

25 – LAKE COMO BOROUGH

PLANNING TEAM AND PARTICIPATION

| Name | Title | Participation |
|-----------------|------------------------|---|
| Robert DeMartin | OEM Coordinator | Point of Contact, Municipal Workshop #1 |
| Brian Poppert | Deputy OEM Coordinator | Point of Contact, Municipal Workshop #1 |
| Andrew Huisman | Borough Administrator | HMP Review |
| Amy Boney | Borough Clerk | HMP Review |
| Samantha Waters | CFO | HMP Review |
| Sam Avakian | Borough Engineer | HMP Review/discussion via phone |

COMMUNITY PROFILE

Overview

The Borough of Lake Como is a 0.2 square mile area separated from the Atlantic Ocean by a small portion of Belmar. Lake Como is located on the southeastern shore of Monmouth County. Most the borough's land area is residential. No major highways traverse Lake Como. County Route 30 serves as the borough's Main Street, and County Route 18 (16th Ave) is the northern border. Lake Como is situated along the North Jersey Coastline Railway, which can be accessed by nearby Belmar Train Station, and is served by the 317 and 830 bus routes.

Lake Como is a member of Monmouth University Urban Coast Institute Coastal Lakes Observing Network, which partners with municipalities and community groups to organize citizen science efforts, workshops and conferences dedicated to understanding the causes of environmental problems facing seaside water bodies.

Land Use, Development, & Growth

Lake Como is a predominantly residential community and most of its land is developed. From 2015 to 2020, the community underwent minimal change in its land use composition, with urban or developed land accounting for nearly 92 percent of its total area, and water and wetlands making up the remaining 8 percent.

| Land Use Type | Total Acres (2015) | Total Acres (2020) | Percent Change |
|---------------|--------------------|--------------------|----------------|
| Agriculture | - | - | - |
| Barren Land | - | - | - |
| Forest | - | -- | |
| Urban | 148.3 | 148.3 | >0% |
| Water | 4.7 | 4.7 | >0% |
| Wetlands | 8.4 | 8.4 | >0% |

Source: NJDEP Land Use/Land Cover data, 2015-2020

Recent Major Development and Infrastructure from 2020 to Present

Lake Como has focused on revitalizing its Main Street, increasing mixed-use development, and improving its housing stock consistent with its shore community character. In addition, the Borough seeks to improve Lake Como and provide additional recreational facilities and opportunities for its residents. In 2020, the Borough Council authorized a study to determine what improvements are needed for Main Street.

Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years

Lake Como plans to relocate its borough hall to 18th Ave where the former first aid building was located. The site of the current borough hall will then be used for mixed-use development.

Demographics & Vulnerable Populations

This plan analyzed census-derived data on population trends and population age distributions to help illustrate potential vulnerability within the borough. A population increase or decrease can illustrate potential hazard vulnerability through development pressures on the built environment, or through physical and social impacts of marked population loss. A community with a large share of population under age five may indicate vulnerabilities in hazard response, resource allocation, and evacuation – FEMA identifies that the pediatric population is disproportionately affected during disasters, and requires special consideration in categories of anatomy and physiology, psychological, and education vulnerabilities (FEMA, 2022, NLM, 2022). Individuals over age 65 are a growing share of the country's population and often represent the greatest share of deaths from extreme weather events and other natural disasters. A larger share of population over 65 may indicate local vulnerabilities to hazard events both before and after a disaster occurs – these populations may have mobility needs, uneven access to resources, and limited social networks that makes pre-disaster engagement challenging (FEMA, 2023).

Lake Como Borough has a total estimated population of 1,710. Of this population, an estimated 2.6% is under age 5, and 19.2% is over age 65. The Borough experienced an estimated 12.6% population growth over the ACS survey periods between 2013-2017 and 2018-2022. With an aging population making up nearly twenty percent of their total community, Lake Como may focus hazard mitigation efforts on those with robust messaging and engagement for older residents, evacuation plans inclusive of populations with mobility issues, and resilient networks for resource accessibility post-disaster. With a striking population growth over the past five-year survey periods, Lake Como's vulnerability to disaster may continue to be shaped by population growth and changes to the built environment including development and potential redevelopment or densification.

