Mobile Irrigation Laboratories)
- In partnership with water management districts to develop alternative water supply projects
- Participate with stakeholders to develop innovative water storage programs on private lands





Private Agricultural, Range, and Forested Land and Habitat Conservation Areas

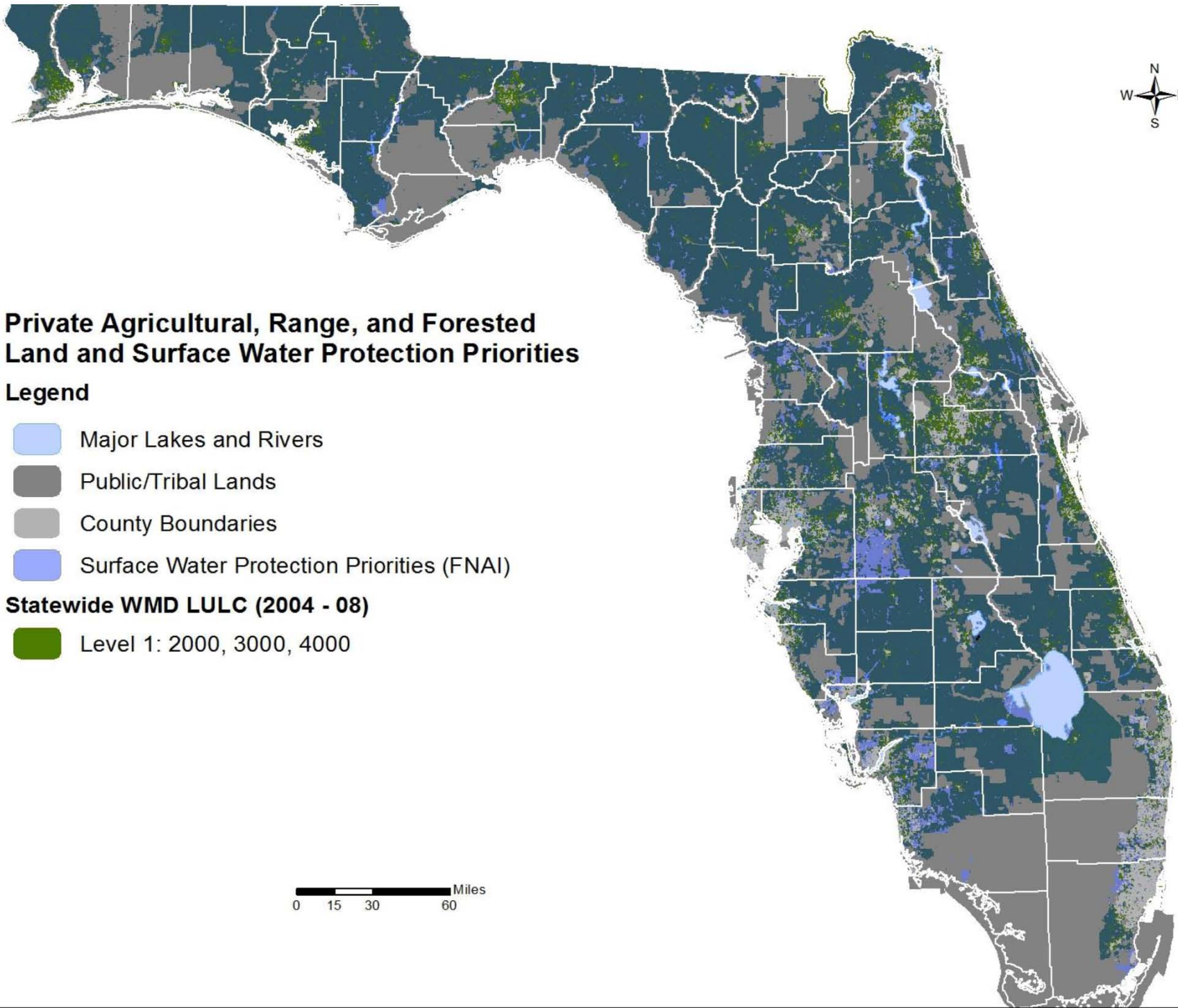
Legend

-  Major Lakes and Rivers
-  Public/Tribal Lands
-  County Boundaries
-  Rare Species Habitat Conservation Priorities (FNAI)
-  Strategic Habitat Conservation Areas (FNAI)

Statewide WMD LULC (2004 - 08)

-  Level 1: 2000, 3000, 4000

0 15 30 60 Miles



Private Agricultural, Range, and Forested Land and Surface Water Protection Priorities

