



**Climate Change Conference
Tampa, Florida
May 9-11, 2007**

**ENVIRONMENTAL DISCUSSION GROUP
SUGGESTIONS FOR CENTURY COMMISSION**

Group discussion

Approximately 40 individuals convened for over 3 hours on May 10-11 as part of the Climate Change Conference to provide environmental recommendations to the Century Commission. These persons represented a very broad range of expertise, knowledge, and interests, including local, county, state, and federal governments, non-governmental organizations, academia (faculty and students), and the private sector (attendance list attached). At a broad level, the group first identified a range of environmental topics (Section II) that the Commission should include when considering climate change in Florida. Even though there might not be specific recommendations under every topic, the group felt that the Commission should use these as a framework for future discussions. After discussing these topics at a broad level, the group developed approximately 35 specific recommendations. Once these recommendations were listed and further considered, the group organized them into three tiers using a voting process. All recommendations are listed below (Section III).

Range of environmental topics for Century Commission consideration

Environmental topics, linkages, and processes

Freshwater ecology
Marine ecology
Coastal ecology
Terrestrial ecology
Built environment
Exotic species
Species of conservation concern
Wildlife migration
Climate/meteorology
Hydrology (surface and ground water)
Fire
Water (drinking, irrigation)
Connectivity
Carrying capacity

Land use
Agriculture
Urban/rural
Conservation
Transportation
Planning

Energy (including alternative energy sources)

Florida's regional context (e.g., specific climate zones)

Incentives/Disincentives

Catastrophic Events

Florida-specific research needs

Adaptive design and adaptive management

Outreach/Communication

Prioritized list of specific recommendations for Florida

After consideration of all suggested recommendations, each member of the group was given 3 votes to allocate among their top 3 choices (one vote each). The list below is prioritized by tiers according to the voting. The group felt that every recommendation listed, even if not in the first tier, should be communicated to the Commission for their information and possible use.

First tier:

1. Florida's growth management and land use planning must result in a connected, ecologically functional network of conservation areas buffered by land uses consistent with fire and other land management needs. This approach is critical to ensure persistence of Florida's biological communities resilient to climate change.
2. Measure the synergistic effects of climate change and increased human population on quality of life, environmental quality, cost of living, and economic opportunities.
3. Determine the carbon cycle (including all needed accompanying data) for each land use type and its associated plant communities, with the goal of establishing incentives to conserve areas of high carbon sequestration capacity.

4. Plan ahead for climate change and sea level rise to allow migration of communities and ecosystems (e.g., establishment of greenways, reduction of barriers for migration).
5. Charge an independent entity to establish an adaptive, clean energy strategy to mitigate climate change. Require science-based justification and validation incorporating clear benchmarks.
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.
7. Fully fund and support the 2008 (and beyond) Florida Ocean and Coastal Resources Council research plans emphasizing monitoring, mapping, and modeling.

Second tier:

8. Reduce carbon emissions, and take local management actions for carbon emission mitigation and adaptation.
9. Develop and implement a comprehensive education and outreach strategy to create awareness and foster measurable behavior change of citizens, governments, businesses, and institutions.
10. Develop a model set of state, regional, and local comprehensive plan goals, objectives, and policies to address climate change across jurisdictions.
11. Develop new technologies and partnerships to reduce impermeable surfaces; provide incentives to reduce runoff and to enhance aquifer recharge.
12. Invest in emergency response and mitigation strategies for extreme environmental events likely to be exacerbated by climate change.
13. Mandate mass transit incentives.
14. Address synergistic effects of multiple stressors impacting coral reefs; examine climate change-related ocean temperature rise and acidification in addition to other anthropogenic factors such as nutrification and increased suspended sediments.
15. Establish a long-term vision for healthy and vibrant beach dune communities that will be affected by sea level rise.
16. Develop a process for early detection, evaluation, and handling of emerging environmental issues.

17. Fund more aggressive invasive species research and control/eradication programs that take into account climate change scenarios.
18. Assess the impacts of climate change on potable water supply, infrastructure, and increased salt water intrusion in coastal well fields.
19. Freeze controllable greenhouse emissions and control energy growth; include a regulatory structure for decentralized energy sources, allowing utilities to be managers.
20. Provide developer and community incentives to achieve water use best practices based on local ecology and biological communities.
21. Provide incentives for existing homeowners to implement green building concepts, including deviations from existing deed restrictions and encouragement of Florida- friendly landscapes.
22. Assess the impact of climate change on microbial communities and processes across all of Florida's ecosystems.

Third tier:

23. Mandate climate change-integrated conservation management and restoration plans within an adaptive management framework.
24. In consideration of Florida's emerging urban forest, develop a prioritized research agenda for public universities based on resource managers' science needs.
25. Restore flow by completing the Comprehensive Everglades Restoration Plan; it will create a fresh water head to slow salt water intrusion, will allow species to adapt, and will provide habitat to migrate.
26. Consider the built environment when developing ecosystem corridors.
27. Identify and provide additional protection for natural areas and species that inherently are resilient to climate change and local stresses.
28. Identify species and ecosystems of conservation concern, emphasizing their overall services and benefits; prioritize protective strategies for them in response to climate change.
29. Establish specific reduction targets for carbon emissions by specific dates through the formation of state, national, and international partnerships; promote one, unified market mechanism.

30. Fund university research on a multi-year basis to promote long-term ecological research related to climate change.
31. Fund research on alternative fuels such as hydrogen with low carbon footprints; develop infrastructure for alternative fuels use.
32. Given recent changes in climate patterns, update state-wide rainfall intensity and distribution maps.
33. Determine the conditions under which it will be necessary to limit the growth of Florida's human population.
34. Develop a process to ensure ongoing science input to the Century Commission and to broader policy-making in general.