There are no areas of Lake Como which have been identified by CDRZ, CEJST, or OBC designation criteria.

| Demographics Summary | |
|--|-------|
| Total Population (2018-2022 ACS 5-year Estimates) | 1,710 |
| Population Change since 2017 | 12.6% |
| Percent of Population Age < 5 | 2.6% |
| Percent of Population > 65 | 19.2% |

Source: 2018-2022 ACS 5-Year Estimates, 2013-2017 ACS 5-Year Estimates

HAZARD IDENTIFICATION

One of the first steps in developing a risk assessment is for participating municipalities to review and prioritize the hazards that can affect them. This was done based on how often a hazard has occurred, how significant effects have been in the past, the difficulty and cost of recovering from such events. Jurisdictions ranked the list of hazards as either high, medium, low, or no concern. The following include the Borough's hazard ranking. The full risk assessment for each hazard is located in Section 4.0.

Hazard Ranking

| High | Medium | Low |
|---------------------------|----------------------|--------------|
| Natural Hazards | | |
| Hurricane/ Tropical Storm | Extreme Temperatures | Lightning |
| Nor'easter | Extreme Wind | Drought |
| Flood | Tornado | Earthquake |
| Storm Surge | Winter Storm | Wildfire |
| | | Landslide |
| | | Wave Action |
| Human-made Hazards | | |
| | Cyber Attack | Civil Unrest |
| | Economic Disruption | |

| High | Medium | Low |
|------------------------|---------------|-----|
| Natural Hazards | | |
| | Power Failure | |
| | Terrorism | |
| | Pandemic | |

Hazard Ranking Explanation

The hazard ranking remains unchanged from the previous plan update. This consistent ranking underscores the ongoing importance of monitoring and mitigating these hazards to maintain community safety and resilience.

Significant Hazard Events Since Last Plan Update

Flooding incidents have been reported along Main Street leading into Lake Como, particularly at the intersection with 22nd Avenue near the park, Marucci Park, and Behrman Park. While these parks often experience flooding, along with some backyards, there is generally minimal damage to the houses. The backyards were notably flooded due to Hurricane Sandy.

Climate Change Impacts on Extent and Magnitude of Hazards

Climate change is expected to significantly amplify the risks and hazards faced by communities like Lake Como Borough. As global temperatures continue to rise, the frequency and intensity of extreme weather events such as hurricanes, tropical storms, and nor'easters are projected to increase. This will likely result in more severe flooding, particularly in low-lying and coastal areas. The borough's existing flood-prone zones, including the areas adjacent to Lake Como, will face heightened risks, potentially leading to more frequent and severe inundation events. Additionally, the increased occurrence of extreme temperatures and prolonged heatwaves will pose significant health risks, especially to vulnerable populations such as the elderly and young children.

The changing climate will exacerbate the challenges associated with stormwater management and infrastructure resilience. The borough's stormwater systems, which are already under strain during heavy rainfall events, will need to be upgraded to handle the increased volume and intensity of precipitation.

RISK ASSESSMENT

National Flood Insurance Program (NFIP) statistics

| Lake Como Borough | |
|-------------------------------------|----------------|
| Initial FIRM | |
| Effective FIRM | |
| Number of Policies In-Force: | 70 |
| Total Losses: | 41 |
| Total Payments: | \$2,412,185.42 |
| Number of RL Properties: | 3 |
| Number of Mitigated RL Properties: | 0 |
| RL – Total Losses: | 6 |
| RL – Total Paid: | \$85,300.87 |
| Number of SRL Properties: | 0 |
| Number of Mitigated SRL Properties: | 0 |
| SRL – Total Losses: | 0 |
| SRL – Total Paid: | \$0 |

Source: FEMA Policy and Loss Data, August 2024

Vulnerability of the Built Environment

The Special Flood Hazard Area (SFHA) in the Borough of Lake Como is primarily centered adjacent to the main waterbody of the borough, Lake Como. Approximately 6.8 percent of the total area of Lake Como lies within the 1% annual chance flood zone as defined by FEMA. An additional 4.1 percent of the area of the municipality is in the 0.2% annual chance flood zone.

