A Risk Communication Campaign for Coastal New Jersey: Community-Based Art Grant Program

What are coastal hazards?

- **Tidal flooding** – low-lying coastal areas flood when high tides cause water levels to rise above ground elevation, even in the absence of rainfall or a storm event, also known as sunny-day flooding.
- **Coastal storms –** flooding due to waves and storm surges - a rise in water levels due to a storm pressure and winds- which can also cause coastal erosion. Coastal storms can also cause high winds and heavy rains.
- **Rainfall Flooding –** lower lying areas, both along waterways and inland, can flood when heavy rain overwhelms drainage infrastructure.
- **Riverine Flooding –** this type of flooding occurs when rivers, streams, lakes reservoirs, or canals overflow due to extreme rainfall or rapid snowmelt.
- **Joint Flooding –** combination of riverine and coastal flooding along tidally influenced rivers.

Why will they get worse?

- Coastal change will cause increases in the height of tides and sea level, average temperatures, heat waves, changes to rain events, and more frequent and severe coastal storms.
- Sea-level rise results in more tidal flooding day-to-day and increasing water levels during a coastal storm.
- Increased precipitation can cause more rainfall and riverine flooding.

Key Findings:

- By 2050, there is a 50% chance that sea-level rise will meet or exceed 1.4 feet and a 17% chance it will exceed 2.1 feet. Those levels increase to 3.3 and 5.1 feet by the end of the century (under a moderate emission scenario).
- Coastal areas will see more daily flooding events from high tides. For example, it is extremely likely that Atlantic City will experience "sunny day flooding" 95 days a year, and a 50% chance it will experience 355 days a year, by 2100 (under a moderate emission scenario).
- Annual precipitation in New Jersey is expected to increase by 4% to 11% by 2050.

Project Area:

- The funded project area is shown on the map on the next page. The map was created by using NJFloodMapper. The layer added to the project area was a five-foot increase in the mean higher high water (MHHW) level to show the possible increase of tides during a flooding event. To see flooding caused by other water levels, please visit njfloodmapper.org.

NJ Floodmapper

*MHHW= Mean Higher High Water

[Home Page | NJFloodMapper]