2020 Regular Session

TAB

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#### The Florida Senate

#### **COMMITTEE MEETING EXPANDED AGENDA**

#### APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE, ENVIRONMENT AND GENERAL GOVERNMENT Senator Mayfield, Chair Senator Powell, Vice Chair

MEETING DATE: TIME: PLACE:	Wednesday, September 18, 2019 1:30—3:00 p.m. <i>Toni Jennings Committee Room,</i> 110 Senate Building Senator Mayfield, Chair; Senator Powell, Vice Chair; Senators Albritton, Bean, Berman, Broxson, Hooper, Hutson, Rodriguez, and Stewart				
MEMBERS:					
BILL DESCRIPTION and					
BILL NO. and INTRODUCER SENATE COMMITTEE ACTIONS		COMMITTEE ACTION			
Presentation on Agricultural Water Policy by Department of Agriculture and Consumer Presented Services					
Presentation on Invasive Species Impacts, Prevention, and Enforcement by the Florida Fish Presented and Wildlife Conservation Commission					
Presentation by the Department of Management Services on its Responsibilities Relating to Presented the State of Florida's Information Technology					

Other Related Meeting Documents

# Overview of the Office of Agricultural Water Policy

# Senate Appropriations Subcommittee on Agriculture, Environment and General Government

#### Senator Debbie Mayfield, Chair

September 18, 2019



Florida Department of Agriculture and Consumer Services

# **Responsibilities of OAWP**

- Development and Implementation of Agricultural Best Management Practices (BMPs)
- Implementation of Cost Share Programs
- Water Supply and Water Quality Planning and Coordination
- Other Policy Development and Statutory Responsibilities



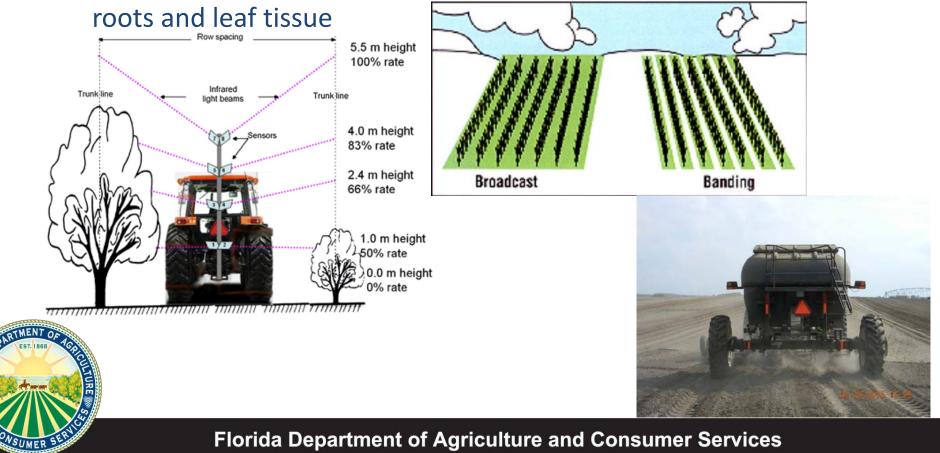
# **BMPs**

- Management strategies, tools and practices that improve water quality, conserve water, and protect the environment
- Best available science and technology
- Technical and economic feasibility



# **Nutrient Management BMPs**

- <u>Precision Fertilization</u> Multiple technologies such as soil sampling on a grid or precision application equipment – reduces fertilizer inputs as much as 35%
- Variable Rate Technology Allows precise placement of nutrients to



# Irrigation Management BMPs

- <u>Soil Moisture Probes</u> Reduces fertilizer and water usage by up to 50%, provides tracking of fertilizer through soil column
- <u>Precision Irrigation</u> Allows placement of water close to the plant, reduces evaporation, individual valves may be guided by soil moisture probes – reduces groundwater withdrawals up to 40%





# Water Resource Protection BMPs

#### • Surface Water Control Structures







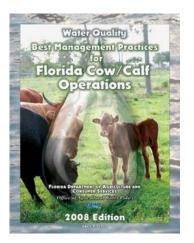


#### Florida Department of Agriculture and Consumer Services

### **BMP Manuals**

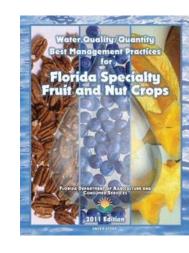
Florida Vegetable

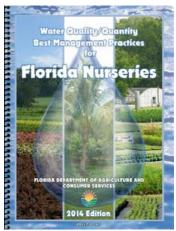
Agronomic Crops



ment Practices

Florida Citrus





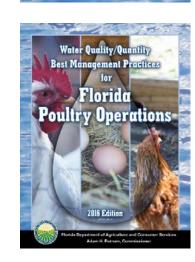


Nutrient Management Irrigation Management Water Resource Protection



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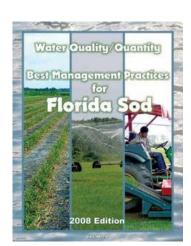




2011 Edi

Vater Quality/Quantit

Best Management Practices for Florida Equine Operations



Coming Soon!

Florida Small Farms

# **Development of BMPs**

- Manuals updated as necessary or as new research or needs arise
- Regular evaluation and review of existing manuals and BMPs
- Research projects
- Best available science and technology
- Technical and economic feasibility
- Research coordination committee
- Manuals are currently being evaluated and updated



# **BMP Enrollment and Verification**

- Notice of Intent to Implement BMPs
  - Enrollment and Identification of BMPs appropriate to the specific parcel and commodity
- Annual BMP implementation surveys
- Implementation verification site visits
- Referral to the Department of Environmental Protection in the event of non-compliance
- Annual Report submitted to the Governor and Legislature as required by law
- Data management through the Field Staff Application (FSA)



# **OAWP Cost Share Programs**

#### Prioritization

- "Bang for the buck"
- Targeted areas
- **Economic feasibility**
- **Collaboration and Leveraging** 
  - Water management district programs
  - Statutory requirements as a collaborative agency
  - Federal agency programs (Natural Resources Conservation Service USDA)







# OAWP Role in Regulatory Planning Efforts

- Regional Water Supply Planning
  - Coordination with the water management districts
  - Land use, commodity type, and irrigation projections
  - Required by Florida law
- BMAP Development and Implementation
  - Land use coverage
  - BMP and cost share project implementation
  - Determination of agricultural nonpoint source allocation and credits
- Florida Statewide Agricultural Irrigation Demand (FSAID) GIS Tool



# **Other OAWP Policy Involvement**

- Utilization of FSAID data to inform the development of minimum flows and levels
- Coordination with partners on outreach and education
- Interagency coordination as required by law or to implement funding opportunities
- Participation in state and federal restoration program planning and regulatory development
  - Central and South Florida Flood Control Project
  - Everglades Restoration
  - Northern Everglades and Estuary Protection Program



# **Other OAWP Responsibilities**

- Binding Determinations Applicability of the agricultural exemption in s. 373.406, F.S.
- Technical assistance to agricultural stakeholders
- Coordination of mobile irrigation labs
- Intra-agency coordination



# Office of Agricultural Water Policy (OAWP)

# 51 positions

- Policy
- Finance and contracts
- IT
- Field staff (25 positions)
- Contractual field staff support provided by soil and water conservation district technicians
- \$45 million budget for FY 2019-2020



# 2020 Legislative Budget Requests

- Base budget for BMP implementation and cost share \$30 million
- 10 additional FTE positions \$1.2 million)
  - Implementation Verification Site Visits
  - Hemp BMP implementation
- \$1.5 million for water supply planning
  - FSAID data aggregation and model development to meet statutory obligations
  - Mobile irrigation labs
- \$25 million for fixed capital outlay projects
  - Larger scale
  - Upscaling research projects to farm scale
  - Innovative technology and BMP pilot projects
  - Research
- \$5 million- BMAP focused cost share short term projects

# Thank You!

#### http://www.fdacs.gov/Divisions-Offices/Agricultural-Water-Policy

Christopher Pettit Director (850) 617-1700 Christopher.pettit@fdacs.gov





Florida Department of Agriculture and Consumer Services • Commissioner Nicole "Nikki" <sup>16</sup>/<sub>Fried</sub>

THE FLOR	RIDA SENATE	
APPEARAN	ICE RECORD	
9 - 8 - 9 (Deliver BOTH copies of this form to the Senator	or Senate Professional Staff conducting the meeting)	
Meeting Date	Bill	Number (if applicable)
Topic OANP overview	Amendmen	t Barcode (if applicable)
Name Christopher Pettit		,
Job Title Diactor DACS office	2 of Ag Water Policy	
Address 407'S. Calhoun St	Phone 8505	19 4356
Street Tallahassee FL	Email christop	her. pettit@
City State	Zip fdac	5-30V
Speaking: For Against Information	Waive Speaking: In Suppo (The Chair will read this information	
Representing Florida Dept.	of Agriculture + Con	sumer Service
Appearing at request of Chair: Yes No	Lobbyist registered with Legislature:	Yes No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

This form is part of the public record for this meeting.

S-001 (10/14/14)

#### **Invasive Species Impacts, Prevention, and Enforcement**







Senate Subcommittee on Agriculture, Environment, and General Government Appropriations Kipp Frohlich, Director Division of Habitat and Species Conservation

Florida Fish and Wildlife Conservation Commission

## Nonnative Fish and Wildlife in Florida

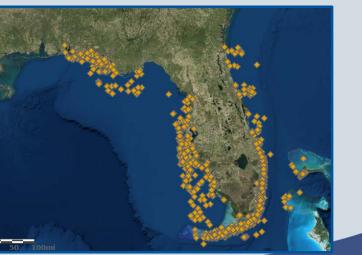


Nonnative Fish and Wildlife in Florida 1924 – Present, FWC Data Base

Almost 600 nonnative species observed

- At least 150 species reproducing
- Nearly 87,000 observations of nonnative wildlife (not including lionfish) since 1924
- Over 590,000 lionfish have been removed since 2014

Lionfish reports in the USGS Nonindigenous Aquatic Species Database 1985-Present





## Why Florida?

- Sub-tropical climate
- Hotspot for exotic pet trade
- 15 ports of entry





### **Fish and Wildlife Pathways**



- Live Animal Trade
  - Aquaria Releases
  - Escaped/released captive wildlife/live animal
- Hurricanes and Natural Disasters



# **Species Introductions in Florida**

	Number of Introduced Species	Introduced via Live Animal Trade (estimates)
Mammals	18	50%
Reptiles	180	92%
Freshwater Fish	130	88%
Amphibians	27	59%
Marine Fish	40	93%
Birds	198	68%
Total	593	80%





#### **Nonnative Animal Business**



- Over 224 million documented live animals imported annually
  - Sold in retail
  - o Breeding
  - o Export



#### **Impacts of Invasive Fish and Wildlife**

- Ecological impacts
  - Direct predation
  - Competition with native species
  - Habitat alteration
  - Disease and parasites
- Human health and safety
- Economic impacts











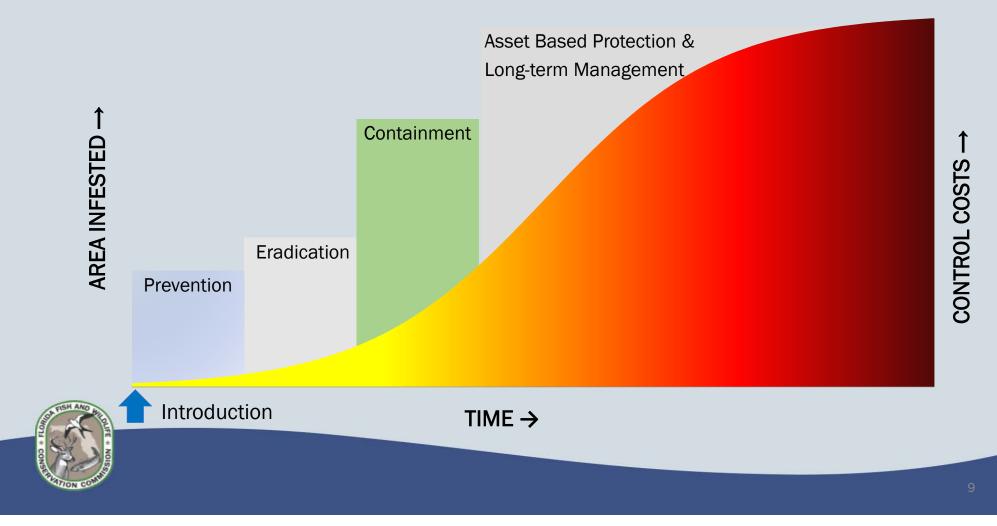
### **Economics of Invasive Species Management**

- Economic Impacts
  - Property damage
  - Agriculture impacts
  - Tourism
- Management Costs
  - State and federal agencies
  - Local governments
  - Constituents





#### **The Invasion Curve**



# **FWC's Role**

- Prevention
  - Risk assessment/screening
  - Regulation
  - Enforcement
  - Education and Outreach
- Control and Management
  - Early detection/rapid response (EDRR)
  - Removal



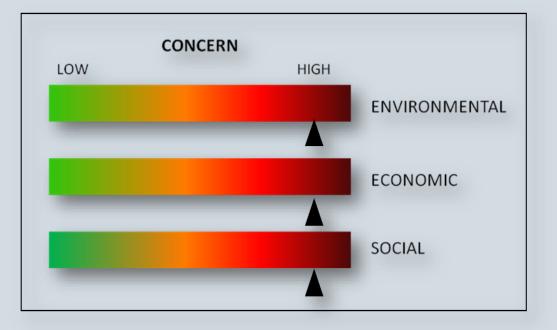
#### **Research Support**





## **Prevention: Risk Assessment/Screening**

- Not all nonnative species are invasive
- Assessment of risk
- Level of concern may change based on location



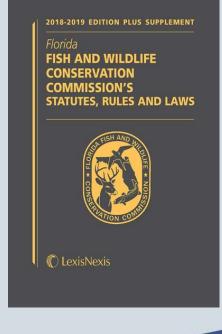


#### **Prevention: Regulation**

Rules and Statutes address ownership of fish and wildlife for both commercial use and personal pets

FWC has two captive wildlife classification systems:

- 1) Assess level of human risk
- 2) Assess invasive risk to the environment





#### **Prevention: Enforcement**

- Captive Wildlife
  - Mission: Oversee and enforce rules regarding the commercial and personal pet ownership of captive wildlife
- Port Investigations
  - Mission: Detect the unlawful commercial trade and trafficking of fish and wildlife species and prevent illegal importation, exportation and potential release of invasive species





## **Prevention: Education and Outreach**

- Exotic Pet Amnesty Program
- Awareness campaigns
- Outreach events
- Technical assistance
- Training



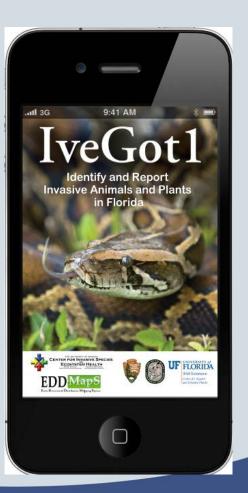


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## **Control and Management: Early Detection/Rapid Response**

- Reporting
- Verification
- Evaluation
- Response







## **Control and Management: Removal Efforts**

- Burmese pythons
- Argentine black and white tegus
- Green iguanas
- Nile monitors
- Lionfish







# **Removal of Priority Species**

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Priority Species	Total Removed To Date	Total Removed 2018	Removal Method
Burmese Python	Over 9,000	1,894	Hand capture, firearms, air rifles
Lionfish	Over 590,000	Over 62,000	Spearfishing, trapping
Argentine Black and White Tegus	Over 7,500	1,086	Trapping, air rifles
Nile Monitors	Over 800	62	Trapping, air rifles, firearms
Green Iguanas	Over 4,000	3,561	Catch pole, hand capture, trapping, air rifles
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## **Research Support**

- Understanding impacts
- Detection
- Traps/lures
- Technology advancements







### **Recent Progress**

- Expanded Prohibited Species List
- Florida Keys green iguana initiatives
- Lionfish initiatives
- Expanded python program
- Increases in paid contractors







### FWC Budget Nonnative Fish and Wildlife

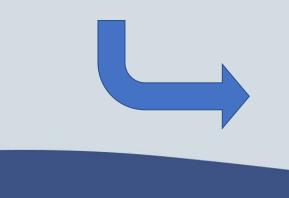
Year	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
HSC- Nonnative Fish and Wildlife Program	\$1,046,583	\$1,077,836	\$2,655,611	\$2,673,233	\$2,497,215	\$2,429,498
Marine Fisheries- Lionfish	\$316,108	\$327,085	\$624,926	\$754,541	\$1,276,764	\$1,276,764
Law Enforcement- Captive Wildlife	\$2,766,452	\$2,766,452	\$3,738,613	\$3,400,544	\$3,790,686	\$3,790,685
Law Enforcement- Port Inspections	\$373,717	\$393,387	\$838,428	\$936,744	\$1,231,815	\$1,428,508
Total By Year	\$4,502,860	\$4,564,760	\$7,857,578	\$7,765,062	\$8,796,480	\$8,925,455





### **Future Direction: Making a Difference**

- Improve coordination among partners
- Prohibit new high-risk species
- Increase funding for research
- Expand use of contractors
- Increase public understanding, support and participation





- More invasives removed
- Range expansion reversed
- Fewer impacts to native species
- Prevent future problems

	DA SENATE CE RECORD Senate Professional Staff conducting the meetin	g)
Meeting Date		Bill Number (if applicable)
Topic Invasive Species Impacts	Ame	ndment Barcode (if applicable)
Name Kipp Froh Lich		
Job Title Director, Division of Habit	it and species conservation	
Address 620 S. Meridian St.		-488-383
Tallahassee FL City State	Zip Email Kipp	. Frohlich @ my fwc. com
Speaking: For Against Information	Waive Speaking: In S (The Chair will read this inform	
Representing FWC		
Appearing at request of Chair: Yes No	Lobbyist registered with Legisla	

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S-001 (10/14/14)

### Implementation Update DMS-AST Merger HB 5301/SB 1570

Jonathan Satter Secretary Florida Department of Management Services



## **Bill Summary**

- Merged the Agency for State Technology into the DMS Division of Telecommunications to create the Division of State Technology
- Established the State Chief Information Officer reporting to the DMS Secretary
- Established a "Cloud-First" policy for state agencies
- Created the Florida Cybersecurity Task Force led by Lt. Governor Nuñez to study cybersecurity procedures, rules, and vulnerabilities and make recommendations
- Encourages the conversation of data-interoperability between agencies



## Merger of AST into DMS

### **Initial Transition**

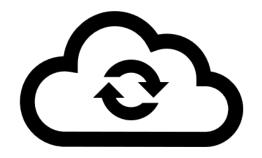
- All FTE's transferred on July 1, 2019
- Positions continue to be updated to reflect organizational changes
- Organizational assessment underway

### **State Chief Information Officer**

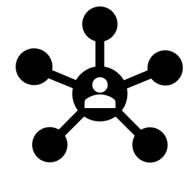
- National search for State CIO
- Final interviews underway, expected to be complete by early 2<sup>nd</sup> quarter



### **Strategic Priorities**







**1. Cloud Computing** 

2. Cybersecurity

3. Data Interoperability



# **1. Cloud-First Policy**

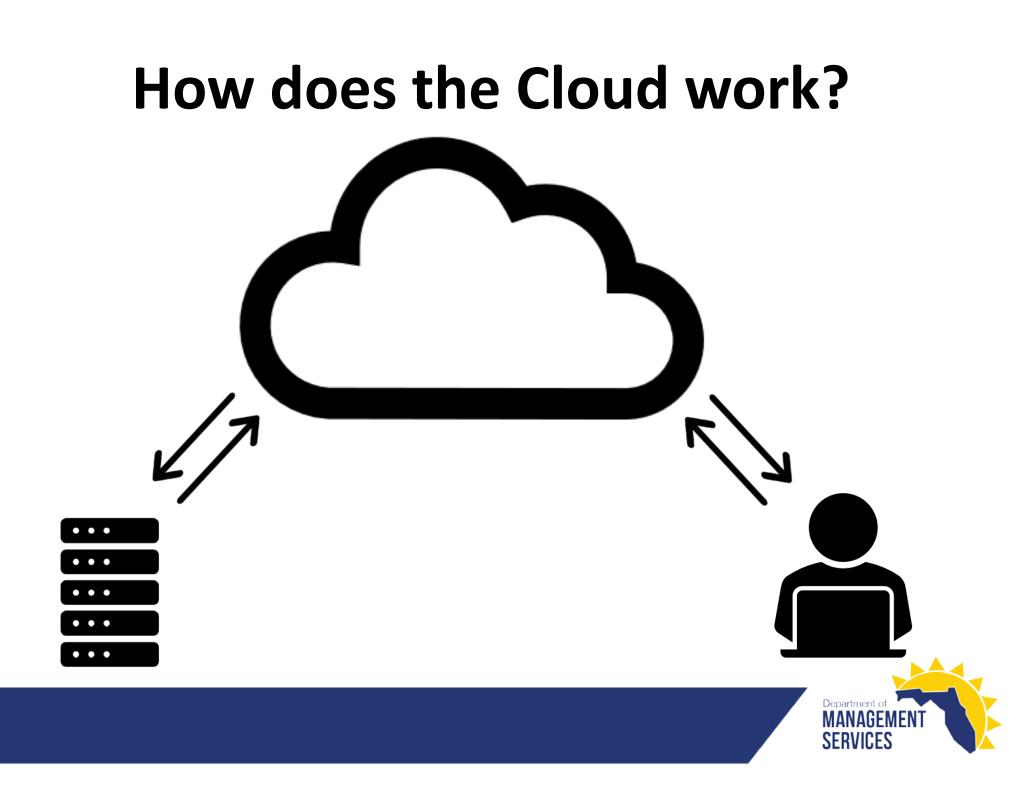
### **Policy Overview**

- Creates a cloud-first policy for state agencies, requiring each agency to first consider cloud computing solutions when sourcing technology
- Requires DMS to establish best practices for the procurement of cloud computing services
- Requires DMS to appoint a State Data Center Director who has experience in leading data center facilities and cloud computing management

### **Cloud Rulemaking**

- Collaborative process to provide guardrails
- Robust public comment with over 100 workshop participants
- Final rule expected before October 1





## How is the Cloud protected?





# **Creating Efficiencies**

#### **Business Case**

- The Department is currently in the process of procuring an independent consultant to conduct a business case
- The business case will examine options of how best to operate the state data center in full support of the cloud-first strategy
- The Department will report the findings to the Governor and Legislature for consideration

#### **Application Strategic Plan**

- Due by October 15, 2019 to be updated annually by each state agency
- Provides inventory of applications at the State Data Center
- Plan must identify an approximate timeline and readiness of transitioning to the cloud
- The State Data Center should utilize information from state agencies' strategic plans when determining services



# 2. Protecting Florida's Data

### Cybersecurity

- State Chief Information Security Officer (CISO) is established to provide a strategic vision and plan for the enterprise
- Continued coordination with the Department of Homeland Security and the State University System
- Development of Florida's Cyber Disruption plan in coordinating with FDLE, DEM, and the National Guard
- Updated Agency guidance to reflect the increase in intellectual threats
- Support government entities with best practices related to Cybersecurity protocols.
  - October is Cybersecurity Awareness Month





#### Overview

- Established to review and provide recommendations for the improvement of the state's cybersecurity infrastructure, governance, and operations
- Meets quarterly and must submit a final report by November 1, 2020

#### Composition

- Chaired by Lt. Governor Jeanette Nuñez
- Representatives from the Private Sector
- Appointments forthcoming, with multiple meetings in the 2<sup>nd</sup> quarter



# 3. Data Interoperability

### Overview

 Legislation requires DMS to recommend potential methods for standardizing data across state agencies that will promote interoperability and reduce the collection of duplicative data

#### **Benefits of Interoperability**

- Provide connections across policy silos
- Allows for decision makers to reference trends that may lead to better outcomes or cost-savings
- Improve customer service



## **QUESTIONS?**



THE FLORIDA SENATE				
APPEARANCE RECO	DRD			
9/18/19 (Deliver BOTH copies of this form to the Senator or Senate Professional	Staff conducting the meeting)			
Meeting Date	Bill Number (if applicable)			
Topic DMS-AST Merger: Implementation Update	Amendment Barcode (if applicable)			
Name Jonathan Satter				
Job Title Secretary of Management Services	_			
Address 4050 Esplanade Way	Phone (850) 487-7001			
Tallahassee FL 32399	_ Email Email			
City State Zip   Speaking: For Against Information Waive Speaking: In Support Against   Speaking: For Against Information Waive Speaking: In Support Against				
Representing Florida Department of Management Services				
Appearing at request of Chair: Ves No Lobbyist regis	stered with Legislature: 🗹 Yes 🗌 No			
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S-001 (10/14/14)

#### **CourtSmart Tag Report**

Room: EL 110 Case No.: Type: Caption: Senate Appropriations Subcommittee on Agriculture, Environment and General Government Judge: Started: 9/18/2019 1:31:47 PM Ends: 9/18/2019 2:43:38 PM Length: 01:11:52 1:31:47 PM Sen. Mayfield (Chair) 1:33:40 PM TAB 3 - Presentation by the Department of Management Services on its Responsibilities Relating to the State of Florida's Information Technology 1:34:08 PM Jonathan Satter, Secretary, Dept. of Management Services 1:41:16 PM Sen. Berman 1:41:30 PM J. Satter Sen. Berman 1:41:39 PM 1:41:51 PM J. Satter 1:42:20 PM TAB 1 - Presentation on Agricultural Water Policy by Department of Agriculture and Consumer Services 1:42:31 PM Sen. Mavfield 1:42:40 PM Christopher Pettit, Director, Office of Agricultural Water Policy, Department of Agriculture and Consumer Services 1:45:04 PM Sen. Bean 1:45:29 PM C. Pettit 1:45:36 PM Sen. Mayfield 1:45:44 PM C. Pettit 1:47:28 PM Sen. Mayfield 1:47:39 PM C. Pettit Sen. Mayfield 1:59:48 PM C. Pettit 2:00:10 PM Sen. Bean 2:01:38 PM 2:01:54 PM C. Pettit Sen. Bean 2:03:21 PM 2:03:32 PM C. Pettit Sen. Broxson 2:04:43 PM 2:04:53 PM C. Pettit 2:05:57 PM Sen. Broxson 2:06:05 PM C. Pettit 2:07:08 PM Sen. Mayfield 2:07:26 PM C. Pettit 2:07:48 PM Sen. Mayfield 2:07:58 PM C. Pettit Sen. Mayfield 2:08:40 PM C. Pettit 2:08:59 PM Sen. Mayfield 2:09:05 PM 2:09:38 PM C. Pettit 2:11:11 PM Sen. Mayfield 2:11:42 PM TAB 2 - Presentation on Invasive Species Impacts, Prevention, and Enforcement by the Florida Fish and Wildlife Conservation Commission 2:11:51 PM Kipp Frohlich, Director, Division of Habitat and Species Conservation, Fish and Wildlife Conservation Commission 2:31:15 PM Sen. Powell K. Frohlich 2:31:54 PM 2:32:49 PM Sen. Broxson 2:33:35 PM K. Frohlich 2:34:51 PM Sen. Broxson 2:35:23 PM K. Frohlich 2:35:27 PM Sen. Bean 2:35:52 PM K. Frohlich 2:36:45 PM Sen. Stewart 2:37:01 PM K. Frohlich 2:38:21 PM Sen. Mayfield

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2:41:34 PM	Sen. Berman
2:41:55 PM	K. Frohlich
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