Floodplain Management and the National Flood Insurance Program

August 2025

Kathy Potter, MS
DE NFIP Coordinator
DNREC Div of Watershed Stewardship,
Shoreline and Waterway Mgmt.

DNREC DIVISION OF WATERSHED STEWARDSHIP

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Overview

- What is the NFIP ?
- Floodplain Management
- Higher Standards
- Flood Insurance and Risk Rating
- Mitigation
- Floodplain Mapping and the Delaware Flood Planning Tool

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

What is the NFIP ?

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

- Established by the National Flood Insurance Act of 1968
- Offers flood insurance to properties with significant flood risk
- Promotes reduction of flood risk through adoption of floodplain management standards
- Managed by FEMA

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

FEMA Flood Zones

Special Flood Hazard Area (SFHA)

SFHA

outside of SFHA

Flood Zone	Description
A	1% annual chance floodplain mapped using approximate methods no elevations provided
AE	1% annual chance floodplain elevations provided
VE	Coastal area subject to wave action (velocity hazard) elevations provided
X (shaded)	Area of moderate hazard 0.2% annual chance floodplain
X (unshaded)	Area of low hazard outside of 0.2% annual chance floodplain

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Floodplain Management Requirements
44 CFR (Code Federal Regulations) 60.3

- Outlines Floodplain management criteria for flood-prone areas.
- Provides minimum standards for participation in the NFIP.
- Communities must adopt and enforce floodplain management regulations that meet the minimum NFIP standards and requirements.
- Communities have the right to adopt higher standards.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

What are Higher Standards?

- The NFIP has established minimum floodplain management requirements for participating communities.
- Communities may exceed the minimum standards by adopting more comprehensive floodplain management regulations.
- Community officials are more knowledgeable of local information or conditions that may require, particularly for human safety, higher standards than the minimum NFIP criteria.
- More restrictive regulatory requirements are encouraged by FEMA and take precedence.
- Communities that exceed the minimum requirements of the NFIP may be eligible to participate in the Community Rating System (CRS).

Life goes back to normal sooner

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

* Adapted from FEMA definition of Higher Standard (https://www.fema.gov/glossary/higher-standard)

Why Incorporate Higher Standards?

- Reduce risk to human life
- Reduce risk of flood damage to personal property.
- Reduce damage to the environment, structures, and the infrastructure.
- Reduce costs for flood insurance premiums, damage claims, repair costs, and lost revenue.
- Reduce Hardship – displaced families, lack of critical services, the community as a whole.

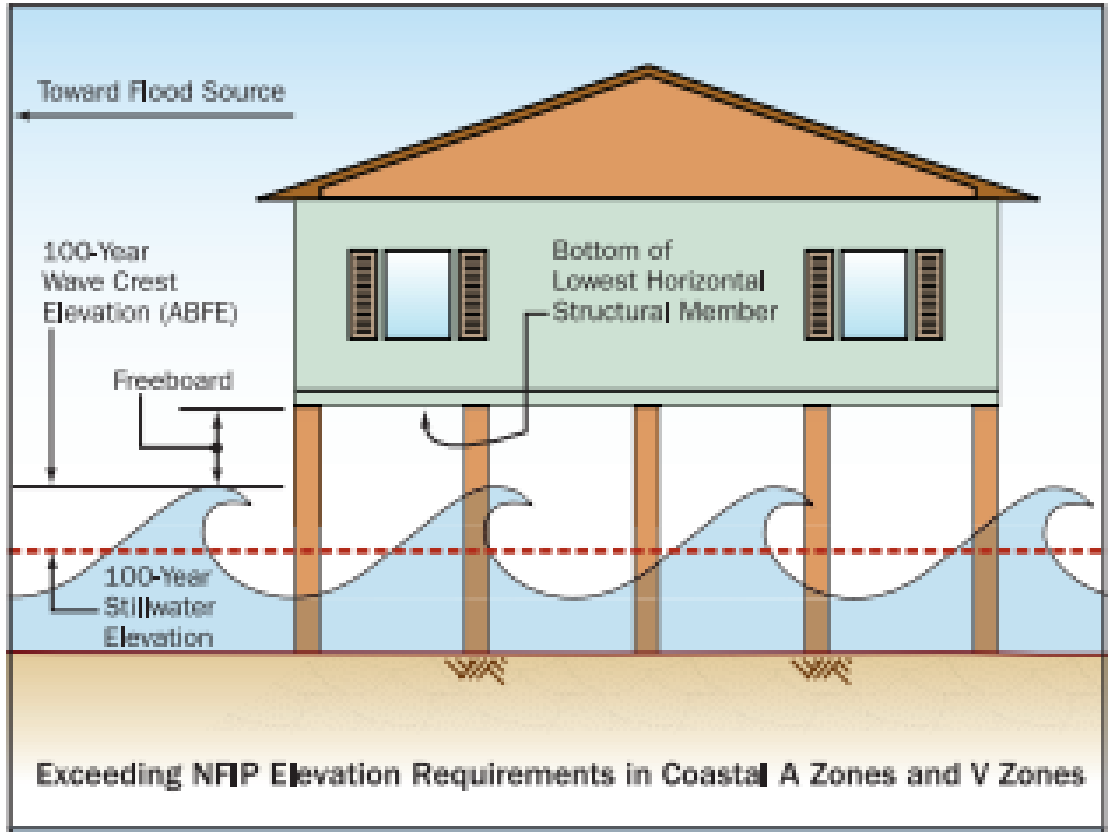
DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Types of Higher Standards

- Freeboard – the most effective way to reduce flood risk to a structure in the floodplain.
- Cumulative Substantial Damage/Substantial Improvement
- Accessibility – designing elevated roadways and ingress/egress access points
- Floodway Setback Requirement – protecting floodway carrying capacity by establishing fringe buffers that prevent encroachment and increase in flood elevation.
- Flood Elevation Rise - Limiting allowable flood elevation rise due to construction activities in the floodplain . (No Rise to 0.5 feet)
- Coastal A Zones - Requiring all new construction in coastal A zones to meet VE zone construction standards.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Freeboard



- Freeboard – the single most effective way to reduce flood risk to a structure in the floodplain.
- Factor of safety usually expressed in feet above the base flood elevation.
- Compensates for the many unknown factors that could contribute to flood heights greater than the flood heights calculated for a particular flood event.
- Extremely cost-effective method for long term savings on flood insurance.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

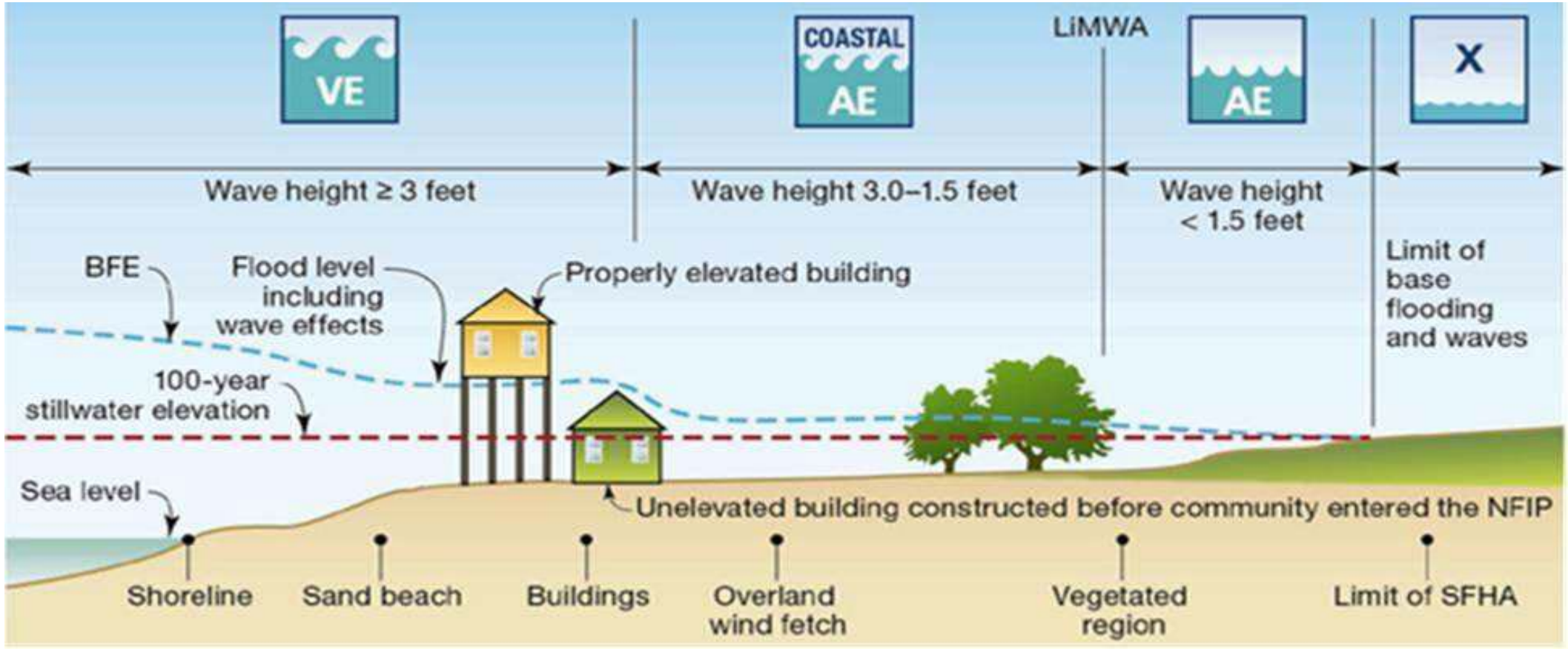
Freeboard

Lowest floor was built 1.5 feet above BFE - no damage

Foundation collapse of dwelling not elevated properly.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Coastal A Zones



Mother Nature isn't going to stop at a line on a map

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

www.fema.gov

Floodplain Management

- Lowers the cost of flood insurance
- Reduces flood damage and need for expensive drainage solutions.
- Creates more resilient communities.
- Decreases recovery time.
- Enforcement of flood regulations helps avoid NFIP probation.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Flood Insurance

NFIP Pricing Approach

As of April 2022, policy risk rating will be based on:

1. Flood frequency
2. Flood sources and types - river overflow, storm surge, coastal erosion and heavy rainfall.
3. Distance to a water source, size of nearest water body.
4. Building characteristics such as First Flood Height.
5. Cost to rebuild your structure.

Policies will represent an individual property's risk, not an average.

FIRMs and Elevation Certificates are no longer used to calculate flood insurance premiums.

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

NFIP Pricing Approach

More than 40% of all NFIP claims come from outside the areas of highest risk.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

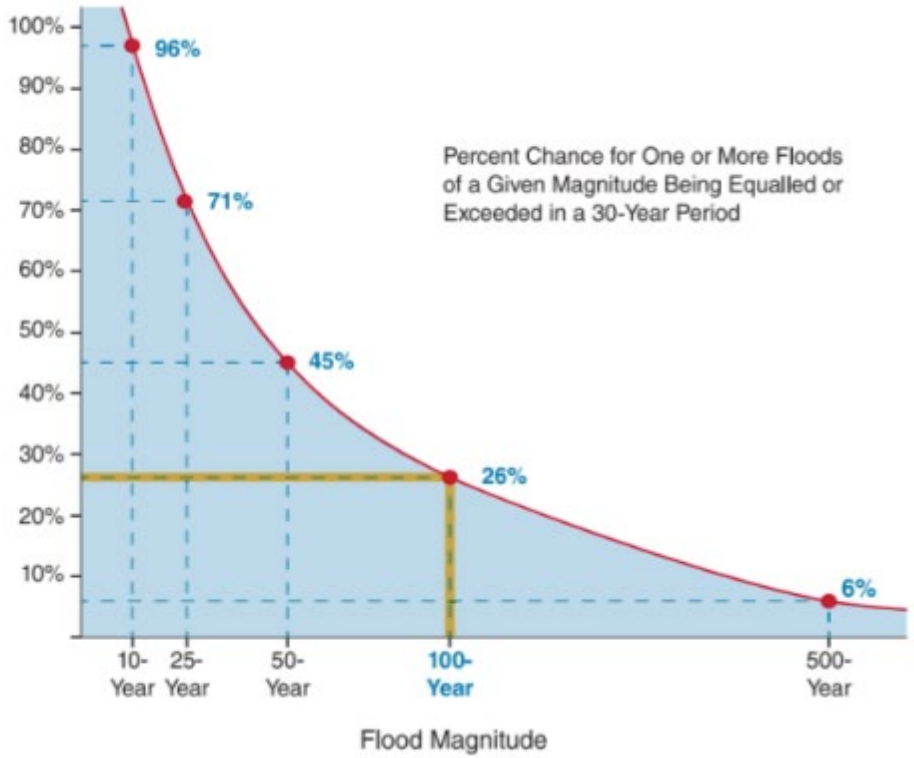
Mitigation

Hazard mitigation is any sustainable action that reduces or eliminates long-term risk to people and property from future disasters.

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

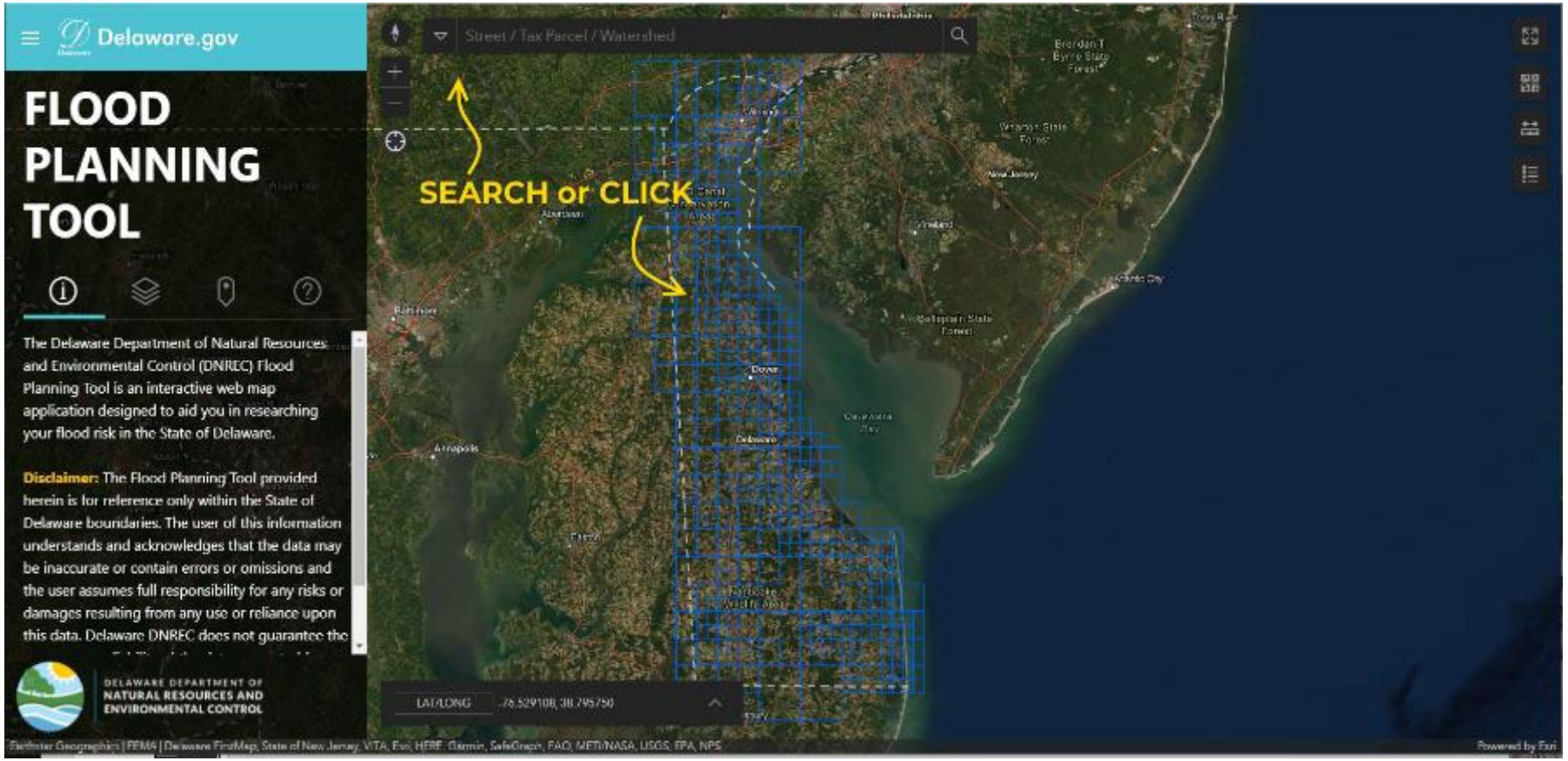
Floodplain Mapping – Know Your Risk

Figure 3-1. This graph shows the relationship between flood recurrence intervals and the probability of an event occurring within a 30-year period.



DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

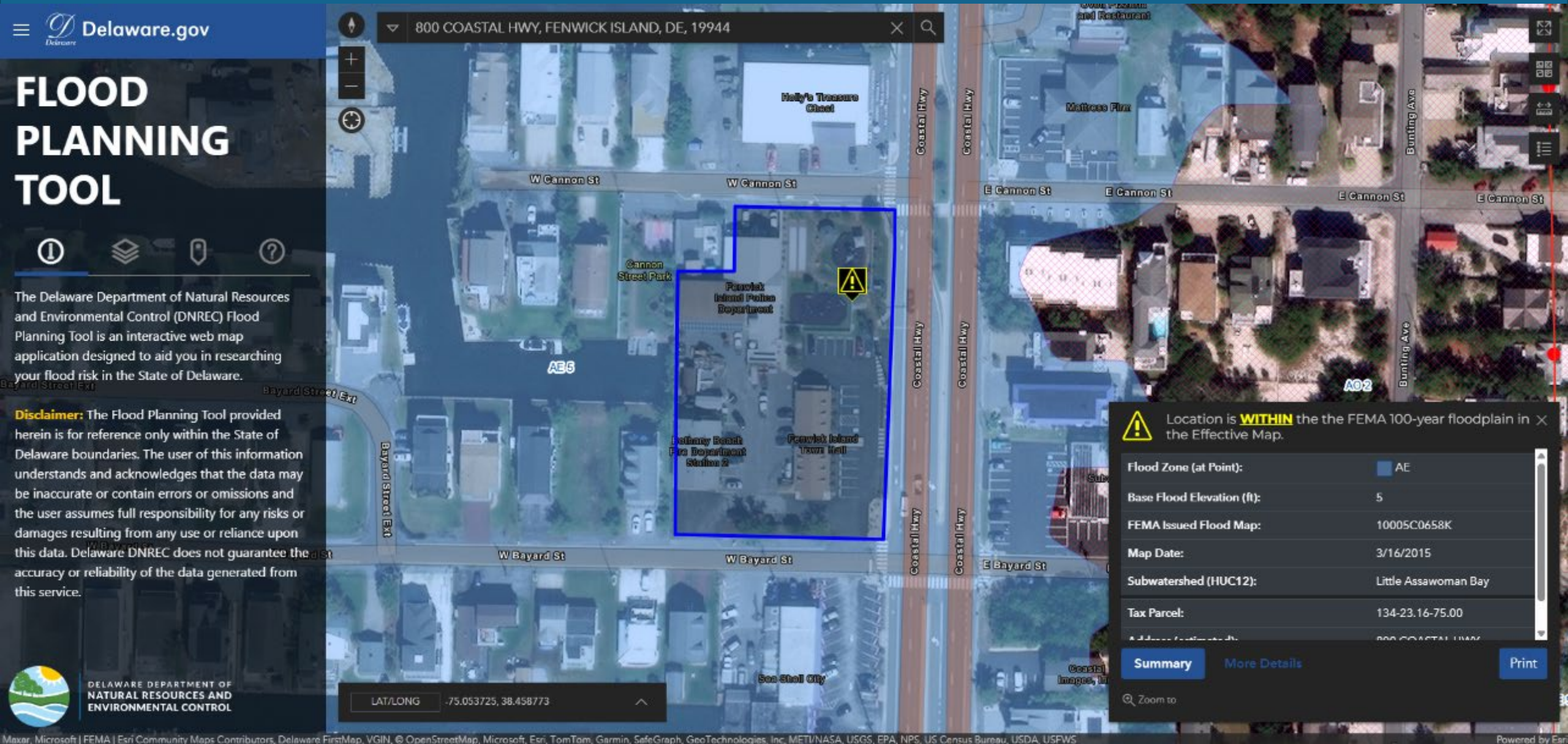
Delaware Flood Planning Tool



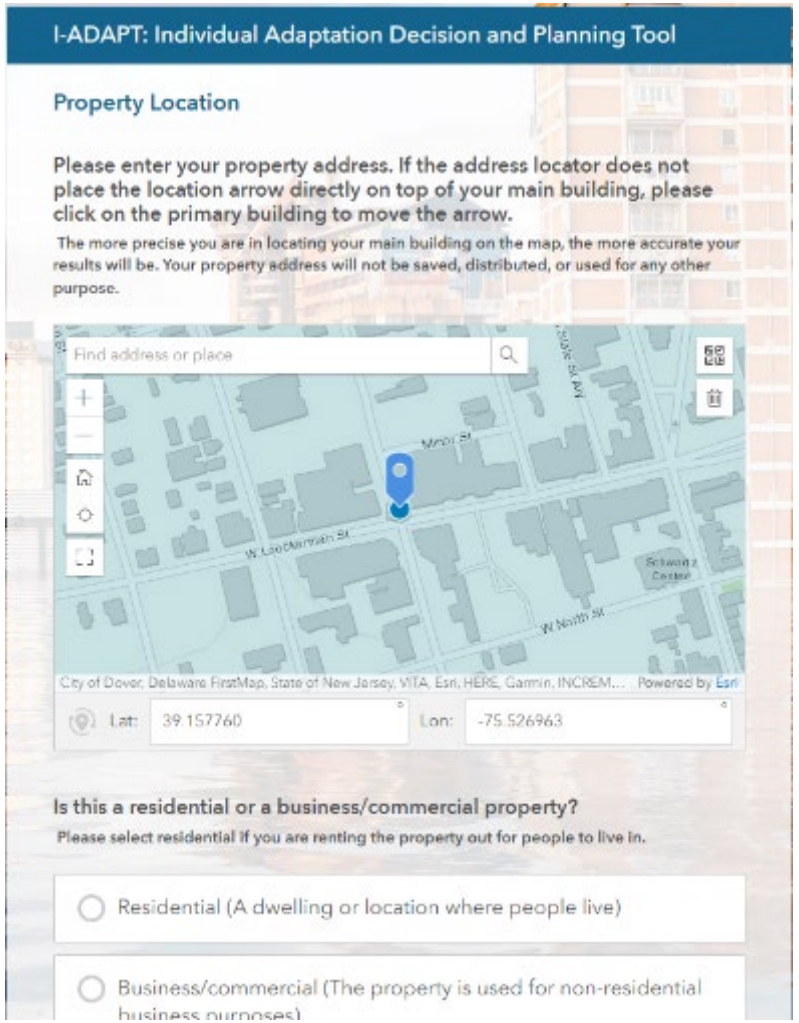
https://floodplanning.dnrec.delaware.gov/

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Delaware Flood Planning Tool



Individual Adaptation Decision and Planning Tool (I-Adapt)



The Individual Adaptation Decision and Planning Tool, I-ADAPT, is designed to help Delaware residents adapt to increased flooding. Users enter information about their property and the tool generates recommendations on how to lower their flood risk.

As Delaware residents experience flooding events more frequently due to climate change induced sea level rise and increased coastal storm activity, they need to know which adaptation strategies could help protect their unique properties from flooding.
More frequent intense storms and flooding are among the impacts of climate change that Delaware is already experiencing. Learn more about climate change in the First State, and how we can minimize harmful greenhouse gas emissions and increase our resiliency, at de.gov/climateplan.

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

https://dnrec.delaware.gov/coastal-programs/i-adapt/

Key Takeaways

- Educate residents on their risk – USE THE TOOLS AVAILABLE TO YOU!
- Encourage Flood Insurance, even outside of the SFHA (Where it Rains It Floods)
- Flood insurance alone is not the solution
- Adopt Higher Standards
- Buildings with floors 18+” above the base flood elevation are far less likely to be damaged
- Discourage construction/fill in the flood fringe
- Locate critical facilities outside of high-risk areas
- Discourage development in the floodplain
- Mitigate known issues

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Important Links

- DE Flood Planning Tool https://floodplanning.dnrec.delaware.gov/
- DNREC I-ADAPT: https://dnrec.delaware.gov/coastal-programs/i-adapt/
- FEMA Flood Insurance Quote Tool https://www.floodsmart.gov/policy-quote/ and https://www.floodsmart.gov/get-insured/buy-a-policy
- Know Your Zone https://preparede.org/know-your-zone/
- *Delaware Homeowners Handbook To Prepare For Natural Hazards, Second Edition August 2019* https://repository.library.noaa.gov/view/noaa/49608
- FEMA's Flood Smart website https://www.floodsmart.gov/
- DE Coastal Flood Monitoring System: https://coastal-flood.udel.edu/

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL

Thank you!

Kathy Potter, MS
DE NFIP Coordinator
DNREC Div of Watershed Stewardship
Shoreline and Waterway Mgmt.
kathy.potter@delaware.gov
302-608-5496 (direct)
302-608-5400 (main)

DNREC DIVISION OF
WATERSHED
STEWARDSHIP

DELAWARE DEPARTMENT OF
NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL