

# Florida Department of Transportation

**Susanne Travis**

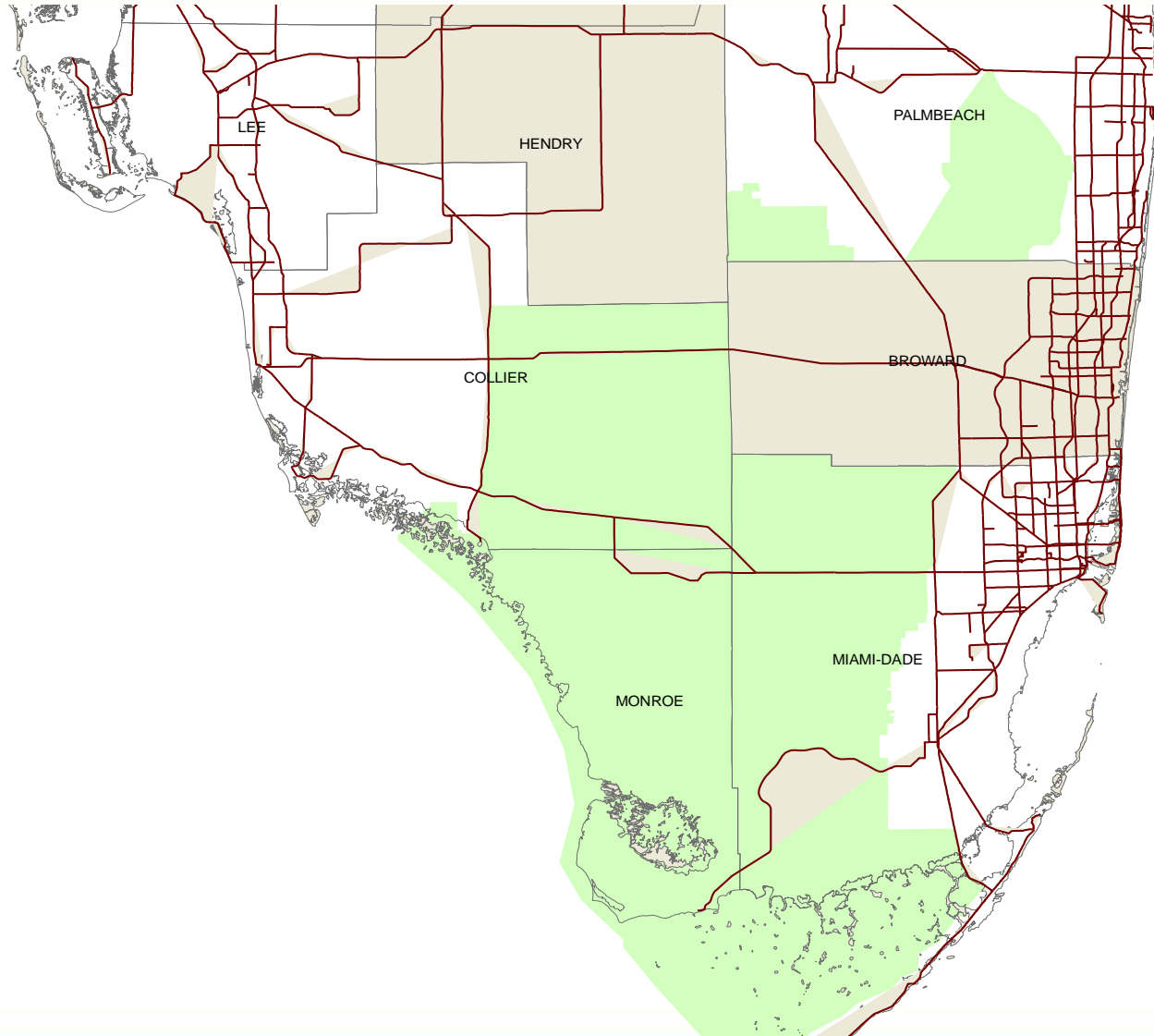
Senior Environmental Scientist

**Nasser Brahim**

Environment Specialist



# Florida's Transportation System



# State Roads that Transect ECISMA

## District 1

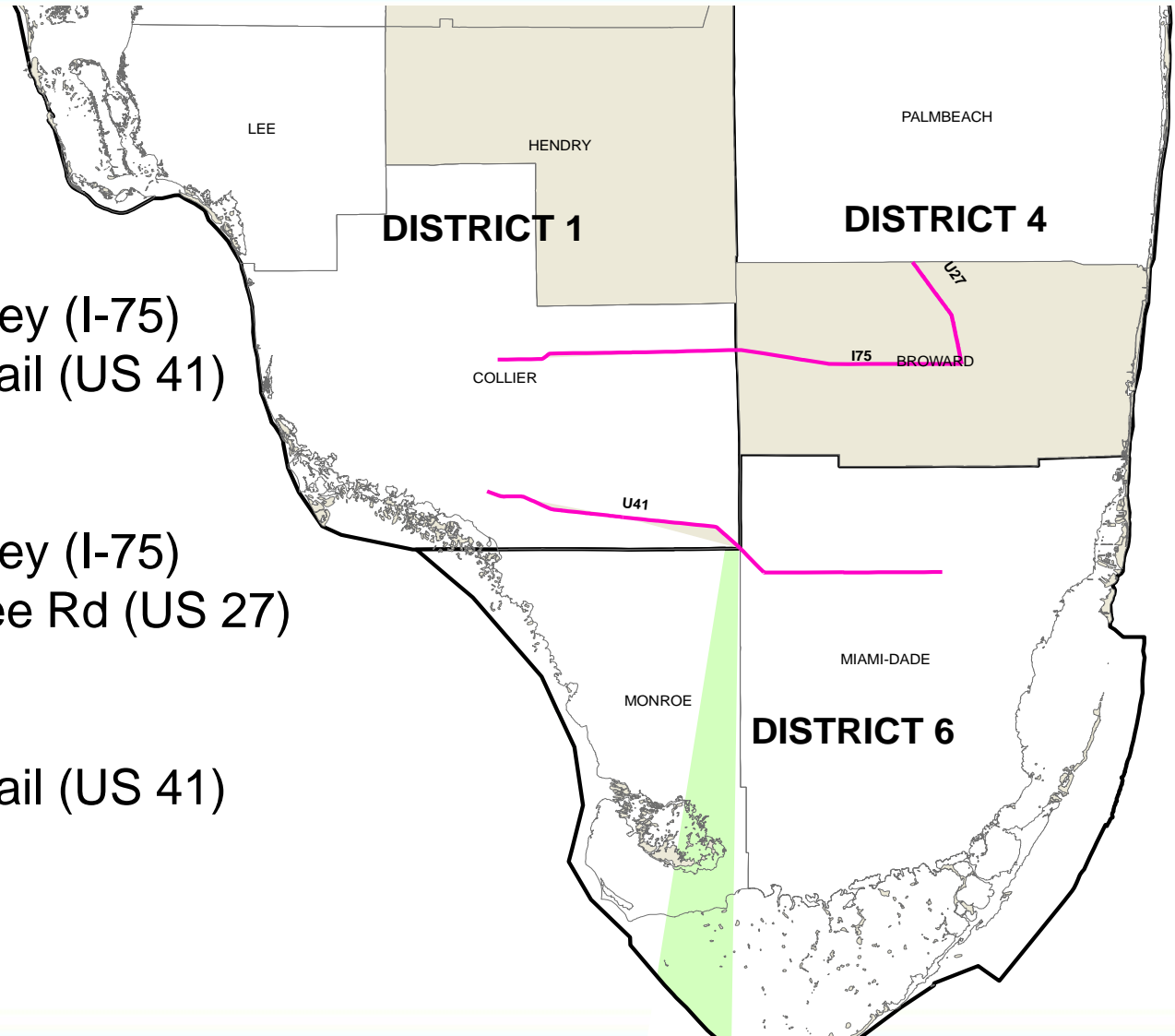
- Alligator Alley (I-75)
- Tamiami Trail (US 41)

## District 4

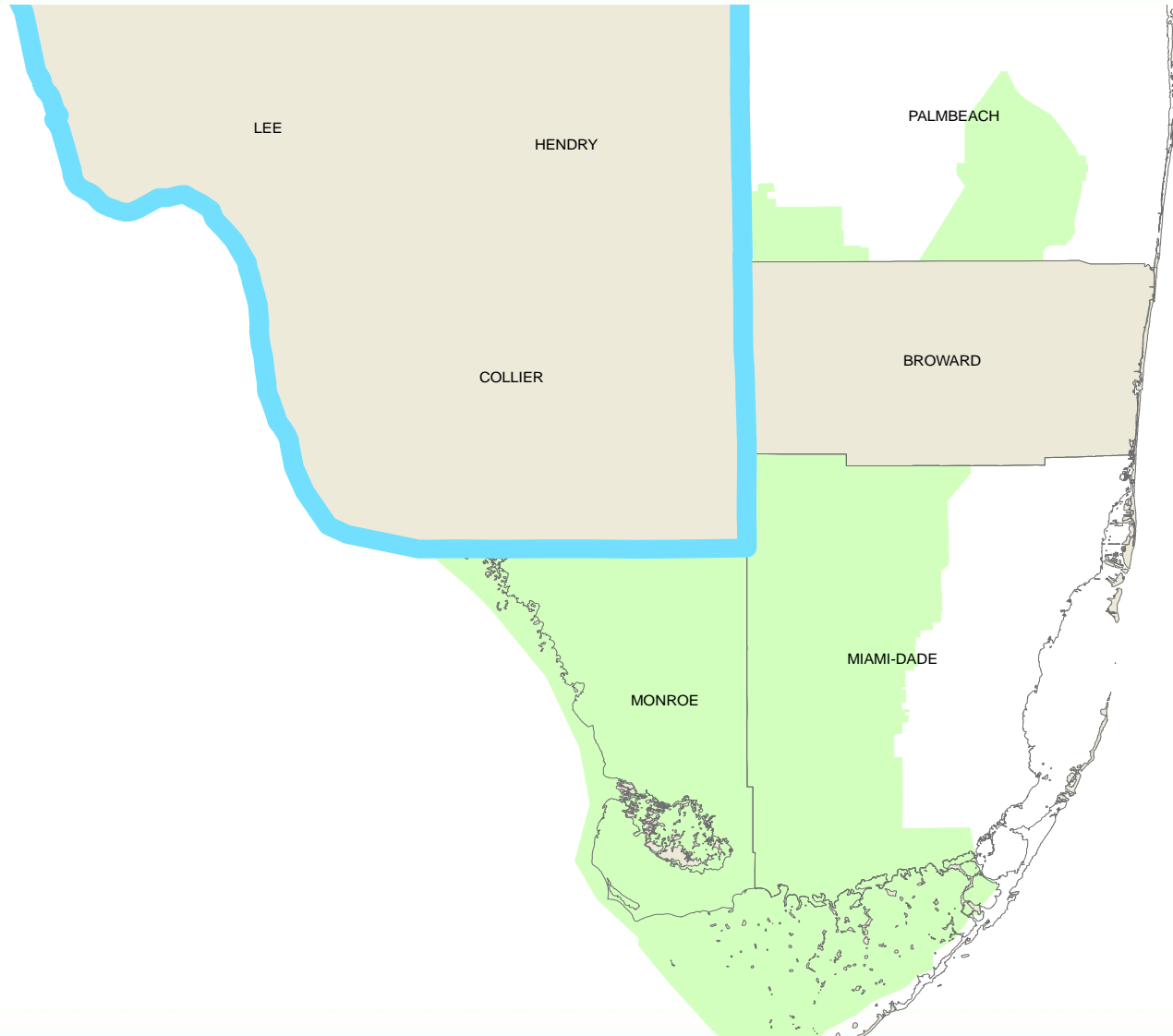
- Alligator Alley (I-75)
- Okeechobee Rd (US 27)

## District 6

- Tamiami Trail (US 41)



# District 1



## FDOT-District 1 Invasive Species control

- Task Name: Brazilian Pepper Eradication Program
- Description: Remove Brazilian Pepper from the District's right-of-way along I-75 and I-275 using mechanical control methods
- Objective: Environmental stewardship
- Start Date: December 2007
- Funding: Specific Contract; paid on per acre basis, cost estimate between \$300 and \$1000/acre
- Status: Ongoing; District-1 Secretary's Initiative; managed by District Maintenance Office
- Annual Summary: 700 acres treated since December 2007



# Typical “Before” Picture



# Typical “After” Picture



Typical "After" Picture showing 10' wide maintenance path inside fenceline

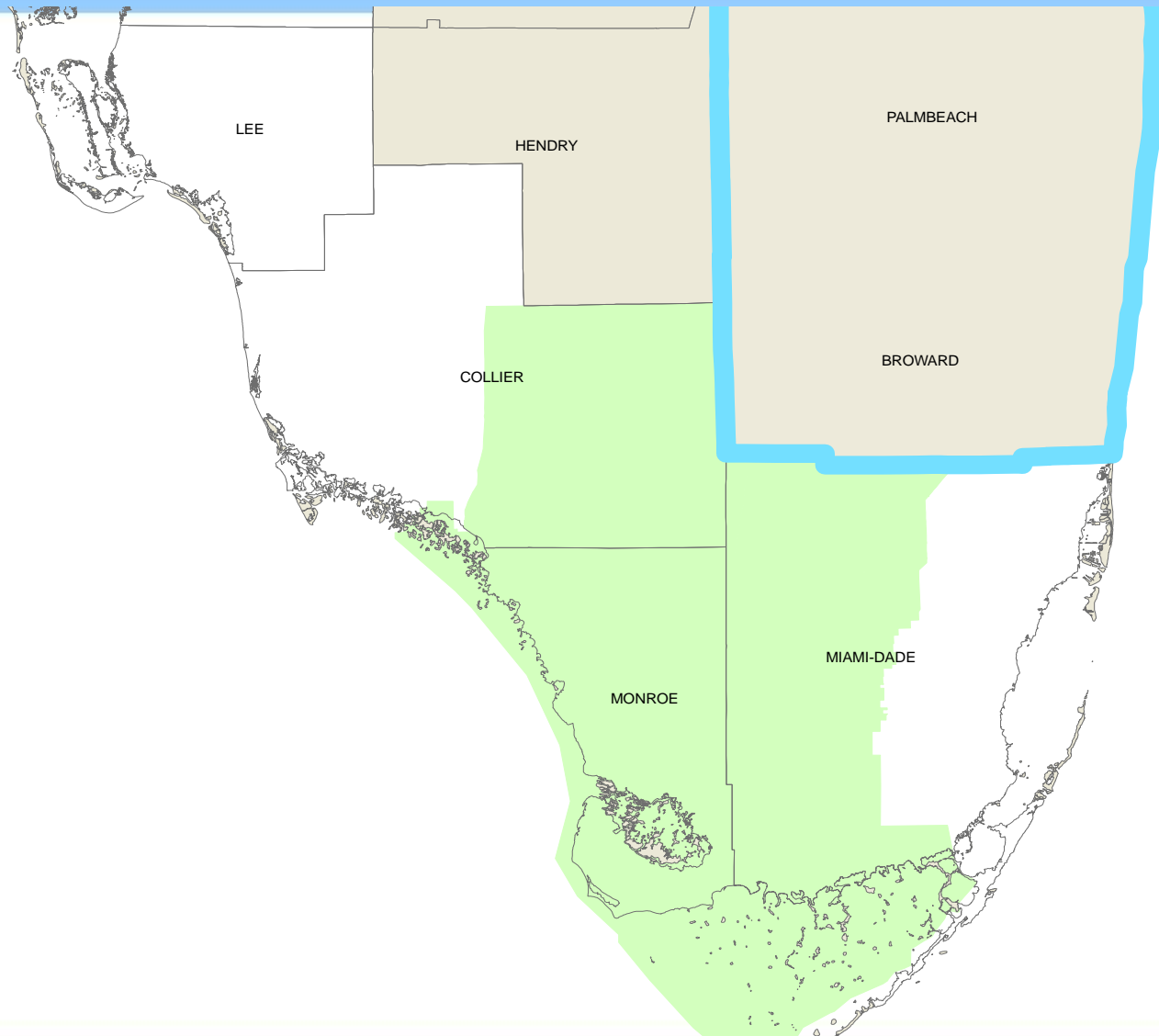


## FDOT-District 1 Maintenance & Monitoring

- Task Name: Exotic Vegetation Maintenance Plan
- Description: Treat Brazilian Pepper removal areas for regrowth (short-term), and conduct initial treatments for other exotic species (long-term plan)
- Methods: Initial herbicide treatment within 2-3 months of BP removal (foliar and stump applications)
  - Remaining root systems
  - Remaining stumps at ground level or below
  - Berries that dropped (1-3 months for 30% to germinate )
- Status: Ongoing. Will continue to monitor and treat for 3 years
- Funding: This is a subtask within a larger Maintenance Contract.



# District 4

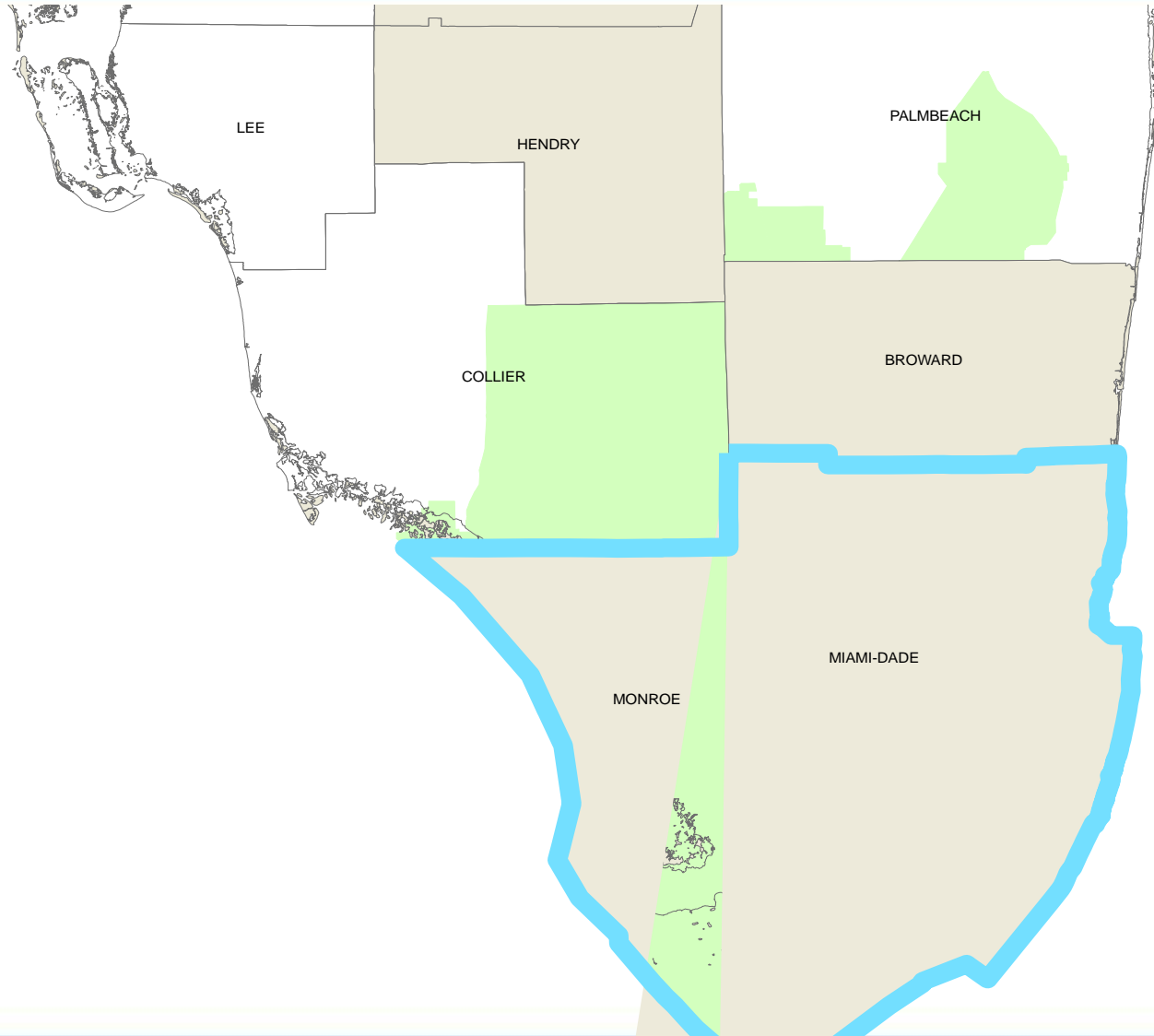


## FDOT-District 4 Invasive Species control

- Task Name: Removal of Invasive Plants on 3R Projects
- Description: Selective clearing of Category I species (usually Brazilian Pepper, Melaleuca, and Australian Pine)
- Objective: Environmental stewardship
- Status: Ongoing. Undertaking by the District-4 Environment/Landscape Architecture unit.
- Funding: Included in roadway construction contracts
- Methods: Design plans - infested areas are identified and quantified for bidding purposes. Construction – selective clearing by roadway contractor, with chemical treatment of stumps
- Maintenance & Monitoring: Difficulty enforcing 1-yr of maintenance within Construction Contract



# District 6



## FDOT-District 6, Right-of-way Maintenance Program

- Task Name: Mowing, weed removal (these activities also apply in other FDOT Districts)
- Description/Objective: Maintain a clear recovery area, free of tall vegetation, for safety and aesthetics (a secondary benefit is control of exotics through continued treatments)
- Methods: mowing (8-10 cycles/year); herbicide treatment of weeds along guardrail and fences, on sidewalks, and in gutters
- Status: Ongoing
- Funding: In-house Maintenance, or Maintenance Contracts for Mowing, Herbicide, or Landscape Maintenance
- Plants Tracked: Tropical Soda Apple and Cogongrass (FDOT statewide mandate – neither identified in District 6)



# Priority Plant Species

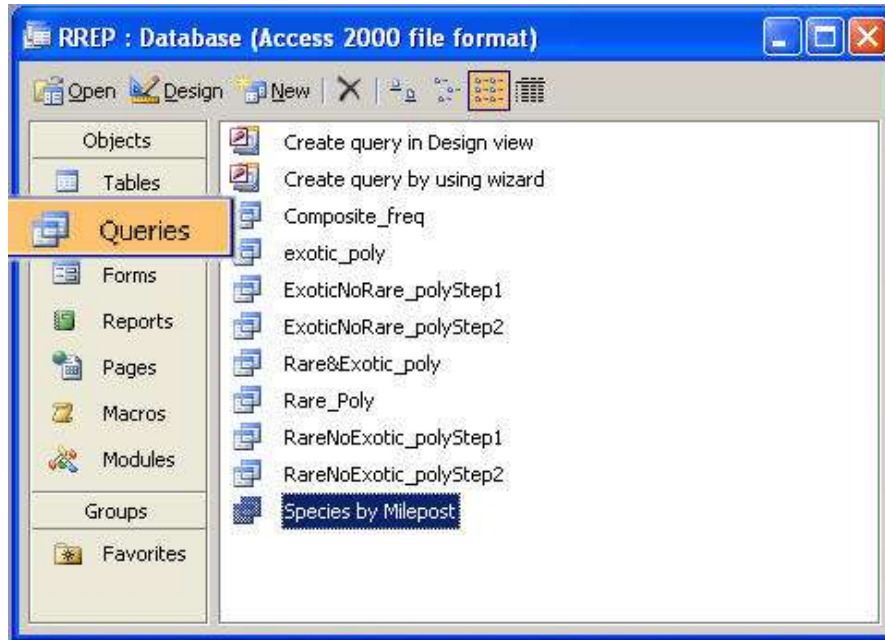
- **Priority Plants**

- District 1: Brazilian pepper and others...
- District 4: FLEPPC Category I
- District 6: Cogon grass, Tropical soda apple