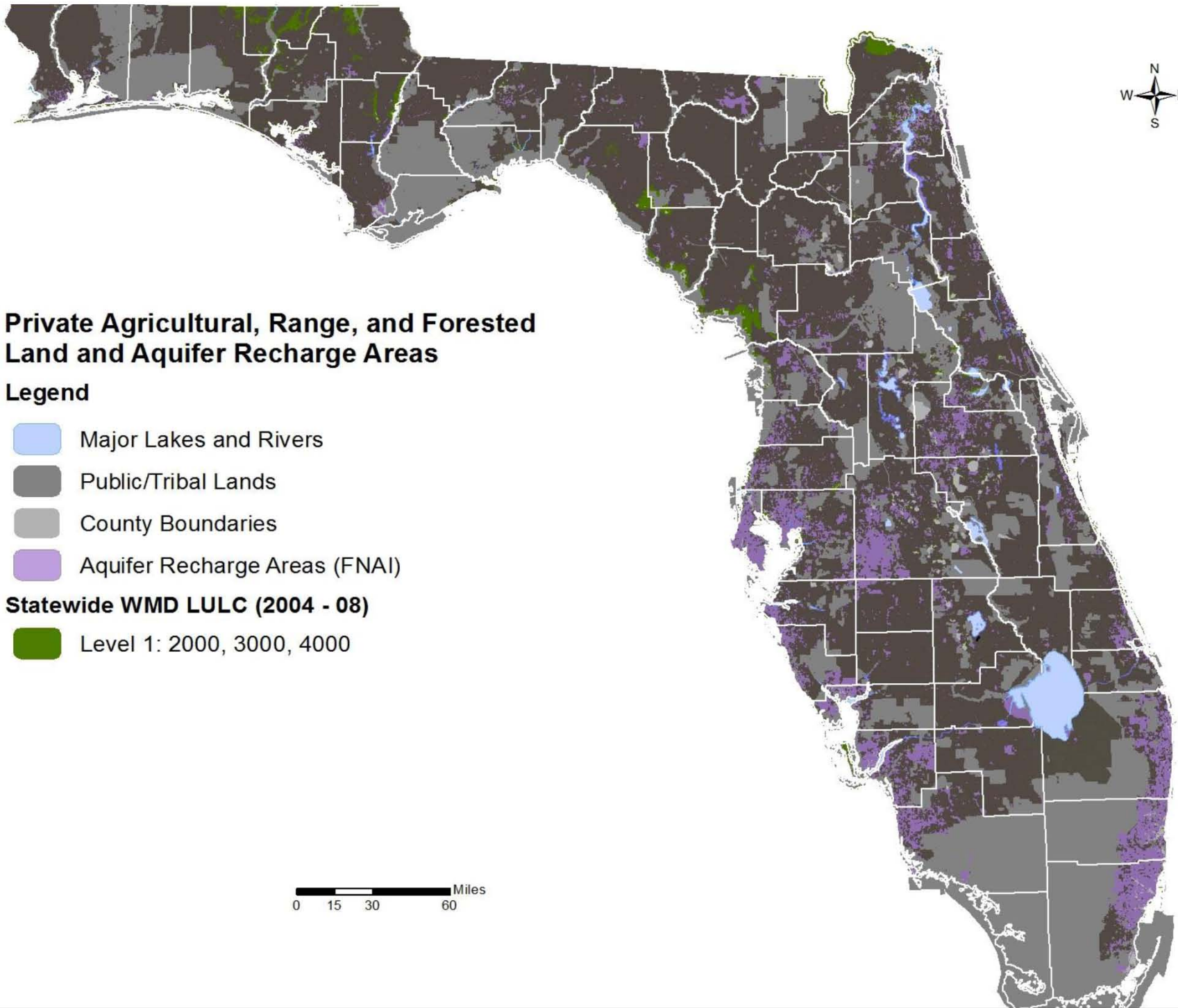
Legend

-  Major Lakes and Rivers
-  Public/Tribal Lands
-  County Boundaries
-  Surface Water Protection Priorities (FNAI)

Statewide WMD LULC (2004 - 08)





-  Level 1: 2000, 3000, 4000

0 15 30 60 Miles



Private Agricultural, Range, and Forested Land and Aquifer Recharge Areas

Legend

-  Major Lakes and Rivers
-  Public/Tribal Lands
-  County Boundaries
-  Aquifer Recharge Areas (FNAI)

Statewide WMD LULC (2004 - 08)

-  Level 1: 2000, 3000, 4000

0 15 30 60 Miles

Natural Resource Protection

- FDACS manages, for wildlife habitat and recreation, over 1 million acres of state-owned land and provides fire control services for 26 million acres
- Many of FDACS BMPs directly contribute to wildlife habitat and protection
- Preserving agricultural lands is critical for water storage and treatment, ground water recharge, and wildlife corridors
- Cooperatively develop programs to compensate landowners for providing environmental benefit to the public

DESERT RANCHES OF FLORIDA



DESERET RANCHES

History

- Founded in 1950
- Property consisted of native land and cut-over timberland
- Now has 80-90 employees (cowboys, mechanics, agronomists, etc.); some are third-generation
- Owner is the LDS Church, which is committed to agriculture, self-reliance, and sustainability



DESERRET RANCHES

Geography

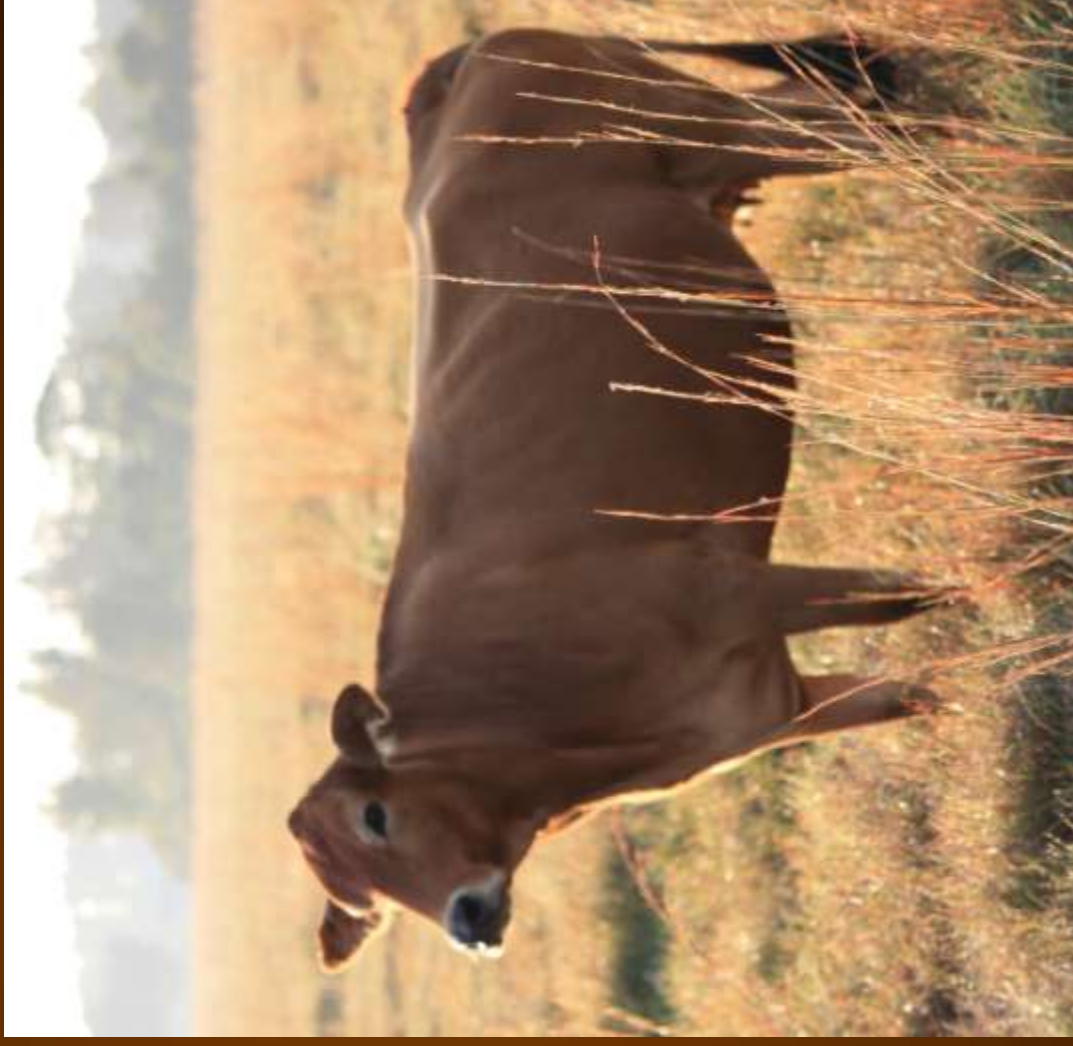
- Ranch is 290,000 acres, mostly pasture
- Borders St. Johns River and Upper Kissimmee
- Located in Osceola, Orange, and Brevard counties



