RESILIENT SALEM

Salem Resilience Action Planning

Resiliencia de Salem Comportamiento

Wednesday September 13, 2023
at 6pm via Zoom

RESILIENT NJ: MUNICIPAL ASSISTANCE PROGRAM

Promotes resilience planning at the local level by providing funding for the development of a local climate resilience strategy and/or climate change–related hazard vulnerability assessment consistent with P.L. 2021, c. 6.

Salem submitted a proposal with the BRS, Inc. Team on November 22, 2021 and was notified on December 29, 2021.

This work was made possible with financial assistance from the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration (NOAA) through the New Jersey Department of Environmental Protection, Coastal Management Program

RESILIENT NJ

Project Team

BRS inc

NEW JERSEY FUTURE

PH PRINCETON HYDRO

MEETING AGENDA

1. Welcome
2. Project Update
3. Resilience Actions
4. Discussion
5. Next Steps

Timeline

Data Collection/Research

Completed June 2022

Public Outreach

July 2022
February 2023
July 2023

Vulnerability Assessment

July 2023

Action Planning

September 2023

RESILIENT SALEM

Home | About | Research and Background | Public Input | Vulnerability Assessment | Action Planning | Resilience Action Plan

UPCOMING MEETINGS

ent Public Workshop
l6, 2023 at 6pm
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Public Input Page

Tell us about yourself!

Sign up for our mailing list

RESILIENT SALEM

Resilient Salem is an NJDEP funded effort to understand the vulnerabilities that the City has due to climate change and develops a plan to mitigate tl

RESILIENT NJ

Resilient NJ, administered through the NJDEP Bureau of Climate Resilience Planning, brings together planners, engineers, designers, and other experts to address flood- ar
For more information, visit resilient.nj.gov

What is Climate Change?

What is a Vulnerability Assessment?

https://brsinc.com/resilient-nj-salem

What we heard

Resilience Goals

Planning and Policy:

- Develop and implement climate change policies and strategies.
- Incorporate climate resilience into land use regulations.
- Promote community participation in climate change decision-making.
- Address social and economic disparities in climate resilience planning.
- Improve data collection and analysis for informed decision-making.

Physical Works:

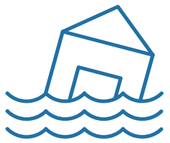
- Protect critical infrastructure and facilities from climate change impacts.
- Conduct regular maintenance and upgrades of infrastructure systems.
- Increase the implementation of green infrastructure solutions.
- Upgrade infrastructure to withstand climate-related hazards.
- Implement comprehensive tree maintenance programs.
- Develop sustainable water management strategies.

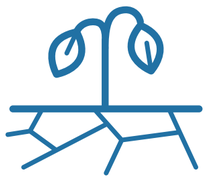
Emergency Planning:

- Enhance emergency response plans for climate-related emergencies.
- Protect public health from climate-related risks.
- Address the needs of vulnerable populations during emergencies.

Communication and Training:

- Improve communication about climate change risks and resilience measures.
- Enhance the availability and accessibility of climate-related services.
- Provide training and capacity-building for climate resilience.





Approach

Planning and Policy:
- Community Engagement & Social Equity
- Post-disaster Recovery
- Data & Information

Physical Works:
- Critical Facilities
- Critical Maintenance and Upgrades
- Green Infrastructure
- Tree Maintenance
- Water Management

Emergency Planning:
- Emergency Management and Preparedness
- Flooding
- Public Health
- Vulnerable Populations

Communication and Training:
- Communication
- Staffing
- Training

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List of actions

Discussion

What's missing?

What's most urgent?

Community Engagement & Social Equity:

- Comprehensive outreach program, including youth
- Needs assessment for vulnerable populations

Post-disaster Recovery:

- Post Disaster Redevelopment Plan: define short-, medium-, and long-term steps for recovery post-disaster, including reconstruction and restoration plans.
- Develop a comprehensive post-disaster recovery funding system, including improvement of current systems, a detailed funding

Data & Information:

- Comprehensive data management strategy
- Single "Source of Truth" about climate changes, impacts, and hazards

Policy & Regulations:

- Adopt resilience standards and land use policies to reduce flood risk in hazard areas.
- Update plans and documents to include resilience guidelines and incorporate climate resilience into infrastructure planning, including sustainable infrastructure guidelines.
- Establish policies to enhance biodiversity and resilience in parks.
- Align funding programs for remediation and resilience specifically for contaminated sites.
- Develop requirements for heat mitigation.
- Provide guidance on re-uses in the Blue Acres Program and develop a community-based plan for voluntary buyouts in highly vulnerable areas.
- Update flood damage prevention ordinances.

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Critical Facilities:

- Install backup power sources in critical asset locations including: police and fire stations, emergency operations center, shelters, cooling centers, and wireless communication facilities.
- Protect critical assets by elevating mechanical systems, constructing flood barriers, retrofitting pump stations, and relocating facilities if needed.

Critical Maintenance and Upgrades:

- Replace aging infrastructure
- Upgrade and update pumping stations and facilities

Green Infrastructure:

- Construct rain gardens, bioswales, and subsurface stormwater retention/detention systems in public areas/roadways
- Implement permeable pavement and rain gardens to reduce stormwater runoff and increase infiltration.

Tree Maintenance:

- Improve coordination between city agencies and private developers to preserve street trees during street projects.
- Prioritize street trees in new development projects and provide assistance to developers for tree plantings.

Water Management:

- Replace or upgrade aging water infrastructure with resilient materials, conduct regular maintenance and inspections to address water main breaks.
- Sustainable water management practices, implement green stormwater infrastructure, and water reuse programs.
- Update stormwater management ordinances
- Provide guidance on abandoning basements to minimize flood-related disruptions and potentially lower flood insurance costs.
- Raise, elevate, or relocate home mechanicals, utilities, and appliances to reduce the risk of flood damage.
- Install backflow valves or flood vents in abandoned basements to control water entry and minimize damage.

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Emergency Management and Preparedness:

- Develop shelter plans: Leverage partnerships for increased capacity.
- Establish additional shelter locations: Designate FEMA shelters.
- Improve transportation plans: Ensure efficient movement of displaced persons.
- Enhance emergency communication: Strengthen warning systems.
- Implement stormwater management: Reduce runoff and increase infiltration.
- Encourage sustainable emergency practices: Plan with environmental considerations.
- Expand cooling center network: Identify and develop new locations.
- Monitor flood events: Install flood gauges on road signs.
- Prioritize rebuilding efforts: Optimize resources for efficient recovery.

Flooding:

- Ensure community protection: Install stormwater backflow preventers.
- Ensure compliance with flood insurance program: Check policies.
- Improve drainage systems: Mtigate flood risks in prone areas.

Public Health:

- Protect outdoor workers: Policies for extreme heat safety.
- Develop heat emergency response plans: Effective strategies in place.
- Enhance green spaces: Mtigate urban heat island effect and improve air quality.

Vulnerable Populations:

- Improve housing conditions: Prioritize resources for low-income populations.
- Youth resources during emergencies
- Address needs of elderly populations: Emergency planning.

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Communication:

- Standardize a texting system throughout the city.
- Increase outreach efforts to the Latino community.
- Develop a proactive communication plan that includes early warning systems and community preparedness training.

Staffing:

- Hire a Certified Floodplain Manager (CFM) to manage floodplains.
- Develop emergency personnel staffing plans and prioritize recruitment efforts.
- Acquire necessary equipment.
- Provide additional training for disaster response protocols.
- Reorganize staffing structures to ensure sufficient time for the OEM director.

Training:

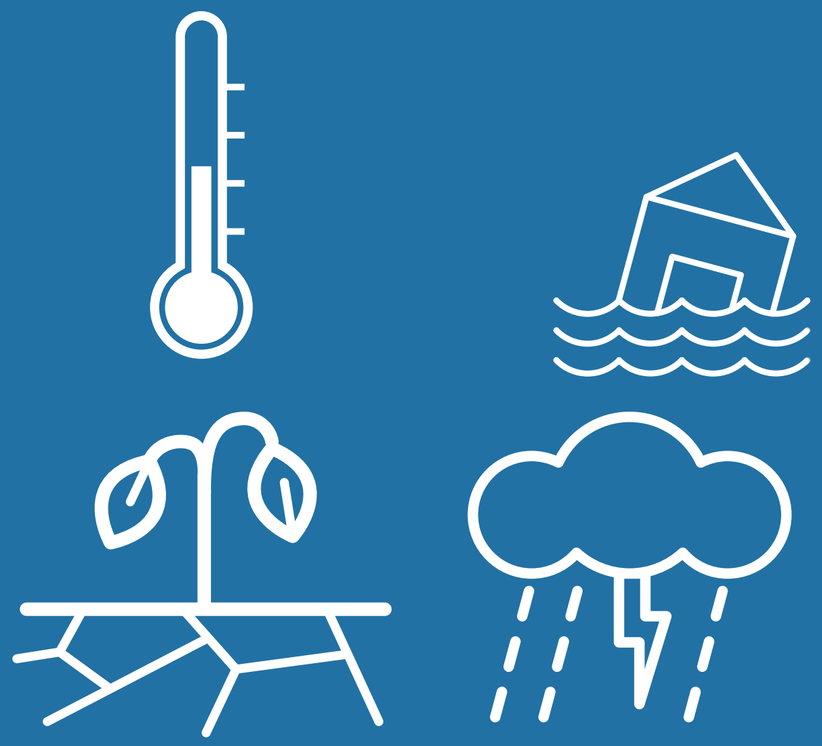
- Provide training on FEMA regulations and Incident Command System (ICS) modules to relevant staff.
- Conduct regular training exercises for emergency preparedness.

ACTION MATRIX

Exacerbation by Climate Change
Actions
Geography
Action Type
Populations Addressed
Connection to Other Actions
Estimated Cost
Hazard Mitigation Plan Category
Estimated Project Duration
Lead Organization/Department/Division
Supporting Organizations

Federal role
State role
Region role
County role
Municipal role
Role of utilities or infrastructure entities
Role of individuals
Potential Funding Sources
Funding Currently Available
Local Planning Mechanisms to be Used in Implementation
Critical Next Steps
Known Obstacles

IMPLEMENTATION AND ACTION PLAN



Implementation process for resilience actions
Roadmap and timeline for action implementation within the municipality
What else should we be thinking about?

THANK YOU

https://brsinc.com/resilient-nj-salem/