About 86.2 percent of Lake Como is considered developed. Of the developed parcels of the town, 2.7 percent fall within the 1% annual chance flood zone and 4.5 percent are within the 0.2% annual chance flood zone. This illustrates that the developed area of the municipality is generally in line with overall flood risk.

| | Percentage in the 1% Floodplain | Percentage in the 0.2% Floodplain | 5 feet of Sea Level Rise |
|--------------------------|------------------------------------|--------------------------------------|--------------------------|
| Developed Parcels | 2.7% | 4.5% | NA |
| Exposed Land Area | 6.8% | 4.1% | NA |

During the planning process, Lake Como identified critical facilities which function as community lifelines. These facilities provide the most fundamental services in the community that, when stabilized, enable all other aspects of society to function. The municipality identified 6 total facilities. Of these facilities, none are within the floodplain.

| | Number in the 1% Floodplain | Number in the 0.2% Floodplain | Number within 5 feet of Sea Level Rise |
|--|-----------------------------|-------------------------------|--|
| Community Lifelines and Critical Facilities | - | - | NA |

| | Percentage in the 1% Floodplain | Percentage in the 0.2% Floodplain | 5 feet of Sea Level Rise |
|--|------------------------------------|--------------------------------------|--------------------------|
| Developed Parcels | 2.7% | 4.5% | NA |
| Community Lifelines and Critical Facilities | NA | NA | NA |
| Exposed Land Area | 6.8% | 4.1% | NA |



Flood Risk

Lake Como Borough

FEMA Flood Zone

- 0.2% Annual Chance
- AE (1%)

County Routes

Local Roads

Municipal Boundaries

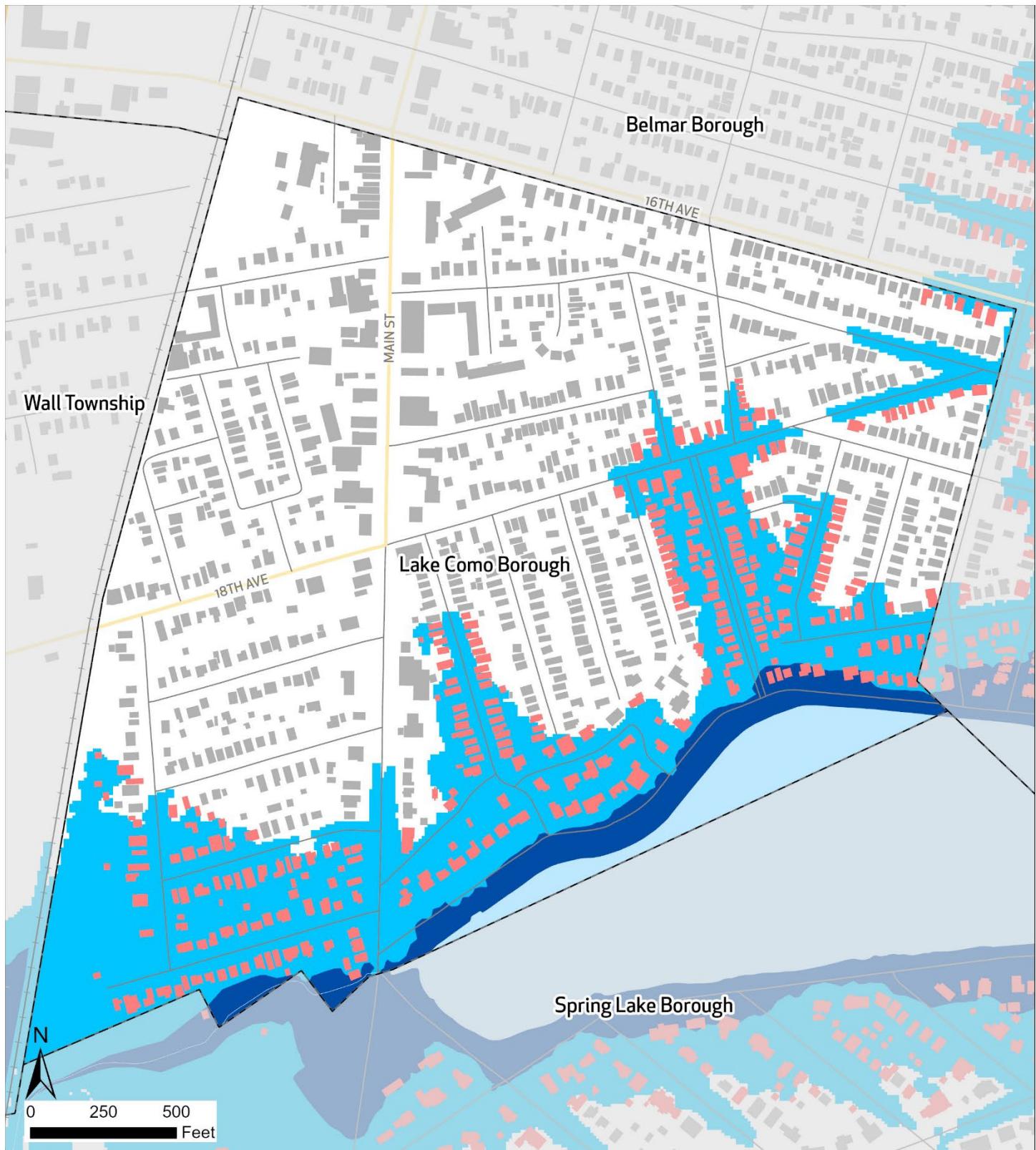
Building Footprints

Building Footprints within

Floodplain

Water

Source: FEMA NJDEP, NJOIT, NJTransit



NJ Inland Design Flood Elevation Lake Como Borough

FEMA Flood Zone

- Current Base Flood Elevation (1%)

NJ Inland Design Flood Elevation

- FEMA BFE (1%) plus 3 Feet

County Routes

Local Roads

Railroad

Municipal Boundaries

Water

Building Footprints

Building Footprints within IDFE

Source: FEMA, Rutgers University, NJDEP, NJOIT, NJTransit



Wildland Urban Interface (WUI) Classification

Lake Como Borough

High or Medium Density Housing
No Housing

County Routes
Local Roads
Rail Lines

Municipal Boundaries
Building Footprint
Water

Source: USFS, NJDEP, NJOIT, NJTransit

CAPABILITY ASSESSMENT

Planning & Regulatory Capabilities

Lake Como Borough has the following additional Planning & Regulatory capabilities:

| Plan and Regulation | Yes | No | Date of last update | How does this capability support hazard mitigation? |
|---|-----|----|---------------------|---|
| Master Plan | x | | 2021 | |
| Capital Improvement Plan | x | | 2024 | |
| Local Emergency Operations Plan/Continuity of Operations Plan | x | | | |
| Floodplain Development Ordinance | x | | 2022 | |
| Floodplain Management Plan | x | | | |
| Stormwater Management Ordinance | x | | 2024 | |
| Stormwater Management Plan | x | | | |
| Watershed Management Plan | | x | | |
| Sheltering Plan | | x | | |
| Evacuation Plan | x | | | |
| Substantial Damage/Improved Structures Response | | x | | |
| Repetitive Loss Plan | | x | | |
| Disaster Debris Management Plan | x | | | |
| Tracking elevation certificates and/or Letter of Map Change | x | | | |
| Post-Disaster Recovery Plan | x | | | |
| Current/recent redevelopment plans or studies | x | | | |
| Community Wildfire Protection Plan | | x | | |
| Climate Adaptation Plan | | x | | |
| Other Plans that discusses hazard mitigation | x | | | |
| Other ordinance and regulation that mitigate the impacts of natural hazards | x | | | |

Administrative and Technical Capabilities

Lake Como Borough has the following Administrative and Technical capabilities:

| Position | Yes | No | Explanation |
|--|-----|----|---------------------------------|
| Floodplain Administrator | x | | |
| Grant Writer | | x | |
| Staff trained to support mitigation | x | | |
| Existing mutual aid or technical assistance agreements to support hazard mitigation projects | x | | |
| Non-governmental organizations/other partners that work with the municipality on mitigation projects | | x | |
| Organizations that work with socially vulnerable or underserved populations | x | | Monmouth County Social Services |

Education and Outreach Capabilities

Lake Como Borough has the following Education and Outreach capabilities:

| Education & Outreach Capability | Yes | No | Explanation |
|---|-----|----|------------------------------------|
| Communicate natural and human-based hazards to the public | x | | Onsolve and Nixle alerting systems |
| StormReady | x | | |
| Firewise USA | x | | |
| Severe Weather Awareness Week | x | | |
| Community Rating System (CRS) | x | | |

Financial Capabilities

Within the last five years, Lake Como Borough has used the following financial capabilities to implement hazard mitigation activities:

| Financial Capability | Yes | No | Explanation |
|--|-----|----|-------------|
| FEMA BRIC | x | | |
| FEMA FMA | x | | |
| FEMA Public Assistance | x | | |
| FEMA HMGPs | x | | |
| Non-FEMA Federal Funding Programs | x | | |
| Other FEMA resources | x | | |
| NJ Infrastructure Bank | x | | |
| Other state municipal assistance or grant programs | x | | |
| Evaluation process on the prioritization of risk reduction projects against other local activities | x | | |
| Other ongoing efforts to build additional financial capabilities | x | | |

