

CMP Climate Change-Related Hazard Vulnerability Assessment Project (a Planning Board subteam):
Brief Interim Summary (Public Posting) Sep 9, 2025

Members: Ed Barnhart, Stew Farrell, Elise Geiger, Bill Gibson, Matt Brown

Meetings To-Date: Apr 1, Apr 30, May 14, June 25, July 23, Aug 6 (...expected to finish by year-end)

DECISIONS

- A. Public Awareness/Input is important: A short description of CCRHVA was included in Spring CMPTA Newsletter. Public updates at Commissioner meetings and PB meetings are acceptable forms of regular communication. Planning toward Q&A Session at CMPTA Annual Meeting on Sept 12.
- B. Focused, agile scope of project has been agreed to.
- C. Time horizon (looking out to 2050) has been agreed to. 50% probability level is initial focus of data evaluation
- D. List of 9 Hazards has been agreed to
- E. Working list of CMP Assets has been agreed to
- F. A working set of research data and projections in the 9 Hazards areas has been identified, with as much relevance to CMP as possible, in accord with best available science from respected organizations recognized by NJ DEP
- G. Mitigation Action Goals and Themes have been drafted. A Prioritized List of Mitigation Actions has been drafted. Mitigation action proposals are not yet completed.

Hazard List

Hazard Type	Comment
Increased / Extreme Temperature	Required Hazard
Drought	Required Hazard
Flooding	Required Hazard
Severe Weather	Required Hazard
Saltwater Intrusion	
Wildfires	
Vector-Borne Disease	Primarily Mosquito and Tick vectors
Ecological Disease / Agricultural Pests	
Shoreline Erosion	Natural Trend is impacted by other Hazards

Asset/Feature List

'Municipal' Structures:

- Firehouse
- Borough Hall
- Post Office
- Public Works Garage Bldg (Lighthouse Ave)
- Public Works Pole Barn (Sunset Ave)

Utility Infrastructure

- MUA Pumping Station - Sewage (Yale & Coral Ave)
- CMP Pumping Station - Sewage (near Circle)
- Potable Water Management Infrastructure – Sunset (Water Pumping) Borough Pumping Station & Water Supply Connection (to CM City)
- Lake Lilly Pumping Station (Oak Ave) & infrastructure
- Storm Water Management Infrastructure: Pumps, Valves and Piping (Under Streets)
- Sewage Management Infrastructure: Valves, Piping, Pumps (Under Streets)
- Electric Supply Infrastructure and generators
- Cable Communications infrastructure including Wireless/WiFi systems
- Natural Gas supply infrastructure
- Emergency Mgmnt Infrastructure (Air Horn)
- Roadway Access and Evacuation Routes: Sunset Ave & Stevens Rd

Municipal Equipment (movable)

- Fire Department Equipment
- Public Works Equipment
- Borough Records and Document Backup Systems

Non-Public Structures

- Residential Properties: single-family & condos
- Non-Profit Org. Facilities: Audubon Bird Observatory, Science Center
- Commercial Facilities: Red Store?
- Historic Buildings (incl Churches)

Physical Landscape Elements

- Lake Lilly
- Circle
- Beach
- Beach Jetties
- Beach Dunes and underlying structure

Influential Neighboring Assets

- State Park – near Lighthouse Ave (Lake, Dunes, Lighthouse, Trails, Museum)
- State Park – near Alexander Ave
- Lower Twp near-Higbee Preserve
- CM City water supplier
- Roadway Evacuation Routes: Sunset Ave & Stevens Rd

