

Comprehensive Plan Elements and Suggested Amendments to Improve Flood Resilience

Review your local government’s comprehensive plan and talk with staff about possible additions you can make to increase flood resilience and environmental protection. Ideas are suggested for each element.

1. Conservation Element

- **Purpose:** Protect and conserve natural resources, including wetlands, floodplains, and wildlife habitats.
- **Key Areas for Amendment:**
 - Strengthen protections for wetlands and floodplains through regulations, incentives, land acquisition, conservation easements, restoration programs, and buffer zones.
 - Incorporate strategies to restore and enhance natural floodplain functions and wetland systems for flood protection.
 - Add policies for maintaining or increasing the use of green infrastructure for stormwater management and ecosystem services.
 - Add policies to reduce catastrophic wildfire threats by managing flooding sustainably and increasing natural wetland storage into dry season months, as well as mitigating drought and heat risks.

2. Coastal Management Element (may be included in Conservation Element)

- **Purpose:** Manage coastal resources and address risks related to coastal flooding, erosion, and sea-level rise.
- **Key Areas for Amendment:**
 - Implement policies that encourage the use of living shorelines (e.g., mangroves, oyster reefs, beach and dune systems) instead of hard infrastructure like seawalls.
 - Include strategies to protect and restore coastal wetlands, estuaries, and natural barriers that mitigate storm surges and flooding.
 - Integrate sea-level rise projections and coastal flood risks into development regulations and zoning.
 - Add policies that reduce coastal freshwater flooding by increasing natural wetland storage capacity.
 - Add policies that limit or prohibit human community infrastructure, residences and non-water-based commercial projects in coastal high hazard areas.

3. Future Land Use Element

- **Purpose:** Guide the location, density, and intensity of land development in the county.
- **Key Areas for Amendment:**
 - Add creation and implementation of Watershed Management Plans.

- Ensure land-use regulations limit development in flood-prone areas, including coastal high hazard areas, floodplains and wetlands. These policies should include planned retreat from high hazard areas.
- Promote Transfer of Development Rights (TDR) programs to direct growth away from vulnerable flood areas, as well as natural water storage areas of watersheds.
- Prioritize green infrastructure and low impact development in urban development, such as bioswales, permeable pavements, and tree canopies to manage stormwater.
- Add voluntary incentive-based “resiliency overlays” in key watershed and resiliency areas to protect such green infrastructure from conflicting development.

4. Infrastructure Element (Drainage and Stormwater Management Sub-element)

- **Purpose:** Plan and manage infrastructure, including stormwater systems, to reduce flooding and improve water quality.
- **Key Areas for Amendment:**
 - Promote the use of green infrastructure/low impact development solutions like rain gardens, green roofs, and bioswales for stormwater management to reduce runoff.
 - Assure policies maximize the ecologically beneficial retention of stormwater in natural wetlands and floodplains. Management of ground and surface water resources should assure adequate supplies and watershed health in dry season and droughts.
 - Update stormwater standards to preserve natural floodplain functions and protect/promote natural hydrology in discharge areas.
 - Set policies to ensure that new development projects incorporate sufficient green stormwater infrastructure to mitigate local flooding.
 - Ensure consistency with Watershed Management Plans.

5. Intergovernmental Coordination Element

- **Purpose:** Facilitate coordination between various governmental agencies, municipalities, and regional bodies on land use and environmental issues.
- **Key Areas for Amendment:**
 - Foster partnerships with federal and state agencies (e.g., FEMA, Florida Department of Environmental Protection) for floodplain management, restoration of wetlands, and flood mitigation funding.
 - Collaborate with neighboring counties and regional entities to implement watershed-based flood mitigation strategies and green infrastructure projects.
 - Add policies on promotion of regional resiliency coordination, including through any coalition or compact that exists in the region.

6. Capital Improvements Element

- **Purpose:** Plan public investments and infrastructure improvements necessary for growth and environmental protection.
- **Key Areas for Amendment:**
 - Prioritize capital investments in green infrastructure projects that enhance flood resilience, such as wetland restoration, floodplain conservation, dune, reef, and mangrove restoration, and stormwater management systems.
 - Allocate funds for acquiring frequently flooded properties and converting them into natural flood buffers or public green spaces.
 - Invest in monitoring and evaluation systems for flood risks and the success of green infrastructure projects.

7. Public Facilities Element

- **Purpose:** Ensure the adequate provision of public facilities such as water, sewer, and drainage systems.
- **Key Areas for Amendment:**
 - Integrate climate adaptation measures and flood resiliency in the planning and design of public facilities, particularly drainage and stormwater systems.
 - Promote the design and retrofit of public infrastructure using green infrastructure principles to manage stormwater and reduce flood risks.
 - Add policies that plan for infrastructure retreat from coastal high hazard areas.

8. Housing Element

- **Purpose:** Ensure adequate housing for all residents while promoting safe and sustainable communities.
- **Key Areas for Amendment:**
 - Establish policies that restrict housing development in high-risk flood zones, floodplains, or ecologically sensitive areas.
 - Assure development and building standards address current and anticipated climate risks.

9. Recreation and Open Space Element

- **Purpose:** Plan for public recreation areas, parks, and open spaces, which can also serve as flood mitigation areas.
- **Key Areas for Amendment:**
 - Include policies for expanding natural open spaces in flood-prone areas to act as flood buffers, enhancing the recreational and ecological value of floodplains and wetlands.

- Promote the use of parks, golf courses, and public spaces as multi-functional green infrastructure to manage stormwater and reduce localized flooding.

10. Climate Change/Resiliency Element

- **Purpose:** Address long-term climate adaptation and resiliency measures, including those for flood protection.
- **Key Areas for Amendment:**
 - Integrate climate change projections (e.g., sea-level rise, increased rainfall intensity) into flood protection policies and green infrastructure planning.
 - Encourage adaptive management strategies to adjust land-use policies based on changing flood risks over time.
 - Promote community-driven resilience projects that involve public participation in the planning of flood mitigation and wetland protection.
 - Advocate inclusion of climate change mitigation policies, including greenhouse gas reduction strategies on energy, transportation, and water use, and carbon capture functions of wetland restoration.

11. Hazard Mitigation Element

- **Purpose:** Develop policies that reduce the risk and impact of natural hazards, including flooding.
- **Key Areas for Amendment:**
 - Incorporate flood mitigation strategies that focus on wetland restoration, natural floodplain protection, and green infrastructure to manage stormwater and reduce flood risks.
 - Prioritize non-structural flood control measures like land acquisition, wetland restoration, and relocation programs in areas subject to recurrent flooding.

12. Water Management Element

- **Purpose:** Ensure sustainable water resource management, which is closely linked to flood control and natural systems.
- **Key Areas for Amendment:**
 - Promote water retention with green infrastructure and protection of wetlands.
 - Strengthen policies that prevent the disruption of natural hydrology and encourage the conservation of floodplains as natural water storage areas.
 - Add policies to create and implement a Watershed Management Plan.