

# Resilient Infrastructure Strategies

- Adaptation Action Areas
- Coastal Engineering For Shoreline Stabilization
- Watershed Management Plan Updates
- Regional Stormwater Program
- Comprehensive Resilient Transportation Strategy
- Context Sensitive Roadway Elevation
- Critical Facility Hardening
- Comprehensive Asset Management
- Energy Grid Resilience



Strategy	Description/Purpose	Instruments & Authorities	Implementation Steps
<b>Adaptation Action Areas (AAA)</b>	A mapped coastal designation in the Comprehensive Plan that focuses higher standards, targeted capital projects, and voluntary buyouts inside the boundary, reducing repetitive loss and clarifying investment priorities.	Comp Plan (Coastal, FLU); Zoning & LDRs; LMS; CIP	Map candidate AAAs, weave into future land use planning, align with buyout and infrastructure priorities
<b>Coastal Engineering For Shoreline Stabilization</b>	Site-specific projects, from living shorelines to revetments and low-profile breakwaters, used where erosion and wave energy threaten roads, utilities, public land, and working waterfronts. The point is to protect priority assets or, where not justifiable, to clarify where retreat makes more sense.	Comp Plan (Coastal); LMS; CIP	Conduct vulnerability and cost-benefit analysis, program in CIP, & pursue federal/state mitigation funding
<b>Watershed Management Plan (WMP) Updates &amp; Implementation</b>	A strategic approach to the periodic refresh of stormwater plans so stormwater designs match today's terrain, rainfall, and growth. The payoffs are WMPs that are more accessible to residents and stormwater engineers; a clear, basin-by-basin project list that allows community input; and more nature-based, activated, and community-oriented stormwater facilities.	WMPs; CIP	Refresh models, publish user-friendly maps, integrate updated BMPs into development review and CIP
<b>Regional Stormwater Program</b>	Shared, off-site ponds or vaults that serve many parcels, funded by fees or an MSBU. This lets small lots redevelop without oversized on-site ponds, improves water quality, and simplifies inspections and maintenance.	Floodplain Ordinance; MSBU/fee; CIP; Interlocal Agreements	Form a municipal service benefit unit, prioritize basins, plan regional ponds, coordinate fees or cost-share
<b>Comprehensive Resilient Transportation Strategy</b>	A countywide approach to keeping key roads open or quickly reopened during floods by naming lifeline routes, setting design criteria, and programming fixes through the LRTP and CIP. It protects evacuation, emergency access, and economic activity.	Comp Plan (Transportation); LRTP; CIP	Identify corridors, set design standards, sequence projects in LRTP and CIP
<b>Context Sensitive Roadway Elevation</b>	Raising selected segments just enough, with matching drainage, driveway tie-ins, and multimodal facilities that fit adjacent land uses. This reduces chronic closures without cutting off local access or resulting in out of context roads.	LRTP, VA, LMS, Zoning	Select priority segments, develop preliminary designs, coordinate drainage and utility upgrades
<b>Critical Facility Hardening</b>	Targeted upgrades so essential buildings and systems stay functional, including structure, power, water, and communications. This keeps emergency services running and stabilizes recovery.	LMS; CIP	Verify critical facility list, choose appropriate hardening measures, seek hazard mitigation funding
<b>Comprehensive Asset Management</b>	One inventory for roads, pipes, facilities, and natural assets, scored for condition and risk. It lets the County keep track of its investments and prioritize repairs and hardening decisions.	Asset-Management Policy; CIP	Build and maintain asset register, score risk and condition, integrate into CIP
<b>Energy Grid Resilience</b>	A mix of undergrounding, sectionalizing, microgrids, and on-site solar plus storage at critical nodes. The goal is shorter outages and reliable power for services the community depends on.	Utility Agreements/FRAs; CIP	Map critical loads, evaluate microgrid opportunities, align with public facility upgrades and seek utility partnerships