Hazard Impact Assessment

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AK	AL	AM								
1	HAZARD IMPACT (HI)			HAZARDS																																							Revised July 23, 2025		
2	Score Matrix			Incr./Extreme Temp.			Drought			Flooding			Severe Weather			Salt Water Intrusion			Wildfires			Vector-borne Disease			Ecological / Pests			Shoreline Erosion																	
3	ASSETS			Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*	Expo.*	Sens.*	Score*						
4	Municipal Buildings																																												
5	Firehouse			2	2	2	1	1	1	2	1	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1							
6	Borough Hall			2	2	2	1	1	1	3	1	3	2	2	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1								
7	Post Office			2	2	2	1	1	1	2	1	2	2	3	3	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1								
8	Public Works Garage			2	3	3	1	1	1	2	1	2	2	2	2	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1								
9	Public Works Pole Barn			2	3	3	1	1	1	2	1	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	2	1	1	1	1	1								
10	Utility Infrastructure																																												
11	MUA Pumping Station			2	3	3	1	2	2	3	3	3	2	3	3	1	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1								
12	CMP Pumping Station			2	3	3	1	2	2	3	3	3	2	3	3	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
13	Potable Water Infrastr.			2	3	3	1	3	2	2	3	3	2	2	2	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
14	Lake Lilly Pump Station			1	2	2	1	1	1	3	3	3	2	4	4	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
15	Storm Water Infrastr.			1	2	2	1	2	2	3	3	3	2	3	3	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
16	Sewage Infrastructure			1	2	2	1	2	2	2	3	3	2	3	3	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
17	Electric Supply Infrastr.			4	5	5	1	1	1	2	1	2	2	4	4	1	1	1	2	4	4	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1	1								
18	Cable Communications			3	4	4	1	1	1	2	1	2	2	4	4	1	1	1	2	4	4	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1	1								
19	Natural Gas Infrastr.			2	2	2	1	1	1	2	1	2	2	2	2	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
20	Emergency (Air Horn)			3	3	3	1	1	1	2	1	2	2	3	3	1	1	1	1	1	3	2	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
21	Roadway Access/Evac.			1	2	2	1	1	1	3	3	3	2	3	3	1	1	1	1	2	2	2	2	2	1	2	2	1	2	2	1	2	1	1	1	1	1								
22	Municipal Equipment (movable)																																												
23	Fire Dept. Equipment			2	3	3	1	1	1	2	1	2	2	2	2	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
24	Public Works Equip.			2	3	3	1	1	1	2	1	2	2	2	2	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
25	Boro Records/Backup			3	2	3	1	1	1	2	2	2	2	3	3	1	1	1	1	2	3	3	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
26	Non-Public Structures																																												
27	Residential Properties			2	2	2	1	1	1	3	1	3	2	3	3	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1	1								
28	Non-Profit Facilities			2	2	2	1	1	1	2	1	2	2	3	3	1	1	1	2	2	2	2	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
29	Commercial Facilities			2	2	2	1	1	1	2	1	2	2	3	3	1	1	1	1	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1	1								
30	Historic Buildings			2	3	3	1	1	1	2	1	2	2	3	3	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1	2	2	1	1	1	1	1							
31	Physical Landscape Elements																																												
32	Lake Lilly			2	3	3	1	4	3	4	3	4	2	2	2	2	2	2	2	2	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1								
33	Circle			2	2	2	1	1	1	2	1	2	2	2	2	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1								
34	Beach			2	2	2	1	1	1	2	1	2	2	4	4	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	3	3	3	3	3	3								
35	Beach Jetties			2	1	2	1	1	1	2	1	2	2	4	4	1	1	1	1	1	1	1	2	1	2	2	1	2	2	1	2	1	1	1	1	1	1	1							
36	Beach Dunes/Struct.			2	2	2	1	3	2	2	1	2	2	5	4	1	1	1	1	1	1	1	2	1	2	3	3	3	3	3	1	1	1	1	1	1	1								
37	Influential Neighboring Assets																																												
38	Lighthouse State Park			2	2	2	1	3	2	4	3	4	2	3	3	3	3	3	3	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2								
39	State Park @ Alexander			2	2	2	1	2	2	2	1	2	2	3	3	2	2	2	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2								
40	Lower Twp near-Higbee			2	2	2	1	2	2	3	3	3	2	3	3	2	2	2	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2								
41	CM City water supplier			2	3	3	1	4	3	2	2	2	2	2	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1								
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CMP CCRHVA Mitigation Goals (DRAFT)