# FDOT District 6 Innovation

## Roadside Rare and Exotic Plant Geodatabase



# Roadside Rare and Exotic Plant Geodatabase

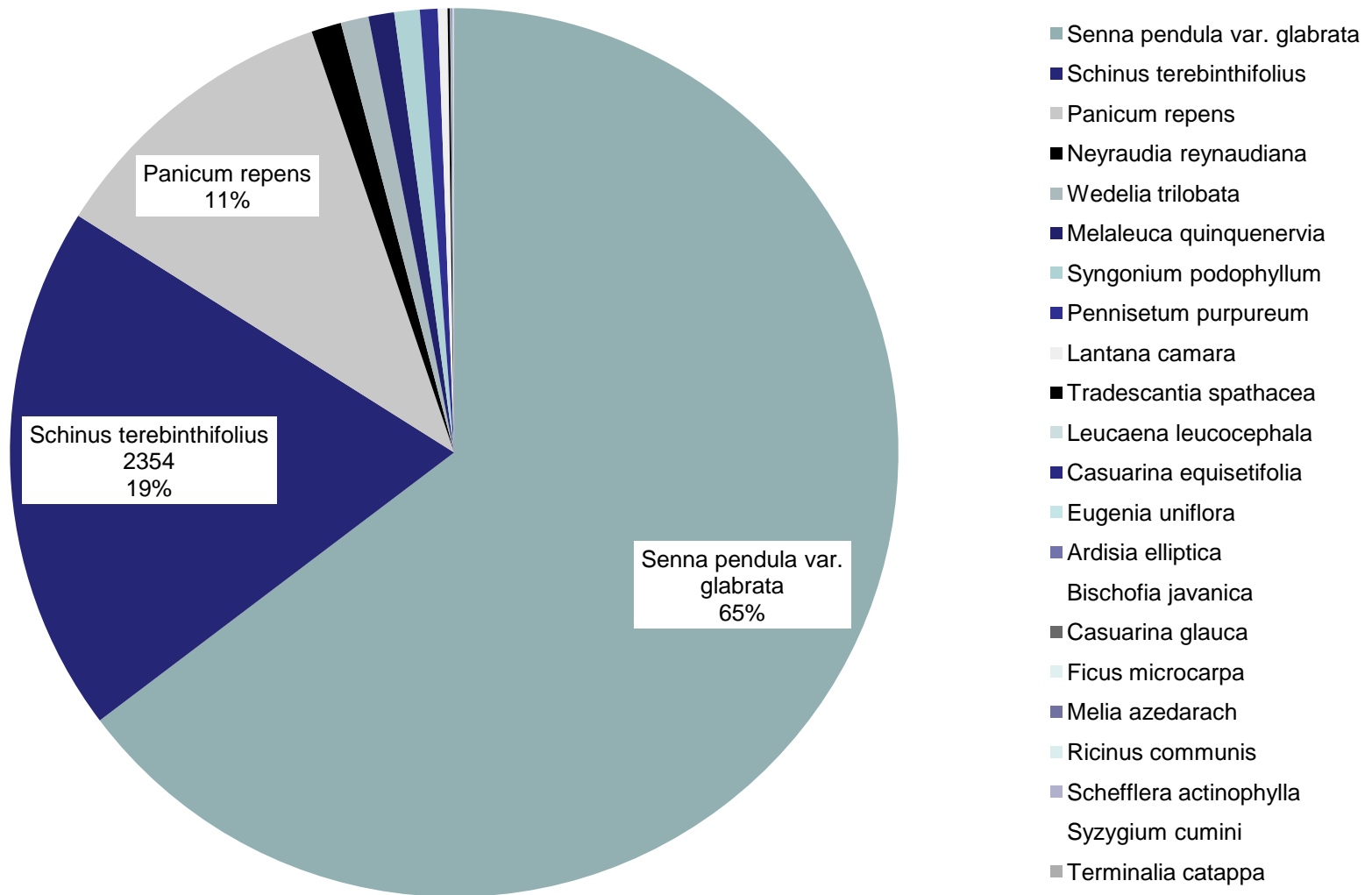
Microsoft Access - Query Tools - Design

Species by Milepost

| SegmentID     | MilePost | FullName                    | Cover | Abundance | EPPC |
|---------------|----------|-----------------------------|-------|-----------|------|
| 87110000_0.1S | 0.1      | Melaleuca quinquenervia     | 2     | 1         | I    |
| 87110000_0.1S | 0.1      | Schinus terebinthifolius    | 2     | 1         | I    |
| 87110000_0.2S | 0.2      | Schinus terebinthifolius    | 2     | 1         | I    |
| 87110000_0.3S | 0.3      | Neyraudia reynaudiana       | 2     | 1         | I    |
| 87110000_0.3S | 0.3      | Syngonium podophyllum       | 3     | 11        | I    |
| 87110000_0.4S | 0.4      | Syngonium podophyllum       | 3     | 101       | I    |
| 87110000_0.4S | 0.4      | Neyraudia reynaudiana       | 2     | 1         | I    |
| 87110000_0.4S | 0.4      | Senna pendula var. glabrata | 3     | 51        | I    |
| 87110000_0.5S | 0.5      | Senna pendula var. glabrata | 3     | 101       | I    |
| 87110000_0.5S | 0.5      | Schinus terebinthifolius    | 2     | 11        | I    |
| 87110000_0.5S | 0.5      | Pennisetum purpureum        | 1     | 1         | I    |