Additional Capability Assessment Information:

MITIGATION STRATEGY

Overview and Progress Since Last Update

The mission of the Borough of Lake Como Hazard Mitigation Program is to enhance community resilience by identifying, reducing, and managing risks associated with natural and human-made hazards. Through proactive planning, public engagement, and strategic investments, we aim to protect lives, property, and the environment while ensuring the long-term sustainability of our community. We are committed to identifying and assessing potential hazards that may impact Lake Como, implementing cost-effective and sustainable mitigation strategies, promoting public awareness, education, and preparedness and strengthening infrastructure and natural systems to reduce vulnerabilities. By fostering a culture of preparedness and resilience, we strive to safeguard the well-being of our residents, businesses, and visitors while preserving our community's unique character.

Completed or Removed Actions

| Action | Name | Description | Hazards Addressed | Priority | Responsible Party | Potential Funding | Cost Estimate | Timeline | Action Status | Notes |
|-------------|---|---|--|----------|--|--|---------------|----------|---------------|----------------------------|
| Action 25-1 | Construct a New Outfall Pipe and Pump at Lake Como to Allow Water to be Released to the Ocean | Lake Como, Spring Lake, and Belmar are seeking remedies to prevent flooding. Currently implementing a solution to reduce the amount of water in the lake prior to heavy rain events. The outfall pipe and area for pumps has to be designed to allow water to be released to the ocean. | Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge | N/A | Lake Como, Spring Lake & Belmar all responsible | N/A | \$2,000,000 | N/A | Completed | <i>Funded By Belmar</i> |
| Action 25-2 | Improve Water System | Lining project and replacement to upgrade the distribution of water system. | Drought | N/A | Municipal Engineer | NJ Environmental Infrastructure program; US Department of Agriculture; possible mitigation grant; local funding through bonds issued | \$5,000,000 | N/A | Completed | <i>USDA \$4 million</i> |
| Action 25-3 | Purchase and Install Generator for OEM Central Command Center - Borough Hall | Loss of power is possible during hazard events including flooding, surge, extreme wind, hurricane and tropical storm, nor'easter, extreme temperatures, and lightning. OEM Central Command Center - Borough Hall lacks backup power. | Extreme Temperatures, Flood, Extreme Wind, Lightening, Nor'easter, Hurricane and Tropical Storm, Storm Surge | N/A | Office of Emergency Management and Administration. | N/A | \$80,000 | N/A | Completed | <i>Borough self funded</i> |

| Action | Name | Description | Hazards Addressed | Priority | Responsible Party | Potential Funding | Cost Estimate | Timeline | Action Status | Notes |
|-------------|---|---|--|----------|---|-------------------|---------------|----------|---------------|---|
| Action 25-4 | Purchase and install Generator for First Aid Building | Purchase a generator for the First Aid Building which is the First Response Emergency Center. | Extreme Temperatures, Flood, Extreme Wind, Lightening, Nor'easter, Hurricane and Tropical Storm, Storm Surge | N/A | N/A | N/A | N/A | N/A | Withdrawn | Withdrawn. This building was knocked down - priority for Borough Hall as Emergency Center. |
| Action 25-5 | Purchase and Install Generator for Emergency Shelter | Purchase a generator for the Emergency Shelter located at Academy Charter High School. The Borough uses the gymnasium as an emergency shelter (1725 Main Street) located across the street from the Office of Emergency Management. | Extreme Temperatures, Flood, Extreme Wind, Lightening, Nor'easter, Hurricane and Tropical Storm, Storm Surge | Medium | Office of Emergency Management will coordinate with school. | FEMA HMA | \$140,000 | 1 year | Withdrawn | The Borough has moved on from this gymnasium as they are using Belmar's gymnasium for the emergency shelter and Lake Como Boro Hall as secondary shelter. |

New and Ongoing Actions

| Action | Name | Description | Hazards Addressed | Priority | Responsible Party | Potential Funding | Cost Estimate | Time-line | Action Status | Notes |
|-------------|---|---|--|----------|--|---|---------------|-----------|---------------|--|
| Action 25-6 | Acquire, elevate, or relocate buildings and infrastructure in flood prone areas, with a focus on Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties | Home elevations to comply with the FEMA flood base guidelines, specifically RL/SRL properties. | Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge | High | Boro Administrator will be the lead person. | FEMA HMA | \$10M | 10 years | Ongoing | With the Borough having control of high-risk areas and properties, it will allow for full control over the projects that can be done on site. This will allow that no new major construction be proposed |
| Action 25-7 | Purchase and Install Generator for Public Works Building | Purchase a generator for the Public Works Building which is essential during times of emergencies. Located at 790 Seventeenth Avenue. | Extreme Temperatures, Flood, Extreme Wind, Lightening, Nor'easter, Hurricane and Tropical Storm, Storm Surge | Low | Office of Emergency Management and Administration. | Hazard Mitigation Grant; local funding. | \$75,000 | 2 year | Ongoing | Lake Como DPW still in need of funding for a generator to allow employees to work efficiently during power loss and help town recover from storm. |

| Action | Name | Description | Hazards Addressed | Priority | Responsible Party | Potential Funding | Cost Estimate | Time-line | Action Status | Notes |
|--------------|---|--|--|----------|--|---|---------------|-----------|---------------|---|
| Action 25-8 | Protect the Emergency Command Center from Wind Damage Through Purchasing and Installing Hurricane Windows and Roof Straps | Installation of hurricane windows and roof straps which will be in the complex location at 1730-1740 Main Street. | Extreme Wind | Medium | Office of Emergency Management and Administration. | Hazard Mitigation Grant; local funding. | \$125,000 | 1 year | Ongoing | Still ongoing and awaiting funding to further protect the boro hall complex which is vital for towns operations in extreme weather. |
| Action 25-9 | Purchase and Install Generator for Belmar Police | The Belmar Police Station and shelter needs a new generator. | All Hazards | Medium | Borough of Belmar and Lake Como | FEMA HMA | \$350,000 | 1 year | Ongoing | Still waiting funding to update the generator at Belmar PD to allow the boro gymnasium which is listed as a shelter for both Lake Como and Belmar to also have power. |
| Action 25-10 | Third Avenue/Main Street Drainage Improvements | Upsizing the storm drainage pipe under Third Avenue/Main Street is a crucial step toward improving the stormwater management infrastructure in the area. By increasing the capacity of the pipe, this project will reduce the risk of localized flooding during heavy rainfall events and enhance the overall drainage efficiency. The upgraded pipe will align with county regulations, ensuring compliance with modern standards for stormwater conveyance and environmental protection. This improvement will also help mitigate potential damage to roadways, properties, and adjacent | Flood, Nor'easter, Hurricane and Tropical Storm, Storm Surge | Medium | Borough of Lake Como | FEMA HMA | \$400,000 | 3 year | New | This will allow for more efficient stormwater management in an area that is high priority as a roadway utilized in an evacuation. There is flooding experienced during storm events that need to be addressed. By addressing this critical issue proactively, the community can achieve a safer, more resilient, and environmentally compliant drainage system. |

| Action | Name | Description | Hazards Addressed | Priority | Responsible Party | Potential Funding | Cost Estimate | Time-line | Action Status | Notes |
|--------------|----------------------------------|--|--|----------|----------------------|------------------------|---------------|-----------|---------------|--|
| | | infrastructure caused by overflow or insufficient drainage. In addition, the project supports long-term sustainability by accommodating anticipated increases in stormwater volume due to changing climate conditions. | | | | | | | | |
| Action 25-11 | Dredge Lake Como | Remove excess sediment from identified choke points and reduce flood risks during heavy rainfall events. As of now, buildup prevents retention. | Hurricane/ Tropical Storm/ Flood/ Nor'easter | High | Borough of Lake Como | Local funding / grants | \$750,000 | 3 years | New | Dredging the lake will allow for more capacity in the lake. During a storm event, moving the water off of the road and into the body of water. |
| Action 25-12 | Extend the Outfalls at Lake Como | Extend the outfall pipes at Lake Como. Pipes are in need of cleaning and repair. Investigation needed to see where breaks are. During storm events flooding of the surrounding areas occurs. | Hurricane/ Tropical Storm/ Flood/ Nor'easter | High | Borough of Lake Como | USACE, NJDEP | \$100,000 | 5 years | New | Expanding the outfall length will ensure all stormwater reaches the lake and allow for stormwater to flow. |