



## Draft

### Nominated Early Action Items

#### ADP-1. Advancing Science Data and Analysis for Climate Change

**Goal 2:** Foster and support climate-science research agenda for Florida with some broad priorities as outlined below. Consider instituting a new scientific advisory council on climate change to advise state government on this research agenda. Identify and establish long-term funding to support research. Funding should be protected from short-term economic or political cycles. [2 nominations]

##### Strategies:

- HB 7135 in the 2008 Florida Legislative Session created the Florida Energy Systems Consortium as a "super center of excellence" within the State University System. The center should consider, as a priority order of business, the appointment of a scientific advisory council composed of members from identified disciplines adaptive to climate change and representative of each participating institution to better coordinate energy-related research in support of Florida's adaptation, energy and climate change policy objectives.
- The Florida Energy and Climate Research Trust Fund should be created by the legislature and a dedicated revenue stream provided. The revenue stream could be from public/private grants and donations or come from a slight increase in state lands lease fees and "local development fees" so that urban areas undergoing more lucrative development would pay more than rural areas.
- The Governor should propose multi-year research plans to address key aspects of climate change.

**Goal 3:** Conduct research needed to support incorporation of climate change into the protection of Florida's ecosystems and biodiversity.

##### Strategies:

- Define the likely new "states" of Florida ecological systems to determine state budget and policy requirements. Identify species and habitats likely unable to migrate naturally due to geographic constraints and craft strategies to assist the relocation or recreate habitat elsewhere to facilitate this shift.
- Expand the newly-developed Critical Lands & Waters Identification Project (CLIP) v1.0 database. CLIP updates, unifies, and prioritizes existing GIS databases. Completed July

1, 2008, CLIP identifies and prioritizes statewide natural resource-landscapes, biodiversity and water, and serves as a starting point for the Cooperative Conservation Blueprint project.

**Goal 4:** Enhance support for mapping, monitoring, and modeling. All of these will be necessary to provide information to support policy making. For example, the state is supporting use of Light Detection and Ranging (LIDAR) to improve mapping of Florida’s coastlines. Such mapping should be done for the entire coastline of the state. In addition, effective monitoring programs are needed to detect impacts of climate change, as well as modeling to better project impacts. [3 nominations]

**Strategies:**

- Seek stronger coordination and cross-pollination of private research, local, state, federal and international information databases for Florida’s oceans, coastal, inland and geological mapping. Ensure all state and local geological data is digitized as appropriate to allow its use in the database. A century of geological studies, data and reports from mining and drilling in Florida have been accumulated on paper in inaccessible to researchers using the existing electronic database. These records contain valuable data on rock and aquifer density and permeability that could inform discussion and research on saltwater intrusion, vulnerability of freshwater resources and carbon storage/sequestration.
- [Strategy is in Research Priorities] Create a new center, or virtual center, to coordinate and align data from available proxy data sets to build a more precise picture of climate change in Florida over last few thousand years, **and in the future, and track with** associated responses in vegetation, sea level, changes in fire regimes, and the need for more proxy work and gaps in knowledge—spatial and temporal.

**ADP-2.1. [Comprehensive Planning] Local Government Level**

**Goal 2:** State and regional agencies should provide financial and technical assistance to local governments to ensure timely updates of local plans.

**Strategies:**

- {drafted by Jim Murley} Update DCA FL planning Tools website, existing section on climate change update with adaptation information from Action Team and other sources.
- Tie state and regional agencies into a central state digital database and ensure that all pertinent state records are digitized. This will provide instant access for local government planners for the information necessary to better consider impacts of updates to local plans.

**Goal 4:** Local governments should review their coastal management elements to determine necessary amendments to make their coastal areas (especially the coastal high hazard area) resilient to the future impacts of climate change, including SLR.

**Strategies:**

- [drafted by Jim Murley] Create best practices manual for local governments identifying coastal lands for state acquisition with new adaptation language incorporated into local, regional and state government land acquisition processes.
- Identify and revise statutory direction for local, state and regional planning processes to identify potential within planning areas for seawater encroachment, particularly within coastal areas. Provide for an assessment of
  1. The potential movement of the coastal construction control line and related changes,
  2. The extent and potential for expansion of floodplains, and
  3. A consideration of habitat and wildlife migration potentials.

**ADP-2.3. [Comprehensive Planning] State Government Level**

**Goal 3:** Balancing Property Rights and Protecting Communities and Natural Resources. Florida statutes, regulations, policies, rules and Florida Administrative Code should be reviewed by the Florida Attorney General to determine potential conflicts with private property rights and the state and local governments' responsibility to protect communities.

**Strategy:** The Florida Attorney General shall prepare a report on the above within 6 months.

**ADP-3.1. [Protection of Ecosystems and Biodiversity] Uplands, Freshwater and Marine Systems**

**Goal 1:** A representative portfolio of Florida's terrestrial, freshwater, and marine natural communities with redundant representation of habitats and species and connecting corridors (e.g., Florida's Biodiversity Blueprint) is protected and well managed [3 nominations] ~~Goal 5:~~ ~~The portfolio of sites identified under Goal 1 above is managed~~ in a manner that maximizes the health and resilience of these communities systems to climate change impacts.

**Strategies:**

- Tie into existing and expanded databases such as the Critical Lands & Waters Identification Project in order to examine existing local, regional, state and federal land holdings, and categorize these holdings with regard to the representative portfolio.
- Provide a centralized, expanded and updated database to track changes to the natural communities and corridors.

### **ADP-3.2. [Protection of Ecosystems and Biodiversity] Beaches and Beach Management**

**Goal 1:** Reduce and discourage future reliance on bulkheading/hardening to stabilize estuarine and beach shorelines. Shoreline hardening should be considered only after a full and cumulative assessment of short- and long-term impacts to coastal resources and coastal ecosystems. ADP-3.2; Goal 5: State and local governments Establish policies and regulations that clearly define when, how, where, and under what circumstances emergency beach stabilization is allowed.

#### **Strategies:**

- Address state, regional and local permitting programs and planning elements to fully assess and consider potential impacts/changes to coastal resources and ecosystems from proposed coastal armoring, bulkheading, hardening and beach stabilization actions.
- Add an overview element to state and regional planning documents describing statewide strategies and circumstances for coastal and shoreline retreat and erosion.

**Goal 9:** Provide incentives to encourage private entities public and local governments to site structures and infrastructure away from areas at high risk from the impacts of climate change and SLR. [2 nominations]

#### **Strategies:**

- Utilize the Critical Lands and Waters Identification Project and similar expanded and centralized digital databases to determine high-risk areas from climate change impacts
- Examine state insurance law and associated administrative rules that presently encourage or provide subsidies for siting in high-impact areas.

### **ADP-3.3. [Protection of Ecosystems and Biodiversity] Species Protection**

**Goal 1:** The vulnerability of Florida’s fish and wildlife to climate change impacts is assessed, the most vulnerable species are identified and plans are prepared to enhance their chances of persistence where there is a reasonable likelihood that the species will persist over the next 50 years.

#### **Strategies:**

- Utilize the Critical Lands and Waters Identification Project and similar expanded and centralized digital databases to determine potential species and habitat vulnerability.
- Incorporate species and habitat vulnerability from climate change into state and regional planning/zoning, government land acquisition or determinations for conservation easements.

### **ADP - 5.1. [Built Environment, Infrastructure and Community Protection] Building Codes and Regulation**

**Goal 1:** Require that the Florida Building Code incorporate design criteria for buildings to resist future loads that may result from the impact of climate change exacerbated hazards during a minimum service life of 50 years.

**Strategies:**

- Strengthen Florida Building Code requirements for new structures and appropriate renovation to encourage climate change impact resistance.
- Conduct research on how building codes can be routinely updated to account for changes in climate and to develop options on how such codes could account for potential future changes in risks from climate change

**Goal 4:** Develop a required training program to educate existing professionals in relevant fields (e.g., architecture, engineering, and construction management) on the need to incorporate adaptation to climate change as a basis for establishing design criteria for new infrastructure. Completion of such required training to be a condition for relicensing.

**Strategies:**

- Examine licensing and recertification requirements for building professionals and revise to include climate change impact design criteria.
- Add an adaptation criteria to professional education curricula at state universities and trade schools for building and design degrees.