| 87110000_0.6S | 0.6      | Pennisetum purpureum        | 2     | 1         | I    |
| 87110000_0.6S | 0.6      | Schinus terebinthifolius    | 2     | 1         | I    |
| 87110000_0.7S | 0.7      | Schinus terebinthifolius    | 2     | 11        | I    |
| 87110000_0.7S | 0.7      | Senna pendula var. glabrata | 2     | 11        | I    |
| 87110000_0.7S | 0.7      | Pennisetum purpureum        | 2     | 1         | I    |
| 87110000_0.8S | 0.8      | Casuarina equisetifolia     | 1     | 1         | I    |
| 87110000_0.8S | 0.8      | Senna pendula var. glabrata | 2     | 11        | I    |
| 87110000_0.8S | 0.8      | Schinus terebinthifolius    | 1     | 1         | I    |
| 87110000_0.9N | 0.9      | Lantana camara              | 1     | 1         | I    |
| 87110000_0.9S | 0.9      | Senna pendula var. glabrata | 3     | 101       | I    |

Record: 1 of 328

## Approx. Abundances of Invasive Exotic Plant Species in District 6 Tamiami Trail Right of Way (Mile 0 – 24.7)





# Roadside Rare and Exotic Plant Geodatabase



# Challenges Moving Forward



## Initial Contact Information

- **District 1 – Bartow**

Maintenance Office: 863-519-2314

- **District 4 – Ft. Lauderdale**

Environment Office: 954-777-4325

Maintenance Office: 954-777-4202

- **District 6 – Miami**

Environment Office: 305-470-5220

S. Dade Maint. Office: 305-256-6330

