



**Town of North Topsail Beach
Planning Board**

Thursday, July 09, 2026, at 6:00 PM

Town Hall - 2008 Loggerhead Court, North Topsail Beach, NC 28460

(910) 328-1349 | www.northtopsailbeachnc.gov

Fred Fontana - Chair, Lisa Brown - Vice Chair, Teri Ward, Keith Wilkerson, Sam Ferreri, Jan Bellamy-Genee - Alternate, Charles "Rusty" Walker – Alternate

Staff: Deb Hill, MPA, AICP, CFM - Planning Director, Donna Sayre - Clerk to the Planning Board, Brady Golden - Planner

I. CALL TO ORDER

II. ADOPTION OF AGENDA

III. APPROVAL OF MINUTES

[A.](#) Approval of May 14, 2026, Planning Board Minutes

[B.](#) Approval of June 11, 2026, Planning Board Minutes

IV. PUBLIC COMMENT

V. OLD BUSINESS

[A.](#) Floodplain Management (No Action Required)

[B.](#) Flood Damage Prevention Ordinance (No Action Required)

VI. NEW BUSINESS

[A.](#) Higher Standards

VII. DISCUSSION

VIII. ADJOURNMENT

Notice to citizens who wish to speak: As a courtesy to others, a citizen speaking on an agenda item or making a petition is normally limited to three minutes. Persons who are organizing a group presentation and who wish to speak beyond the three minute limit are requested to make prior arrangements through the Planning Director by calling 910-328-1349. If you wish to address the Board this evening, please go to the front right corner of the conference room and sign up with the Recording Secretary. The Board may also change the order in which agenda items are presented.

Attorneys: *If you are representing a person with an interest in a quasi-judicial proceeding on this agenda and believe you may wish to cross examine a witness, please identify yourself as such to the Recording Secretary. For the sake of maintaining an accurate public record all speakers must be prepared to speak into an amplified microphone and must provide their name to the Recording Secretary.*



Town of North Topsail Beach
 Planning Board
 Thursday, May 14, 2026, at 6:00 PM
 Town Hall - 2008 Loggerhead Court, North Topsail Beach, NC 28460
 (910) 328-1349 | www.northtopsailbeachnc.gov

Planning Board: Lisa Brown (acting Chair), Sam Ferreri, Jan Bellamy-Genee - Alternate, Charles "Rusty" Walker – Alternate

Staff: Deb Hill, MPA, AICP, CFM - Planning Director, J. Brady Golden

Absent: Fred Fontana – Chair; Teri Ward; Keith Wilkerson; Donna Sayre - Clerk to the Planning Board; Attorney Charles J "Chip" Payson

CALL TO ORDER

Acting Chair Ms. Lisa Brown called the meeting to order at 6:07 p.m.

ADOPTION OF AGENDA

Mr. Ferreri made a motion to adopt the agenda. Mr. Walker seconded the motion. The motion passed unanimously, 4-0

APPROVAL OF MINUTES

Mr. Walker made a motion to approve the March 12, 2026. Mr. Ferreri seconded the motion. The motion passed unanimously, 4-0.

PUBLIC COMMENT

The Chair called for public comment. Although Mr. Rao had signed up to speak, no public comments were presented.

OLD BUSINESS

There was no old business.

NEW BUSINESS

A. Request for Right-of-Way Encroachment to Construct Private Beach Access

Applicant: Mr. Rayo

Property: 611 Ocean Drive (owner) / proposed access at 614 Ocean Drive, Lot 6, Block 7, Ocean City

Staff Presentation

Planning Director Deb Hill presented the request for a right-of-way encroachment to allow construction of a private beach access crossover.

Key points included:

- The subject lot lies entirely oceanward of the dune system.
- The property is located between the Chestnut Street Public Beach Access (#10) and Thompson Street Public Beach Access (#11).
- The Planning Board's role was limited to making a recommendation to the Board of Aldermen.
- The right-of-way width is approximately 60 feet.
- The landward toe of the dune is approximately 22 feet from the property line.
- The lot is zoned CDR-5 and consists primarily of public trust area.
- The parcel contains no site improvements and is approximately 0.10 acres (4,572 square feet).
- The property was purchased on March 27, 2026.

Staff reviewed applicable CAMA regulations and noted concerns that the submitted concept did not fully demonstrate compliance with:

- Conditions contained in the CAMA Letter of Exemption.
- State administrative code requirements regarding dune access structures and placement.

Staff also discussed:

- The location of nearby public beach accesses.
- Potential impacts to public right-of-way maintenance.
- The shifting nature of the dune system.
- Public safety and public interest considerations.

Applicant Presentation

Mr. Rayo explained that:

- The proposed beach access was intended to provide private access from property owned by him.
- Similar beach access structures exist on neighboring properties.
- The structure would be a simple four-foot-wide stairway and not a deck or large platform.
- He understood the town's concerns regarding dune migration and stated he would accept conditions requiring future removal or modification if necessary.
- The intent was not to alter or damage the dune system.
- He believed prior discussions with CAMA indicated the project could proceed with appropriate approvals.

Board Discussion

Board members discussed several issues, including:

- Lack of detailed plans showing exact encroachment dimensions.
- The relationship between the proposed structure, the right-of-way, and the dune system.
- Compliance with CAMA requirements.

- Public safety concerns are associated with structures located in a public right-of-way.
- Potential interference with Public Works operations and beach maintenance activities.
- The absence of a demonstrated public benefit from granting the encroachment.
- Existing nearby public beach access opportunities.
- Whether neighboring crossovers were installed under earlier regulations or site conditions.

Board members generally expressed concern about establishing a precedent for structures within public rights-of-way and the potential impacts to dune protection efforts.

Motion

Mrs. Jan Bellamy-Genee made a motion to recommend to the Board of Aldermen that they not approve the request. Mr. Charles “Rusty” Walker seconded the motion. The motion to deny passed 4-0.

Recommendation: The Planning Board recommended denial of the request.

VII. DISCUSSION

Staff Updates

Electronic Zoning Map Project

Ms. Hill provided an update regarding adoption of the electronic GIS-based zoning map.

Highlights included:

- The Board of Aldermen continued consideration of the electronic zoning map ordinance until July.
- Additional ordinance and mapping revisions are still necessary.
- Staff plans to return to the Planning Board in June with materials for review and recommendation.
- A public hearing before the Board of Aldermen is anticipated in July.
- Ms. Hill noted the substantial effort undertaken between 2006 and 2010 to verify zoning information and expressed enthusiasm about making the electronic zoning map available to the public.

Election of Officers Discussion

A board member inquired about the process for selecting Planning Board officers.

Ms. Hill explained:

- The Planning Board annually elects its Chair and Vice Chair.
- Due to scheduling and meeting activity, the election had not yet been conducted for 2026.
- Election of officers will be placed on the agenda for the next meeting.

VIII. ADJOURNMENT

The Chair requested a motion to adjourn. Mr. Ferreri made a motion to adjourn, Seconded by Mr. Walker.

Meeting adjourned following conclusion of business at 6:46 pm.



**Town of North Topsail Beach
Planning Board Regular Meeting**

**Thursday, June 11, 2026, at 6:00 PM
Town Hall - 2008 Loggerhead Court, North Topsail Beach, NC 28460**

(910) 328-1349 | www.northtopsailbeachnc.gov

Present: Fred Fontana - Chair, Lisa Brown, Teri Ward, Jan Bellamy-Genée - Alternate, Charles "Rusty" Walker – Alternate

Absent: Keith Wilkerson, Sam Ferreri

Staff Present: Deb Hill – Planning Director, Brady Golden – Planner, Donna Sayre - Clerk

CALL TO ORDER

Chair Fontana called the meeting to order at 6:02 p.m.

ADOPTION OF AGENDA

Ms. Brown made a motion to adopt the agenda. Ms. Ward seconded the motion. The motion passed unanimously.

APPROVAL OF MINUTES

No minutes were presented for approval.

PUBLIC COMMENT

There were no public sign-ups.

OLD BUSINESS

- A. Amendment to Article 3 Zoning of the Unified Development Ordinance to Establish the Official Zoning Map in Electronic GIS Geodatabase Format.

Planning Director Deb Hill presented the staff report by stating that converting a paper zoning map into an officially adopted electronic zoning geodatabase (Onslow County GIS-based map).

Ms. Hill stated that the proposed ordinance would amend the Unified Development Ordinance to designate the Town's official zoning map in electronic GIS geodatabase format using the Onslow County GIS-based map as the Town's zoning map of record. North Carolina law allows zoning maps be maintained in digital format if approved by the local government and kept available for public inspection. This amendment is intended to modernize map administration, improve accessibility, and clarify that archived paper maps be retained only for historical reference.

Ms. Hill also stated that the draft also identifies the Planning Director as the zoning map administrator, provides for maintenance of the authoritative electronic map in coordination with Onslow County GIS, establishes how adopted map amendments will be incorporated, and states that the Board of Aldermen retains sole legislative authority over zoning designations and amendments.

Ms. Hill provided the Board with the proposed ordinance language. She stated that the Board of Alderman have a meeting scheduled July 1, 2026, which would allow this ordinance to become effective July 1, 2026.

Ms. Hill stated that she contacted the Onslow County GIS Director to inquire as to whether any other towns had adopted the digital format to which they responded negatively. The Onslow County GIS Director stated that he contacted the Director of Land Use Management to inquire as to whether he or she was aware as to an agreement between any Town and the GIS Department for maintaining the digital map. The GIS Director was told that there is not one presently that they are aware of but feels it is a good idea to have a clearly laid out agreement in case questions arise. Ms. Hill stated since there is not an agreement draft to be used, that the Board recommends that the Town's attorneys draft an agreement on behalf of the Town.

Ms. Hill stated that the proposed text amendment is reasonable and in the public interest because it improves the administration and accessibility of the zoning map without changing underlying zoning districts through this ordinance. It is consistent with the Town's adopted land use policies and with North Carolina General Statutes permitting zoning maps in digital format.

Chair Fontana asked if the Board members had any questions for Ms. Hill and no questions were presented.

Ms. Ward made a motion to recommend to the Board of Alderman to amend the ordinance to establish the official zoning map in Electronic GIS Geodatabase format. Ms. Brown seconded the motion. The motion passed unanimously.

NEW BUSINESS

A. Article 7 Flood Damage Prevention

Planning Director Hill stated that the 2206 changes were made available by North Carolina Emergency Management Department of Public Safety and once received by the Town, changes to made to Article 7.

Ms. Hill stated that the items highlighted in green are mandatory changes while the blue text was optional. She stated that some of the highlighted blue texts have already been adopted by the Town. Ms. Hill then stated that the only optional change is that the Town is proposing is the non-conversion agreement. She then clarified the definition of a non-conversion agreement.

Ms. Hill stated that conversions are currently treated as violations. She informed the Board that the Town is basically managing the situation in the same way now but without the additional benefits tied to the CRS points, which are substantial.

Ms. Ward stated that she one question that was not answered yet. She stated her remaining question refers to the placement of recreational vehicles in a VE or Coastal A zone. Ms. Ward asked how that would affect the travel trailer parks within the Town of North Topsail Beach such as Rogers Bay. Ms. Hill stated that Rogers Bay is an existing travel trailer park. Ms. Ward then asked if it would only pertain to new travel trailers and not existing. Ms. Hill read the wording and stated that the language is defined as no new travel trailers can be placed in Rogers Bay. The trailers that exist now would be grandfathered in but once these ordinance changes were adopted, no new travel trailers would be allowed.

Chair Fontana asked if a travel trailer owner is seasonal with bringing travel trailer here for the summer season but taking it off the island at the end of summer.

Planner Brady Golden stated that he and Deb would speak with the with the NFIP Planner who is reviewing the document for clarification.

Ms. Hill made note of a correction that needed to be made in Section 7.05.B4.F. She stated that all text pertaining to non-conversion agreement should be in blue.

Ms. Brown stated a correction needed to be made in the fine section. She stated that the fine of one hundred dollar per day needs to be written in all sections.

Ms. Brown made a motion that the Planning Board recommends to the Board of Alderman adoption of the amendments to Article 7, based on the language that is required by NFIP along with any changes or clarifications required after the review by the NFIP Planner. Ms. Ward seconded the motion. The motion passed unanimously.

Ms. Brown made a motion to amend her motion to include adopting Section 11, Definition. Ms. Ward seconded the motion. The motion passed unanimously.

DISCUSSION

Ms. Hill stated that FEMA approved the Hazard Mitigation Plan on April 21, 2026. She stated that the Town has already adopted it as part of the draft.

ADJOURNMENT

Ms. Brown made a motion to adjourn. Ms. Walker seconded the motion. The motion passed unanimously.

The Planning Board meeting adjourned at 6:52 p.m.

APPROVED

This ____ day of _____, 2026

Fred Fontana, Chair

CERTIFIED

This ____ day of _____, 2026

Donna Sayre, Clerk to the Planning Board


Floodplain Management



FEMA



North Carolina Department of
PUBLIC SAFETY

Town of 
NORTH TOPSAIL BEACH

FOUNDED IN 1990 *Nature's Tranquil Beauty* NORTH CAROLINA

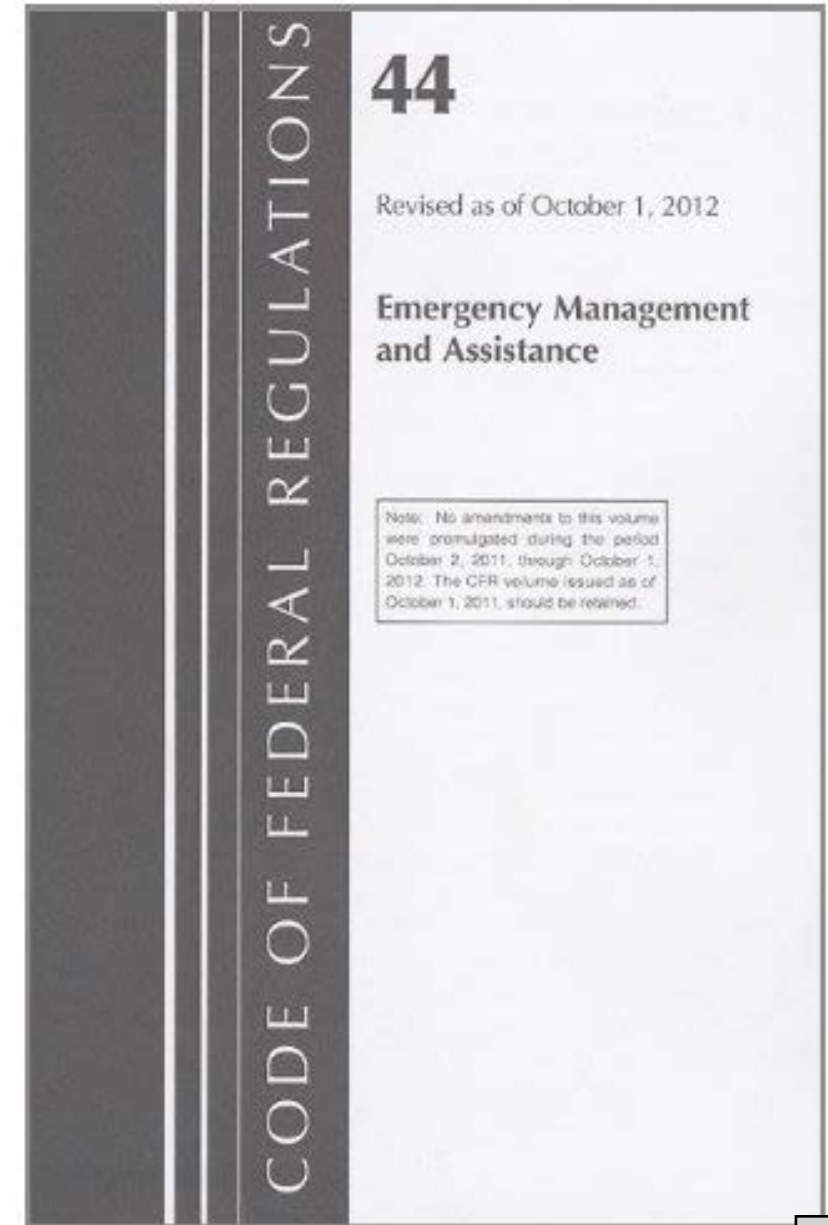
Purpose of the National Flood Insurance Program (NFIP)

The National Flood Insurance Program (NFIP) was created in 1968 by Congress to:

- Provide flood insurance coverage;
- Reduce flood damage through floodplain management;
- Share the risk of flood losses; and
- Support recovery and resilience.

The Code of Federal Regulations (CFR) is the official codification of the general and permanent rules issued by U.S. federal agencies and departments. 44 CFR 60.3 establishes minimum floodplain management standards for communities participating in the National Flood Insurance Program, ensuring development in flood-prone areas is reasonably safe from flooding.

There are more than 22,000 NFIP-participating communities.



Benefits of NFIP Participation

- NFIP flood insurance
- Safer, damage-resistant development
- Grants and loans
- Faster recovery with more financial support



FEMA



Why Flood Insurance Is Important

Disaster assistance rarely covers everything, creating debt.

Flood Insurance:

- Average claim payment: \$75,000
- Claims paid for all flooding in all flood zones.
- No payback required.
- Policies not canceled for repeat losses.
- Coverage available for buildings and contents

Disaster Assistance:

- Average payout: \$4,000
- Requires Presidential Disaster Declaration
- Disaster loans must be repaid with interest
- Individual disaster assistance may only be accessible if many structures are significantly damaged.

National NFIP Claims

Claims Paid by NFIP 1980-2025

\$88,876,717,541.40

Number of Claims Paid

2,000,656

Onslow County NFIP Claims

Claims Paid by NFIP 1980-2025

\$70,654,928.34

Number of Claims Paid

3,089

Federal Responsibilities in the NFIP

FEMA has Federal responsibility. FEMA and the Federal Government:

- Make flood hazard maps and products to help communities understand flood risk and regulate floodplain development.
- Provide mitigation planning and technical assistance.
- Set the minimum floodplain development standards for local communities.
- Offer access to Federal flood insurance.
- Distribute Federal funding.
- Ensure communities enforce their NFIP programs.



National Flood Insurance Program (NFIP)

Floodplain Management Requirements

A Study Guide and Desk Reference for Local Officials -

FEMA 480





Federal Responsibilities in the NFIP (cont.)

- Provide mitigation planning and technical assistance.

The Disaster Mitigation Act of 2000 requires that after November 1, 2004, communities must have a FEMA-approved mitigation plan in place to receive HMGP funding or funding for projects under the new Pre-Disaster Mitigation Program.

This plan is updated every 5 years. On March 4, 2026, the Board of Aldermen approved the Resolution to Adopt the Southeastern North Carolina Regional Hazard Mitigation Plan and the plan was approved by FEMA on April 21, 2026.



Southeastern North Carolina Regional Hazard Mitigation Plan

Submitted by **ESP Associates, Inc.**
DRAFT - February 2026

The President's Council to Assess the Federal Emergency Management Agency

The recommendations reflect a broader policy direction that emphasizes a greater role for states and local communities in disaster management.

Even before any legislation moves forward, the report's direction carries important signals for **LOCAL GOVERNMENT** preparedness.



Final Report

The President's Council to Assess the Federal
Emergency Management Agency

May 7, 2026

State Responsibilities in the NFIP

Support NFIP communities by:

- Providing enabling land use authority
- Setting higher standards
- Providing technical assistance
- Managing their own mapping program through a cooperative agreement with FEMA (optional)
- Supporting FEMA in monitoring community NFIP compliance



Local Community Responsibilities in the NFIP

The Town is responsible for effective implementation of the NFIP. by:

- Adopting local floodplain management ordinances that meet or exceed State laws and NFIP minimum development standards
- Enforcing local flood ordinances consistently
- Completing SD/SI assessments and determinations
- Promoting proactive floodplain management
- Evaluating and mitigating flood risk by
 - Adopting higher standards; and
 - Working with FEMA to ensure accurate, updated flood hazard information



Effects of Suspension or Non-Participation in the NFIP

The National Flood Insurance Program (NFIP) is a voluntary program. A community has the right to choose whether to participate in the NFIP and regulate development within flood-prone areas designated by FEMA. However, the Federal government will not support development in these hazardous areas through Federal programs if a community chooses not to participate. Federal law imposes certain restrictions on Federal or federally-assisted financing within the flood hazard areas of non-participating communities. State restrictions on hazard mitigation grants and disaster assistance also apply.

- **Flood insurance:** Not available in non-participating NFIP communities; existing policies cannot be renewed and are cancelled after the policy term.
- **Federally-backed mortgages:** Not available for properties in SFHAs (e.g., FHA, VA, FmHA).
- **Federal/state funding:** No federal grants, loans, or mortgage insurance for SFHA properties, and no state disaster assistance after flood events.
- **Disaster assistance:** No federal disaster aid for repair or rebuilding of insurable SFHA buildings after flood-related presidential disasters.
- **Conventional loans:** Allowed in SFHAs at lender discretion but require disclosure that the property is in a flood hazard area and may be ineligible for federal disaster assistance.
- **Implementation:** FIRM rules and NC Building/Residential Code flood standards apply in SFHAs regardless of NFIP participation; ignoring them can make properties difficult to insure or finance.
- **Liability:** Non-participation or weak regulation can expose local governments to liability due to increased risk, lack of insurance access, and failure to reduce known flood hazards.
- **Reapplication:** If development worsens flood risk, the community must correct the hazard to the maximum extent possible before NFIP eligibility can be restored.

Benefits of Floodplain Management

- Promotes economic growth
- Increases community resilience
- Improves water quality
- Protects wildlife habitats
- Maintains natural flood storage



SOUND FLOODPLAIN MANAGEMENT STRATEGIES:



SAVE LIVES AND PROTECT PROPERTY



REDUCE RECOVERY TIME AND COSTS



PROTECT VALUABLE ECONOMIC AND NATURAL RESOURCES



REDUCE THE COST OF FLOOD INSURANCE

Flood Damage Prevention Ordinances

- Also called flood or floodplain ordinances or local floodplain regulations
- Authority granted by State statutes
- Adopted and enforced by local communities
- The Town's Flood Prevention and Damage Ordinance is codified in Article 7 of its Unified Development Ordinance.
- Help keep the community safe from flooding, protect public infrastructure, and reduce the cost of recovery

2021

Section V, Item A.

UDO

Unified Development Ordinance

The UDO is an ordinance that addresses contemporary development and zoning practices and written to be easily understood by administrators, the public and the development community. The UDO supports goals and policies expressed in the 2021 CAMA Land Use Plan and implements related action items. The UDO addresses all elements of the Town's zoning and subdivision ordinance, in addition to other regulations and applicable policies.

Town of North Topsail Beach
7/1/2021

21

The graphic features a dark grey background with a grid of blue and grey squares on the left. A red box at the top left contains the year '2021'. The title 'UDO' is in large white letters, with 'Unified Development Ordinance' below it. A paragraph of text describes the ordinance. A seal of the Town of North Topsail Beach is shown, featuring a bird, a ship, and the text 'COPSAIL BEACH' and 'FOUNDED 1930'. At the bottom right, the town's name and date are written in a script font, next to a small red and grey logo.

Responsibilities of the Floodplain Administrator (FPA)

Floodplain Administrators:

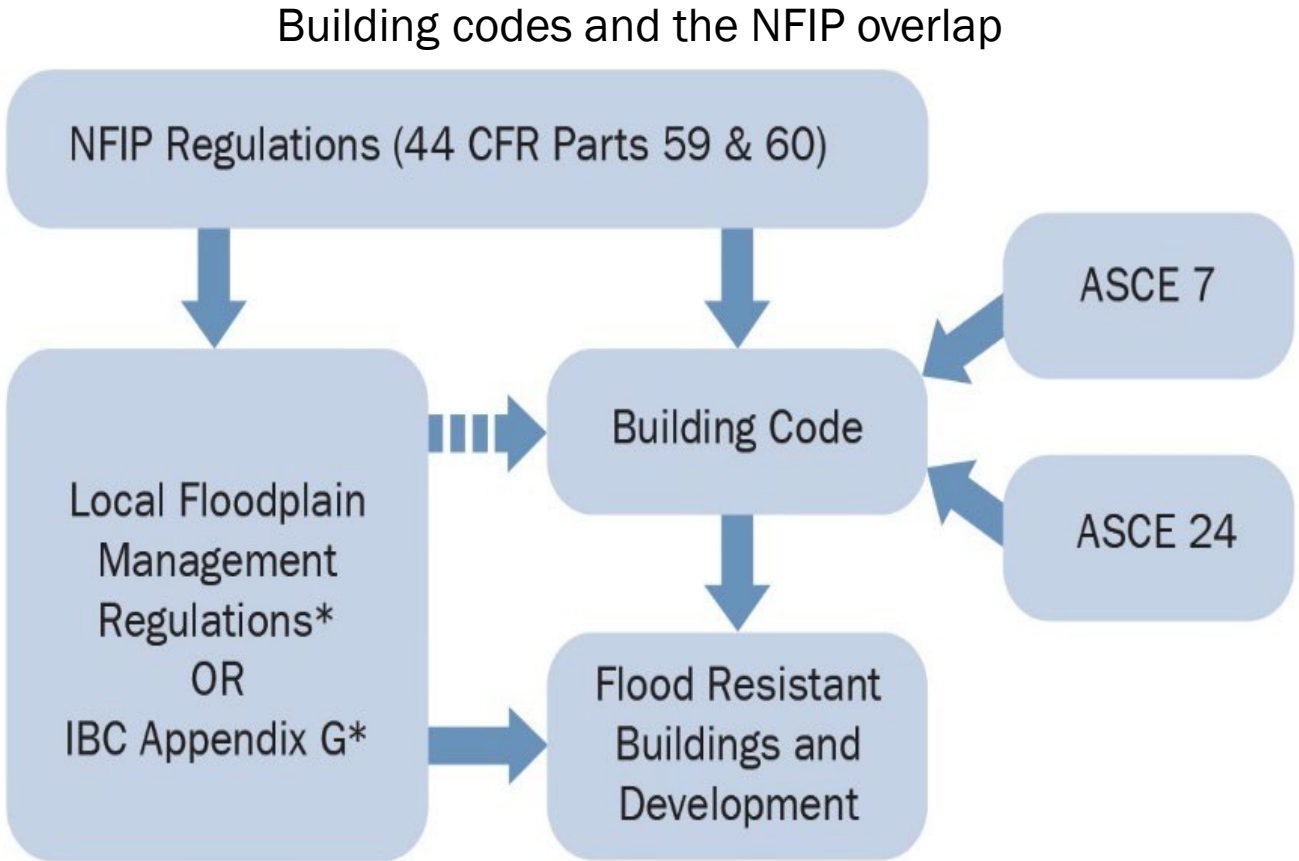
- Review proposed floodplain development for compliance with local floodplain regulations.
- Review and issue or deny permits for floodplain development
- Inspect development to ensure compliance
- Keep adequate records of development in floodplains in perpetuity
- Coordinate with other community departments to ensure community projects comply with floodplain regulations

Development: Any human-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.



Core Objectives of Building Codes and Floodplain Management

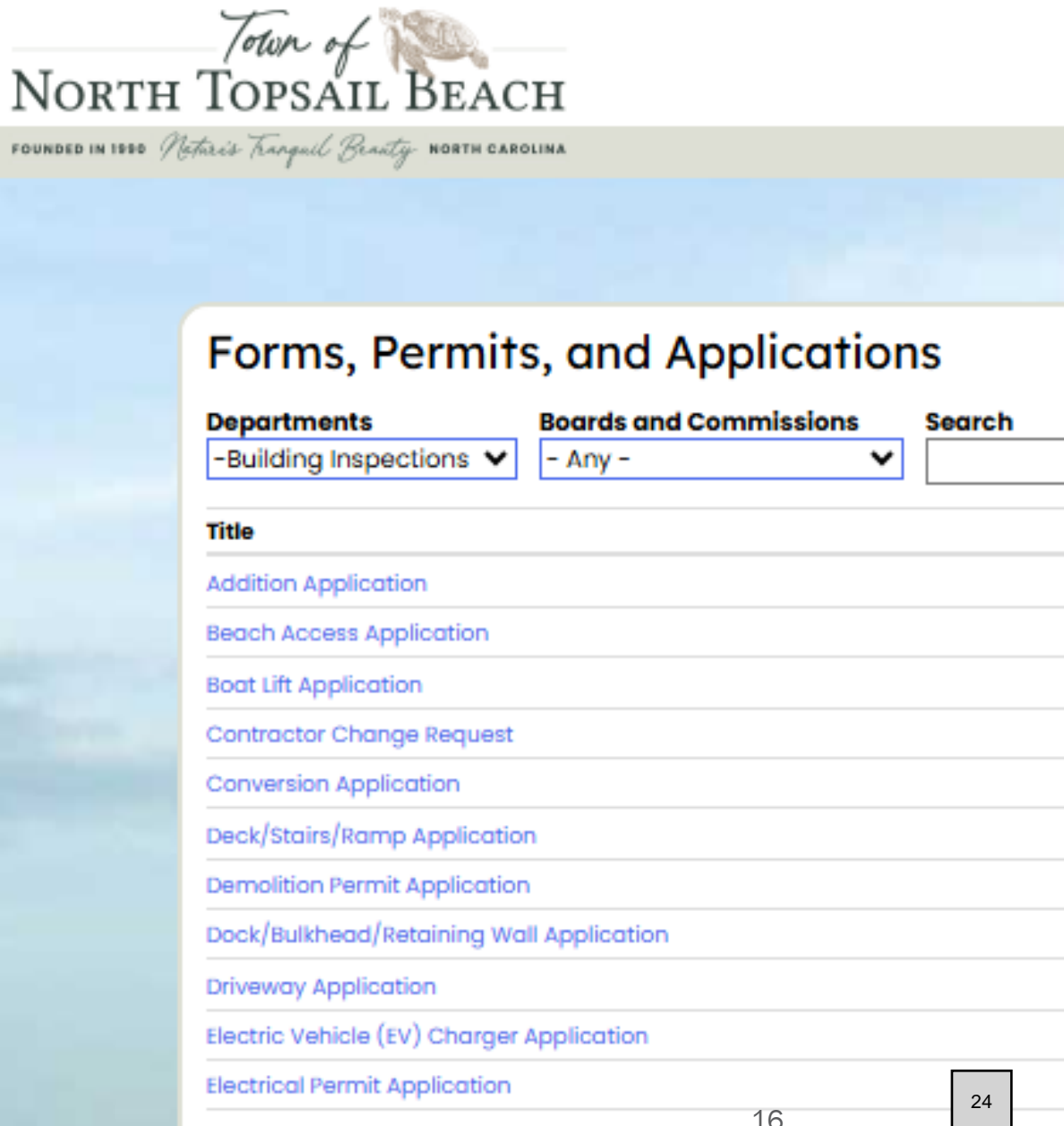
- Protect Lives and Property
- Ensure Safety and Health
- Promote Accessibility and Inclusivity
- Support Disaster Resilience
- Provide Uniform Standards
- Protect the Environment



* NFIP-consistent administrative provisions, community-specific adoption of Flood Insurance Studies and maps, and technical requirements for development outside the scope of the building code (and higher standards, in some communities).

Compliance Begins by Submitting a Permit Application

- Permits for development are required by NFIP, NC Building Codes and the Town’s UDO to ensure safety, legal compliance, and proper oversight of construction, renovations, and other regulated activities.
- In addition to reviewing the application for code compliance, the FPA is responsible for conducting an SD/SI determination.
- If the cost of improvement is equal to or higher than 50% of market value, the structure must meet the requirements for new construction.



CRS Program with Community Flood Insurance Discounts

- Communities can get CRS credits for applying higher standards, mitigation actions, and outreach activities.
- CRS credits lead to flood insurance premiums savings.
- All NFIP-insured structures receive discounts.
- ~40% of flood insurance claims come from structures not in mapped high-risk flood areas.



Benefits of Higher Standards

- Less damage from flooding and faster recovery
- More affordable flood insurance
- Safer places to live
- Economic growth

An infographic with a dark blue background. On the right side, there is a vertical yellow ruler with black markings. The number "1" is printed at the bottom of the ruler, indicating one inch. To the left of the ruler, the text "Just 1 inch of water can cause \$25,000 of damage to your home." is written in white and yellow. At the bottom of the infographic, there are logos for FEMA (U.S. Department of Homeland Security) and the National Flood Insurance Program (NFIIP), which includes an icon of three houses. A light blue wavy line at the bottom of the infographic represents water.

Just 1 inch of water can cause \$25,000 of damage to your home.

FEMA NATIONAL FLOOD INSURANCE PROGRAM

Common Higher Standards

Freeboard



Fill restrictions



No-rise requirements for entire floodplain



Open space preservation



Maintaining CRS Participation

- The Town must recertify that we are doing our credited activities.
- We get audited every year and recertified every three or five years.

Section V, Item A.



OMB No. 1660-0022
Expires: March 31, 2020

National Flood Insurance Program
Community Rating System

Coordinator's Manual

FIA-15/2017



FEMA

CRS Classes and Their Discounts

- CRS rates communities from 9 to 1.
- Each CRS class earns an additional 5% discount on flood insurance premiums.
- Class 1 communities receive the highest discount.

CRS Class	Discount Percentage
9	5%
8	10%
7	15%
6	20%
5	25%
4	30%
3	35%
2	40%
1	45%

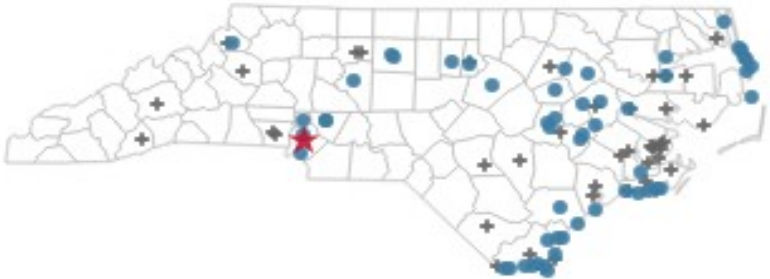
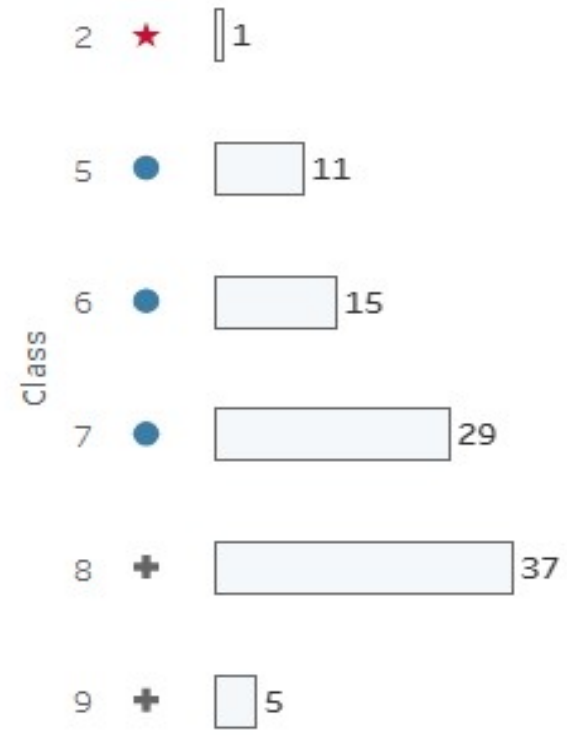
North Carolina CRS Participation

North Topsail Beach

Communities by Class

COMMUNITIES

Show as table



Communities	Policies in Force	Premiums
97	69.8K	\$51.2M



Class:	5
Community:	NORTH TOPSAIL BEACH
PIF:	1,051
Premiums:	\$685,931



AVG COST OF NFIP POLICY IN NTB \$652.64 AS OF 10/24/2024

Source: FEMA at www.fema.gov/floodplain-management/community-rating-system

Date: October 2024



FEMA

Town of North Topsail Beach

successfully participates in the

National Flood Insurance Program Community Rating System

The community has undertaken a series of meaningful activities to protect its citizens from losses caused by flooding and has significantly exceeded the requirements for NFIP participation and effective floodplain management.



May 1, 2017

Roy E. Wright
Deputy Associate Administrator
Federal Emergency Management Agency
National Flood Insurance Program Administration

Questions?

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bgolden@northtopsailbeachnc.gov



FEMA



Final Report

The President's Council to Assess the Federal Emergency Management Agency

May 7, 2026

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Listening to the Nation: Stakeholder and Public Feedback

In order to meet the mandate established by the President, for over a year the Council was deliberate in its actions, devoting significant time to engage across jurisdictional levels and with various entities to hear about their experiences with FEMA during and after disasters. The Council solicited input from a broad range of stakeholders, including Americans affected by natural and man-made disasters; the research community; private sector; state, local, tribal, and territorial (SLTT) governments; foundations; faith-based and nonprofit organizations. In total, the Council received and reviewed (1) 11,708 public submissions, (2) a nationwide survey of SLTT agencies and non-government partners yielding 1,387 responses, (3) direct engagement with 50 states and territories, (4) listening sessions in 13 cities across the nation, and (5) four listening sessions with tribal nations.

The feedback received underscores widespread support for FEMA reform aimed at addressing inefficiencies, reducing bureaucratic barriers, and enhancing support for disaster survivors and local governments. Stakeholders consistently identified key priorities, including the need to streamline processes, decentralize decision-making, improve the access to mitigation and preparedness initiatives, and ensure fairness in disaster response and recovery efforts. Participants emphasized the importance of implementing reforms gradually, allowing for a phased approach that strengthens partnerships among federal, state, tribal, and local entities while minimizing disruptions.

This robust engagement process has provided the Council with invaluable insights into the challenges and opportunities facing FEMA's operations. The feedback serves as a cornerstone for shaping the Council's recommendations, ensuring that potential reforms are informed by the lived experiences of those directly impacted by disasters and those responsible for managing emergency response and recovery efforts. By integrating this input into its recommendations, the Council aims to create a more efficient and responsive FEMA that is better equipped to meet the needs of communities nationwide. The inclusion of public feedback reflects the Council's commitment to fostering collaboration and transparency in the pursuit of meaningful reform.

Guiding Principles and Key Recommendations

At the direction of President Donald J. Trump, the FEMA Review Council (the Council) conducted a full-scale agency review in accordance with Executive Order 14180 and developed a comprehensive set of recommendations for overhauling the federal government's approach before, during, and after disasters. This executive summary provides the President with the Council's summarized recommendations, to include guiding principles for reform, recommendations for improvements, and proposed structural changes to promote the national interest and enable national resilience. After the Council fully evaluated the country's history of disaster response, reviewed feedback from more than 13,000 individuals impacted by disasters, and met with stakeholders involved in emergency management, the Council agreed on this key doctrine to guide the Council's recommendations: *Disaster response should be locally executed, state or tribally managed, and federally supported.*

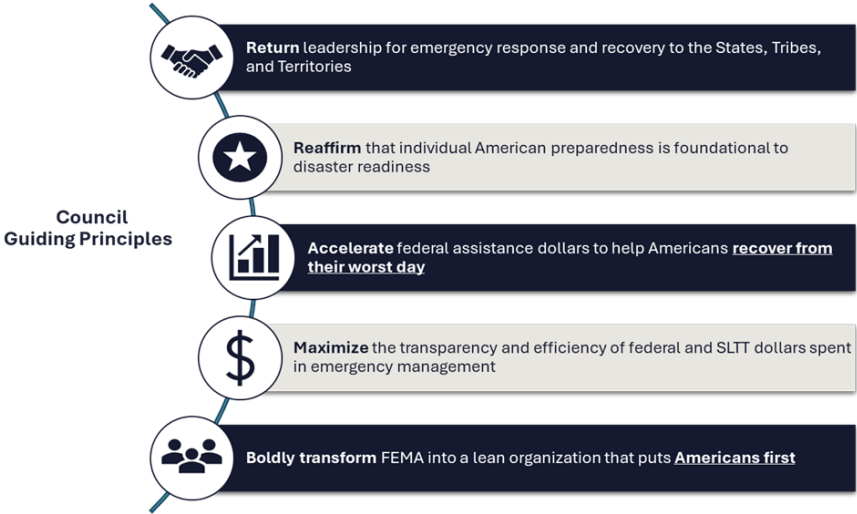
Disaster response is complicated and increasingly expensive. With taxpayers bearing the burden of funding emergency management in the United States, it is the responsibility of every

American to embrace their individual responsibility to lessen this burden by being prepared for disasters. Prudent preparation through planning, mitigation, insurance, capabilities, and seeking a fundamental understanding of their role in a disaster is vital to contributing to national preparedness. Active preparation and knowledge directly contribute to the effectiveness of local execution in any emergency or disaster. As our nation returns ownership of emergency management back to local communities and their states, tribes, and territories, we encourage every American to review their insurance policies and personal disaster plans as well as engaging with their local community leaders to be better prepared when disaster strikes.

States and local governments are the foundation of a successful emergency management system. As the immediate first responders, local public safety, infrastructure, and human service personnel require adequate training and equipment to manage all incidents effectively. States and local governments are on the frontline of recovery efforts following a disaster incident, working with states to reopen critical public and economic infrastructure. Beyond immediate response, local governments are essential for proactive community safety through proper land-use planning and by enforcing building codes to harden critical infrastructure against identified local risks. During a crisis, the visible leadership of state and local officials—demonstrated through decisive action and transparent public communication before, during, and after a disaster—is paramount for public trust and effective coordination. It is imperative that the Council’s reforms are implemented in a phased approach manner over two to three years. This phased approach ensures States, Locals, Tribes, and Territories are able to prepare their fiscal and physical capabilities for the new transformed agency.

When local resources are overwhelmed, a robust system of state-coordinated mutual aid compacts becomes critical to ensuring communities receive necessary support and do not fail. This tiered support system, which can scale up to federal assistance, when necessary, guarantees a resilient national response. Ultimately, strengthening state and local government capability in disaster preparedness, response, recovery, and mitigation is a direct and essential investment in national safety and community resilience.

After an exhaustive national review of the nation’s ability to prepare for, respond to, and recover from natural disasters, the Council developed five guiding principles for reform:



The Council leveraged these five guiding principles to develop the following ten key recommendations.

1. Equip States, Local governments, Tribes, and Territories to Lead Disaster Response with the Federal Government in a Supporting Role

The National Preparedness Goal aims to create a secure and resilient nation that can handle various threats and hazards.¹ As it stands today, most of the public’s first instinct during a major natural disaster is to rely on or expect the federal government to complete a whole-of-government national response irrespective of whether that incident necessitates *any* federal response. However, contrary to that misconception, it is the SLTT governments that have always had the primary response role during a disaster. Reorienting the National Preparedness System to empower SLTT governments to manage the mitigation, response, and recovery of disasters effectively returns the federal role from *leading* to *supporting*.

To achieve this, the Council recommends addressing both the lack of a national standard for initial response and recovery as well as addressing the limited ability to share and coordinate resources. The transformed agency must reinvigorate a national system to ensure SLTT, private, and non-profit capabilities can better integrate during disasters. Additionally, the Council recognizes the importance of Non-Disaster Grants, such as the Emergency Management Performance Grant (EMPG), that ensure our nation’s security and recommends these programs be retained within the future agency. The Council encourages exploring how to leverage federal savings from other efficiencies gained to create a potential one-time EMPG increase to better facilitate the return of responsibilities to States, Tribes and Territories.

To address a lack of a national standard for incident response and recovery:

- 1. Encourage adoption of national capability standards at SLTT level
- 2. Incentivize building scalable training resources at SLTT level
- 3. Professionalize emergency management to promote professional development
- 4. Focus on catastrophic planning and promote a common approach to exercise standards

To address the limited ability to share and coordinate resources:

- 1. Revitalize and promote the use of the Unified Resource Catalog of all Federal and SLTT-typed capabilities and resources
- 2. Refocus SLTT grant investment on mission-ready teams, capabilities, and infrastructure that meet national standards (i.e. State Search and Rescue, Swift Water Rescue, and other teams as identified in National Resource Hub) in lieu of funding specialty equipment
- 3. Enhance and improve upon the existing credentialing framework under the National Incident Management System (NIMS) and National Qualification System (NQS)
- 4. Promote the integration of additional partners, to include volunteer and faith-based organizations

¹ Federal Emergency Management Agency, “National Preparedness Goal,” <https://www.fema.gov/emergency-managers/national-preparedness/goal>

- 5. Incentivize investments in interoperable systems for communication and data sharing to improve real-time coordination

2. Enhance Critical Federal Programs & Resources to Support Communities

The federal government must maintain the ability to provide federal support resources through a single federal entity, so that state and local officials can quickly and efficiently leverage the full force of the federal government when required. Although state and local authorities have the primary responsibility for responding to a wide range of hazards and protecting their citizens, the federal government should retain the responsibility to support these efforts when required. FEMA's current mission exists at the intersection of emergency management and national security. An essential component of this is FEMA's authority to coordinate other federal agencies in support of SLTT partners. These include federal capabilities and programs such as Urban Search and Rescue Task Forces, National Disaster Medical System, Radiological Emergency Preparedness, and public communication tools like the Integrated Public Alert and Warning System and the National Alert and Warning System.

Additionally, the agency maintains an arsenal of dual-use capabilities, regional offices, incident management teams, prepositioned logistic systems or programs, and the Disaster Relief Fund to ensure the American people are resilient in the face of any threat, whether natural or man-made. Therefore, sustaining and resourcing this mission in the transformed agency is vital to public safety, economic stability, and national resilience.

3. Realign the Criteria for Federal Disaster Assistance

Federal assistance should only be reserved for truly significant events that exceed SLTT capacity and capability. Therefore, common criteria should be established on how to evaluate when this occurs. The current disaster declarations process for federal assistance does not adequately account for SLTT capacity and, therefore, is inconsistent with legislative intent and disincentivizes SLTT investment in disaster preparedness. In addition, the complexity and subjectivity within the existing process for granting federal assistance to individual citizens also creates frustration and tension between federal and state partners that distract from a common desire to assist survivors efficiently and fairly.

The transformed agency should implement common-sense approaches to update federal disaster declaration thresholds, thus rebalancing federal and state responsibilities. This includes a reset of the Per Capita Indicator threshold, using the Consumer Price Index to account for historical inflation. The Council recommends that disasters be evaluated for federal assistance based on the level of severity for public assistance and individual assistance funding. Additionally, an annual calendar year minimum expenditure should be established for small, medium, and large states prior to them being able to request a federal declaration (*see Appendix A for detailed guidance*).

4. Replace the Hazard Mitigation Grant Program with a Two-Phase Funding Structure

FEMA's current Hazard Mitigation Grant Program is hampered by administrative burdens that delay funding distribution until well after rebuilding begins, thus missing opportunities for cost-effective mitigation. Reviews indicate lengthy project approval times, inconsistent oversight, and a narrow focus on certain risk while neglecting others. The Council proposes a state-managed

program, notionally titled “Refined Risk Reduction” Program (R3P), where project priorities are nationally set and environmental reviews are handled locally, with two phases of funding:

- **Rapid Mitigation Advance** (Within the first 30 days provide up to 5% of the federal government contribution for the disaster to facilitate immediate residential mitigation to primary residences and communities impacted by the event or in other high-risk zones)
- **Strategic Mitigation Allocation** (Within the first six months provide up to the remaining 10% of the federal government contribution to improve the performance of the NFIP by mitigating properties and critical infrastructure based on Federal Administration priorities)

For mitigation to work, the Council recommends states take on greater program management responsibility and continue to develop an improved and comprehensive state hazard mitigation process that identifies projects that are immediately implementable. The program would be structured with up to a 75% cost share based on performance metric (*see Appendix A*) with a 50% minimum. The program would focus on expediting funding for states and territories with approved hazard mitigation plans and a history of successful HMGP performance, encouraging identification and sharing of best practices, inventorying high risk properties and building sound funds management systems. All projects should be completed as soon as practicable and must be completed within eight years, including completion of all required federal permits and any other federal closeout actions. Finally, winding down the legacy open disaster declarations by converting them to the new model would reduce the backlog and break the cycle of repetitive loss, improve fiscal sustainability, and enhance community resilience.

5. Streamline the Individual Assistance Program into a Single Direct Payment Program

The current FEMA Individual Assistance (IA) Program,² which provides direct assistance to disaster survivors, is overly slow, confusing, and inefficient. It leaves many Americans frustrated by complex rules, inconsistent decisions, and long wait times for aid when they are most vulnerable. With at least 15 categories of assistance, the system bewilders and sidelines recipients and private-sector partners who are best positioned to help survivors. Furthermore, the program is not well integrated with other federal housing programs. It does not give Americans the quick certainty they need to drive their own recoveries, and instead centralizes control in Washington, D.C. The process spends taxpayer dollars inefficiently and with little accountability for outcomes. To address these challenges that survivors experience in receiving assistance, the Council proposes the *Framework for Accessible Individual Relief* (FAIR) Program:

- Consolidate existing programs into one direct payment to survivors whose homes are uninhabitable after a disaster.
- Transfer evacuation and temporary emergency sheltering responsibilities to state, tribal, and territorial (STT) governments.

² FEMA’s Individual Assistance program is designed to help disaster survivors with basic critical needs such as a safe, sanitary, and functional place to live during recovery from a disaster. It is not designed to make survivors whole and is not a substitute for insurance coverage. <https://www.fema.gov/fact-sheet/questions-and-answers-about-individual-assistance#:~:text=FEMA%E2%80%99s%20Individual%20Assistance%20program%20is%20designed%20to%20help,and%20is%20not%20a%20substitute%20for%20insurance%20coverage>.

- Focus the transformed agency's role on emergency and temporary housing (mass care/sheltering and temporary housing/rental assistance) instead of long-term housing, and only for Americans whose homes are uninhabitable (not those who experience minor damage).
- Affirm private insurance companies remain responsible for permanent housing, with the U.S. Department of Housing and Urban Development and Small Business Administration in lead federal roles.

Instead of bureaucratic, delayed payments that eventually provide only a few thousand dollars to the average American, swift support for emergency sheltering with a faster amount of monetary assistance would directly and positively impact affected Americans. Consolidating assistance into a single payment would provide all Americans clear, specific information on what assistance they would receive from the federal government in the event of a catastrophic loss.

- **Homeowner Assistance**

- For homeowners, the payment package would be based on their level of need and no more than 15% of the local government's assessed value, capped at a \$1 million valuation (i.e. maximum payment not to exceed \$150,000).
- Allowable use would include repairs, replacement, rental and other needs assistance (i.e. personal property loss, transportation, medical, funeral expenses).

- **Renter Assistance**

- For renters, the payment package would be based on level of need and cover 3 months of rent (first, last, and current month) at the HUD Fair Market Rate (FMR) for the appropriate household size. Individuals with greater need could have the option for 3 additional months of rental assistance for 6 months total.
- This covers rent and Other Needs Assistance.

These reforms provide quick, cost-effective, and transparent support to disaster survivors, within the limits of federal funding, as well as reduce administrative overhead and clarify federal agency responsibilities. Further, there should be an option for this to be a state-managed program if individual states wish to do so.

6. Reform the Public Assistance Program to Provide Direct Funding

The current disaster recovery process under FEMA's Public Assistance (PA) program,³ which provides funding to communities after a federally declared disaster, is burdened by bureaucracy, leading to significant delays and frustration from states and communities. To address this, the Council proposes the *Reformed and Partnered Initiative for Disasters* (RAPID) program, a modern and agile framework that converts the existing PA program into a direct funding model that leverages pre-defined objective event criteria and cost estimates to accelerate and streamline

³ Public Assistance is FEMA's largest grant program providing funds to assist communities responding to and recovering from major disasters or emergencies declared by the President. The program provides funding for emergency assistance to save lives and protect property and assists with funding for permanently restoring community infrastructure affected by a federally declared incident. -FEMA Public Assistance Fact Sheet October 2019.

recovery. Utilizing a parametric trigger,⁴ funding would be released to states within 30 days of a major federal disaster declaration. This eliminates the need for time-consuming loss assessments and quickly provides a financial backstop and cashflow for rapid response and recovery. When paired with traditional insurance of public facilities, this can enable communities to *quickly recover* with manageable financial risk and burden to local taxpayers.

The Council recommends the future agency convene a group of STT and private sector representatives to collectively establish a parametric funding model that is based on existing data from the authoritative federal agency or organization over each type of eligible event (i.e. earthquake, hurricane, flood, etc.). The federal funding should be set with a minimum of 50% and increase up to 75% of the established parametric amount based on state performance (*see Appendix A for details*). STTs, in turn, would gain the autonomy to manage the funding, to include determination of project eligibility, and look for duplications of effort as referenced in the Council’s first key recommendation.⁵ Determination of eligibility would be simplified and limited to eligible applicants, eligible facilities, eligible work, and eligible costs.

Accountability would be maintained through a two-phase audit process: a one-time validation of costs within one year and a final program closeout. All federal funding provided under RAPID must be expended or returned within eight years. The transformed agency should pursue the ability to convert historic disasters to the new RAPID Direct Funding program, making a onetime payout and immediately transitioning to the two-phase reconciliation approach described above. This significantly reduces the administrative burden on all stakeholders and prevents added confusion from overlapping approaches. *See Appendix B for an example flow chart of how RAPID would function in a natural disaster.*

7. Reform the FEMA National Flood Insurance Program (NFIP) for Financial Stability and Risk Resilience

The National Flood Insurance Program (NFIP), administered by FEMA, faces significant challenges that threaten its long-term viability. The program is financially unsustainable, burdened by over \$20 billion in debt,⁶ and relies on outdated risk information.⁷ This leads to a disconnect between the price of insurance, the public’s perception of risk, and actions to mitigate or transfer it. A comprehensive reform plan centered on a strategic shift toward a primary role for the private market, with the goal of fostering a more resilient and financially stable flood risk management system. The Council recommends:

- Empowering communities with stronger land-use policies

⁴ Parametric, or index-based, is a concept where if an event reaches a pre-defined threshold, it automatically sets the payment amount based on the magnitude of the event. This is different than traditional payment based on the magnitude of assessed loss. The main benefit of a parametric model is the speed and certainty of payouts, which are triggered automatically *after* a federal disaster declaration is made, when pre-defined, objective event criteria are met, like wind speed or earthquake magnitude.

⁵ This would be accomplished through congressional authorization for eligible, certified STT programs.

⁶ Federal Emergency Management Agency, NFIP Debt, <https://www.fema.gov/case-study/nfip-debt>

⁷ *Underwater: How FEMA’s outdated flood maps incentivize property owners to take risks.* <https://www.nbcnews.com/science/environment/water-femas-outdated-flood-maps-incentivize-system-risk-negotiable-rcna220529>

- Modernizing risk data with continued implementation of Risk Rating 2.0 and revising flood maps to inform the American people about their true risk
- Implement risk-based pricing and actual costs
- Revising “Write Your Own” compensation to reduce overall administrative costs
- Incentivizing the launch of a "take-out" program to transfer policies to the private market and focus Hazard Mitigation funds on repetitive loss properties
- Engaging state insurance commissioners to facilitate this transfer, including exploring the establishment of a centralized flood insurance marketplace to serve as a clearinghouse for admitted insurers

These changes are expected to accelerate disaster recovery, reduce the federal government's financial burden, send clear financial signals, and provide predictable financial outcomes for homeowners, ultimately leading to a more prepared nation.

8. Maximize Every Dollar Spent by Reducing Administrative Costs

A central issue with the current disaster management system is the amount of taxpayer money used for administrative costs. In fact, a substantial part of grant funding is spent on administrative and management expenses at both the federal and state/local levels. In total, almost 25 cents on every dollar can be provided for administrative expenses. As an example, since 2018 in Florida, the cost of a recovery consultant contract rate has increased from \$100 to nearly \$300 per hour. Most of these costs are expended during the grant development phase, which hinders the pace of recovery. The complexity of existing grant programs has resulted in a shift from using government staff to private contractors in exorbitantly high numbers. A FEMA official in Puerto Rico highlights this phenomenon stating, “I have 500 contracted employees that would not be needed if FEMA’s grant process was not so complex.”⁸ The above recommendations offer efficient, streamlined programs that reduce overall administrative cost burdens by replacing grant programs with direct funding that does not require administrative management.

Any sense of urgency emphasized in this report for providing assistance to SLTTs should be carefully balanced with a robust financial review and compliance. It is critically important that states should be required to utilize their state auditor and/or comptroller to complete timely audits of income and expenditure of all federal funds. Consideration of utilizing private, Certified Public Accountants, or accounting firms to assist in this critical process of accountability would be prudent as many state auditors of public accounts may be overburdened by current statutory responsibilities. Localities and Tribal Governments should be required to submit a standardized audit either from their public auditor or licensed accounting firm. By eliminating and simplifying programs, capping administrative costs, strengthening ethics rules, and increasing direct government support, policymakers would improve how disaster relief funds are used to build a more resilient nation.

⁸ FEMA Review Council Listening Session, 24 September 2025, San Juan, Puerto Rico.

9. Revitalize A Unified National Network for Partnership

The current emergency management landscape lacks a comprehensive framework that effectively integrates the efforts of federal, state, and local governments with those of private industry, faith based, and non-profit partners. The current system of laws, executive orders, and policies causes confusion by using the following terms interchangeably: frameworks, incident command systems, lifelines, core capabilities, and emergency support functions. This gap prevents the building of shared capabilities and national-level capacity, directly impacting the readiness and effectiveness of local first responders.

The transformed agency should promote a "Whole Community" approach to national preparedness. To do this, the agency must address the existing gap in the emergency management landscape by returning to a network that enables government, private industry, faith based, and non-profit partners to build toward shared capabilities and integrated resources. This formalizes and streamlines coordination between government agencies, critical private-sector partners, and non-profit organizations.

10. A Transformed Agency

It is time to close the chapter on FEMA. "FEMA" as a brand and as an agency was irreparably damaged by the previous Administration's proclivity to mission creep and endemic program failures. A transformed agency should be established that retains the core missions of FEMA, while highlighting the renewed emphasis on locally executed, state or tribally managed, and federally supported emergency management.

Beyond boldly transforming the agency, it should refocus on its core mission *to reduce the loss of life and property and protect the Nation from all hazards*⁹ by reducing bureaucracy, improving efficiency, and building stronger partnerships with SLTT governments. Therefore, the agency should shift from a District of Columbia-centric bureaucracy and regulatory bottleneck to a new, lean coordination-focused workforce that empowers SLTT officials to provide relief for their citizens. The transformed agency should conduct a strategic review of requirements to determine appropriate staffing levels and address a recent surge in headquarters-based personnel by rebalancing their headquarters vs. field personnel ratio to reduce the agency's bureaucratic bloat. This assessment and determination should occur over a two-to-three-year period and would be dependent on the Council's recommendations being implemented. The transformed agency should deliver any cost savings achieved through staffing efficiencies back to the States, Tribes, and Territories. As the agency transforms, there remains a need for partnerships between states and federal stakeholders, and this can be best facilitated by active regions.

To empower these partners, the transformed agency should shift training execution to states, expand and leverage existing successful partnerships, continue support of Emergency

⁹ *The primary mission of the Agency is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.* – Post-Katrina Emergency Management Reform Act of 2006

Management Assistance Compact agreements, empower states with expedited funding, and limit federal on-the-ground response to only incidents that exceed the capabilities and capacities of SLTT stakeholders.

The Council recommends reviewing all existing FEMA programs and maintaining those that are critical to our nation’s security. Further, rather than replacing successful programs, the future agency should double down on those with a proven track record of effective federal-state-local partnership such as the Emergency Management Assistance Compact, National Urban Search and Rescue Program, Centers for Domestic Preparedness, and U.S. Fire Administration among others.

The transformed agency must look for opportunities to remove duplications of effort such as environmental and historical reviews, audits, and inspections that should be conducted by states. Further, the agency should endeavor to expedite the closeout of historical open disasters. Doing so will address and reduce lingering administrative costs as well as legacy information technology systems that are maintained solely to facilitate open disaster declarations. Both directly benefit Americans by accelerating ongoing recovery efforts and reducing taxpayer costs. Finally, as FEMA is transformed, the recommendations below must be made with a comprehensive effort to streamline and modernize the agency’s technology to support its refocus on the core mission.

Benefits of the Ten Recommendations

These recommendations lead to a more resilient *AMERICA*:





- *Accelerate* disaster response and recovery
- *Modernize* systems and technology for greater efficiency
- *Empower* local and state governments with better resources and tools
- *Reduce* administrative costs and federal burden
- *Improve* coordination across government, private sector, and nonprofits
- *Cultivate* public trust through transparency and accountability
- *Amplify* resilience for rural communities and critical infrastructure

These reforms aim to create a more resilient and prepared nation by ensuring that disaster response and recovery efforts are efficient, cost-effective, and locally executed. Such reforms also ensure that federal support is available when catastrophic events occur that overwhelm local systems.

Implementation Requirements by Recommendation

Based on the Council’s interpretation of existing policy, legislation, and regulation, the following actions are required to achieve the full intent of each recommendation. The table below shows the minimum action required to implement each of the Council’s recommendations. It is important to note that all recommendations requiring legislative action will also need to be accompanied by regulations, but since they cannot be accomplished through regulation alone that

action is not checked. While Executive Orders may be used to make some of the proposed changes, the Council advocates for legislative action to ensure a systemic and sustained transformation of the current approach to disaster management.

Recommendation	Minimum Action Required to Implement			
	Policy 	Legislation 	Regulation 	Executive Order 
#1 Equip SLTT to Lead	✓			
#2 Enhance Critical Programs	✓		✓	
#3 Realign Criteria for Assistance			✓	
#4 Replace HMGP		✓		
#5 Streamline IA		✓		
#6 Reform PA		✓		
#7 Reform NFIP		✓		
#8 Reduce Admin Costs				✓
#9 Network for Partnership	✓			
#10 Transform FEMA		✓		✓

Appendix A: Detailed Charts

Cost Comparison of Current and Proposed Programs

Current Program	Activity	Current Federal Cost Share	Proposed Program	Activity	Proposed Federal Cost Share
Public Assistance	Emergency Declarations	Not Less than 75% POTUS can increase <i>Section 503(a)</i>	RAPID Direct Funding		<ul style="list-style-type: none"> Up to 75% based on performance metric; 50% minimum POTUS can increase
	Category A: Debris Removal	Not less than 75% POTUS can increase <i>Section 407(d)</i>			
	Category B: Emergency Protective Measures	Not less than 75% POTUS can increase <i>Section 403(b)</i>			
	Categories C-G: Permanent Work	Not less than 75% POTUS can increase <i>Section 406(b)(1)</i>			
Individual Assistance	Temporary Housing Assistance (homeowners and renters)	<ul style="list-style-type: none"> 100% <i>Section 408(g)(1)</i> 	FAIR	<ul style="list-style-type: none"> Temporary Housing Assistance (homeowners and renters) Other Needs Assistance 	75%
	Other Needs Assistance	<ul style="list-style-type: none"> 75% <i>Section 408(g)(2)</i> 			
Hazard Mitigation Grant		<ul style="list-style-type: none"> Up to 75% <i>Section 404(a)</i> 	Refined Risk Reduction (R3P)	<ul style="list-style-type: none"> Rapid Mitigation Advance Strategic Mitigation Allocation 	<ul style="list-style-type: none"> Up to 75% based on performance metric; 50% minimum Rapid Mitigation Advance (up to 5% of overall federal contribution) Strategic Mitigation Allocation (up to 10% of overall federal contribution)

Proposed Cost Share Increase Criteria for States, Tribes, and Territories

**A quantitative index should incorporate these criteria to determine cost share increase(s).*

	Preparedness	Financial Investment	Response	Recovery	Mitigation
Required	STT entity has implemented a statewide citizen preparedness campaign. ¹⁰	STT entity certifies they have and are maintaining insurance on 100% past permanent work projects.	STT entity annually updates a resources list that includes their resources, typed and cost mapped for deployment outside of the STT (<i>tying costs to resources</i>)	The SLTT has the ability to collect, validate, and report preliminary damage assessment data for an affected jurisdiction within the first 30 days post-disaster, enabling timely activation of state and federal assistance mechanisms.	STT entity actively identifies risk through annual THIRA and SPR review and updates to track progress on building national preparedness capabilities.
Recommended	<i>STT entity should have a statewide emergency management program that addresses the five national preparedness areas.¹¹</i>	STT entity has a minimum of 5% of their state budget in cash reserve	STT entity has an annually reviewed emergency operations plan and requires all localities to have an emergency operation plans and the STT reviews the plan at a minimum every three years	STT has an individual assistance program that includes: 1. Temporary housing assistance 2. Individual and family grant program that includes crisis counseling 3. Disaster unemployment assistance 4. Disaster case management for use during federal disaster.	STT entity manages a mitigation program with a state or local match that provides STT funding to localities to harden infrastructure.
	STT entity adopted consensus standard building codes	STT entity has a disaster reserve or relief fund that support state and local recovery costs; used for FEMA match and non-declared events.	STT entity has participated in EMAC (<i>outbound/inbound</i>) deployment in the past 5 years	STT entity must be an IPAWS participant and 75% of the state's localities have a local alert and warning system or participate in IPAWS.	
		STT entity has 50% of their buildings and infrastructure covered by all hazard insurance (including floods)			

¹⁰ The program must include 2 of the following topics areas to qualify: 1) Preparedness education for their citizens; 2) Coordination with the private and non-profit sectors in planning and communication; 3) Public education related to the importance of personal insurance

¹¹ Demonstrate this through 1) Maintain current statewide plans for each mission area; 2) Use HSEEP-compliant exercises and implement corrective actions; 3) Integrate THIRA/SPR findings into budgets and strategy; 4) Provide annual preparedness or performance findings

Appendix B: RAPID Direct Funding Flow Chart



Appendix C: Looking Back - A History of Emergency Management and FEMA

The history of disaster and emergency management in the United States reflects the evolution of federal responses to crises, beginning with the first legislative act of disaster relief following the Portsmouth, New Hampshire fire in 1802. Early efforts were reactive, addressing individual emergencies through separate laws until the Federal Disaster Relief Act of 1950 established a comprehensive framework. During the mid-20th century, emergency management expanded to include wartime civil defense and preparation for nuclear attacks, while flooding emerged as a major challenge, prompting the creation of the National Flood Insurance Program (NFIP) in 1968.

The 1970s marked a shift toward a more coordinated approach to disaster management, spurred by large-scale disasters like Hurricane Agnes in 1972. The Disaster Relief Act of 1974 introduced planning and mitigation measures, professionalizing emergency management. This period also saw the establishment of FEMA in 1979 through Executive Order 12127, consolidating federal disaster-related functions under one agency. The Stafford Act of 1988 further defined FEMA's role in disaster response and recovery, emphasizing a systemic approach to preparedness and mitigation.

Major disasters such as Hurricane Katrina in 2005 and Hurricane Sandy in 2012 highlighted gaps in federal response and recovery efforts, leading to legislative reforms. The Post-Katrina Emergency Management Reform Act of 2006 clarified FEMA's authorities and responsibilities, while the Sandy Recovery Improvement Act of 2013 streamlined recovery processes and expanded disaster assistance. The Disaster Recovery Reform Act of 2018 introduced significant reforms, including dedicated funding for pre-disaster mitigation through the Building Resilient Infrastructure and Communities program.

The COVID-19 pandemic in 2020 required an unprecedented federal response, with FEMA coordinating efforts to distribute medical supplies, personal protective equipment, and vaccines, while supporting state and local governments. Lessons learned from the pandemic led to improvements in public health coordination and emergency preparedness. Legislative measures such as the American Rescue Plan Act of 2021 and the Infrastructure Investment and Jobs Act of 2021 provided substantial funding to enhance the Disaster Relief Fund and then subsequently attempt to legislate a solution of how to adjudicate the billions in unobligated funds leftover from the pandemic response.

Overall, the U.S. approach to disaster and emergency management has evolved from reactive measures to a comprehensive system that emphasizes preparedness, mitigation, response and recovery, reflecting the growing complexity and frequency of disasters over time. However, the cumulative effect of reactive legislation saddled FEMA with additional roles, responsibilities, and benefits has ultimately pulled FEMA away from its core mission.

Appendix D: FEMA Disaster Response (2021-2024)

Over the previous four years, FEMA encountered one of the busiest disaster periods in recent history, responding to numerous complex and concurrent disasters while grappling with significant workforce and administrative challenges. This assessment highlights FEMA's operational shortcomings, particularly in staffing sufficiency, disaster response delays, and grant oversight failures, which collectively contributed to inadequate disaster response outcomes against an ever-growing mission portfolio. In February 2025, the Government Accountability Office added federal disaster assistance to its "High-Risk List," underscoring systemic issues within FEMA.

