RESILIENT NJ

Capability and Capacity Building Actions: Local Planning and Regulations

Resilience Action Matrix Summary

ID:	Resilience Strategy:	Climate Change Effects Addressed:								Climate Change Impacts Addressed:							Source Document:
		Decreased Air Quality	Decreased Water	Drought	Extreme Weather	Increasing Precipitation	Ocean Acidification	Rising Temperatures	Sea-Level Rise	Health and Well-Being	Coastal Communities	Ocean and Marine Life	Ecosystems and Wildlife	Socially Vulnerable Populations	Infrastructure	Agriculture and Food Supply	
LPR_01	Create a Critical Infrastructure Protection Plan	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	×	×	✓	×	Planning for Hazards Land Use Solutions for Colorado
LPR_02	Amend Historic Preservation Ordinance to Incorporate an Expedited Post-Disaster Design Review Process	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_03	Consult with Historic District Commission To Protect And Preserve Historic Resources	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_04	Evaluate Existing, Disparate Regulations Related to Natural Resource Protection and Consider Streamlining Them	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	✓	×	×	×	NJ Future, Local Options/Local Actions
LPR_05	Utilize Unused or Underutilized Properties	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_06	Resilient Design Guidelines	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_07	Wildlife Adaptation Plan	✓	✓	✓	✓	✓	✓	✓	✓	×	×	×	✓	×	×	×	NJ Future, Local Options/Local Actions

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LPR_08	Modify Substantial Damage and Improvement Thresholds And Calculations	×	×	×	✓	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_09	Advanced Hydrologic Modeling	×	×	×	×	✓	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_10	Conduct an Impervious Surface Assessment	×	✓	×	×	✓	×	×	×	×	×	×	✓	×	×	×	NJ Future, Local Options/Local Actions
LPR_11	Conservation Easements	×	×	×	×	✓	×	×	✓	×	×	×	✓	×	×	×	Planning for Hazards Land Use Solutions for Colorado
LPR_12	Identify and Establish Climate Hazard Overlay Zones	×	×	×	×	✓	×	×	✓	×	×	×	×	×	✓	×	California Adaptation Planning Guide
LPR_13	Promote Compact, Mixed-Use Development, Especially Near Transit Hubs	×	×	×	×	✓	×	×	✓	×	×	×	×	×	✓	×	NJ Future Local Options/Local Actions; Rutgers Resilient Plan
LPR_14	Resilient Quotient System	×	×	×	×	✓	×	×	✓	×	×	×	×	×	✓	×	NJ Future Local Options/Local Actions; Rutgers Resilient Plan

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LPR_15	Stream Buffers and Setbacks	×	✓	×	×	✓	×	×	×	×	×	×	✓	×	×	×	Planning for Hazards Land Use Solutions for Colorado
LPR_16	Cluster Subdivisions	×	×	×	×	✓	×	×	✓	×	×	×	×	×	✓	×	Planning for Hazards Land Use Solutions for Colorado
LPR_17	Assess Impacts of Sea Level Rise on Resident Evacuation	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_18	Create a Debris Management Plan for Hazard Events	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_19	Establish New Requirements For Road, Street Grade, and First Floor Elevation	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_20	Adopt and Enforce Building Codes and Development Standards For Flood Resilience	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_21	Adopt And Enforce Building Codes to Prevent Wind Damage	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_22	Adopt Building Codes and Development Standards for Storm Surge Resilience	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_23	Adopt Polices to Reduce Stormwater Runoff	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_24	Adopt Requirements Regulating Construction of Hard, Engineered Structures that Prevent Floods and Erosion	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_25	Coastal Overlay Zone	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_26	Coordinate Saltwater Intrusion Mapping	×	×	×	✓	×	×	×	×	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_27	Create Beneficial Setbacks in Undeveloped Or Sparsely Developed Areas	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_28	Develop A Wildland-Urban Interface Code	×	×	×	×	×	×	✓	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_29	Enhanced Floodplain Mapping	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	Naturally Resilient Communities
LPR_30	Establish Setbacks in High-Risk Areas that Account for Potential Sea Level Rise	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_31	Flood Resilience Zoning	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_32	Form Partnerships to Support Floodplain Management	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_33	Improve Flood Risk Assessment	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_34	Improve Land Use Planning And Regulations for Storm Surge Resilience	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_35	Incorporate Flood Mitigation In Local Planning	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_36	Incorporate Sea Level Rise Projections Into Municipal Planning Documents	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_37	Incorporate Wildfire Mitigation in uhe Comprehensive Plan	×	×	×	×	×	×	✓	×	×	×	×	✓	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_38	Increase Development Density In Areas to be Covered by Flood Protection Infrastructure	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_39	Increase Setbacks for Septic Systems	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_40	Integrate Projected Climate Impacts on Wildland Fires Into Fire Management Strategies	×	×	×	×	×	×	✓	×	×	×	×	✓	×	×	×	NJ Future, Local Options/Local Actions
LPR_41	Integrating Climate Change & Water Supply Planning	×	✓	×	×	×	×	×	×	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_42	Join or Improve Compliance With NFIP	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_43	Limit or Restrict Development In Floodplain Areas	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_44	Manage Development in Erosion Hazard Areas	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_45	Manage Development in Sea Level Rise High-Risk Areas	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_46	Manage the Floodplain Beyond Minimum Requirements	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_47	Minimize Storm Surge Risk to New Facilities and Infrastructure	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_48	Modify Urban Landscaping Requirements	×	×	×	×	✓	×	×	×	×	×	×	✓	×	×	×	NJ Future, Local Options/Local Actions
LPR_49	Monitor Drought Conditions	×	×	✓	×	×	×	×	×	✓	×	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_50	Monitor Water Supply	×	×	✓	×	×	×	×	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_51	Participate in the CRS	×	×	×	×	✓	×	×	×	×	✓	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_52	Plan for Drought	×	×	✓	×	×	×	×	×	✓	×	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_53	Prevent Infrastructure Expansion in High-Risk Areas	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_54	Prevent Overgrazing	×	×	✓	×	×	×	×	×	×	×	×	×	×	×	✓	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_55	Reduce Wildfire Risk Through Land Use Planning	×	×	×	×	×	×	✓	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_56	Require Water Conservation During Drought Conditions	×	×	✓	×	×	×	×	×	✓	×	×	×	×	×	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_57	Restricted Redevelopment Standards in Vulnerable Areas	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_58	Revise/Create Regulations to Protect Coastal Resources	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_59	Rolling Easements	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_60	Vary Freeboard Requirements Depending on Use And Zone	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_61	Voluntary Climate Change Relocation	×	×	×	×	×	×	×	✓	×	✓	×	×	×	×	×	NJ Future, Local Options/Local Actions
LPR_62	Impose Stricter Base Flood Elevation Requirements	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	NJ Future, Local Options/Local Actions
LPR_63	Promote or Require Site and Building Design Standards to Minimize Erosion Risk	×	×	×	×	×	×	×	✓	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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LPR_64	Promote or Require Site and Building Design Standards to Minimize Wind Damage	×	×	×	×	✓	×	×	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural
LPR_65	Require or Encourage Fire-Resistant Construction Techniques	×	×	×	×	×	×	✓	×	×	×	×	×	×	✓	×	FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural

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Individual Action Sheet

Resilience Strategy: Create a Critical Infrastructure Protection Plan

ID: LPR_01

Description:

A Critical Infrastructure Protection Plan is a strategy to make critical infrastructure more resilient.

Climate Change Effects Addressed:	
Decreased Air Quality	✓
Decreased Water Quality	✓
Drought	✓
Extreme Weather	✓
Increasing Precipitation	✓
Ocean Acidification	✓
Rising Temperatures	✓
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

Planning for Hazards Land Use Solutions for Colorado

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Amend Historic Preservation Ordinance to Incorporate an Expedited Post-Disaster Design Review Process

ID: LPR_02

Description:

Expedites review of properties in disaster declaration area.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✓	Health And Well-Being	✗
Decreased Water Quality	✓	Coastal Communities	✗
Drought	✓	Ocean And Marine Life	✗
Extreme Weather	✓	Ecosystems And Wildlife	✗
Increasing Precipitation	✓	Socially Vulnerable Populations	✗
Ocean Acidification	✓	Infrastructure	✓
Rising Temperatures	✓	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Consult with Historic District Commission To Protect And Preserve Historic Resources

ID: LPR_03

Description:

Evaluates options for protecting, preserving and managing historic resources within areas impacted by current and projected flooding.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✓	Health And Well-Being	×
Decreased Water Quality	✓	Coastal Communities	×
Drought	✓	Ocean And Marine Life	×
Extreme Weather	✓	Ecosystems And Wildlife	×
Increasing Precipitation	✓	Socially Vulnerable Populations	×
Ocean Acidification	✓	Infrastructure	✓
Rising Temperatures	✓	Agriculture and Food Supply	×
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Evaluate Existing, Disparate Regulations Related to Natural Resource Protection and Consider Streamlining Them

ID: LPR_04

Description:

Preserve green space and protect water resources.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✓	Health And Well-Being	✗
Decreased Water Quality	✓	Coastal Communities	✗
Drought	✓	Ocean And Marine Life	✗
Extreme Weather	✓	Ecosystems And Wildlife	✓
Increasing Precipitation	✓	Socially Vulnerable Populations	✗
Ocean Acidification	✓	Infrastructure	✗
Rising Temperatures	✓	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Utilize Unused or Underutilized Properties

ID: LPR_05

Description:

Conduct an assessment of unused or underutilized properties and develop an approach for utilizing such properties that enhances overall resilience goals; design resilience and adaptation projects for underutilized spaces based on the specific capacity of each space. Potential uses of unused spaces could include stormwater flow and storage or green space.

Climate Change Effects Addressed:	
Decreased Air Quality	✓
Decreased Water Quality	✓
Drought	✓
Extreme Weather	✓
Increasing Precipitation	✓
Ocean Acidification	✓
Rising Temperatures	✓
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Resilient Design Guidelines

ID: LPR_06

Description:

Identifies key design principles to guide flood-resistant construction in urban areas. Creates parks that provide public space and flood control.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✓	Health And Well-Being	×
Decreased Water Quality	✓	Coastal Communities	×
Drought	✓	Ocean And Marine Life	×
Extreme Weather	✓	Ecosystems And Wildlife	×
Increasing Precipitation	✓	Socially Vulnerable Populations	×
Ocean Acidification	✓	Infrastructure	✓
Rising Temperatures	✓	Agriculture and Food Supply	×
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Wildlife Adaptation Plan

ID: LPR_07

Description:

Recommends conservation strategies for wildlife.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✓	Health And Well-Being	×
Decreased Water Quality	✓	Coastal Communities	×
Drought	✓	Ocean And Marine Life	×
Extreme Weather	✓	Ecosystems And Wildlife	✓
Increasing Precipitation	✓	Socially Vulnerable Populations	×
Ocean Acidification	✓	Infrastructure	×
Rising Temperatures	✓	Agriculture and Food Supply	×
Sea-Level Rise	✓		

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NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Modify Substantial Damage and Improvement Thresholds And Calculations

ID: LPR_08

Description:

Municipality lowers the substantial damage or improvement threshold to less than 50% of a structure's pre-damage market value in order to increase resilience of the community building stock.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✓
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Advanced Hydrologic Modeling

ID: LPR_09

Description:

Use hydrologic models to generate scenarios illustrating the likely impacts of sea level rise and extreme flooding on the region' s water supply and flood control systems.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Conduct an Impervious Surface Assessment

ID: LPR_10

Description:

Impervious assessments and growth models help municipalities plan to reduce it.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✓	Coastal Communities	✗
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✓
Increasing Precipitation	✓	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✗		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Conservation Easements

ID: LPR_11

Description:

Provides a beneficial way to preserve private lands with intrinsic public value or hazard risk without the need to acquire or further regulate.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	✓
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

Planning for Hazards Land Use Solutions for Colorado

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Identify and Establish Climate Hazard Overlay Zones

ID: LPR_12

Description:

Local governments can use GIS to identify where climate change-related effects are most likely to occur now and in the future and put specific development and infrastructure regulations in place to ensure that neighborhoods can prevent and are prepared for climate hazards and other effects.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

California Adaptation Planning Guide

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Promote Compact, Mixed-Use Development, Especially Near Transit Hubs

ID: LPR_13

Description:

Reduce impacts on watersheds and environmentally-sensitive areas by concentrating development.

Climate Change Effects Addressed:	
Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

NJ Future Local Options/Local Actions; Rutgers Resilient Plan Element for Perth Amboy

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Resilient Quotient System

ID: LPR_14

Description:

Harness market forces to encourage landowners and developers not to build in high-risk, flood-prone areas. Prohibit redevelopment in areas destroyed by storms or chronic flooding.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✓	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✓
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

NJ Future Local Options/Local Actions; Rutgers Resilient Plan Element for Perth Amboy

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Stream Buffers and Setbacks

ID: LPR_15

Description:

A stream buffer (also known as a riparian buffer) is a defined area along a watercourse that is protected from development for the purpose of preserving the natural benefits of riparian ecosystems and reducing hazards risks of such areas. A stream setback is the minimum distance that a development must maintain between its boundaries and a riparian area to protect a buffer zone.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✓
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✓
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

Planning for Hazards Land Use Solutions for Colorado

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Cluster Subdivisions

ID: LPR_16

Description:

Cluster subdivisions are implemented through a community' s subdivision regulations. Subdivision regulations are a community' s opportunity to address new development in terms of location and density of lots, protection of environmentally-sensitive areas, and to meet other community goals. The primary benefit is the protection of environmentally sensitive areas, but long-term maintenance costs are reduced too.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

Planning for Hazards Land Use Solutions for Colorado

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Assess Impacts of Sea Level Rise on Resident Evacuation

ID: LPR_17

Description:

Update evacuation evaluation based on climate reports.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	×	Health And Well-Being	×
Decreased Water Quality	×	Coastal Communities	✓
Drought	×	Ocean And Marine Life	×
Extreme Weather	×	Ecosystems And Wildlife	×
Increasing Precipitation	×	Socially Vulnerable Populations	×
Ocean Acidification	×	Infrastructure	×
Rising Temperatures	×	Agriculture and Food Supply	×
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Create a Debris Management Plan for Hazard Events

ID: LPR_18

Description:

Build resilience into solid waste and stormwater systems in order to handle debris.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✓	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✓
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✗		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Establish New Requirements For Road, Street Grade, and First Floor Elevation

ID: LPR_19

Description:

Adopt stricter building and infrastructure standards within highly vulnerable areas.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✕	Health And Well-Being	✕
Decreased Water Quality	✕	Coastal Communities	✕
Drought	✕	Ocean And Marine Life	✕
Extreme Weather	✕	Ecosystems And Wildlife	✕
Increasing Precipitation	✕	Socially Vulnerable Populations	✕
Ocean Acidification	✕	Infrastructure	✓
Rising Temperatures	✕	Agriculture and Food Supply	✕
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Adopt and Enforce Building Codes and Development Standards For Flood Resilience

ID: LPR_20

Description:

- Adopting ASCE 24-05 Flood Resistant Design and Construction. ASCE 24 is a referenced standard in the IBC that specifies minimum requirements and expected performance for the design and construction of buildings and structures in the flood hazard areas to make them more resistant to flood loads and flood damage.
- Adding or increasing "freeboard" requirements (feet above base flood elevation) in the flood damage ordinance.
- Prohibiting all first-floor enclosures below base flood elevation for all structures in flood hazard areas. - Considering orientation of new development during design (e.g., subdivisions, buildings, infrastructure, etc.).
- Setting the design flood elevation at or above the historical high-water mark if it is above the mapped base flood elevation.
- Using subdivision design standards to require elevation data collection during platting and to have buildable space on lots above the base flood elevation.
- Requiring standard tie-downs of propane tanks.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✓
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Adopt and Enforce Building Codes to Prevent Wind Damage

ID: LPR_21

Description:

- Adopting standards from International Code Council (ICC)-600 Standard for Residential Construction in High-Wind Regions.
- Reviewing building codes and structural policies to ensure they are adequate to protect older structures from wind damage.
- Requiring or encouraging wind engineering measures and construction techniques that may include structural bracing, straps and clips, anchor bolts, laminated or impact-resistant glass, reinforced pedestrian and garage doors, window shutters, waterproof adhesive sealing strips, or interlocking roof shingles.
- Requiring tie-downs with anchors and ground anchors appropriate for the soil type for manufactured homes.
- Prohibiting the use of carports and open coverings attached to manufactured homes.
- Requiring the use of special interlocking shingles designed to interlock and resist uplift forces in extreme wind conditions to reduce damage to a roof or other structures.
- Improving nailing patterns.
- Requiring building foundation design, braced elevated platforms, and protections against the lateral forces of winds and waves.
- Requiring new masonry chimneys greater than 6 feet above a roof to have continuous reinforced steel bracing.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✓
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Adopt Building Codes and Development Standards for Storm Surge Resilience

ID: LPR_22

Description:

- Establishing design standards for buildings located in areas susceptible to storm surge.
- Implementing V-zone construction requirements for new development located in coastal A-zones.
- Adopting building requirements for higher elevation in inundation zones.
- Requiring open foundations (e.g., piles or piers) in coastal areas.
- Requiring deep foundations in order to avoid erosion and scour.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✓
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Adopt Polices to Reduce Stormwater Runoff

ID: LPR_23

Description:

In addition to stormwater management, techniques to reduce rain runoff can prevent flooding and erosion, such as:
- Designing a "natural runoff" or "zero discharge" policy for stormwater in subdivision design. - Requiring more trees be preserved and planted in landscape designs to reduce the amount of stormwater runoff.
- Requiring developers to plan for on-site sediment retention.
- Requiring developers to construct on-site retention basins for excessive stormwater and as a firefighting water source.
- Encouraging the use of porous pavement, vegetative buffers, and islands in large parking areas.
- Conforming pavement to land contours so as not to provide easier avenues for stormwater.
- Encouraging the use of permeable driveways and surfaces to reduce runoff and increase groundwater recharge.
- Adopting erosion and sedimentation control regulations for construction and farming.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Adopt Requirements Regulating Construction of Hard, Engineered Structures that Prevent Floods and Erosion

ID: LPR_24

Description:

Improve procedures and criteria for siting and design of hard armoring and soft armoring ("living shorelines"), as appropriate for different areas and development densities.

Climate Change Effects Addressed:	
Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Coastal Overlay Zone

ID: LPR_25

Description:

Gives highest priority to water-dependent uses and facilities in shorefront areas.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	×	Health And Well-Being	×
Decreased Water Quality	×	Coastal Communities	✓
Drought	×	Ocean And Marine Life	×
Extreme Weather	×	Ecosystems And Wildlife	×
Increasing Precipitation	×	Socially Vulnerable Populations	×
Ocean Acidification	×	Infrastructure	×
Rising Temperatures	×	Agriculture and Food Supply	×
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Coordinate Saltwater Intrusion Mapping

ID: LPR_26

Description:

Ensure consistency in efforts to map saltwater intrusion across the region to create better information and improve management decisions for protecting regional freshwater aquifers; utilize saltwater intrusion models and validated data to identify wellfields and underground infrastructure at risk of contamination or infiltration by saltwater due to rising sea levels.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✓
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✓
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Create Beneficial Setbacks in Undeveloped Or Sparsely Developed Areas

ID: LPR_27

Description:

Create beneficial setbacks in undeveloped or sparsely developed areas.

Climate Change Effects Addressed:	
Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Develop a Wildland-Urban Interface Code

ID: LPR_28

Description:

Communities can develop regulations for safer construction and incorporate mitigation considerations into the permitting process. Potential actions include:
- Developing specific design guidelines and development review procedures for new construction, replacement, relocation, and substantial improvement in wildfire hazard areas.
- Addressing fire mitigation through access, signage, fire hydrants, water availability, vegetation management, and special building construction standards.
- Involving fire protection agencies in determining guidelines and standards and in development and site plan review procedures.
- Establishing wildfire mitigation planning requirements for large scale developments or planned unit developments.

Climate Change Effects Addressed:	
Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✓
Sea-Level Rise	✗

Climate Change Impacts Addressed:	
Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:
FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Enhanced Floodplain Mapping

ID: LPR_29

Description:

Relying solely on the Flood Insurance Rate Maps produced by the National Flood Insurance Program leaves a community open to increased flood losses. Creating floodplain maps that focus on the entire floodplain, account for the potential risk posed by existing flood control infrastructure, and try to prepare for future impacts from changes in precipitation, sea level rise, and land use will provide a much more effective base from which a community can engage in comprehensive flood management.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	×

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

Naturally Resilient Communities

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Establish Setbacks in High-Risk Areas that Account for Potential Sea Level Rise

ID: LPR_30

Description:

Establish setbacks in high-risk areas that account for potential sea level rise.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	×	Health And Well-Being	×
Decreased Water Quality	×	Coastal Communities	✓
Drought	×	Ocean And Marine Life	×
Extreme Weather	×	Ecosystems And Wildlife	×
Increasing Precipitation	×	Socially Vulnerable Populations	×
Ocean Acidification	×	Infrastructure	×
Rising Temperatures	×	Agriculture and Food Supply	×
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Flood Resilience Zoning

ID: LPR_31

Description:

Encourages flood-resilient building construction in floodplains.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✓
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Form Partnerships to Support Floodplain Management

ID: LPR_32

Description:

Partnerships between local, state, and regional entities help expand resources and improve coordination. Consider the following actions:
- Developing a stormwater committee that meets regularly to discuss issues and recommend projects.
- Forming a regional watershed council to help bring together resources for comprehensive analysis, planning, decision-making, and cooperation.
- Establishing watershed-based planning initiatives to address the flood hazard with neighboring jurisdictions.
- Forming a citizen plan implementation steering committee to monitor progress on local mitigation actions. Include a mix of representatives from neighborhoods, local businesses, and local government.

Climate Change Effects Addressed:	
Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	×

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Improve Flood Risk Assessment

ID: LPR_33

Description:

Heighten awareness of flood risk with the following:
- Incorporating the procedures for tracking high water marks following a flood into emergency response plans.
- Conducting cumulative impact analyses for multiple development projects within the same watershed.
- Conducting a verification study of FEMA's repetitive loss inventory and developing an associated tracking database.
- Regularly calculating and documenting the amount of flood-prone property preserved as open space.
- Requiring a thorough watershed analysis for all proposed dam or reservoir projects.
- Developing a dam failure study and emergency action plan.
- Using GIS to map areas that are at risk of flooding.
- Obtaining depth grid data and using it to illustrate flood risk to citizens.
- Incorporating digital floodplain and topographic data into GIS systems, in conjunction with Hazus, to assess risk.
- Developing and maintaining a database to track community exposure to flood risk.
- Revising and updating regulatory floodplain maps.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✓
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Improve Land Use Planning and Regulations for Storm Surge Resilience

ID: LPR_34

Description:

Land uses should be planned and regulated to minimize the impact of storm surge.
- Developing and maintaining a beach management plan.
- Adopting shoreline setback regulations and establishing coastal setback lines.
- Adopting coastal zone management regulations.
- Eliminating all obstructions in areas along the coast subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves (also known as the V-zone).
- Planning for future storm surge heights due to sea level rise.
- Limiting or prohibiting development in areas along the coast subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves (referred to as the V-zone on Flood Insurance Rate Maps).
- Adopting coastal A-zones, areas of special flood hazard that extend inland and are subject to breaking waves between 1.5 and 3 feet, and ensuring that they are mapped accurately.
- Adopting and enforcing coastal A-zones in A-zones.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Incorporate Flood Mitigation In Local Planning

ID: LPR_35

Description:

Comprehensive planning and floodplain management can mitigate flooding by influencing development. Strategies include:
- Determining and enforcing acceptable land uses to alleviate the risk of damage by limiting exposure in flood hazard areas. Floodplain and coastal zone management can be included in comprehensive planning.
- Developing a floodplain management plan and updating it regularly.
- Mitigating hazards during infrastructure planning. For example, decisions to extend roads or utilities to an area may increase exposure to flood hazards.
- Adopting a post-disaster recovery ordinance based on a plan to regulate repair activity, generally depending on property location.
- Passing and enforcing an ordinance that regulates dumping in streams and ditches.
- Establishing a "green infrastructure" program to link, manage, and expand existing parks, preserves, greenways, etc.
- Obtaining easements for planned and regulated public use of privately-owned land for temporary water retention and drainage.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✓
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Incorporate Sea Level Rise Projections into Municipal Planning Documents

ID: LPR_36

Description:

Plan future infrastructure projects based on timeframe of use matched with sea level rise projections.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Incorporate Wildfire Mitigation in uhe Comprehensive Plan

ID: LPR_37

Description:

Communities can review comprehensive plans to ensure wildfire mitigation has been addressed. The comprehensive plan may include the following:
- Recognizing the existence of wildfire hazards and identifying areas of risk based on a wildfire vulnerability assessment.
- Describing policies and recommendation for addressing wildfire risk and discouraging expansion in the wildland-urban interface.
- Including considerations of wildfire hazards in land use, public safety, and other elements of the comprehensive plan.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	✓
Sea-Level Rise	×

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	✓
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Increase Development Density in Areas to be Covered by Flood Protection Infrastructure

ID: LPR_38

Description:

Increase development density in areas to be covered by flood protection infrastructure.

Climate Change Effects Addressed:	
Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:	
Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Increase Setbacks for Septic Systems

ID: LPR_39

Description:

Increase shoreline setback requirements for septic systems to protect water quality during floods.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✓
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Integrate Projected Climate Impacts on Wildland Fires into Fire Management Strategies

ID: LPR_40

Description:

Integrate projected climate impacts on wildland fires into fire management strategies and support ecological adaptation measures that facilitate better fire management, including increasing landscape diversity and increasing biological diversity.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✓
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✓
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Integrating Climate Change and Water Supply Planning

ID: LPR_41

Description:

Ensure all water resource policy, planning, and management decisions are consistently aligned with the latest unified sea level rise projections, regional climate scenarios for planning (e.g., storm surge, design storm events), and hydrologic models used in adaptation planning, from local to regional scales.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✓
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Join or Improve Compliance with NFIP

ID: LPR_42

Description:

The National Flood Insurance Program (NFIP) enables property owners in participating communities to purchase insurance protection against flood losses. Actions to achieve eligibility and maintain compliance include:
- Participating in NFIP.
- Adopting ordinances that meet minimum Federal and state requirements to comply with NFIP.
- Conducting NFIP community workshops to provide information and incentives for property owners to acquire flood insurance.
- Designating a local floodplain manager and/or CRS coordinator who achieves CFM certification.
- Completing and maintaining FEMA elevation certificates for pre-FIRM and/or post-FIRM buildings.
- Requiring and maintaining FEMA elevation certificates for all new and improved buildings located in floodplains.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	×

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Limit or Restrict Development in Floodplain Areas

ID: LPR_43

Description:

Flooding can be mitigated by limiting or restricting how development occurs in floodplain areas through actions such as:
- Prohibiting or limiting floodplain development through regulatory and/or incentive-based measures.
- Limiting the density of developments in the floodplain.
- Requiring that floodplains be kept as open space.
- Limiting the percentage of allowable impervious surface within developed parcels.
- Developing a stream buffer ordinance to protect water resources and limit flood impacts.
- Prohibiting any fill in floodplain areas.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	×	Health And Well-Being	×
Decreased Water Quality	×	Coastal Communities	×
Drought	×	Ocean And Marine Life	×
Extreme Weather	×	Ecosystems And Wildlife	×
Increasing Precipitation	✓	Socially Vulnerable Populations	×
Ocean Acidification	×	Infrastructure	✓
Rising Temperatures	×	Agriculture and Food Supply	×
Sea-Level Rise	×		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Manage Development in Erosion Hazard Areas

ID: LPR_44

Description:

Erosion damage can be mitigated by regulating how development occurs in hazard areas, such as the following:
- Adopting sediment and erosion control regulations.
- Adopting zoning and erosion overlay districts.
- Developing an erosion protection program for high hazard areas.
- Employing erosion control easements.
- Prohibiting development in high-hazard areas.
- Developing and implementing an erosion management plan.
- Requiring mandatory erosion surcharges on homes.
- Locating utilities and critical facilities outside of areas susceptible to erosion to decrease the risk of service disruption.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Manage Development in Sea Level Rise High-Risk Areas

ID: LPR_45

Description:

Local governments can mitigate future losses resulting from sea level rise by regulating development in potential hazard areas through land use planning, including:
- Using zoning, subdivision regulations, and/or a special sea level rise overlay district to designate high-risk areas and specify the conditions for the use and development of specific areas.
- Promoting conservation and management of open space, wetlands, and/or sea level rise boundary zones to separate developed areas from high-hazard areas.
- Prohibiting the redevelopment of areas destroyed by storms or chronic erosion in order to prevent future losses.
- Encouraging compact community design in low-risk areas.
- Establishing setbacks in high-risk areas that account for potential sea level rise.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Manage the Floodplain Beyond Minimum Requirements

ID: LPR_46

Description:

In addition to participation in NFIP, implementing good floodplain management techniques that exceed minimum requirements can help minimize flood losses.
- Incorporating the ASFPM's "No Adverse Impact" policy into local floodplain management programs.
- Revising the floodplain ordinance to incorporate cumulative substantial damage requirements.
- Adopting a "no-rise" in base flood elevation clause for the flood damage prevention ordinance.
- Extending the freeboard requirement past the mapped floodplain to include an equivalent land elevation.
- Including requirements in the local floodplain ordinance for homeowners to sign non-conversion agreements for areas below base flood elevation.
- Establishing and publicizing a user-friendly, publicly accessible repository for inquirers to obtain Flood Insurance Rate Maps.
- Developing an educational flyer targeting NFIP policyholders on increased cost of compliance during post-flood damage assessments.
- Annually notifying the owners of repetitive loss properties of Flood Mitigation Assistance funding.
- Offering incentives for building above the required freeboard minimum (code plus).

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Minimize Storm Surge Risk to New Facilities and Infrastructure

ID: LPR_47

Description:

Infrastructure and critical facilities can be protected from storm surge damage through the following:
- Locating future critical facilities outside of areas susceptible to storm surge.
- Requiring that all critical facilities meet requirements of Executive Order 11988 and be built 1 foot above the 500-year flood elevation (considering wave action).

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Modify Urban Landscaping Requirements

ID: LPR_48

Description:

Increase resilience via landscaping such as vegetative surfaces and permeable surfaces.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	✓
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	×

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	✓
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Monitor Drought Conditions

ID: LPR_49

Description:

Identifying local drought indicators, such as precipitation, temperature, surface water levels, soil moisture, etc. Establishing a regular schedule to monitor and report conditions on at least a monthly basis.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✓
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✓	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✗		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Monitor Water Supply

ID: LPR_50

Description:

Regularly checking for leaks to minimize water supply losses. Improving water supply monitoring.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✓	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✓
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✗		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Participate in the CRS

ID: LPR_51

Description:

The Community Rating System (CRS) rewards communities that exceed the minimum NFIP requirements. Depending upon the level of participation, flood insurance premium rates are discounted for policyholders. Potential activities that are eligible to receive credit include:

- Advising the public about the local flood hazard, flood insurance, and flood protection measures.
- Enacting and enforcing regulations that exceed NFIP minimum standards so that more flood protection is provided for new development.
- Implementing damage reduction measures for existing buildings such as acquisition, relocation, retrofitting, and maintenance of drainageways and retention basins.
- Taking action to minimize the effects of flooding on people, property, and building contents through measures including flood warning, emergency response, and evacuation planning.

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✓
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Plan for Drought

ID: LPR_52

Description:

Developing a drought emergency plan. Developing criteria or triggers for drought-related actions.Developing a drought communication plan and early warning system to facilitate timely communication of relevant information to officials, decision makers, emergency managers, and the general public. Developing agreements for secondary water sources that may be used during drought conditions. Establishing an irrigation time/scheduling program or process so that all agricultural land gets the required amount of water. Through incremental timing, each area is irrigated at different times so that all water is not consumed at the same time. Spacing usage may also help with recharge of groundwater.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✓
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✓	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✗		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Prevent Infrastructure Expansion in High-Risk Areas

ID: LPR_53

Description:

Future development can be protected from damage resulting from sea level rise through the following:
- Setting guidelines for annexation and service extensions in high-risk areas.
- Locating utilities and critical facilities outside of areas susceptible to sea level rise to decrease the risk of service disruption.
- Requiring all critical facilities to be built 1 foot above the 500-year flood elevation (considering wave action) or the predicted sea level rise level, whichever is higher recharge of groundwater.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Prevent Overgrazing

ID: LPR_54

Description:

Prevent overgrazing, which has been linked to drought vulnerability, through actions such as: establishing a grazing policy or permitting program to prevent overgrazing and reducing the number of animals and improving range management.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✓	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✓
Sea-Level Rise	✗		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Reduce Wildfire Risk Through Land Use Planning

ID: LPR_55

Description:

Local governments can mitigate future losses by regulating development in wildfire hazard areas through land use planning, including:
- Addressing density and quantity of development, as well emergency access, landscaping and water supply.
- Promoting conservation of open space or wildland-urban boundary zones to separate developed areas from high-hazard areas.
- Setting guidelines for annexation and service extensions in high-risk areas.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	✓
Sea-Level Rise	×

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Require Water Conservation During Drought Conditions

ID: LPR_56

Description:

Require mandatory water conservation measures during drought emergencies, including: developing an ordinance to restrict the use of public water resources for non-essential usage, such as landscaping, washing cars, filling swimming pools, etc. and adopting ordinances to prioritize or control water use, particularly for emergency situations like fire fighting.

Climate Change Effects Addressed:	
Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✓
Extreme Weather	✗
Increasing Precipitation	✗
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:	
Health And Well-Being	✓
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✗
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Restricted Redevelopment Standards in Vulnerable Areas

ID: LPR_57

Description:

Would prohibit redevelopment of areas destroyed by storms or chronic erosion in order to prevent future losses.

Climate Change Effects Addressed:	
Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Revise/Create Regulations to Protect Coastal Resources

ID: LPR_58

Description:

Protect shorelines and marine resources.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✓
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✗
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Rolling Easements

ID: LPR_59

Description:

As land is eroded or falls under sea level, a rolling easement shifts landward onto beachfront property, providing a regulatory framework for protecting the shore from private ownership.

Climate Change Effects Addressed:

Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:

Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Vary Freeboard Requirements Depending on Use And Zone

ID: LPR_60

Description:

Requires critical facilities to have higher elevation than non-critical ones.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	×	Health And Well-Being	×
Decreased Water Quality	×	Coastal Communities	×
Drought	×	Ocean And Marine Life	×
Extreme Weather	×	Ecosystems And Wildlife	×
Increasing Precipitation	×	Socially Vulnerable Populations	×
Ocean Acidification	×	Infrastructure	✓
Rising Temperatures	×	Agriculture and Food Supply	×
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Voluntary Climate Change Relocation

ID: LPR_61

Description:

Relocate populations in jeopardy of flood inundation due to sea-level rise and/or coastal erosion. "Climigration" is defined as the point when inhabitants must resort to relocation because a community is no longer sustainable due to ecological changes.

Climate Change Effects Addressed:	
Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	×
Sea-Level Rise	✓

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	✓
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	×
Agriculture and Food Supply	×

Source Document:

NJ Future, Local Options/Local Actions

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Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Impose Stricter Base Flood Elevation Requirements

ID: LPR_62

Description:

All new structures within the danger zone must be built 2 feet above the 500-year floodplain.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✕	Health And Well-Being	✕
Decreased Water Quality	✕	Coastal Communities	✕
Drought	✕	Ocean And Marine Life	✕
Extreme Weather	✕	Ecosystems And Wildlife	✕
Increasing Precipitation	✕	Socially Vulnerable Populations	✕
Ocean Acidification	✕	Infrastructure	✓
Rising Temperatures	✕	Agriculture and Food Supply	✕
Sea-Level Rise	✓		

Source Document:

NJ Future, Local Options/Local Actions

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Promote or Require Site and Building Design Standards to Minimize Erosion Risk

ID: LPR_63

Description:

Development can be designed to minimize damage due to erosion using the following techniques:

- Constructing open foundation systems on buildings to minimize scour.
- Constructing deep foundations in erosion hazard areas.
- Designing and orienting infrastructure to deter erosion and accretion.

Climate Change Effects Addressed:		Climate Change Impacts Addressed:	
Decreased Air Quality	✗	Health And Well-Being	✗
Decreased Water Quality	✗	Coastal Communities	✗
Drought	✗	Ocean And Marine Life	✗
Extreme Weather	✗	Ecosystems And Wildlife	✗
Increasing Precipitation	✗	Socially Vulnerable Populations	✗
Ocean Acidification	✗	Infrastructure	✓
Rising Temperatures	✗	Agriculture and Food Supply	✗
Sea-Level Rise	✓		

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Promote or Require Site and Building Design Standards to Minimize Wind Damage

ID: LPR_64

Description:

Damage associated with severe wind events can be reduced or prevented if considered during building and site design. Examples include the following:
- Using natural environmental features as wind buffers in site design.
- Incorporating passive ventilation in the building design.
- Incorporating passive ventilation in the site design. Passive ventilation systems use a series of vents in exterior walls or at exterior windows to allow outdoor air to enter the home in a controlled way.
- Encouraging architectural designs that limit potential for wind-borne debris.
- Improving architectural design standards for optimal wind conveyance.
- Encouraging wind-resistant roof shapes (e.g., hip over gable).

Climate Change Effects Addressed:

Decreased Air Quality	✗
Decreased Water Quality	✗
Drought	✗
Extreme Weather	✗
Increasing Precipitation	✓
Ocean Acidification	✗
Rising Temperatures	✗
Sea-Level Rise	✗

Climate Change Impacts Addressed:

Health And Well-Being	✗
Coastal Communities	✗
Ocean And Marine Life	✗
Ecosystems And Wildlife	✗
Socially Vulnerable Populations	✗
Infrastructure	✓
Agriculture and Food Supply	✗

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards

Capability and Capacity Building Actions: Local Planning and Regulations

Individual Action Sheet

Resilience Strategy: Require or Encourage Fire-Resistant Construction Techniques

ID: LPR_65

Description:

A local government can encourage fire-resistant construction or may choose to require it through local regulations. Examples include:
- Encouraging the use of non-combustible materials (i.e., stone, brick, and stucco) for new construction in wildfire hazard areas.
- Using fire resistant roofing and building materials in remodels, upgrades, and new construction.
- Enclosing the foundations of homes and other buildings in wildfire-prone areas, rather than leaving them open and potentially exposing undersides to blown embers or other materials.
- Prohibiting wooden shingles/wood shake roofs on any new development in areas prone to wildfires.
- Encouraging the use of functional shutters on windows.

Climate Change Effects Addressed:	
Decreased Air Quality	×
Decreased Water Quality	×
Drought	×
Extreme Weather	×
Increasing Precipitation	×
Ocean Acidification	×
Rising Temperatures	✓
Sea-Level Rise	×

Climate Change Impacts Addressed:	
Health And Well-Being	×
Coastal Communities	×
Ocean And Marine Life	×
Ecosystems And Wildlife	×
Socially Vulnerable Populations	×
Infrastructure	✓
Agriculture and Food Supply	×

Source Document:

FEMA Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards