

Appendix F

Adaptation (ADP) Policy Options

Changes approved by the ADP Technical Work Group (TWG) on September 9, 2008

1. Page F-5. ADP-1. Goal 6. Change “a reasonable extent” to “the greatest extent possible.”
2. Page F-7. ADP-1. Delete paragraph beginning “Create a new center...” because the statement is a strategy under Goal 4.
3. Page F-10. ADP-2.1. Goal 1. Strategy B. Replace with: “The FECC and DCA will recommend to the Florida legislature new authority to provide necessary direction for local government comprehensive plans to address the range of adaptation actions, including the built environment, anticipated from climate change impacts.” [“including the built environment” is added in.]
4. Page F-10. ADP-2.1. Goal 2. Strategy B. Replace with: “Tie state and regional agencies into a broadly available state digital database focused on climate change and ensure that all pertinent state records are digitized to provide local government planners with instant access to the information they need to better consider the impacts of updates to local plans.”
5. Page F-10. ADP-2.1. Goal 4. Strategy A. Replace with: “Amend Chapter 163.3178 (8), to provide for coastal counties to include SLR as a criteria when prioritizing lands for acquisition through state programs.”
6. Page F-10. ADP-2.1. Goal 4. Strategy B. Replace with: “Create a best practices manual for local governments to use that incorporates risk from SLR when identifying coastal lands for state acquisition using new adaptation language incorporated into local, state, and regional government land acquisition processes.”
7. Page F-10. ADP-2.1. Goal 4. Strategy D. Remove “[Move to ADP 2.3?]”
8. Page F-11. ADP-2.3. Change “AFP-2.3” to “ADP-2.3”
9. Page F-12. ADP-2.3. Delete Goal 4.
10. Page F-16. ADP-3.1. Goal 1. Replace with “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 in a manner that maximizes the health and resilience of these systems to climate change impacts.”

11. Page F-16. ADP-3.1. Goal 1. Strategy B. Replace with: "Provide an accessible, expanded, and updated database to track changes to the natural communities and corridors."
12. Page F-16. ADP-3.1. Goal 1. Add Strategy D. "DEP should maintain and enhance and, where possible, increase efforts to reduce nutrient loading and set numeric criteria for nutrients, particularly in estuaries and coastal waters, by requiring "performance-based treatment systems" (new technology that significantly reduces nutrients and other pollutants) in coastal and other sensitive areas. DEP should also consider piping into nearby existing systems, reducing phosphorous and nitrogen in the Everglades by lowering total maximum daily loads (TMDLs), building storage treatment areas (STAs), and setting a nitrogen standard for the Comprehensive Everglades Restoration Plan (CERP)."
13. Page F-17. ADP-3.1. Goal 3. Strategy A. Delete "DEP should redouble efforts to reduce nutrient loading and set numeric criteria for nutrients, particularly in estuaries and coastal waters."
14. Page F-17. ADP 3.1. Delete Goal 5 and Strategy A.
15. Page F-17. ADP-3.1. Change "Goal 6" to "Goal 5."
16. Page F-17. ADP-3.1. Add new Goal 6: "Establish an integrated network of early warning sites on protected lands to track long-term changes in biological communities and processes; establish a Center for Climate Archives for baseline and associated data."
17. Page F-18. ADP-3.2. Replace Goal 4 with: "Require the state Acquisition and Restoration Council to conduct a review of management plans for those lands under its authority every 10 years and include property-specific analyses of vulnerability to climate change in each management plan."
18. Page F-18. ADP-3.2. Goal 4. Replace Strategy with: "Consider a Full Disclosure Law that alerts buyers of coastal property about erosion rates, storm history, SLR concerns, and other relevant information."
19. Page F-20. ADP-3.4. Goal 4. Replace Strategy with: "Conduct a review of required management plans for public parks, forests, and wildlife areas every 10 years and include analyses of vulnerability to climate change for each area."
20. Page F-22. ADP-4. Objectives. Replace last sentence with: "It is important that the five water management districts have consistent and coordinated water policies to address climate change."
21. Page F-22. ADP-4. Goal 1. Strategy B. Replace "planners" with "staff."
22. Note that entire Section 5.2 is new.

ADP-5.2 Flood Protection

Goal 1: Reduce or eliminate the potential for damage from flooding by requiring all new or substantially renovated buildings to be elevated above potential threshold flood depth (considering climate change), which is to be determined on a site-specific basis for the projected service life of the building.

Strategy: Implement zoning criteria and/or building code design criteria that will require all new buildings or buildings that are substantially renovated to have a zero-flood-depth elevation that is a minimum of one foot above a projected site-specific flood depth with an annual probability of flooding of 0.5% during the remaining service life of the building. For purposes of these requirements, a substantially renovated building is one where work to be done is equal to or above 25% of the current replacement value of the structure.

Goal 2: Substantially reduce or eliminate storm water runoff as a contributor to flooding.

Strategy: Implement land use and zoning regulations and/or building code design criteria requiring all new or substantially renovated buildings to incorporate porous materials and other low-impact development techniques for site work, sidewalks, curbs, driveways, and other locations in order to promote water percolation into the ground to reduce runoff volume during rain events.

Goal 3: Set new parameters for water management with the objective of reducing the potential for flooding from extreme rain events.

Strategy: Encourage the five water management districts in Florida to work with pertinent federal and state agencies and the research community to develop extreme-precipitation threshold models, which will be used to activate water management actions to reduce the potential for flash floods. These models and related water management actions are to be linked to monitoring systems using virtual rain gauges, satellite observations, and other technology to forecast the risk of a given amount of precipitation occurring within a given time frame.

Goal 4: Substantially reduce or eliminate currently developed building sites subject to repetitive flood loss events.

Strategy: Charge counties and municipalities with cataloging currently developed building sites that have been flooded three or more times within the last 10 years. Target those sites for future use conversion to reduce the human risk or the potential for property damage.

Goal 5: Incorporate regional or community-wide flood protection, on the basis of projected SLR and other flood threats, into regional and/or comprehensive plans that focus on development and redevelopment over the next 50 to 100 years.

Strategy: Fund studies to identify community-wide or region-wide adaptation alternatives to reduce the potential for damage from coastal flooding exacerbated by projected SLR. Such studies will incorporate a comparative analysis, estimated costs, timelines, and associated economic, social, and environmental impacts of a range of adaptation measures, including engineering and structural works as well as land-use and zoning measures.

Goal 6: Develop scenarios for land-use conversion that accommodate future population growth and development and that incorporate flood prevention criteria on the basis of projected flood threats 50 to 100 years from now.

1. Page F-30. ADP-5.3. Goal 1. Strategy A. Delete bullet: "Triage urbanized and ecologically important areas according to which should be considered for coastal armoring because of increasing SLR and other impacts."
2. Page F-31. ADP-5.4. Replace first sentence with: "Of the 121,525 miles of public roads in Florida, 12,062 are part of the state highway system (owned by FDOT), 107,421 are city and county roads, and 2,042 are owned by other federal entities.¹"
3. Page F-31. ADP-5.4. At end of Goal 3, insert:

The following strategies support all three goals:

Strategy A: The Florida Department of Transportation (FDOT) should update the Florida Transportation Plan in cooperation with local, state, regional, and federal governments and modal partners to develop long-range goals, objectives, and strategies for addressing climate change and adapting to potential impacts from climate change.

Strategy B: Local, state, and regional governments and modal partners in Florida should work cooperatively to identify and evaluate transportation infrastructure at risk and to coordinate their adaptation efforts for infrastructure that is immediately landward of coastal high-hazard areas; they should also provide emergency evacuation routes for coastal populations.

Strategy C: FDOT should continue its analysis of rainfall statistics and hurricane surge (including updating such statistics and analyzing the accompanying affects of wave forces and erosion on highways and bridges and in other areas) to identify infrastructure at risk.

1. Page F-44. ADP-9. Goal 5. Replace with: "Develop a process for early detection, evaluation, and handling of extreme events resulting from climate change. Effectively disseminate such information to key emergency preparedness and response personnel."
2. Page F-44. ADP-9. Delete Goal 6. Change "Goal 7" to "Goal 6."

¹ FDOT Website, Highway Mileage Reports at <http://www.dot.state.fl.us/planning/statistics/mileage-rpts/shs2007.pdf>

3. Page F-50. ADP-11.4. Replace Goal 1 with: "Create incentives for the general public and businesses to use the latest technologies to adapt to climate change"
4. Page F-51. ADP-12. Description of Issues. Second Paragraph. First Sentence. Following "HB 713" insert "(Ch. 2008-227, Laws of Florida)"
5. Page F-52. ADP-12. Replace Goal 3 with: "Determine whether Florida should create a Coastal Commission to provide for more centralized authority and management of the state's coastal resources in view of future climate change impacts. The study should review existing Florida institutions, such as the Florida Ocean and Coastal Resources Council and similar institutions in other coastal states."
6. Page F-54. ADP-13. Delete Goal 6.