- 1) Strategically protect life and property
- 2) Enhance resiliency, preparedness, and continuity of operations between government, utilities, and community members
- 3) Support public awareness, education, and preparedness for climate-related hazards and their risks
- 4) Promote Partnerships with neighboring municipalities, government agencies, utilities, business, and non-profit organizations
- 5) Protect the Coastal Dune Environment and other Natural Resources through short- and long-term actions focused on preservation and sustainability

Prioritized Potential Mitigation Actions for CCRHVA: Workup DRAFT

Ideas for potential mitigation actions were collected from group brainstorm July 15-Aug 6, 2025.

As context and examples, the team reviewed NJ FUTURE Model/Guide, 2021 CM County Hazard Mitigation Plan, 2016 CMP Coastal Vulnerability Assessment, 2021 CMP Watershed Management Plan, and Upper Township CCRHVA.

^Time Horizon Definition: Near = <2 years, Medium = ~5 years, Long = ~10 years)

ID #	Action Description	Time Horizon ^ (Near-, Medium-, Long-term)	All Reviewer Comments (just add text onto others)	Priority Tier	Goals # Supported
9	a) Install larger pipes for drainage East to restrict backflow from Lighthouse Ponds. b) Consider adding active pumping ability for Drainage East. c) Partner with WCM and CM County to protect flow capacity and control on Perry Street creek. (See CM County Hazard Mitigation Project 2021-CMC-034)	Medium		1	1,2,4,5
24	Work with DEP to facilitate water egress from Lake Lily through Lighthouse and Nature Conservancy Ponds (clogged with phragmites) as well as a routine maintenance program	Near		1	1,2,4,5
6	Partner with Lower Twp, W Cape May and Cape May City to develop longer-range plans to ensure evacuation route access	Medium		1	1,3,4
2	Implement longer-range capital planning for climate hazard mitigation activities	Near		1	1,2,3
5	Raise portions of Coral Beach access ramp to allow dune to rise naturally	Near		1	1,2,5

7	Define a temporary water restriction ordinance to reduce non-essential water usage during government-declared emergencies	Near		1	2,3
8	Ensure adequate generator capacity, including 2 nd -tier backup system, for Drainage West	Near		1	1,2,3
14	Plan for removal of key physical assets during flooding— e.g. fire equipment	Near		1	1,2
15	Implement Borough Website modifications to communicate climate plans/emergency procedures	Near		1	1,2,3
23	Replacement of Main outflow pipe to Bay to assure optimal function, including evaluation for potential size increase.	Medium		1	1,2,5
27	Encourage local and state efforts to expand electricity generation within state	Near thru Long		1	1,3,4
12	Identify code changes necessary to implement state-mandated building base height. Consider whether flood sensitive areas of CMP should have unique code restrictions.	Near		2	2,3,4
13	Update plan for Borough Hall-Records/ Data backup in event of flood	Near		2	2,3
21	Develop guidelines for properties adjacent to vulnerable drains to support stormwater management (e.g. “Rain Gardens”)	Near		2	2,3,5
29	As judicious steward of water resources, support CMP role in Water supply partnership with CM City to ensure adequate supply of water, including water quality and pressure	Medium		2	2,3,4
30	Improve valve control infrastructure for water supply management (e.g. less manual, more automated)	Near		2	1,2
32	Develop Phragmites Fire Plan in conjunction with State Park and Nature Conservancy	Medium		2	1,4,5
1	Raise key roadway beds by 3-6 inches when repaved. Define which roadways are “key.” Partner with County as needed on this.	Medium thru Long		2	1,2,4
16	Evaluate current notification systems and develop a reverse 911 system if Nixle is not adequate.	Near		2	1,2,3
28	Plant trees in select areas to minimize heat stress on structures	Medium		2	1,2,5
31	Replant Dunes with plants providing root structure in areas suffering from tree loss due to Pine Borer Beetles	Near		2	1,2,5