The bureaucracy and mission creep that has pulled FEMA away from its core mission combined with a persistent shortage of experienced staff to address these additional missions was a major factor affecting FEMA's performance. At the start of FY2022, FEMA had approximately 11,400 disaster employees, falling short of its staffing goal of 17,670 by roughly 35%. This gap hindered FEMA's ability to deploy surge capacity, retain institutional knowledge, and effectively manage complex operations. Although personnel gaps were routinely highlighted as a challenge, it was left unspoken that the root problem was the expanding mission portfolio, not simply personnel.

The impact of overreliance on the federal government and lack of personnel to conduct manual administrative tasks was evident in delayed disaster assistance, politicization allegations, and administrative inefficiencies. For example, following the cumulative impacts of Hurricanes Helene and Milton, FEMA faced a backlog of 500,000 assistance applications by December 2024, delaying aid delivery to survivors. FEMA's response to the Lahaina wildfires in 2023 also revealed weaknesses in housing logistics and survivor case management, with delays in constructing temporary housing and confusion over rent policies. Similarly, during Hurricane Ida in 2021 and the Eastern Kentucky floods in 2022, survivors reported long delays in receiving aid due to rigid verification rules and insufficient field staffing.

FEMA's administrative capacity was further strained by delays in disaster closeouts and grant oversight failures. The U.S. Department of Homeland Security's Office of Inspector General found that FEMA's oversight deficiencies prolonged disaster closeouts, complicating audits and grant reconciliation. Additionally, FEMA's insufficient oversight of COVID-19 emergency protective measures grants resulted in over \$8.1 billion in questioned costs and improper payments, highlighting vulnerabilities in monitoring high-volume grant programs.

Where FEMA had pre-positioned capacity and adequate local partnerships, the agency delivered lifesaving functions and early recovery support. Where pre-existing local capacity was weak (notably some rural and underserved areas) or where multiple disasters clustered, FEMA's limited surge and administrative backstops produced slower assessments, longer grant processing, and protracted closeouts—outcomes that prolong community recovery and increase fiscal exposure. The combination of staffing shortfalls and administrative weaknesses therefore had an uneven but material effect on recovery speed and completeness. Meanwhile, state, local, and private stakeholders routinely delivered faster and effective responses to disasters.

The rising frequency and complexity of disasters have outpaced FEMA's static capacity, creating a strategic mismatch between demand and capability. This mismatch combined with increased responsibilities has constrained FEMA's ability to manage simultaneous large-scale incidents without sacrificing speed or oversight.

About the FEMA Review Council

On January 24, 2025, President Donald J. Trump signed Executive Order (EO) 14180, “Council to Assess the Federal Emergency Management Agency (FEMA),” establishing a FEMA Review Council to recommend improvements or structural changes to the agency, promote the national interest, and enable national resilience. The Secretary of Homeland Security established the Council consistent with the Federal Advisory Committee Act on February 21, 2025.

The FEMA Review Council consists of two co-chairs and ten council members, who were all appointed by President Trump on April 28, 2025. After the appointment of the members, the Council created three subcommittees to address federal and state coordination, disaster response and recovery assessments, and the compilation of the final report.

The Council also coordinated requests from the President, through the Assistant to the President for National Security Affairs, the Assistant to the President for Homeland Security Affairs, and the Director of the Office of Management and Budget.

For additional information regarding the Council, visit:
<https://www.dhs.gov/federal-emergency-management-agency-review-council>

Work Performed

The Council’s work was conducted from approximately February 2025 through November 2025, during which time the following critical efforts were completed. In total, the Council engaged with representatives from all 50 states and territories, as well as numerous tribal leaders and representatives.

- **Council Public Meetings.** Council members met routinely, both virtually and in-person, for internal proceedings and public meetings.
- **DHS/FEMA Briefings.** The Council received multiple briefings from FEMA and other related DHS offices.
- **Stakeholder Listening Sessions.** The Council and its subcommittees conducted 17 listening sessions to hear from federal, state, local, and tribal partners, as well as relevant private sector entities and non-profit institutions, such as faith-based organizations. The Council traveled extensively throughout the nation to conduct meetings with key stakeholders to capture their concerns, ideas, and solutions.
- **Public Comment and National Survey.** In addition to the above efforts, the Council collected and assessed over 11,000 public responses received via Federal Register Notice solicitation for comment, as well as conducted a national survey of state, local, tribal, and territorial emergency managers.

FEMA Review Council Members

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- The outside experts who offered their time and insights,
- The members of state and local emergency management and homeland security entities and governments,
- Governors from many states and their chiefs of staff, and
- The current and former FEMA employees who offered their time and experience.

The Designated Federal Officer, Mr. Patrick Powers, for his exemplary leadership and effort to ensure the Council’s work was coordinated, transparent, and effective to ensure a comprehensive effort to meet President Trump’s directives – and the many incredible staff members directly supporting the Council, among countless others who made this report possible.

The Council also dedicates this report to the tens of thousands of hardworking emergency management professionals who have dedicated their careers to the preparation, response, recovery, and mitigation of natural and manmade disasters – notably, those who continue to recover from ongoing disasters.



Report Addendum for Implementation Considerations

The President's Council to Assess the Federal Emergency Management Agency

May 7, 2026

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Key Recommendations

1. Equip States, Local governments, Tribes, and Territories to Lead Disaster Response with the Federal Government in a Supporting Role

Disasters demand unified action across government, private industry, and with non-profit partners, leveraging the strengths of these sectors to optimize national resilience. The national emergency management landscape lacks a framework that helps everyone involved in responding to emergencies build toward a shared capability and integrated resources to raise national-level capacity. This gap directly impacts the readiness of local responders.

Problem 1: Lack of a National Standard for Incident Response and Recovery

Standards that define the capabilities jurisdictions should have, how they are measured, and how personnel are qualified have not been adopted nationally, and the overall approach requires significant improvement. While there have been attempts over time to develop national standards and systems, such as the National Preparedness System and core capabilities, these efforts have been fragmented and lack cohesive implementation. Without uniform standards, training varies, equipment is purchased without common specifications, and response teams cannot reliably integrate across jurisdictions. These inconsistencies make it harder to field mission-ready teams, match resources to needs, and deliver timely assistance to survivors.

"FEMA sets the tone and guides systems down to local jurisdictions through the provision of guidance, frameworks, and training." -Anonymous Stakeholder Feedback

Recommendations:

1. **Encourage National Capability Standards Adoption:** The transformed agency should establish a formal governing board of federal, state, local, tribal, and territorial (FSLTT) stakeholders to codify national minimum standards for incident response and recovery capabilities. These standards would build upon existing frameworks like the National Incident Management System (NIMS) Resource Typing and National Qualification System (NQS) and be published through a Resources Typing Library Tool or a similar platform. The goal is to define, in plain terms, the personnel, equipment, training, and performance criteria for common mission sets like mass care, communications, incident management, and logistics.
2. **Build Scalable Training Resources:** State, locals, and tribal nations should take responsibility for training delivery, with the federal role primarily shifting to developing curriculum and setting outcome-based standards. In addition to curriculum development, the transformed agency should expand its "train-the-trainer" programs to scale instruction, certifying SLTT instructors from across the nation to provide the curriculum. This would expand the number of trainings delivered locally to emergency managers and allow for consistency in training for emergency management best practices. The transformed agency's schoolhouses would primarily be focused on hands on training not

available elsewhere, to include existing live-agent training at the Center for Domestic Preparedness.

3. **Professionalization of Emergency Management:** To address the unique professional development needs of senior leaders in emergency management, the transformed agency should establish advanced education pathways focused on crisis leadership, interagency coordination, and strategic decision-making. These pathways should include specialized training programs, executive-level workshops, and mentorship opportunities designed to equip leaders with the skills required to navigate complex emergencies and coordinate effectively across agencies and jurisdictions. Such an initiative would strengthen the leadership pipeline by fostering a cadre of well-prepared professionals who can consistently apply national doctrine and make informed strategic decisions during crises. By investing in the professionalization of emergency management, the transformed agency should promote a unified approach to leadership and decision-making, ensuring greater consistency and effectiveness in emergency response and recovery efforts nationwide.

4. **Catastrophic Planning and Exercise Standards:** The transformed agency should focus national plans and federally funded exercises on truly catastrophic scenarios, such as large-scale natural disasters, nation-wide cyberattacks, or coordinated terrorist events, to ensure preparedness for the most severe threats. The transformed agency should also develop and implement standardized approaches for SLTT exercise and planning practitioners through shared training, doctrine, and evaluation criteria. By leveraging established frameworks such as the Homeland Security Exercise and Evaluation Program (HSEEP) and Community Planning Guidance, the transformed agency should promote a common approach to how SLTT jurisdictions plan and prepare for incidents within their communities. This will be critical in fostering national resilience as an integrated network, enabling jurisdictions to identify resource gaps in relation to a national inventory and prioritize investments accordingly. This will enhance the ability of SLTT jurisdictions to respond effectively to catastrophic events and integrate seamlessly into broader national response efforts.

Problem 2: Limited Ability to Share and Coordinate Resources

National readiness is constrained by an inconsistent application of a single, standards-driven effort that provides real-time visibility into capabilities and resources across jurisdictions and sectors. Without this, resource sharing depends on uneven mutual aid processes, variable recognition of responder qualifications, and fragmented, non-interoperable data systems — conditions that slow decisions and erode trust in deployments. At the same time, non-disaster grant funding is not aligned to build and sustain typed, mission-ready capabilities that are discoverable and rapidly deployable nationwide. Significant private, nonprofit, and volunteer capacity remains outside formal operational workflows. The result is duplicated requests, delayed missions, and avoidable reliance on federal surge assets, while local investments fail to aggregate into a coherent, interoperable national capability.

Recommendations:

1. **Revitalize and promote the use of the Unified Resource Catalog:** FSLTT stakeholders should be required to identify and catalog their typed capabilities and resources within a

defined period for implementation and updated routinely. Pre-vetted private sector resources and nonprofit capabilities should also be cataloged to present a complete national picture. The transformed agency should determine whether its Resource Inventory System or a new cloud-based platform is needed to establish a national inventory, creating a single, searchable online marketplace for all stakeholders to find available resources within budget. Standardized resource typing and federal policies would formalize mutual aid frameworks to enable rapid, coordinated sharing of personnel, equipment, and resources during large-scale incidents.

2. **Credentialing:** To enhance the sharing of personnel nationally and improve upon the existing credentialing framework under the National Incident Management System (NIMS), the system must be modernized to ensure uniform standards, interoperability, and recognition of responder qualifications across jurisdictions. This includes expanding the National Qualification System (NQS) to cover emerging roles, integrating credentialing into a centralized national database for real-time visibility, streamlining verification processes using advanced technology, and incorporating volunteer, faith-based, and private sector responders into the credentialing framework. Federal policies should mandate compliance with updated credentialing standards for jurisdictions receiving non-disaster grant funding, while training and technical assistance should be provided to support adoption. These enhancements would ensure rapid deployment of qualified personnel, reduce delays, and strengthen national preparedness and resilience during large-scale incidents.

3. **Prioritize Investment for Mission-Ready Teams, Capabilities, and Infrastructure:** We are a nation of local governments with resources residing at the local level. With this in mind, we must invest via grants to build and standardize this national coalition. The transformed agency should update program guidance and regulations to prioritize investments in Mission Ready Teams (MRTs) for non-disaster grants. Funded capabilities should meet national standards, be typed according to NIMS definitions, and be entered into the national inventory system. Federal non-disaster grant programs (NGDP) should be updated to prioritize investments in mission-ready capabilities and infrastructure that meet national standards and integrate into the national inventory system. These investments must directly support national preparedness objectives and ensure rapid deployment during emergencies. Further, these investments must emphasize building capabilities and capacities with a shift away from sustaining SLTT capabilities and capacities with federal grant dollars. The NDGP should be limited to a maximum of 3 years for personnel-related projects with the local jurisdiction funding that person(s) in perpetuity on SLTT funds. NDGP should be limited to building a new capability or capacity through capital outlay equipment once, then SLTT should pick up the cost for maintaining that new capability or capacity through SLTT funds in perpetuity. Additionally, the Council recognizes the importance of Non-Disaster Grants, such as the Emergency Management Performance Grant within the suite of FEMA's preparedness grants, in ensuring our nation's security and recommends these programs be retained within the transformed agency. The Council encourages exploring how to leverage federal savings from other efficiencies gained to create a potential one-time EMPG increase to better facilitate the return of responsibilities to States, Tribes and Territories. Linking federal funding to compliance with uniform standards for deployable capabilities

would streamline mutual aid processes, enhance resource interoperability, and strengthen national preparedness by focusing on readily deployable resources.

4. **Promote the Integration of Additional Partners, to include Volunteer and Faith-Based Organizations:** *To enhance the effectiveness and inclusivity of emergency management efforts, the transformed agency **should prioritize** the integration of volunteer, faith-based, and nonprofit organizations into national preparedness, response, and recovery frameworks.* The transformed agency should establish and maintain a national inventory of volunteer, faith-based, and 501(c)(3) organizations, and integrate pre-vetted private sector resources to create a comprehensive national capability picture. Federal policy should require the integration of these entities into planning, coordination, and operational frameworks to leverage community networks, local knowledge, and additional workforce capacity. This integration would expand the reach and effectiveness of national response and recovery operations while strengthening community resilience.
5. **Fund and Promote Interoperable Systems:** Federal policy should promote and incentivize shared investments in interoperable communications, data-sharing platforms, and information systems that enable real-time coordination across all levels of government and partner organizations. Open data standards should be established and promoted by federal policy to ensure interoperability, consistency, and reliability of information exchange during incident response and recovery.

Benefits:

- **Speed:** Rapid pre-deployment of anticipated resources would ensure local readiness for impending peril
- **Consistent Expectations:** All local emergency managers know exactly the capabilities they would receive
- **Cost Transparency:** Allows local emergency managers to make better informed cost-benefit decisions to optimize their response
- **Predictability:** Helps jurisdictions plan and budget more effectively for disaster response
- **Capability-focused:** Creation of a national inventory connected to funding eligibility would create incentives for SLTT stakeholders to focus on core capabilities
- **Faster, Coordinated Response:** Joint planning and integrated frameworks reduce gaps and overlaps during disasters
- **Efficient Resource Use:** Shared investments in interoperable systems cut costs and eliminate duplicative infrastructure
- **Seamless Recovery:** Aligned federal programs simplify assistance for survivors and speed community rebuilding
- **Broader Capabilities:** Leveraging private sector innovation and nonprofit expertise expands surge capacity and specialized skills
- **Stronger Public Trust:** Clear roles and unified communication enhance transparency and confidence during crises

- **Nationwide Readiness:** Cross-sector partnerships create a more adaptable, scalable system for complex or cascading disasters
- **Faster Response Times:** Well-trained SLTT teams and regional hubs enable immediate action without waiting for federal assets to arrive
- **Stronger Self-Sufficiency:** Local governments gain the skills, equipment, and partnerships to manage crises, reducing dependency on federal surge capacity
- **Scalable Support:** Regional hubs provide shared resources that can expand, or contract based on event size, optimizing efficiency
- **Improved Coordination:** Formalized mutual aid agreements streamline resource sharing across jurisdictions, minimizing gaps or duplication
- **Cost Efficiency:** Local capability and mutual aid reduce expensive federal deployments and allow resources to be used where most needed
- **Enhanced Resilience:** Communities build long-term readiness and confidence, ensuring sustained operations during back-to-back or prolonged disasters
- **Tailored Solutions:** Training and equipment investments reflect local hazards and demographics, improving effectiveness in diverse environments

Savings and Efficiencies Gained:

To be determined through detailed analysis. Expected areas of savings include reduced reliance on costly federal surge deployments when SLTT and private resources are available; lower duplication of resource requests and overlapping contracts; more targeted grant spending on standardized MRPs; and productivity gains from interoperable communications and data systems. A formal cost-benefit framework should measure baseline response times, deployment costs, and coordination overhead before and after implementation to quantify savings.

Conclusion:

A truly resilient nation depends on seamless collaboration across government, private industry, and nonprofit partners. Empowering SLTT governments to take the lead in managing disasters is essential for a resilient national preparedness strategy. Further, implementation of a mandatory national inventory system achieves the goal of ensuring disasters are locally executed, state managed, and federally supported. Leveraging modern technology solutions to establish such a national inventory system that provides transparency to the availability of SLTT resources, alignment to national standards and the typing of those same resources, as well as the upfront costs of those resources would increase the national preparedness of the country.

2. Enhance Critical Federal Programs & Resources to Support Communities

Problem:

State and local governments are primarily responsible for responding to threats to life and property but may lack the full scope and scale of resources required to respond. Consistent standards, effective coordination, and robust and timely federal support capabilities are required to save American lives when threatened by a range of hazards. Man-made hazards and nation-state threats will challenge the national response capability in ways it has not been tested before.

The federal government must continue to build its capability to support these efforts even if state and local governments assume greater responsibilities.

Recommendation:

Preserve and modernize the federal government’s capability to support state and local partners in lifesaving and life-sustaining efforts. Ensure robust national capability is available for the full range of hazards including natural hazards, cybers attacks, and nation-state threats. This capability must be able to evolve with an ever-changing threat environment. Regardless of the incident type or requirement, ensure integrated, timely, and efficient federal support is available when needed.

Protect and Improve National Support Capability

1. Sustain Core Standards to support effective and interoperable teams:

- Maintain national training and certification programs, including NIMS/ICS/NQS (continued further development) and resource typing

2. Improve Federal Coordination:

- Maintain a central and coordinated response capability to support state and local requirements
- Ensure a federal government-wide inventory of all available response assets to include type, costs, and available response times

3. Build Capability for Emerging Threats

- Nation-state threats and cyber-attacks challenge national resilience in ways the United States has not seen in a generation
- Capability for consequence management and national resilience to these hazards must be driven from the federal government as a core function of our national security

4. Integrate Emerging Technology:

- Leverage advanced analytics, AI, and communications platforms to enhance operational capability, predict requirements in advance, and reduce costs

5. Leverage Supply Chains for National Security

- Ensure the federal government can support national preparedness, supply chain resilience, and consequence management during emergencies

6. Continuity of Government

- FEMA leads federal efforts to develop and implement federal continuity programs by directly assigning responsibility for continuity of operations, continuity of government, and continuity of plans
- These programs ensure important federal missions, and state and local governments, continue to function amidst any threat

Benefits:

- **Faster Response Times:** Well-trained and interoperable SLTT teams enable immediate action without waiting for federal assets to arrive

- **Guaranteed National Backbone:** Maintains critical capabilities (NIMS/ICS, US&R, REP, NDMS, IPAWS, DFA) that cannot be replicated at the state or local level
- **Faster, Unified Response:** Consistent standards and trained teams enable seamless coordination across jurisdictions during complex, multi-state disasters
- **Adaptation to Emerging Threats:** Expanding readiness for cyber-attacks, pandemics, and climate-driven disasters ensures relevance to evolving risks
- **Enhanced Public Safety:** Reliable federal assets safeguard lives when catastrophic events exceed local capacity
- **Technology-Driven Efficiency:** Advanced analytics, AI, and next-generation communications improve situational awareness and operational speed
- **Cost-Effective Preparedness:** Sustaining national programs avoids duplicative investments by localities while providing surge capabilities when needed

Conclusion:

FEMA’s current mission exists at the intersection of emergency management and national security. An essential component of this is FEMA’s authority to coordinate other federal agencies in support of SLTT partners. Additionally, the agency maintains an arsenal of dual-use capabilities, regional offices, incident management teams, and prepositioned logistic systems or programs, and the Disaster Relief Fund to ensure the American people are resilient in the face of any threat, whether natural or man-made. Therefore, sustaining and resourcing this mission in the transformed agency is vital to public safety, economic stability, and national resilience.

3. Realign the Criteria for Federal Disaster Assistance

Federal regulations describe the process required for a governor to request Federal disaster assistance, including factors FEMA considers when making a recommendation to the President to approve or deny a major disaster declaration request. The Stafford Act currently prohibits the sole use of “an arithmetic formula or sliding scale based on income or population” when considering declaration requests.¹² Consequently, FEMA uses a set of factors to make recommendations to the President. The existing disaster declarations process for Public Assistance (PA) under accounts for state, local, tribal, and territory (SLTT) capacity and, therefore, is inconsistent with legislative intent and disincentivizes SLTT investment in disaster preparedness. The complexity and subjectivity within the existing disaster declarations process for Individual Assistance (IA) creates frustration and tension between federal and state partners that distract from a common desire to assist survivors. Realigning the criteria for federal disaster assistance could help rebalance responsibilities between the federal government and SLTT governments.

Problem:

Public Assistance (PA): FEMA initially set a per capita indicator of \$1 in 1986, which represented 0.008% of national per capita personal income and correlated closely to 0.1% of state general fund expenditures. Because of this, FEMA assumed \$1 per person was a reasonable amount of assistance a state could contribute towards the cost of a disaster. FEMA did not

¹² Stafford Act, Section 320.

increase the per capita indicator until 1999 when the Agency began adjusting the indicator for inflation.¹³ For FY26, the per capita indicator is \$1.94.

Individual Assistance (IA): FEMA has considered two principal factors since 2019: uninsured home and personal property losses. FEMA assesses these factors using a "cost-to-capacity" ratio to measure the severity and magnitude of a disaster relative to the state's fiscal capacity. To do this, FEMA uses the state's Total Taxable Resources (TTR)—or an estimate of the state's total *potential* tax base—divided by 1 million.¹⁴ The complexity within the existing process for evaluating assistance to individuals and households creates frustration and tension between federal and state partners. Further, the IA declarations process also risks supplanting assistance within the fiscal capacity of a state because it has a disproportionate emphasis on total estimated cost of assistance over those costs in the context of state capacity.

Recommendation:

- **PA Solution:**

- *Explore alternative methods for PA declarations. One option is to adjust the national per capita indicator for inflation from 1986-1999.* The transformed agency would update the current Public Assistance per capita indicator to account for historic inflation from 1986 to 1999, realigning the current per capita indicator of \$1.94 to \$2.99 to account for inflation between 1986 and 1999.

- **IA Solution:**

- *Eliminate the cost-to-capacity ratio and replace it with a simplified evaluation of damage to the impacted state.* The transformed agency would revert to factors like those prior to the 2019 regulatory change. Under this approach, the transformed agency would consider the number of primary residences that are destroyed or sustain major damage, along with other factors such as community impacts.

Benefits:

Public Assistance: *Fewer federal disaster declarations, leading to a rebalancing of state and federal responsibilities.* If the per capita indicator had been adjusted for inflation during the years it was not, analysis found that 29% of disasters declared between 2012 and 2025 would not have met the indicator, representing \$1.5 billion or 0.69% of the total federal share of funding. Annually, this would have led to 16 fewer major disaster declarations and about \$113 million less in funding per year.

Individual Assistance: *Simplified Individual Assistance declaration factors.* FEMA and its partners have experienced several challenges with the current approach. Many stakeholders find the cost-to-capacity approach overly complex and struggle to understand how FEMA makes recommendations based on it. Additionally, the current approach may also rely too heavily on total estimated costs of assistance, which favors larger states that more readily experience \$7.5 million in damages for a given disaster.

¹³ Disaster Assistance; Subpart C, the Declaration Process and State Commitments, 51 Fed. Reg. 13332, Apr. 18, 1986.

¹⁴ Based on annual estimates published by the Department of Treasury.

Implementation Requirements: Updating both the IA and PA declaration thresholds would require regulatory changes. In the interim, the President could direct through executive action that generally only requests above higher thresholds may be considered.

Minimum Expenditures: An annual calendar year minimum expenditure should be established for small, medium, and large states prior to them being able to request a federal declaration (*see Appendix A for detailed guidance*). This further incentivizes states to take the lead with their local partners for disaster mitigation.

Conclusion: Congress intended some executive discretionary authority within the disaster declarations process. Nevertheless, the law also stipulates federal assistance is provided only when a disaster is beyond the capabilities of SLTT partners and, therefore, necessitates common criteria for how to evaluate when those capabilities are overwhelmed. As described above, the existing disaster declarations process for Public Assistance under accounts for SLTT capacity and, therefore, is inconsistent with legislative intent and disincentivizes SLTT investment in disaster preparedness. The transformed agency should implement common sense approaches to realign the criteria for federal assistance and rebalance federal and state responsibilities.

4. Replace the Existing Hazard Mitigation Grant Program with a Two-Phase Funding Structure

Problem:

FEMA’s current Hazard Mitigation Grant Program is conceptually effective but constrained in execution. Although authorized to provide funding for mitigation, most funding is distributed well after the rebuilding process begins. This delay limits opportunities to integrate mitigation into reconstruction, when it is most cost-effective and impactful.

State and local partners consistently report that HMGP application processes are complex and administratively burdensome. GAO reviews found that delays in project approval and funding distribution frequently exceed 12 months, hindering early risk reduction. FEMA’s mitigation analyses have also been concentrated on flooding, hurricanes, and tornadoes—leaving gaps in wildfire, drought, and earthquake mitigation.

OIG audits similarly noted that oversight of HMGP property acquisitions lacks consistency across FEMA regions and that opportunities to integrate mitigation during the initial recovery phase are often missed. These findings reflect a need for more agile, outcome-driven funding mechanisms that reduce administrative friction and better align mitigation with broader national resilience goals.

Without reform, the transformed agency risks perpetuating a reactive recovery cycle—rebuilding to pre-disaster conditions and increasing future federal liabilities under the NFIP and Stafford Act disaster assistance programs.

Recommendations:

1. Establish a Two-Phase Funding Model

The transformed agency should eliminate the current HMGP and establish a two-phase funding structure of up to 15% of the disaster estimate in two allocations. This proposed state-managed program, notionally titled “Refined Risk Reduction” Program (R3P), would be structured with

up to a 75% federal cost share with performance metric and a 50% minimum (*See Appendix A in the Executive Summary*):

A. Rapid Mitigation Advance (up to the first 5% of the federal government contribution for the disaster to facilitate immediate residential mitigation)

- **Initial Allocation:** Within 30 days of a federal disaster declaration, provide up to 5% of the estimated mitigation allocation to states for immediate mitigation actions integrated into rebuilding disaster-impacted primary residences and communities. Alternatively, funds could be used to harden high risk residences and neighborhoods.
 - Some examples include elevation, seismic and wind retrofits, defensible space creation, and floodproofing.

B. Strategic Mitigation Allocation (up to the remaining 10% of the federal government contribution for the disaster for repetitive loss properties and critical infrastructure)

- **Remaining Allocation:** Allocate up to 10% based on Federal Administration priorities that:
 - Mitigate repetitive or severe repetitive loss properties to improve NFIP performance; or
 - Reduce risks to critical infrastructure with the intent of improving the performance of the NFIP as applicable (power, water, transportation, communications systems).

2. Strengthen State Management

For mitigation to work, states must take on greater program management responsibility and continue to develop an improved and comprehensive state hazard mitigation process that identifies projects that are immediately implementable.

Under this proposal, standardized oversight requirements for R3P-funded property acquisitions and mitigation projects should be managed at the state level.

- States and territories must provide and maintain an inventory of properties in high-risk areas not built to modern building codes or not in compliance with current NFIP requirements.
- Funds management systems/processes should be established and validated annually.
- The state should coordinate with Federal, State, Tribal, Local, and Private organizations to ensure implementation of hazard mitigation strategies and effective use of funds.
- Encourage greater proactive coordination at state/territorial level with other agencies to expand use of pre-negotiated exemptions/exclusions that streamline environmental review processes that align with prioritized project types.
- Strategic Mitigation Allocation-eligible projects must be prioritized and meet following criteria.
 - All projects must be approved and funded within one year.

- Construction completion timelines should be consistent with PA project close-out deadlines of eight years; time extensions may not be offered.

3. Prioritize States with Demonstrated Capacity

- Expedite funding for states and territories with approved hazard mitigation plans and a history of successful HMGP performance.
 - Leverage state and territorial mitigation plans as a repository for program performance (demonstrate and track metrics for funds management and oversight, program coordination, etc.).
- Encourage states/territories to assess performance of FEMA-funded projects (not just R3P-funded) and prioritize future investments.
- Support best practice sharing between states/territories at the regional level where hazards are often shared.

4. Winding Down Current Program

- **Reduce backlog by prioritizing high-risk projects:** Identify high risk unliquidated obligations that could either be drawn down by recipients or recovered by the transformed agency within set timeframes, ensuring all stakeholders are accountable for the effective management of existing funds.
- **Convert historic disasters to the two-phase R3P model:** The transformed agency should pursue the ability to convert historic disasters to the two-phase funding model described above.

Conclusion:

Eliminating HMGP and delivering funding via a rapid mitigation advance and strategic mitigation allocation could enable the transformed agency to act faster and more strategically in reducing disaster risk. The R3P model incentivizes state programs to establish program management capacities while aligning directly to GAO and OIG recommendations for timelier and more flexible mitigation investments.

By providing early funding for residential mitigation and directing remaining resources to protect critical infrastructure and reduce NFIP exposure, the transformed agency could:

- Break the cycle of repetitive loss.
- Improve fiscal sustainability.
- Strengthen community resilience; and
- Reinforce the transformed agency’s mission to help people before, during, and after disasters.

This policy change represents a practical, evidence-based step toward building a mitigation framework that delivers measurable results and national benefit.

5. Streamline the Individual Assistance Program into a Single Direct Payment Program

Problem:

Unnecessary Complexity: FEMA's current IA program is unnecessarily difficult for recipients and stakeholders to navigate and often results in delayed assistance to survivors. It has drifted from its core objective of providing immediate relief for temporary housing and other individual needs, instead centering on extensive documentation and verification that can feel adversarial to people in crisis. FEMA and the Federal government have received this feedback directly from the American people through customer surveys provided to the Council. As one survivor put it, "I was really frustrated with all the paperwork and having to prove I needed help. I told the case worker, 'I've already lost everything; haven't I shown you enough to show you I'm deserving? Do you not trust what I'm saying?'" Another recalled, "I just sort of remember sitting down and filling out a bunch of forms. [It was] confusing because we weren't sure what the point of it was, we didn't know what we were getting, but they told us to sign up for this stuff, so we did." As shown in figure 1, the program offers at least 15 types of assistance that are at best overlapping but at worst, extremely confusing for Americans to navigate as they work to recover. The process itself compounds the trauma, leaving people to make rushed, painful decisions under stress.

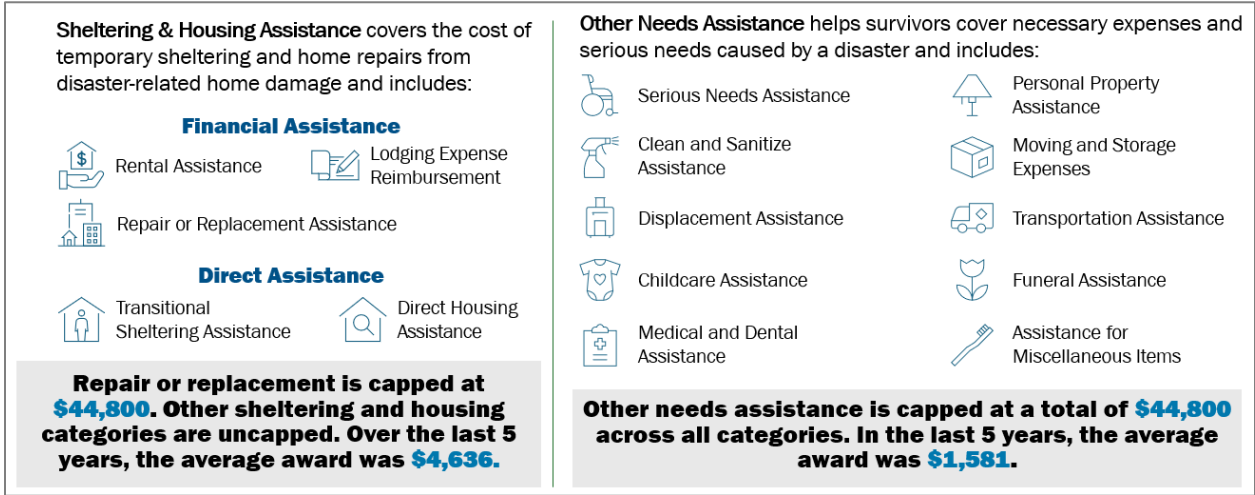


Figure 1. Categories of assistance provided to individuals, maximum and average award amounts.

Duplication & Inefficiency: Compounding these challenges, the program is siloed and duplicative, forcing survivors to repeatedly provide the same information to multiple entities. “What was confusing during the middle of the chaos was trying to figure out what everyone’s role was,” said a survivor. A local emergency manager observed, “Over 80% of the information for FEMA, SBA, HUD, and state or local agencies is the same. Yet, the burden of providing the information is all on the survivor.” This fragmentation drives inefficiency and cost. Staff encounter layers of administrative hurdles— “We will spend thousands not to pay [the citizen] \$500,” a FEMA employee remarked—and expensive delivery models can be misaligned with outcomes: “FEMA will pay 500 thousand dollars to put a trailer in your yard for a few months when we could have bought the house next door for half that,” remarked a government official. As shown in Figure 2, FEMA incurs huge administrative expenses—over \$3.6 billion over the last five years—even though most disaster survivors have very basic questions they cannot answer because FEMA’s program is too complex and hard to understand. Together, bureaucracy, siloed processes, and costly implementation slow aid, increase expense, and move the program away from timely, practical relief for individuals.

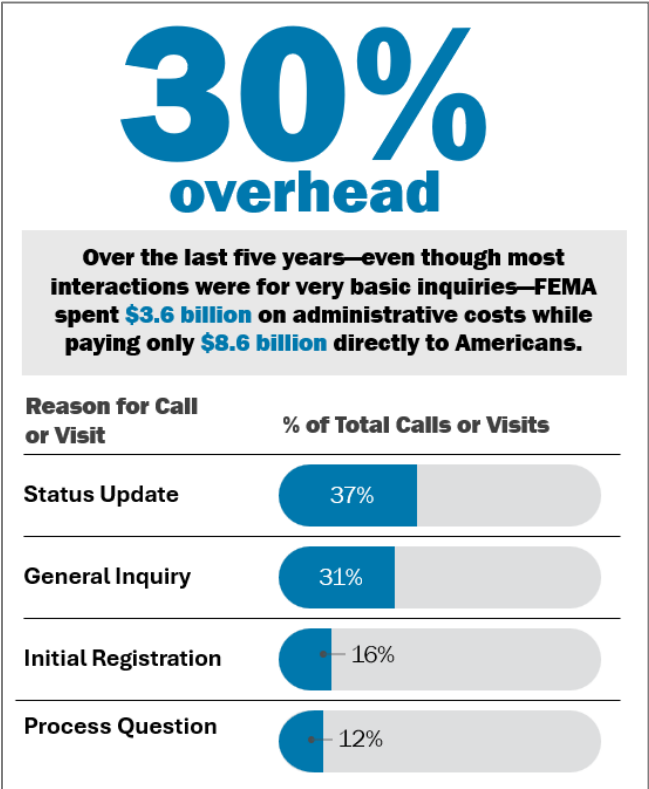


Figure 2. Overhead and expenditures of FEMA’s Individual Assistance program compared to reasons survivors call or visit FEMA recovery centers.

Recommendation:

30-Day Damage Assessments

- To shorten recovery timelines, the transformed agency should leverage private sector best practices and work with STT stakeholders to ensure initial damage assessments can be completed within the first 30 days post-disaster.

Direct Payments to Individuals

- The transformed agency should streamline the IA process by providing a direct payment package to individuals. This funding would focus solely on temporary assistance for individuals with destroyed or uninhabitable homes, excluding secondary homes.
 - Homeowner Assistance
 - For homeowners, the payment package would be based on their level of need and no more than 15% of the local government’s assessed value, capped at a \$1 million valuation (i.e. maximum payment not to exceed \$150,000).

- This covers repairs, replacement, rental and other needs assistance (i.e. personal property loss, transportation, medical, funeral expenses).
- The federal government would cover three-quarters of the assistance and the state, local, tribe or territorial government would cover the remainder.
- Renter Assistance
 - For renters, the payment package would be based on level of need and cover 3 months of rent (first, last, and current month) at the HUD Fair Market Rate (FMR) for the appropriate household size. Individuals with greater need could have the option for 3 additional months of rental assistance for 6 months total.
 - This covers rent and Other Needs Assistance.
 - The Federal government would cover three-quarters of the assistance and the state, local, tribe or territorial government would cover the remainder.
 - Local governments are responsible for creating market conditions that ensure affordable rental properties are available and accessible to survivors.

Shared Responsibility for Emergency Housing

The transformed agency should share responsibility with STT governments for the initial phases of emergency housing (mass care/sheltering and temporary housing/rental assistance). Private insurance companies should continue to take primary responsibility for permanent housing with HUD and SBA in supporting roles.

1. Mass Care/Sheltering (congregate and non-congregate):

- STT responsibility
 - Can be funded through RAPID Direct Funding Program/parametric amount

2. Temporary Housing/Rental Assistance

- Information sharing agreements between FEMA and STT stakeholders must be established to enable comprehensive recovery
- The transformed agency could make direct payments to survivors
 - STTs can take on this responsibility as desired if a pre-existing payment system is in place
- STTs can employ various types of assistance such as emergency home repairs or temporary housing units
 - STTs can utilize their own funding or request a one-time funding allotment, provided within 30 days of the date of the disaster declaration. All federally provided funds must be used within one year.

3. Permanent Housing

- Responsibility of private insurance companies with HUD and SBA in key federal role
 - Can also be funded through CDBG-DR or other federal housing programs

4. Community Services Programs

- **Disaster Unemployment** – No change to current program
- **Disaster Legal Services** – Combine with Disaster Case Management and provide direct grant by the transformed agency to STT.
- **Crisis Counseling** – Direct funding provided by the transformed agency to STT based on per capita cost and an estimate of those impacted and utilizing mass care or sheltering services. Limited to 6 months.
- **Disaster Case Management** - Direct funding provided by the transformed agency to STT based on a per capita cost and an estimate of those impacted that will need temporary housing.

Benefits of IA Program Reform

Speed: Rapid distribution of funds directly to STTs should ensure affected citizens receive monetary relief quickly.

Improved Information Sharing: Establishing agreements between STT stakeholders and the transformed agency for information sharing could accelerate the delivery of assistance to survivors.

Clear Expectations for Survivors: Individuals would know the exact amount of financial assistance and support they may receive after a disaster and can plan accordingly. This cost transparency creates an incentive for individuals to consider private insurance prior to a disaster occurring to optimize their personal recovery.

Predictability: Helps individuals and jurisdictions plan and budget more effectively for disaster recovery.

Cost Savings: Reduces administrative costs by an estimated \$154 million per year.

Shared Responsibilities: Funding, authorities, and activities are shared and clearly articulated across the transformed agency, STTs, HUD, SBA, and private insurance companies to ensure each can provide efficient and effective support to the American public within their appropriate portfolio.

Conclusion:

Refocusing the transformed agency on emergency and temporary housing relief and streamlining individual assistance into flat-rate reimbursements would provide transparent and immediate support to local communities and individual citizens in their hour of need. This effort should reduce burdensome administrative requirements, eliminate costly overhead with limited impact, and accelerate local recoveries.

6. Reform the Public Assistance Program to Provide Direct Funding

Problem:

The current FEMA Public Assistance (PA) program is a reactive reimbursement model that often fails to meet the immediate needs of disaster-struck communities. An excruciatingly slow process, consisting of seven phases and involvement from multiple parties (as evidenced in Figure 3 below) prevents meaningful steps towards recovery.

- **Administrative Delays:** The project-by-project approval process under the current system is notoriously slow, with reimbursement often taking years or even decades. The existing model is rooted in an exact dollar assessment of estimated damages, which is a tedious process. The focus is on accounting for damage rather than addressing the urgent needs of the affected community, and it is a fundamental flaw that hinders the speed and effectiveness of recovery. This forces States, Local, Tribes, or Territories (SLTTs) to rely on limited reserves or expensive credit to begin recovery efforts.
- **Compliance Overload:** Federal regulations, particularly those under the National Environmental Policy Act (NEPA), create additional layers of review and red tape. While important for environmental protection, applying a one-size-fits-all federal standard to urgent recovery work can create unnecessary and costly delays.
- **High Administrative Costs:** In the last five years, FEMA has provided approximately \$180 billion in Public Assistance grants to states and local governments; \$21 billion of this was used to manage these grants and pay project management costs incurred during project construction. FEMA has expended approximately \$11 billion more to administer the \$180 billion in grant funding. This model has created a disaster industrial complex that dilutes the impact of federal funding through multiple layers of administrative and contracting costs.
- **Unpredictable Cash Flow:** The reimbursement model provides no certainty for SLTTs, who must front costs with no guarantee of when, or how much, federal aid will arrive. This hinders effective financial planning, increases financing and debt costs, and slows the pace of recovery.
- **Centralized Decision-Making:** The top-down federal approach can disregard the unique needs and local expertise of individual SLTTs, leading to less efficient and less targeted recovery efforts.
- **Federal Overreach:** The threshold for authorizing the PA Program has become artificially low. This has resulted in increased federal involvement in several small events, many of which should be within the capabilities of the SLTTs.
- **Administrative Backlog:** FEMA is currently managing more than 300,000 projects (i.e., subgrants) on more than 600 open and active disasters. There are approximately 25,000 open projects that have exceeded their regulatory or administrative timelines, representing more than \$54.8 billion in unliquidated obligations.

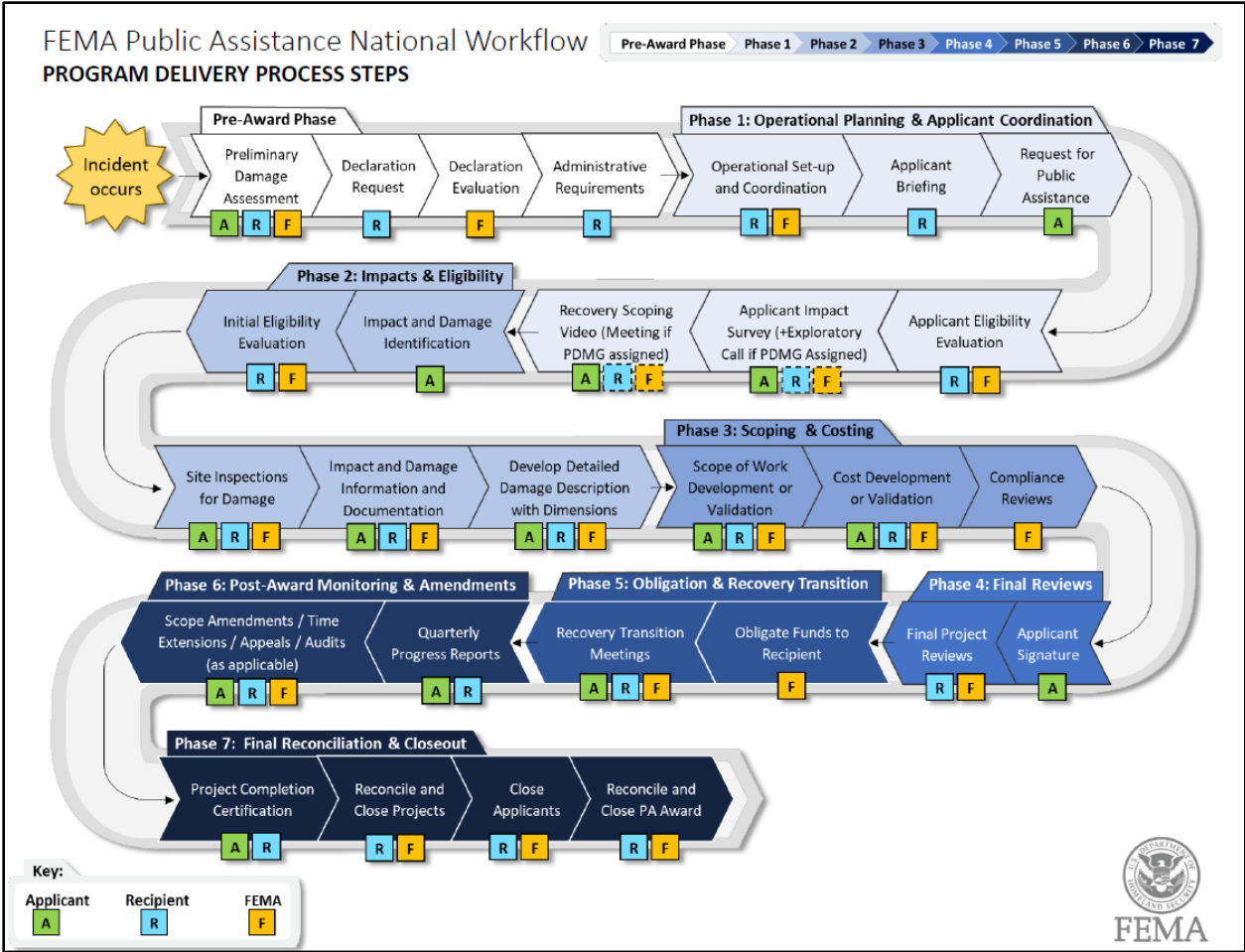


Figure 1. Current FEMA Public Assistance bureaucratic process, with multiple parties engaged in multiple steps in multiple phases that can take decades to complete.

Recommendation:

The RAPID Program fundamentally restructures the disaster funding model, shifting control and responsibility to the SLTT level while maintaining practical, limited federal oversight.

- **Fast Direct Funding:** Following a presidential major disaster declaration, federal funds would be directly transferred to the STT’s treasury within 30 days. This moves away from a traditional grant and instead provides funding directly to the STT for use in adherence with its own procedures. An immediate injection of capital, like the Coronavirus Relief Fund model, provides STTs with the liquidity required to initiate rapid response and recovery.

- **Parametric Funding Mechanism:** The transformed agency’s funding would be determined by a parametric formula based on objective, independently verifiable metrics like population impacted, wind speed, flood depth, or earthquake magnitude. Funding could be used for debris removal, first responder costs, permanent infrastructure repair and replacement, and mass care/sheltering. The federal funding would be up to 75% based on performance metric with a minimum of 50% of the parametric amount. This eliminates the need for detailed, time-consuming initial damage assessments and provides a predictable, reliable funding amount.

Benefits of a Parametric Approach
 The main benefit of a parametric model is the **speed** and **certainty** of payouts, which are triggered automatically when pre-defined, **objective** event criteria are met, like wind speed or earthquake magnitude. This eliminates the need for time consuming loss assessments and quickly provides a financial backstop and cashflow for rapid response and recovery. When paired with traditional insurance of public facilities, this can enable communities to **quickly recover** with manageable financial risk and burden to local taxpayers.

- The transformed agency should convene a group of STT representatives to collectively establish a parametric funding model that is based on existing data from the authoritative federal agency or organization over each type of eligible event (i.e. earthquake, hurricane, flood, etc.)

- **RAPID Direct Funding Authorization Criteria:** While the requirements of the existing federal disaster declaration process would remain in place, the factors used to authorize FEMA Public Assistance funding via RAPID Direct Funding would be replaced with the following:

- Evidence the parametric trigger occurred; and
- Evidence that response demands exceed the resources and capacity of local and state government.
 - The per capita threshold has historically not provided an accurate depiction of when the SLTT and affected local governments are truly overwhelmed during an event. As a result, federal assistance has often erroneously been provided when the STT and local governments had adequate resources to respond.

What is a Parametric trigger?
 Parametric, or index-based, is a concept where if an event reaches a pre-defined threshold, it automatically triggers a set payment amount based on the magnitude of the event. This is different than traditional payment based on the magnitude of assessed loss.

- **Compliance Requirements:** To expedite recovery, the Program would grant STTs authorization to use their own certified environmental, construction, audit and inspection review processes for projects funded by the program, in lieu of federal NEPA and other environmental and historic preservation requirements. This differs from the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program, which requires STTs to perform environmental and historic preservation (EHP) reviews on behalf of HUD, rather than substituting their own

environmental process. Furthermore, STTs would no longer be required to adhere to federal procurement requirements and could use their own procurement standards and processes instead.

- **Certified Local Programs:** STTs would apply to the transformed agency for pre-disaster certification of their existing environmental review processes.
- **Limited Waiver:** The waiver for federal EHP requirements would be exclusively for projects funded by RAPID Direct Funding.
- **Consistency and Oversight:** This approach leverages existing STT-level expertise and procedures, creating a faster, more agile recovery without sacrificing environmental protection. The transformed agency would retain oversight to ensure environmental reviews are appropriate and, if not, revoke certification.
- **Simplified and Broadened Eligibility:** Unlike the current PA program, which categorizes work in a rigid and complex manner, the RAPID Direct Funding program would offer a more simplified approach. This approach bolsters insurance requirements and transfers risks from American taxpayers to the private insurance market.
 - **State/Tribe/Territory Determination:** STTs would have the flexibility to fund projects that are necessary for timely response and recovery and should distribute funding in a fair manner based on disaster-caused need. To ensure project eligibility, the STT must certify projects meet the following criteria:
 - **Eligible applicant.** The applicant must be a state, tribal, territorial, local government, or an eligible PNP organization.
 - **Eligible facility.** The damage must have occurred at an eligible facility, which can include:
 - Buildings (owned or leased)
 - Public works systems
 - Equipment
 - Improved and maintained natural features, such as beaches or levees
 - **Eligible work:** Work must fall into one of two categories:
 - **Emergency Work:** Short-term activities to save lives, protect public health and safety, and protect property. This includes debris removal and emergency protective measures.
 - **Permanent Work:** Long-term work to restore a damaged public or PNP facility.
 - **Eligible cost:** The costs for eligible work must be necessary, reasonable, and adequately documented. Eligible costs can include labor, equipment, materials, and administrative costs.
 - **Emphasis on Outcome:** Eligibility and costs would be based on the outcome (restoring public function and safety) rather than on specific work types or detailed facility classifications.

- **Private Non-Profit (PNP) Eligibility:** The program would streamline the funding process for PNPs while retaining the existing distinction between "critical" and "non-critical" PNPs and the requirement for non-critical PNPs to first apply for an SBA loan.
 - **Expedited Verification of Non-profit Status:** STTs would be encouraged to establish a program to pre-certify PNPs eligibility, creating a verified database that eliminates the need for re-verification after a disaster.
- **Mandatory Two-Phase Reconciliation with Incentives:**
 - **Phase 1: One-Year Reconciliation:** Within one year of receiving initial funding, STTs must submit a certified public accounting (CPA)-conducted audit that provides a full accounting of all projects and costs and their plan to obtain and maintain insurance. Any funds not associated with an eligible project must be classified as underruns. STTs may either return underruns or request reallocation towards mitigation or insurance measures. Additional federal funding is not available for overruns.
 - **Reconciliation Incentives:** STTs that consistently submit timely, accurate, and transparent reconciliations in both audit phases could receive a “High-Performance Designation.” For these high-performing STTs, the President may approve more than 75% of the parametric amount as a federal contribution for the current event.
 - **Phase 2: Program Closeout Audit:** Upon the conclusion of all projects, a final, comprehensive audit should be performed by the STT and submitted to the transformed agency to close out the program. All federal funding provided under the RAPID Direct Funding Program must be expended or returned within eight years from the date of the initial award. This change eliminates the federal audit.
- **Insurance Requirements with Incentives:**
 - To ensure responsible risk management and reduce federal outlays, the RAPID Direct Funding Program would build upon the existing "obtain and maintain" insurance requirement by incorporating powerful incentives for STTs to prioritize insurance and self-insurance.
 - **Encouraging Self-Insurance and Risk Pools:**
 - **Swift State/Local/Tribe/Territory Approval:** The program provides a streamlined process and template for the transformed agency’s approval of SLTT-level self-insurance plans and risk pools, reducing administrative burden and encouraging SLTTs to create more affordable and stable insurance mechanisms. Although insurance would be required for damaged public facilities, the parametric based funding provided would not be reduced by insurance proceeds, incentivizing SLTTs to maximize insurance coverage. Every SLTT should declare their self-insured dollar amount.
 - **Funding for Program Establishment:** A portion of the unused funds can be used by the STT to establish a new self-insurance program or risk pool, demonstrating a direct federal investment in STT-led risk management.

- **Tax Incentive(s):** To increase participation, create tax credits to mitigate the financial burden of flood insurance. Individuals doing the right thing by carrying insurance policies should be rewarded for their investment and effort to protect against disaster.
- **State/Tribe/Territory Verification and Compliance:**
 - **Centralized Asset Registry:** STTs may be required to maintain and publicly publish a centralized, digitized registry of all public and PNP facilities receiving permanent repair funding. This registry should be retroactive and could include insurance details, ensuring a transparent record for audit and enforcement.
 - **Verification Through Audit:** Compliance with requirements to obtain and maintain insurance may be verified through the two-phase state audit process rather than on a project-by-project basis by the transformed agency.
- **Linking Insurance to Mitigation:** The program further incentivizes risk reduction by linking insurance to mitigation measures.
 - **Premium Offset for Mitigation:** SLTTs may use the funds to support public entities and PNPs in implementing mitigation measures, potentially leading to lower insurance premiums and a stronger financial incentive for resilience.
- **Consequences of Non-compliance:** Failure to comply with insurance requirements, as identified in the reconciliation audits, could result in penalties for the STT, such as an automatic reduction in future federal share of the parametric payout.
- **Winding Down Current Program:** While the RAPID Direct Funding program could streamline future funding, the transformed agency must also aggressively pursue closeout and reconciliation of existing disasters.
 - **Convert Historic Disasters to RAPID Direct Funding:** The transformed agency should pursue the ability to convert historic disasters to the new RAPID Direct Funding program, making a one-time payout and immediately transitioning to the two-phase reconciliation approach described above. This would significantly reduce the administrative burden on all stakeholders and prevent added confusion from overlapping approaches.
 - **Reduce backlog through prioritizing high-risk projects:** Identify high risk unliquidated obligations that could either be drawn down by recipients or recovered by the transformed agency within set timeframes, ensuring all stakeholders are accountable for the effective management of existing funds.

Precedent and Justification:

The RAPID Program is built upon proven concepts that prioritize speed, efficiency, and accountability:

- **The Coronavirus Relief Fund:** The Coronavirus Relief Fund demonstrated the effectiveness of distributing flexible, direct aid to STTs in an emergency.

- **Existing Block Grants:** Other federal block grants, like the Community Development Block Grant (CDBG) program, show the effectiveness of giving STTs autonomy in managing specific programs.
- **Parametric Triggers:** Used globally by risk insurers and governments, parametric triggers have a proven track record of providing rapid, predetermined payments following a triggering event.

Benefits:

The implementation of the RAPID Program would offer significant advantages for disaster-prone communities:

- **Accelerated Recovery:** Reduces funding delays from months or years to weeks, speeding up the rebuilding of vital public infrastructure and essential community services.
- **Empowered Local Leadership:** Allows SLTTs to leverage their local expertise and direct resources where they are most needed, fostering a more effective and agile recovery.
- **Increased Fiscal Discipline:** Replaces uncertain federal reimbursement with a predictable, rules-based funding model, while certified audits ensure transparency and accountability. The incentive-based reconciliation encourages performance and responsible stewardship of funds, with the potential for additional federal contributions for the current event based on merit. The eight-year expenditure deadline ensures funds are used efficiently.
- **Reduced Bureaucracy:** Significantly cuts down on the administrative burden for STT and local officials and PNPs, freeing up valuable time and resources.
- **Enhanced Public Trust:** Combines the speed of immediate aid and transparent adjudication with the robust oversight of a multi-phased audit process and incentive structure, assuring the public that funds are being used responsibly and effectively.
- **Improved Risk Management:** By linking insurance coverage to financial incentives, the program encourages STTs to take a proactive role in managing disaster risk for public and non-profit facilities.
- **Reduced Administrative Costs:** The RAPID Program is designed to drastically reduce superfluous administrative costs present in the disaster industrial complex and achieves efficiencies in the transformed agency’s staffing model by eliminating a variety of currently necessary roles in PA program(s). The Program does so by limiting administrative costs to two audits and A&E for project construction. Furthermore, the use of a capped parametric amount for the federal contribution should inherently incentivize STTs to keep administrative costs as low as possible. This ensures that the intent of the federal funding is realized, and taxpayer dollars are stewarded appropriately.

Conclusion:

The RAPID Program offers a modern solution to the challenges of post-disaster recovery. By moving beyond the slow and reactive traditional PA program, it leverages STT autonomy, parametric funding, and transparent auditing to create a faster, more effective, and more accountable system for all Americans affected by disaster.

7. Reform the National Flood Insurance Program (NFIP) for Financial Stability and Risk Resilience

Problem:

The NFIP is financially unsustainable and operates with conflicting policy goals, which hinder its effectiveness.

- **Financial Instability:** The NFIP has previously accrued over \$40 billion in debt (\$16 billion of debt was canceled by Congress in 2017), primarily due to large-scale, catastrophic flooding events that the program's premiums were not designed to cover. The NFIP historically underpriced flood risk, leaving it unable to cover major losses without borrowing from the U.S. Treasury. This financial unsustainability and underpriced insurance has led to an increasing debt burden with no ability to repay. Current interest payments on the debt are \$700 million annually.
- **Outdated Risk Information:** The program's current mapping methodology dates to the 1970's and does not fully capture current or emerging flood hazards, leading to an underestimation of risk. This outdated information does not support the pricing of insurance, leads to misunderstanding of flood risk, and has resulted in communities rebuilding and developing in flood prone areas. The NFIP also utilizes this outdated risk information to set standards for communities to regulate their flood risk. FEMA has not evolved its standards or science to support intuitive land use choices that result in predictable post-flood outcomes. This results in a one size fits all solution that limits local ownership of their flood risk. State and locally tailored standards would better reflect local flood risk choices and ideally decrease community, state, and federal cost.
- **Conflicting Goals:** Congress has instructed the NFIP to be affordable, financially sound, available to all, and risk informed. These goals often pull in opposite directions, and political pressures have frequently blocked meaningful reform, leading to dozens of short-term program reauthorizations. For example, maintaining affordable rates through subsidies directly conflicts with the goal of financial sustainability, and risk-informed pricing is politically unpopular in the most flood prone areas.
- **Duplicative Endangered Species Act (ESA) Requirements:** FEMA has been sued numerous times over its implementation of the NFIP for noncompliance with the Endangered Species Act (ESA). Although the influence of the NFIP on species is insignificant, ESA requirements result in FEMA being forced to impose duplicative and burdensome requirements at the local level, impacting property owners, developers, and local officials. FEMA needs to be able to implement the NFIP without having to engage in complicated, costly, and time-consuming Section 7(a)(2) consultations.

Why do I need Flood Insurance?

Floods can happen anywhere – just one inch of water can cause thousands of dollars' worth of damage. Most homeowners' insurance does not cover flood damage. Flood insurance is a separate policy that can cover buildings, the contents of buildings, or both.

Recommendations:

To address these critical shortcomings, the solution involves a strategic shift to a private market framework combined with strengthened federal oversight and community-level action. Implementing these proposals may require both federal administrative changes and Congressional action to align with current federal statutes, state-based insurance regulatory authorities, and privacy protection laws. FEMA in coordination with the Department of Treasury, state insurance commissioners, and the private insurance industry, should explore strategies for effectively operationalizing these proposals.

- **Empower Communities (Better Land-Use Policies):** Enhance NFIP participation standards administratively to support intuitive land use choices that result in predictable post-flood outcomes for communities. FEMA could explore ways to modernize the Community Rating System incentives to reward integration of property-level resilience activities; align floodplain standards with this proposal’s modernization of mapping data; and provide support to states to promote risk communication with local land-use planning. FEMA should ensure any updates promote local decision making and state primacy in land use choices for flood prone areas. These changes place flood risk management squarely in the hands of those most capable of regulating it—state and local governments.
- **Modernize Risk Assessment (Update Risk Rating 2.0 & Improve Maps):** The NFIP’s updated pricing methodology, Risk Rating 2.0, leveraged advanced technology and data sources to deliver fairer, more individualized rates, must continue to be implemented and updated based on better information and science. Risk Rating 2.0 was the first step in moving away from the use of mapped flood zones which are used for local floodplain management and to tell homeowners they are either "in or out". The new flood insurance rating methodology now uses a more comprehensive approach based on factors like distance to water, flood types, and the cost to rebuild. The program must also improve the accessibility, transparency, and quality of flood risk data and communication tools for all stakeholders. In addition to updating the mapping methodology to show property-level risk, FEMA should explore ways to expand the availability of anonymized flood loss and exposure data consistent with privacy and trade secret protections under federal law. Enhancing access to risk data would bridge the gap between insurance pricing and the outdated regulatory mapping methodology. Further, the NFIP must adopt an efficient model to identify and maintain flood risk information that connects land use choices and pricing.
- **Implement Risk-Based Pricing & Actual Costs:** A key to enabling the private market shift is to charge policyholders the actual costs of their policies. FEMA should continue to refine Risk Rating 2.0 implementation. The Council recommends exploring existing subsidies and working with Congress to address affordability challenges for select homeowners. FEMA can also evaluate opportunities to better align the Community Rating System Program eligible activities and discounts with measurable physical risk reduction actions communities and policyholders can take to ensure premium prices are reflective of property-level risk. These refinements could improve consistency between mitigation outcomes, pricing, and private market participation.
- **Revise ‘Write Your Own’ Compensation:** FEMA provides an expense allowance to Write Your Own (WYO) private insurance companies of roughly \$1 billion annually to sell, write, and service standard flood insurance policies under the National Flood Insurance Program.

WYO companies do not underwrite the flood risk but serve as intermediaries. In FY25, the expense allowance was 29.1% of total written premium volume by company and projected at 28.4% for FY26. The compensation methodology is dated and doesn't reflect improvements in FEMA's systems, automated premium pricing methodology, or the expanded use of the direct-to-customer servicing platform. Compensation should be updated to ensure FEMA is not over-compensating Write Your Own insurance companies. FEMA should evaluate options through ongoing rulemaking to update the compensation framework that reflect administrative costs and new operational efficiencies, which was Congressionally directed in the Biggert-Waters Flood Insurance Reform Act of 2012. Completing this rulemaking has the potential to save hundreds of millions of dollars and promote more private flood offerings.

- **Shift to Private Market through Depopulation of Existing NFIP Policies:** A core component of the solution is a gradual, structured transition of certain existing NFIP policies to the private market in areas where private capacity exists and are consistent with state regulatory frameworks. This would be accomplished by pursuing a voluntary "take-out" program, which would allow FEMA to assess the feasibility of transferring eligible policies to qualified private insurers under existing statutory authority. Depopulation programs have historically been state-based so applying this approach at the federal level will require careful evaluation of operational, regulatory, and consumer protections. This approach, modeled on successful state depopulation programs for other perils, could reduce the NFIP's policy count. States could regulate the market to ensure consumer protection, with the direct involvement of state insurance commissioners.
- **Evaluate Development of Flood Insurance Marketplace:** To modernize and enhance the capacity of the national flood insurance system, it is recommended that FEMA evaluate the development of a flood insurance marketplace designed to provide consumers with access to both NFIP and qualified private insurance options when purchasing a new flood policy. The marketplace could leverage private sector capacity through a centralized clearinghouse model, allowing private participating insurers opportunity to offer coverage prior to placement with NFIP. This collaboration would serve as a clearinghouse opportunity for private flood insurers who could offer coverage prior to submission to the NFIP. FEMA should evaluate potential options with qualified insurance wholesalers or a consortium of insurers to assess the feasibility of administering a clearinghouse under their current authorities. A model of this kind would address the critical needs of market capacity, consumer protection, and improve administrative efficiency while offering consumers a choice between private coverage or the NFIP.
 - **Centralized Clearinghouse:** FEMA should evaluate models in which a wholesaler or consortium could manage a national market exchange that operates as a clearinghouse for consumers seeking private insurer and NFIP flood policies. This would standardize the policy origination processes, thereby reducing the administrative friction that currently limits private carrier participation.
 - **Pricing Alignment:** The marketplace's pricing mechanism could reference FEMA's Risk Rating 2.0 framework as an actuarial benchmark. In addition, the marketplace could encourage depopulation by requiring the insured to select a private flood insurance policy from a marketplace approved insurer that is priced at no more than 10 percent above the NFIP Risk Rating 2.0 actuarial rate for comparable coverage for the same property. This approach aids in depopulation and helps ensure that while private market competition is

encouraged, pricing remains tethered to actuarial science, state rate setting, and avoids significant market volatility.

- **Rigorous Carrier Standards:** To protect consumers and ensure market resilience, FEMA, through its partnership with the wholesaler or consortium, would ensure all private carriers writing flood insurance through the marketplace meet eligibility requirements, in coordination with State Insurance Commissioners that is consistent with the McCarran Ferguson Act. These requirements would include robust financial stability metrics to prevent carrier failure during catastrophic events.
- **Strategic Alignment with the NFIP:** This marketplace would operate in concert with the NFIP, providing a viable and standardized private option that helps offload risk from the federal program. This would ultimately contribute to the NFIP's long-term financial stability and reduce the taxpayer burden.
- **Address Repetitive Loss Properties:** Manage repetitive loss properties through targeted mitigation planning and accountability measures, such as those proposed in the "Repeatedly Flooded Communities Preparation Act" (S.1545). This legislation provides a structured plan to address the highest-risk properties and ensures mitigation is a priority in these areas, thereby reducing the financial burden of repeated claims.
- **Reduce Duplicative ESA Burden on the NFIP:** The Council recommends that National Marine Fisheries Service (NMFS) be directed to 1) rescind all Biological Opinions (BiOps) relating to FEMA's implementation of the NFIP and 2) statutorily exempt the NFIP from the ESA. FEMA should focus on a national ESA solution for the NFIP through a renewed partnership with NMFS.

Benefits:

Implementing these changes would produce several key benefits for the public and the government.

- **Accelerated Recovery:** Broader insurance access and diversified coverage through a more competitive market, which could better sustain the overall market and ensure faster payments and more predictable recovery for local communities after a disaster.
- **Reduced Government Burden:** A more robust private market and stronger community-level, state owned land use management could reduce the financial burden on federal, state, and local governments by empowering individuals to understand and manage their own risk.
- **Predictable Financial Outcomes:** Homeowners will be better able to anticipate post-disaster compensation through knowledge of their personal policies, rather than relying on the uncertain nature of federal disaster aid.
- **Increased Resilience:** By aligning insurance rates with granular flood risk, improving publicly available flood risk information, and promoting local decision making and state primacy in land use choices, property owners and local governments have a greater incentive to invest in mitigation measures, making communities safer and more resilient to the growing threat of flooding.

Potential Next Steps:

The Council recommends that FEMA coordinate with the U.S. Department of Treasury, other relevant federal agencies, state insurance commissioners, and insurance industry stakeholders to further evaluate the NFIP solutions discussed in this section.

Additionally, FEMA, in coordination with the Department of Treasury, should convene a roundtable of state insurance commissioners, federal lending regulators, consumer representatives and relevant insurance industry stakeholders, including insurers, reinsurers, and brokers to analyze the potential reforms outlined in the Council’s proposal. These stakeholders can also assess how data, underwriting, and price information can be shared responsibly and maintain consumer protections consistent with statutory authorities and privacy requirements. Further, federal agencies should continue stakeholder engagement on increasing consumer engagement and understanding of flood risk and insurance options.

In relation to a shift to private market and a potential depopulation program, FEMA, the U.S. Department of Treasury, federal lending regulators, Government Sponsored Enterprises, and the state insurance commissioners should collaborate on developing a potential implementation strategy that would be compliant with the express authorities of the McCarran-Ferguson Act as well as the Flood Disaster Protection Act of 1973 mandatory purchase provisions.

Conclusion:

The National Flood Insurance Program is at a critical juncture. The current model is unsustainable and has not evolved since the 1970s—it cannot meet conflicting expectations of providing affordable insurance, mitigating flood risk, and maintaining financial solvency. By embracing a new strategy that encourages greater private market participation, modernizes risk assessment, and modifies the NFIP's role in state and community-level land use choices, the nation can move toward a more resilient and financially stable flood risk management system. This shift would reduce the federal government's financial burden, promote accurate risk pricing, and incentivize property owners and communities to invest in mitigation, ultimately leading to a more prepared nation in the face of flood-related disasters. While this proposal seeks to address NFIP’s financial problems going forward, the existing debt would have to be addressed by Congress or other revenue sources.

8. Maximize Every Dollar Spent by Reducing Administrative Costs

Problem:

A portion of U.S. federal disaster relief funds is used for administrative costs and contractor fees rather than directly for community recovery. This is due to a system with rising program complexity, significant administrative costs, and a trend of personnel moving between FEMA and private firms. This structure has prompted calls for reforms to simplify grant processes, manage administrative costs, and address the influence of private interests on public policy.

The management system has shifted from one primarily using federal and local government staff to one relying on private contractors. A key factor in this change is the increased complexity of FEMA's grant programs, such as the Public Assistance (PA) and Hazard Mitigation Grant Programs (HMGP). A FEMA official in Puerto Rico highlights this phenomenon: “I have 500 contracted employees that would not be needed if FEMA’s grant process was not so complex.”

The detailed requirements of these programs have created challenges for state and local governments, especially smaller municipalities with limited resources, as noted in GAO reports.

This complexity has fostered a specialized industry of consultants and contractors who assist communities in navigating the grant application and compliance procedures. This industry's growth has been influenced by:

- **Personnel Transitions:** Former FEMA and state political appointees and career employees have joined or established private companies that now serve as major contractors in the disaster management space. This raises questions about whether former officials leverage insider knowledge and connections for private gain.
- **Financial Incentives:** The current system provides private sector financial incentives for state and local governments to hire them. Since administrative costs are largely reimbursable by FEMA, jurisdictions can pass these consultant fees on to the federal government. As one former FEMA official noted, this can lead to "a lot of money getting spent on process... and you end up with a lot of billable hours" without necessarily improving outcomes.

A central issue with the current system is the amount of taxpayer money used for administrative costs. A substantial part of grant funding is spent on administrative and management expenses at

In total, almost 25 cents on every dollar can be provided for administrative expenses

both the federal and state/local levels. In total, almost 25 cents on every dollar can be provided for administrative expenses. Most of these costs are expended during the grant development phase, which hinders the pace of recovery.

- **Overhead spending:** The administrative allowance for state and local governments has been increasing. For instance, DHS OIG audits have identified concerns regarding FEMA's oversight of grant funds and instances of over-obligated funds.
- **Incentive structure:** The reimbursement model may encourage state and local governments to keep disasters "open" longer than necessary to maximize management costs, which can delay project completion. The primary incentive for contractors is to maximize billable hours, not to expedite recovery.
- **Program complexity:** As grant programs become more complex, the demand for specialized consultants increases, which in turn raises administrative costs. The system's intricate nature can make it difficult for citizens and local officials to understand, creating a dependency on the private firms that benefit from this complexity.

Recommendations:

To address these challenges, the following recommendations, informed by GAO and OIG findings, have been suggested:

- **Simplify and streamline grant programs:** FEMA could review its grant programs to reduce unnecessary bureaucratic requirements. Simpler applications and standardized documentation could decrease the need for consultants, especially for smaller communities.

- **Establish caps on administrative overhead:** To ensure more funds reach affected communities, FEMA could implement strict, federally mandated caps on the percentage of grant funds that can be used for administrative costs. A more transparent reporting system could also be established to track overhead spending.
- **Strengthen post-employment rules:** Ethics rules for employees transitioning from FEMA to the private sector could be reinforced. This could involve extending "cooling-off" periods and increasing transparency requirements for former employees who become consultants, which would help to mitigate potential conflicts of interest.
- **Increase direct technical assistance:** Instead of increasing administrative reimbursement percentages, FEMA could provide direct, in-house technical assistance to local governments. By offering pre-packaged support and training, FEMA could reduce the reliance on third-party contractors and empower local officials to manage recovery efforts.

In conclusion, the current U.S. disaster management system, with its reliance on private contractors and complex processes, directs a significant amount of money away from community needs. By eliminating and simplifying programs, capping administrative costs, strengthening ethics rules, and increasing direct government support, policymakers could improve how disaster relief funds are used to build a more resilient nation.

9. Revitalize A Unified National Network for Partnership

Problem:

The current emergency management landscape lacks a comprehensive framework that effectively integrates the efforts of federal, state, and local governments with those of private industry, faith based, and non-profit partners. The current system of laws, executive orders, and policies causes confusion by using the following terms interchangeably: frameworks, incident command systems, lifelines, core capabilities, and emergency support functions. This gap prevents the building of shared capabilities and national-level capacity, directly impacting the readiness and effectiveness of local first responders.

Recommendations:

- **Return to an Integrated Network:** Disasters demand a unified national effort that leverages the strengths of all sectors. The transformed agency would address the existing gap in the emergency management landscape by returning to a network that enables government, private industry, faith-based, and non-profit partners to build toward a shared capability and integrated resources. This network would provide a common understanding of roles and responsibilities, promoting a "Whole Community" approach to national resilience.
- **Enhance Public-Private Coordination:** The new framework would formalize and streamline coordination between government agencies, critical private-sector partners, and non-profit organizations. Because the private sector owns and operates most of the nation's critical infrastructure, and non-profits deliver essential services during emergencies, integrating these partners is essential to strengthening national capacity and improving readiness at the local level. This effort includes revitalizing the National Business Emergency Operations Center (BEOC) and relocating it to the Agency's operational directorate to re-establish its role as a central hub for communication, problem-solving, and resource coordination among businesses and non-profit partners during disasters. Additionally, the

framework would support the development of Regional BEOCs that are aligned with the National by leveraging existing regional resources—particularly the FEMA Regions' private-sector liaison—to ensure closer alignment with state and local operations. As part of this effort, Regional BEOCs should convene key stakeholders—including major retailers, small business leaders, logistics providers, and non-profit response partners—to assess current models, close coordination gaps, and identify priority needs for restoring services, stabilizing supply chains, and bringing communities back online following major disasters.

- **Leverage Technology for Shared Awareness:** The framework would also include a plan to develop and implement modern technology and communication protocols that ensure shared situational awareness and data sharing among all partners before, during, and after a disaster.

10. A Transformed Agency

FEMA needs to be fundamentally transformed from how it exists today and must be remade into a new, supportive agency. “FEMA” as a brand and as an agency has been irreparably damaged by the last four years of mission creep and programmatic failures as noted later in this report. The time is now to transform FEMA into an agency that retains the core missions of FEMA, while highlighting the renewed emphasis on locally executed, state or tribally managed, and federally *supported* emergency management.

The core objective is to realign the agency's mission to prioritize immediate, effective, and impartial disaster response and recovery for American citizens by shifting greater responsibility and direct funding to SLTTs. The current structure is criticized for mission creep, being too centralized, and for administrative bloat that diverts critical resources. Key recommendations include conducting a strategic review of personnel requirements to determine appropriate staffing levels, primarily targeting the disaster workforce through program efficiencies and increased accountability, exploring the relocation of physical headquarters, shifting certain missions, like training, to state authorities, and redefining FEMA's role as a "payer of last resort" to eliminate duplicative federal funding. A crucial element of this reform is to build upon and expand successful federal-state partnership programs to leverage demonstrated value and expertise in the first-response community while establishing a cohesive framework that integrates government, private, and non-profit sectors for unified national resilience. These reforms are designed to create a lean, deployable disaster force that empowers state and local officials, reduces costs, and improves resilience against increasingly complex threats. The internal workforce adjustments should be conducted over a 2-3 year phased approach that allows the agency to realize the efficiencies while reducing staff. Further, these reforms are best achieved via the same timeline that allows for States, Locals, Tribes, and Territories to make corresponding fiscal, capability, and workforce adjustments to ensure a successful transition for all affected stakeholders.

Problem:

FEMA currently suffers from multiple systemic issues that hamper its effectiveness and accountability.

- **Lost Mission Focus:** The agency's resources are diverted to missions outside its core disaster response and recovery responsibilities. This includes a significant financial outlay on issues unrelated to its primary mandate. The resulting mission creep saps limited staff and resources, compromising its ability to respond to actual disasters.

- **Inefficient Use of Federal Funds:** There is excessive overlap in federal benefits programs, with FEMA often providing duplicative funding. This bureaucratic redundancy leads to administrative bloat, delays in delivering aid, and unnecessary costs for taxpayers.
- **Centralized and Bloated Headquarters:** Compared to mission-focused federal agencies with comparable field operations, such as the U.S. Army Corps of Engineers (USACE) and the U.S. Forest Service (USFS), FEMA is significantly top-heavy. The concentration of personnel in a District of Columbia-centric headquarters creates bureaucratic inertia and slows down critical decision-making during emergencies.

Recommendations:

To address these problems, the following recommendations are proposed for the transformed agency:

1. Transfer Training Responsibility and Empower States through Proven Programs

- **Shift Training Execution to States:** While the future agency must establish and maintain national standards for disaster response, the direct execution of training should be shifted to the state level. This would eliminate current personnel requirements within the transformed agency and empower states to build robust, tailored training programs.
- **Expand and Leverage Successful Partnerships:** Rather than replacing successful programs, the future agency doubles down on those with a proven track record of effective federal-state-local partnership.
 - **National Urban Search and Rescue (US&R) Program:** This program, with its network of 28 task forces, has a decades-long history of successfully integrating federal, state, and local emergency response teams. The future agency enhances funding and expands capabilities for these task forces, ensuring they remain a cornerstone of specialized, on-the-ground support. Leverage this successful program as a model to expand the State Urban Search and Rescue (SUSAR) programs.
 - **Centers for Domestic Preparedness (CDP):** The CDP provides invaluable, federally funded training for state, local, tribal, and territorial emergency responders in areas such as incident management and mass casualty response. A transformed agency expands access to and funding for this training, ensuring first responders across the country are equipped for a wide array of threats, including complex disasters and terrorist acts.
 - **U.S. Fire Administration (USFA):** The USFA already works with local fire departments to reduce fire-related injuries and fatalities through training and resource provision. The transformed agency builds on this relationship by better integrating USFA support into overall disaster preparedness and response strategies, particularly for incidents involving complex hazards like wildfires.

2. Empower States with Direct Funding and Limited Federal Coordination

- **Empower States to Take the Lead:** States should assume a greater role in managing disasters from preparedness to recovery, utilizing direct federal funding mechanisms.

This empowers state and local officials who have a more direct understanding of their citizens' needs.

- **Formalize Federal Role as a Coordinated Supporter:** The federal government should limit its on-the-ground response to incidents that exceed the capabilities of state and local resources. In these cases, the transformed agency acts as the central coordinator, aligning resources from across the federal government, such as the Department of War, to provide supplemental support.
- **Closeout of Historical Open Disasters:** The transformed agency should endeavor to expedite the closeout of historical open disasters. Doing so reduces the lingering administrative costs as well as legacy information technology systems that are maintained solely to facilitate open disaster declarations. Both directly benefit Americans by accelerating ongoing recovery efforts and reducing taxpayer costs.
- **Eliminate Duplicative Funding:** This approach, which establishes the future agency as the payer of last resort, would require other federal agencies to provide assistance through their existing benefit programs first, thereby eliminating redundant funding mechanisms and associated administrative burdens. To achieve this, the Administration should work with the U.S. Congress to ensure other existing benefit programs are funded in a timely and responsive manner. Further, the future agency must look for opportunities to remove duplications of effort such as environmental and historical reviews, audits, and inspections that should be conducted by states.

3. Rebalance FEMA workforce and provide clarity across Headquarters, Regions and Field

- **Clarity of roles and responsibilities:** Headquarters should focus on policy, procedures, guidance, oversight, administrative functions, and coordination for national response. The head of the transformed agency is responsible to ensure a national system of emergency management that is locally led, state managed, and federally supported. The regions should focus on preparing and responding to incidents through forward embedded staff at State offices. Incidents should be led by Federal Coordinating Officers who report to Regional Administrators and are empowered to coordinate federal resources and support to States. In partnership with states, tribes, and territories, Regional Administrators should ensure the coordination, training, exercises and plans are in place for the most significant incidents across the United States.
- **Align Personnel with Requirements:** Appropriate staffing levels will need to be assessed and determined as the policy, legislative, and administrative changes called for in this report are implemented. The transformed agency can align personnel with future requirements that are rooted in program efficiency, enhanced effectiveness, and greater accountability. This strategic review should be conducted over a 2-3 year timeline and would be dependent on the Report's recommendations being implemented. The aim is to create a more deliberate approach to FEMA staffing, reserving federal intervention for the largest and most complex events, and ensuring that when needed, FEMA is equipped to succeed in accomplishing its mission.
- **Transfer Logistics Operations:** Explore moving the transformed agency's logistics team to co-locate with the U.S. Transportation Command (USTRANSCOM). This would

create efficiencies through direct collaboration with their Department of War counterparts.

- **Review Executive Structure:** Conduct a review of the Senior Executive Service (SES) billets to realign or reduce them in accordance with the proposed staffing efficiencies and mission refocusing.

Conclusion

This transformation is an imperative step toward restoring the agency's effectiveness, accountability, and public trust. By implementing a bold restructuring plan—centered on staffing alignment, streamlining operations, eliminating redundancies, and empowering state partners—the federal government can ensure a more immediate, effective, and efficient response to disasters. This framework shifts the agency's focus from bureaucracy to boots-on-the-ground action, better positioning the United States to meet the complex disaster challenges of the future. The ultimate outcome would be a streamlined, responsive, and resilient organization that delivers timely relief and recovery to American citizens when they need it most.

Soliciting Input from Stakeholders Across the Nation

Incorporating Public Feedback into FEMA Review Council Efforts

The Council undertook extraordinary measures to ensure that public feedback was solicited from a broad range of stakeholders as part of its comprehensive review of FEMA's programs and operations. Recognizing the critical importance of stakeholder engagement, the Council employed multiple avenues to gather input, including public meetings, Federal Register Notices, in-person listening sessions, electronic and regular mail submissions, and virtual forums. These efforts were designed to ensure transparency and accessibility, enabling voices from across the nation to contribute to the reform process.

The feedback received underscores widespread support for FEMA reform aimed at addressing inefficiencies, reducing bureaucratic barriers, and enhancing support for disaster survivors and local governments. Stakeholders consistently identified key priorities, including the need to streamline processes, decentralize decision-making, increase funding for mitigation and preparedness initiatives, and ensure fairness in disaster response and recovery efforts. Participants emphasized the importance of implementing reforms gradually, allowing for a phased approach that strengthens partnerships among federal, state, tribal, and local entities while minimizing disruptions.

This robust engagement process has provided the Council with invaluable insights into the challenges and opportunities facing FEMA's operations. The feedback serves as a cornerstone for shaping the future of FEMA's programs, ensuring that reforms are informed by the lived experiences of those directly impacted by disasters and those responsible for managing emergency response and recovery efforts. By integrating this input into its recommendations, the Council aims to create a more efficient and responsive FEMA that is better equipped to meet the needs of communities nationwide. The inclusion of public feedback reflects the Council's commitment to fostering collaboration and transparency in the pursuit of meaningful reform.

Methodology

We are a nation built upon local communities, thus the Council immediately recognized that they must canvas the country to capture the widest possible feedback from the American people for a reform effort that tragically may affect nearly every American at some point in their lifetime.

To achieve this objective, the Council leveraged the following tools. Of note, the views expressed from the survey are not endorsed by the Council but were taken into consideration during deliberations on its recommendations.

- National Survey
- Listening Sessions (in-person and virtual)
- Federal Register Notice Comments
- Public Meetings

National Survey

The Council’s State-Federal Coordination Subcommittee surveyed 1,387 stakeholders spanning state, local, tribal, and territorial (SLTT) agencies as well as non-governmental partners. The results revealed critical insights into the current state of national preparedness and response. The Council conducted surveys focused on mitigation, recovery, preparedness, and response, which collectively assessed key emergency management tasks. These surveys evaluated capabilities ranging from community resilience and long-term vulnerability reduction to infrastructure systems, cybersecurity, and mass care services.

With a total of 1,387 responses, the individual totals for the surveys were:

- Mitigation: 354 responses
- Recovery: 271 responses
- Preparedness: 479 responses
- Response: 283 responses

Most of the responses were from SLTT emergency management services, with some responses from non-governmental agencies such as universities, hospitals, and non-profits. Local agencies provided more than 75 percent of the responses. Geographically, the responses cover the entire United States, with a higher concentration of local agency responses coming from populations on the east and west coasts. Figure 1 shows the distribution of responses for the Response survey.

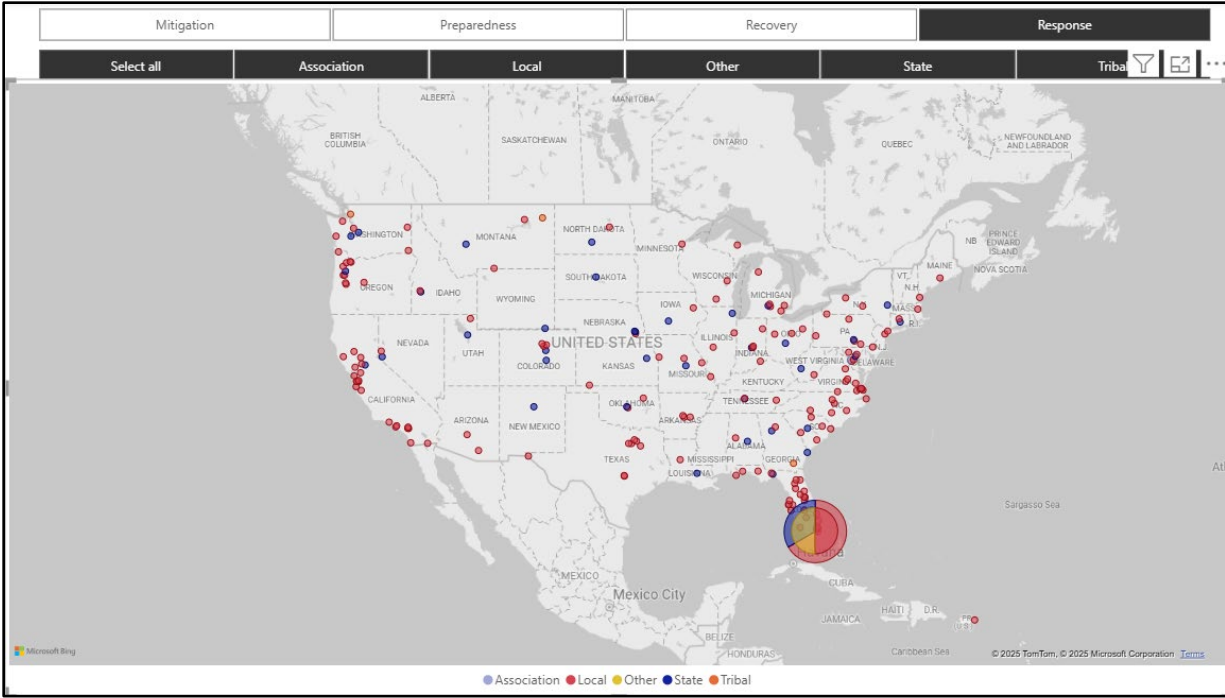


Figure 1: The geographic distribution of inputs from the Response Survey.

Listening Sessions

Subcommittee listening sessions were facilitated to hear from state and local emergency managers throughout the country to hear their thoughts on disaster response, recovery, mitigation, and reforming FEMA’s policies and operations. The listening sessions were attended and facilitated by Council members.

The locations for subcommittee listening sessions were strategically selected throughout the United States based on significant disasters that occurred in those areas, and the ability to meet with a bipartisan selection of state and local emergency managers across the regions.

The locations included: Asheville, North Carolina; Oklahoma City, Oklahoma; New Orleans, Louisiana; Los Angeles, California; Lincoln, Nebraska; Cheyenne, Wyoming; Minneapolis, Minnesota; Cape Coral, Florida; Washington, District of Columbia; Colorado Springs, Colorado; San Francisco, California; Waterbury, Vermont; San Juan, Puerto Rico; and virtually.

Additionally, the subcommittees held listening sessions in Los Angeles, California to discuss the recovery efforts of the 2025 Southern California wildfires; San Juan, Puerto Rico to discuss the ongoing impacts of Hurricane Maria in 2017; and Asheville, North Carolina to honor the one-year anniversary of Hurricane Helene.

In addition to these, the Council held an in-person listening session with over 20 Tribal Nations in Oklahoma City, Oklahoma as well as hosting three virtual listening sessions that cumulatively had over 100 Tribal Nations registrants.

Federal Register Notice Public Comments

The FEMA Review Council published Federal Register Notice DHS-2025-0013 to solicit public feedback on the agency’s reform. The 11,708 public comments received reflect a strong

consensus on the importance of FEMA’s role in disaster response and recovery, while also capturing a broad spectrum of perspectives, experiences, and recommendations.

Public Meetings

The Council held public meetings in three locations: New Orleans, Louisiana; Oklahoma City, Oklahoma; and Washington, District of Columbia. The aim of these public meetings was to ensure the Council operated in a *transparent manner* while also leveraging the anniversaries of significant national disasters to further emphasize President Donald J. Trump’s laser-focus on putting Americans first as part of FEMA’s reform.

- **New Orleans, Louisiana.** In recognition of the 20-year anniversary of Hurricane Katrina.
- **Oklahoma City, Oklahoma.** To highlight that not every disaster is a natural one, such as the Alfred P. Murray Federal Building bombing in 1995, and to further acknowledge natural disasters are not just flooding events, given the number of catastrophic tornadoes in this state.
- **Washington, District of Columbia.** By conducting two public meetings in the nation’s capital, the Council ensured in-person opportunities for senior leaders of the Administration to engage and participate with the Council.

Analysis of Public Feedback Received

The FEMA Review Council's listening sessions, public comments, public meetings, and survey analysis revealed key themes, challenges, and recommendations for improving FEMA’s disaster response, recovery, and mitigation efforts. Details of the below summary can be found in Appendix *Detailed Public Comments*.

List of Common Issues and Challenges:

- **Bureaucratic complexity:** FEMA’s processes are overly complex, slow, and resource-intensive, creating barriers for smaller jurisdictions and tribal nations.
- **Delays in funding and reimbursements:** Cash flow challenges and slow FEMA reimbursements hinder recovery efforts, especially for smaller entities.
- **Workforce and capacity constraints:** There is high turnover among FEMA staff and limited capacity at the local level impact disaster response and recovery effectiveness.
- **Environmental and historic preservation reviews:** EHP reviews are major bottlenecks, delaying critical recovery projects.
- **Insurance and risk management:** Rising insurance costs, underinsurance, and concerns about FEMA’s Risk Rating 2.0 system impact recovery efforts.
- **Disparities in aid:** Systemic inequities affect small, rural, and underserved communities, as well as vulnerable populations like renters, low-income families, and tribal nations.
- **Staffing gaps:** SLTT agencies face shortages in mass care, operational communications, and specialized disaster response capabilities.
- **Communication challenges:** Insufficient clarity and timeliness in FEMA’s communication with local jurisdictions hinder coordination.

- **Dependence on FEMA funding:** SLTT agencies rely heavily on FEMA funding for critical disaster response and recovery activities, with reduced funding threatening capabilities.

List of Common / Core Recommendations:

1. Bureaucratic complexity

- Simplify FEMA processes by streamlining disaster declarations, grant applications, and project reviews.
- Decentralize decision-making to regional offices and implement a single federal family individual assistance application for all federal assistance.