DESERET RANCHES

Cattle

- Deseret is a commercial cow-calf operation
 - Florida has 3 of the top 10 and 7 of the top 20 cow-calf ranches in the country
- Deseret is one of the premier cattle producers in the US
 - 42,000 cows
 - 32,000 calves yearly
 - 1,300 bulls
- Each cow/calf pair has about 4 acres of pasture



DESERET RANCHES



Cattle

- Our cattle breeding program has been a 60-year effort
- Three breed rotational cross: Braford, Brangus, and Simbrah
- Must be adapted to Florida heat, humidity, and insects

DESERET RANCHES



Cattle

- We seek profitability in the cattle market by:
 - Controlling costs
 - Improving genetics
 - AI and embryo transfer
 - Selecting for adaptability, production efficiency, and marketability:
 - Residual feed intake
 - EPDs

DESERET RANCHES

Cowboys

- Ranch is divided into 13 operational units
- Each unit has 2 or 3 cowboys, 3,500 head of cows, and 7,000-25,000 acres
- Work is done on horseback
- Cowboys rotate herds, build fences, manage pastures, and care for the cattle and horses



DESERET RANCHES

Other Operations

- Produce 1700 acres of juice citrus
- Grow potatoes for potato chips
- Harvest palm trees
- Grow sod
- Mine shell deposits



DESERET RANCHES



Environment

- Implement a multiple use philosophy and strive for long-term sustainability
- Maintain an active wildlife management program
 - Wildlife biologist oversees hunting leases
 - Program has led to healthier populations

DESERET RANCHES



Stewardship

- Special attention given to critical species and habitat
 - Wood Stork rookery
 - Jug Island Reservoir
- Awarded the Florida Cattlemen's 2009 Environmental Stewardship Award
- Awarded the National Cattlemen's 2010 Region 2 Environmental Stewardship Award

DESERET RANCHES

DESERET RANCHES

 **Intervet**
Schering-Plough Animal Health

**DAY
IN THE
LIFE**



DESERET RANCHES



Regulatory Issues

- Water Supply
- Water Quality
- Land Use
- Regulatory Burden

DESERET RANCHES

Water (Supply)

- Water is important to communities but is also important to agriculture
- Ranch has donated easements for water storage
- Over 20 million gallons of water per day are pumped off the Ranch to supply local communities



DESERT RANCHES

Water (Supply)

- Municipalities often reach out for water
 - Taylor Creek Reservoir
- Agricultural projections are often ignored in water supply planning
- Who gets the cheap water?



DESERET RANCHES



Water (Quality)

- Ranchlands receive a lot of rainwater
- We have voluntarily tried to retain most of our stormwater runoff
- Numeric Nutrient Criteria
- Best Management Practices

DESERET RANCHES

Land Use

- Central Florida has experienced tremendous growth, which will continue
- We support long-range land-use, transportation, water, and environmental planning
- Ranchers should not be punished for being good stewards



DESERET RANCHES

Species

- Habitat and species can be a mixed blessing for ranchers
- Greenprinting
 - CARL
 - CCB
 - CLIP
 - Greenways
 - New NWR
- Ensuring the economic viability of ranches is the greatest way to ensure their ecological viability



DESERET RANCHES



Regulatory Overlap

- The Econlockhatchee River
 - Federal Wetland Regulations (Clean Water Act Section 404)
 - Florida Wetland Regulations (Florida Statutes 373)
 - Florida Department of Environmental Protection
 - Outstanding Florida Waters Regulation (Florida Administrative Code 62-4.242)
 - Environmental Resource Permitting (Florida Administrative Code 62-343.050)
 - St. Johns River Water Management District Econlockhatchee River Riparian Habitat Protection Zone (Florida Administrative Code 40C-41.063(5))
- Orange County
 - Econlockhatchee River Protection Ordinance (Section 15-443)
 - Innovation Way Policy 8.4.3
 - Environmental Land Stewardship Program
- Administrative Law

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Regulatory Burden

- Agencies often fail to consider the costs of regulations on the private sector:
 - Expensive modeling required
 - Extra-regulatory requirements
 - Multiple Requests for Additional Information
 - Uncertainty in permitting

DESERT RANCHES

Stewardship

- Committed to agriculture, the environment, and the community
- Provide jobs, tax revenue, community support
- Provide land management, open space, ecosystem services
- As a landowner, our future is tied to that of the region and state



Thank you.

DESERT RANCHES OF FLORIDA