# Florida's Wildlife: On the Frontline of Climate Change





## Speakers, Presenters, and Panelists

- Nobel Peace Prize Laureates
- College Professors
- FWC Staff
- Other Agencies
- Interested citizens
- FWC Commissioners







# Summit Workshops

- Inland Aquatic and Semi-Aquatic Ecosystems
- Marine, Estuarine and Coastal Ecosystems
- Natural Resource Management and Land Use Planning
- Native Terrestrial Species, Communities, and Ecosystems
- Hunting and Fishing
- Invasive Organism Impacts on Biodiversity in Future Climates







# Wildlife 2060:

What's at stake for Florida?

#### What future do we want?

Florida now

Possible Florida in 2060



More than two of seven million acres projected to be developed by 2060 lie within a mile of existing public conservation lands.

So even though we've protected millions of acres of wildlife management areas, parks, forests and preserves in Florida, these lands will become increasingly isolated from one another.

Statewide, the forested homes of black bears and wild turkeys will decrease by more than 2 million acres.

Gopher tortoises will lose a fifth of their existing range.

Freshwater and terrestrial and marine systems will have to be even more actively managed by 2060 than they are now.





#### 2060 Issues to Consider

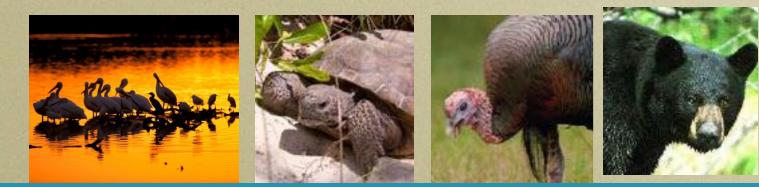
- Habitat loss
- Habitat isolation
- Coastal challenges
- Water quality and quantity
- Wildlife/Human interactions
- Access to land and water





# **Common Themes Species Preservation**

- We will have smaller and more fragmented species populations
- Habitats will be changed, moved, or lost.
- There will be changes to abundance and distribution of wildlife populations
- Migration and reproductive cycles will change





# **Common Themes Water Issues**

- Water will become more critical as the human population expands and rainfall patterns alter due to climate change
- The balance between flood control, water supply, and wildlife needs will become harder to maintain



# Common Themes Conflicts will change and grow.

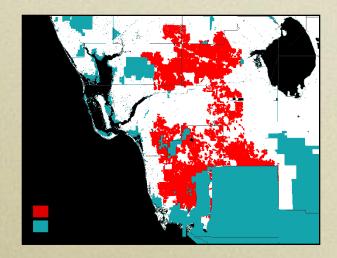
- There will be increasing competition between human/wildlife habitats, water supply, and agriculture.
  - Human and wildlife responses to climate change will likely lead to conflicts



- Need to develop a new conservation paradigm
  - Climate can no longer be treated as a static variable
  - Involvement in land use planning at regional or ecosystem level to develop migration corridors
  - Concepts like biodiversity and exotic species will need to be re-evaluated as species distribution changes



- Land protection to accommodate migration and assisted migration of plants and animals
  - Acquisition
  - Easements
  - Landowner incentives
  - Land swaps
  - Long term leases (e.g. 99 years)
  - Creation of marine protected areas







# Key Actions Needed Research and Monitoring

- Conduct vulnerability assessments
- Standardize research data among U.S. regions
- Identify agency liaison with universities
- Develop more integrated research and data management on wildlife community needs









- Most of the predictive models are at a global or continental scale
  - Models need to be refined or developed at a Florida or regional scale to assist in decision-making
  - Models need to be developed for rainfall and temperature



- Public outreach and education
  - Needed for broad public understanding
  - Social science research will be necessary to understand rapidly changing human demographics



- Communications
  - Internally to agency personnel to get broad support
  - Externally to people who will be impacted; including those that are unaware they will be impacted

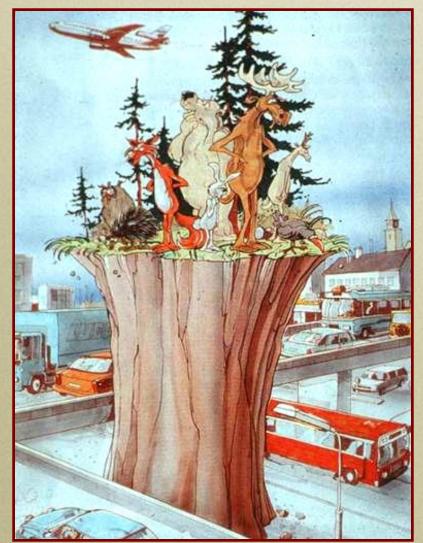


- Development of new partnerships
  - Many will be new or nontraditional for fish and wildlife managers (e.g. Cooperative Conservation Blueprint, local governments)
  - Need to reassess the role of fish and wildlife management in land use planning and focus on proactive involvement as opposed to reactive





 Inspired decision-making in the face of uncertainty





#### Next Steps

- Incorporate climate change into our state wildlife grants program
- Develop research and monitoring for climate change
- Partner
- Act





Keeping Common Species Common



Florida Fish and Wildlife Conservation Commission Visit: MyFWC.com/wildlifelegacy