2. Delays in funding and reimbursements

- Enhance funding mechanisms by increasing funding for Emergency Management Performance Grant (EMPG), Hazard Mitigation Grant Program (HMGP), and Building Resilient Infrastructure and Communities (BRIC) programs.
- Transition to block grants for disaster recovery funding with safeguards for fair distribution to expedite aid delivery.

3. Workforce and capacity constraints

- Build local capacity by investing in training, technical assistance, and staffing for local emergency management agencies.
- Expand FEMA training programs and workforce development initiatives to address staffing shortages.

4. Environmental and Historic Preservation (EHP) reviews

- Streamline EHP reviews to reduce delays in recovery projects and empower local governments to conduct them.

5. Insurance and risk management

- Invest in mitigation and resilience by prioritizing pre-disaster mitigation funding, resilient infrastructure, and incentivizing stronger building codes and forward-looking plans.

6. Disparities in aid

- Address systemic disparities by tailoring FEMA programs to meet the needs of small, rural, underserved communities, tribal nations, and vulnerable populations.

7. Staffing gaps

- Build local capacity by expanding FEMA training programs and workforce development to address gaps in mass care, operational communications, and specialized disaster response capabilities.

8. Communication challenges

- Leverage technology to adopt modern tools like AI, geospatial systems, and real-time data sharing platforms to improve situational awareness and communication clarity.

9. Dependence on FEMA funding

- Maintain and strengthen FEMA’s capabilities to ensure reforms prioritize disaster survivors’ needs, improve aid delivery efficiency, and address increasing disaster frequency and severity.
- Enhance public-private partnerships by integrating private sector and nonprofit organizations into disaster planning and operations to supplement FEMA’s efforts.

Tribal Engagements

The Council recognizes the distinct sovereignty of each individual Tribal Nation and Alaska Native Village and their respective government-to-government relationship with the federal government as outlined in the U.S. Constitution, treaties, statutes, and court decisions. The Council also recognizes the unique position Tribal Nations and Alaska Native Villages are in to be considered both states and locals when applied to the traditional levels of government. While the Council could not directly engage one-on-one with each of the 574 federally recognized tribes, the Council provided numerous opportunities for engagement comments from Tribal Nations as directed in the Executive Order. The Council held an in-person listening session with over 20 Tribal Nations in Oklahoma City, Oklahoma. Additionally, the Council hosted three virtual listening sessions that cumulatively had over 100 Tribal Nations registrants. These sessions aimed to gather input on improving FEMA's programs, services, and disaster response capabilities, with the Council committed to synthesizing feedback into recommendations for the President and Congress.

Findings:

Tribal leaders emphasized the need for FEMA to respect tribal sovereignty by maintaining direct government-to-government relationships and avoiding state or county intermediaries. They highlighted unique challenges faced by tribes, such as geographical isolation, cultural impacts, and infrastructure limitations, and called for tailored solutions like vertical evacuation structures for coastal tribes. Tribes offered the below key concerns and key proposals:

Tribal Concerns:

1. **Tribal Sovereignty and Direct Engagement:** Tribal leaders emphasized the importance of maintaining government-to-government relationships with FEMA, advocating against routing assistance through states or counties. They stressed the need for FEMA to respect tribal sovereignty and directly engage with tribal governments.
2. **Unique Tribal Challenges:** Tribes face distinct challenges, including geographical isolation, cultural impacts of disasters, and limited infrastructure. Alaska Native tribes highlighted erosion, flooding, and permafrost loss, while coastal tribes emphasized the need for vertical evacuation structures to mitigate tsunami risks.
3. **Funding and Grant Accessibility:** Tribes expressed concerns about limited access to FEMA grants, restrictive eligibility criteria, and the cancellation of the Building Resilient Infrastructure and Communities (BRIC) program. They called for streamlined grant processes and equitable funding opportunities.
4. **Disaster Thresholds and Cost Sharing:** FEMA's disaster declaration thresholds often exclude smaller tribes. Tribal leaders advocated for lowering thresholds and increasing cost-sharing flexibility to ensure equitable access to disaster relief.

5. **Emergency Management Capacity:** Many tribes operate with limited Emergency Management staff and infrastructure. Tribes requested increased technical assistance, training programs, and resources to enhance their capacity.
6. **Collaboration and Mutual Aid:** Tribes proposed the creation of a Tribal Emergency Management Assistance Compact (T-MAC) to facilitate mutual aid and resource sharing among tribal nations during disasters.

Proposed Recommendations from the Tribes:

- **Adopt a Tribal Disaster Act:** Establish a standalone act to address tribal-specific needs and organizational structures.
- **Revise the Stafford Act:** Amend the act to better reflect tribal realities, particularly for Alaska Native communities.
- **Restore BRIC and Expand Mitigation Funding:** Reinstate the BRIC program or similar initiatives to support hazard mitigation plans and infrastructure projects.
- **Improve Grant Processes:** Streamline application procedures and broaden eligibility criteria for FEMA grants.
- **Create a Tribal EMAC:** Establish a compact to facilitate mutual aid among tribes.
- **Enhance Technical Assistance:** Provide training, resources, and direct support to build tribal Emergency Management capacity.
- **Recognize Cultural Impacts:** Develop metrics to account for cultural losses in disaster declarations.

Areas for Further Exploration / Engagement

The scope and scale of interconnected topics and challenges when investigating the nation’s state of emergency management is impressively complex. During this journey, the Council identified a series of areas that would benefit from thoughtful exploration from other formal groups or experts that may be best positioned to offer cogent solutions to the President and the Nation.

1. Review and streamline disparate disaster grant programs across federal agencies to improve consistency and accessibility for states and localities
2. Additional analysis on opportunities within the National Flood Insurance Program
3. Assess viability and opportunities for a potential FEMA Headquarters location change
4. Explore how to better integrate emerging technologies including advanced analytics, AI, and communications platforms to enhance operational capability, predict requirements in advance, and reduce costs
5. National Disaster Medical System: How to evolve program to better mirror USAR
6. Qualifications and cultivation of the administrative, state directors, T&T, and major urban core directors
7. National Structure – Optimal/Desired Number of Personnel. Due to anticipating staffing efficiencies, recommend further exploration on staffing as well as Region structure

- 8. Explore the National Core Competencies of all FEMA-related programs
- 9. Explore EMPG eligibility for Tribes
- 10. Explore how to best leverage existing advisory councils for FEMA:
 - a. FEMA National Advisory Council
 - b. FEMA Technical Mapping Advisory Council
 - c. Board of Visitors for the National Fire Academy

Public Meeting Minutes

The Council held four public meetings during its operations, the first being an inaugural gathering of the presidentially appointed members, the second and third meetings acting as updates to progress and actions taken during the operations of the Council, and the last being the formal presentation and voting of this report and recommendations. Full public meeting minutes can be found on the [Council's website](#).

- Inaugural FEMA Review Council Meeting on May 20, 2025, located at the Eisenhower Executive Office Building in Washington, DC.
- Second FEMA Review Council Meeting on July 9, 2025, located at the DHS Customs and Border Protection's Customs House in New Orleans, Louisiana.
- Third Public FEMA Review Council Meeting on August 28, 2025, located at the Oklahoma State Capitol Building in Oklahoma City, Oklahoma.
- Final Public FEMA Review Council Meeting on May 7, 2026, located at the Eisenhower Executive Office Building in Washington, DC.

Engaged Subject Matter Experts and Stakeholders

The FEMA Review Council would like to thank the more than 13,000 individuals and respondents who have participated and engaged with the Council to share their input and insight. A full listing of individuals and organizations who have submitted formal testimony can be found at: [Regulations.gov](#)

The Council would like to note the extensive participation from the organizations and entities listed below. This list is not exhaustive or granular as the Council has engaged with numerous subject matter experts that have met in closed subcommittee sessions. The following list has been provided as is to respect the integrity of the feedback provided in those sessions.

Federal Agencies

Office of Management and Budget
 Department of War
 Department of Treasury

Department of Homeland Security
 Federal Emergency Management Agency

National Organizations

Council of Governors	International Association of Emergency Managers
International Association of Fire Chiefs	National Association of Counties
National Association of Mutual Insurance Companies	National Emergency Management Association
National Governors Association Public Health and Disaster Reform Task Force	National League of Cities
National Volunteer Fire Council	U.S. Conference of Mayors
Reinsurance Association of America	National Association of Insurance Commissioners
American Flood Coalition	...and many additional organizations

Tribal Nations

Agua Caliente Band of Cahuilla Indians	Inter-Tribal Council of Arizona	Ponca Tribe of Nebraska
Ak-Chin Indian Community	Iñupiat Community of the Arctic Slope	Port Gamble S'Klallam Tribe
Alakanuk Tribe	Iowa Tribe of Oklahoma	Potawatomi Nation
Bear River Band of the Rohnerville Rancheria	Jena Band of Choctaw Indians	Prairie Island
Blue Lake Rancheria	Jicarilla Apache Nation	Prairie Island Indian Community
Brownfields Tribal Response Program Coordinator	Kaibab Band of Paiute Indians	Pueblo of Nambe
Burns Paiute Tribe	Karuk Tribe	Pueblo of Zia
Cabazon Band of Cahuilla Indians	Kickapoo Tribe of Oklahoma	Puyallup Tribe
Caddo Nation of Oklahoma	Kiowa Tribe	Quapaw Nation
Cahuilla Band of Indians	Lac Courte Oreilles Nation	Quinault Indian Nation
Catawba Nation	Leech Lake Ojibwe	Red Cliff Band
Cherokee Nation	Lummi Nation	Rincon Band of Luiseño Indians
Chickaloon	Makah Tribal Organization	Saint Regis Mohawk Tribe
Chickasaw Nation	Match-E-Be-Nash-She-Wish-Band of Pottawatomi (aka Gun Lake Tribe)	Salt River Pima - Maricopa Indian Community
Choctaw Nation	Miccosukee	Santo Domingo Pueblo
Coeur d'Alene Tribe	Middletown Rancheria	Seldovia Village Tribe

Comanche Nation	Mille Lacs Band of Ojibwe	Seminole Tribe of Florida
Confederated Tribes of the Umatilla Indian Reservation	Morongo Band of Mission Indians	Shakopee Mdewakanton Sioux Community
Confederated Tribes of Warm Springs	Native Village of Atka	Shinnecock Indian Nation
Cow Creek Band of Umpqua Tribe of Indians	Native Village of Eklutna	Sisseton Wahpeton Oyate of Lake Traverse Reservation
Cowlitz Indian Tribe	Native Village of Kipnuk	Skagit River System Cooperative
Crow Creek Sioux	Native Village of Ouzinkie	Sokaogon Chippewa Community
Dry Creek Band of Pomo Indians	Native Village of Point Hope	Spokane Tribal Business Council
Eastern Band of Cherokee Indians	Native Village of Umkumiut	Summit Lake Paiute Tribe
Eastern Shawnee Tribe of Oklahoma	Navajo Nation	Suquamish Tribe
Federated Indians of Graton Rancheria	Nez Perce Tribe	The Native Village of Dot Lake
Flandreau Santee Sioux Tribe	North Fork Rancheria	Three Affiliated Tribes
Fond du Lac Band of Lake Superior Chippewa	Nottawaseppi Huron Band of the Potawatomi	Tlingit & Haida
Forest County Potawatomi	Oneida Nation	Trinidad Rancheria
Fort Sill Apache Tribe	Organized Village of Kwethluk	Tulalip Tribes
Gila River Indian Community	Pawnee Nation	Twenty-Nine Palms Band of Mission Indian
Grand Portage Band of Lake Superior Chippewa	Pinoleville Pomo Nation	Upper Sioux Community
Great Lakes Inter-Tribal Council, INC.	Pokagon Band of Potawatomi	Wampanoag Tribe of Gay Head Aquinnah
Hannahville Indian Community, Potawatomi Tribe	Pokagon band of Potawatomi Indians of Michigan and Indiana	Wichita and Affiliated Tribes
Ho-Chunk Nation	Pokagon Potawatomi	Winnebago Tribe
Hoh Tribal Business Committee	Pokégnek Bodéwadmik	Yakama Nation
Hoopa Valley Tribe	Ponca Tribe of NE	Ysleta Del Sur Pueblo

States/Territories

Alabama	Alaska	Arizona	Arkansas
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California	Colorado	Connecticut	Delaware
Florida	Georgia	Hawaii	Idaho
Illinois	Indiana	Iowa	Kansas
Kentucky	Louisiana	Maine	Maryland
Massachusetts	Michigan	Minnesota	Mississippi
Missouri	Montana	Nebraska	Nevada
New Hampshire	New Jersey	New Mexico	New York
North Carolina	North Dakota	Ohio	Oklahoma
Oregon	Pennsylvania	Rhode Island	South Carolina
South Dakota	Tennessee	Texas	Utah
Vermont	Virginia	Washington	West Virginia
Wisconsin	Wyoming	Puerto Rico	

Private Industry and Faith-Based Organizations

Artanis Capital	BuildSOS Inc	Rule One Consulting
Mennonite Disaster Service	Samaritan’s Purse	Convoy of Hope
Mercy Chefs	The Salvation Army	International Emergency Management

Detailed Public Comments and Survey Inputs – An Analysis

Feedback Mechanism #1 FEMA Review Council Survey Overview

The FEMA Review Council’s State-Federal Coordination (FSC) Subcommittee conducted a comprehensive survey of 1,387 stakeholders spanning state, local, tribal, and territorial (SLTT) agencies as well as non-governmental partners. This survey revealed critical insights into the current state of national preparedness and response. Findings highlight both the indispensable value of FEMA’s resources and the urgent need for modernization, targeted capacity-building, and sustained partnerships. A recurring theme across responses was the need to streamline the bureaucracy and reduce red tape in administering federal funding. The survey findings outlined high-level strategic priorities to guide FEMA’s transformation, ensuring the agency remains a catalyst for resilience in an evolving risk environment.

Survey responses confirm that FEMA plays a vital role in delivering funding, training, specialized assets, and nationally standardized systems. However, administrative inefficiencies, capability gaps among SLTT partners, and uneven resource distribution threaten the speed and effectiveness of disaster response.

At the same time, FEMA’s unique capabilities, such as the nationwide Integrated Public Alert and Warning System (IPAWS), Urban Search and Rescue (USAR), National Incident Management System (NIMS) standards, financial support during catastrophic disasters remain

irreplaceable assets that underpin the nation’s emergency management framework and should be focused on reducing impacts of future disasters.

Current State

Agencies responding to the survey indicated that FEMA support most commonly includes funding, training, technical assistance, and specialized assistance.

The most cited funding programs were the **Emergency Management Performance Grant (EMPG)**, the **State Homeland Security Grant (SHSP)**, and **Individual Assistance**. Survey responses cited **delays and bureaucracy** as a frequent problem. Funding delays were cited over 60 times in the Response survey. The following comment from Oklahoma Emergency Management describes the importance of Federal funding, while acknowledging that the process is burdensome and slow:

Question: If FEMA no longer supported this capability, how would your organization/jurisdiction accomplish this task? If this task would no longer be accomplished without FEMA, why or why not?

Response: *If FEMA were no longer involved in disaster recovery, our primary concern would not be the loss of personnel or technical assistance, it would be the loss of critical funding. FEMA’s financial support is essential to helping states and communities recover from disasters. However, the current model is weighed down by excessive administrative burden, slow processes, and layers of compliance that often delay recovery efforts and divert resources away from survivors.*

Rather than deploying large numbers of federal staff to manage relatively small disasters or requiring states to navigate a complex and rigid grants system, FEMA should consider shifting to a block grant model. Providing states with flexible, upfront funding would allow us to tailor disaster recovery efforts to our unique needs and capabilities. This approach would reduce bureaucracy, increase efficiency, and expedite the delivery of aid where it’s most needed.

States like ours have built strong local response and recovery systems. What we need from FEMA is not manpower, but streamlined, predictable financial support. A block grant system, paired with accountability measures, would empower states to lead recovery more effectively while still maintaining transparency and federal oversight.

Source: Recovery Survey response from Oklahoma Emergency Management

According to the survey results, FEMA relies heavily on SLTT partners for **on-site security and law enforcement** (153 mentions), **mass care services** (176 mentions) and **operational communications** (120 mentions). FEMA partly relies on SLTT partners for these activities due to **staffing gaps**. 87 survey responses mentioned staffing gaps in mass care and 92 responses citing gaps in communications staffing. Lack of proper communication staffing results in **insufficient direct communications with local jurisdictions** (40 mentions) along with **unsatisfactory clarity and timeliness** (30 mentions).

Based on the survey results, FEMA provides more value in specialized areas, where SLTT partners sometimes lack resources or expertise. Respondents mentioned the FEMA **Incident Command System (ICS)** and **National Incident Management System (NIMS)** courses over 100 times, the deployment of specialized teams such as **Urban Search and Rescue (USAR)** and

Disaster Mortuary Operational Response Teams (DMORT) over 50 times, and the **Integrated Public Alert and Warning System (IPAWS)** over 20 times. The Snohomish County Department of Emergency Management in Washington state provides the following insight:

Question: What training support does FEMA provide? This could include specific courses or other training support.

Response: *All the ICS and NIMS courses. The entire NIMS Training Program which outlines standards processes to support mutual aid. Without nationally standardized training, it will not be long before each state has slightly different response structures or terminology, and state-to-state mutual aid becomes that much harder. We NEED national guidance to ensure we are all able to work together.*

I feel slightly less passionately about the basic Professional Development Series and Advanced Development Series and other independent study courses. In theory these could be replicated at the state level, but at 50x the effort as just having single courses provided by the federal government, which allow locals and states to build curriculum without having to each create the same content from scratch.

Source: Preparedness Survey response from Snohomish County Department of Emergency Management

Impact of Potential Changes

Organizations highlighted **mass care services, operational communications, mass search and rescue, and preparedness** as areas where reduced funding could impact capabilities. Over 80 responses cited dependencies on FEMA funding for shelter, food, and housing. Potential impacts on operational communications include **insufficient funding for equipment upgrades and reduced interoperability** and over 40 SLTT teams stated that they lacked the ability to replace USAR capabilities. According to the survey results, reduced funding would impact jurisdictions, rural jurisdictions and jurisdictions without specialized resources the most. Portsmouth, VA Emergency Management responded with the following:

Question: If FEMA no longer supported this capability, how would your organization/jurisdiction accomplish this task? If this task would no longer be accomplished without FEMA, why or why not?

Response: *In Portsmouth, Virginia, our Emergency Management team consists of only two full-time professionals working alongside the traditional city services like Social Services, Behavioral Health, Police, and the countless non-profit volunteer organizations that help the community daily with unmet mass care needs. Without FEMA's coordination, technical assistance, and resource alignment, we simply do not have the capacity to meet the wide-ranging and escalating demands of sheltering, feeding, hydration, reunification, and accessible services during a major incident.*

Source: Response Survey response from Portsmouth (VA) Emergency Management

Additionally, survey results indicate that SLTT agencies could perform operations such as on-site security. However, reduced funding would limit the ability to scale operations for complex disasters. The St. Lucie County Emergency Management Division in Florida notes potential impacts to long-term or large-scale operations.

Question: If FEMA no longer supported this capability, how would your organization/jurisdiction accomplish this task? If this task would no longer be accomplished without FEMA, why or why not?

Response: *Local law enforcement and mutual aid partners would continue to manage security and protective operations with support from state resources. However, the ability to sustain long-term or large-scale security operations would be limited without FEMA funding and technical assistance.*

Source: Response Survey response from St Lucie County Emergency Management Division

Respondents cited **public information and warning** and **economic recovery** as areas where reduced funding would have less impact. Since FEMA manages systems such as IPAWS independently, reduced funding would not directly impact SLTT operations. However, responses such as this one from the Maryland Department of Emergency Management suggest that replicating FEMA systems such as IPAWS would be expensive.

Question: If FEMA no longer supported this capability, how would your organization/jurisdiction accomplish this task? If this task would no longer be accomplished without FEMA, why or why not?

Response: *The State could not replicate the IPAWS system, and to do so would be highly inefficient and expensive compared with common, distributed use of a nationally maintained system.*

Source: Response Survey from Maryland Department of Emergency Management

Additionally, partnerships with other agencies such as the Small Business Administration (SBA) and the U.S. Department of Agriculture (USDA) mitigate the impact of reduced funding on economic recovery.

Feedback Mechanism #2 Listening Sessions Overview:

The FEMA Review Council conducted extensive listening sessions, public comment analysis, and stakeholder surveys in 2025 to evaluate disaster response, recovery, mitigation, and FEMA’s policies and operations. Feedback from state, local, tribal, and territorial (SLTT) agencies, nonprofit organizations, private sector representatives, and community groups highlighted critical flaws in FEMA’s processes, funding mechanisms, communication strategies, and operational efficiency. Stakeholders repeatedly identified bureaucratic inefficiencies, delays in funding, inconsistent program administration, workforce constraints, and insufficient engagement with local governments as major barriers to effective disaster management.

The following is a comprehensive summary of the listening sessions held by the FEMA Review Council in 2025, focusing on disaster response, recovery, mitigation, and reforming FEMA’s policies and operations.

This captures feedback from a wide range of stakeholders, including state and local emergency management officials, tribal leaders, nonprofit organizations, private sector representatives, and community groups. The views expressed during the listening sessions are not endorsed by the Council but were taken into consideration during deliberations on recommendations.

Below is an analysis of the themes, challenges, and recommendations from the sessions:

Themes Across Sessions

- **FEMA Reform and Streamlining Processes:** Across all sessions, participants emphasized the need to simplify FEMA’s processes, including grant applications, disaster declarations, and recovery programs. The Public Assistance flow chart, often referred to as “The Snake,” and Environmental and Historic Preservation (EHP) reviews were repeatedly criticized for causing delays. Recommendations included decentralizing decision-making to FEMA regional offices, allowing parallel processing of project steps, and adopting technology to modernize operations.
- **Federal, State, and Local Roles:** There was strong support for empowering SLTT governments to lead disaster response and recovery efforts, with FEMA providing strategic oversight and technical assistance. Many participants advocated for a shift from FEMA’s operational role to one of support and funding.
- **Funding and Grant Programs:** Emergency Management Performance Grants (EMPG), Hazard Mitigation Grant Program (HMGP), and Building Resilient Infrastructure and Communities (BRIC) were identified as critical funding mechanisms. Participants called for increased funding, streamlined application processes, and greater flexibility in how funds are used. Block grants and/or direct funding were proposed as a potential solution to reduce bureaucracy, but concerns about implementation challenges were noted.
- **Mitigation and Resilience:** Investment in pre-disaster mitigation and resilient infrastructure was emphasized as a cost-effective way to reduce disaster impacts. Participants highlighted the importance of incentivizing communities to adopt stronger building codes and forward-looking plans.
- **Fairness and Vulnerable Populations:** Fairness was a recurring theme, with calls to address systemic disparities faced by small, rural, and underserved communities. Vulnerable populations, including renters, low-income families, and tribal nations, were identified as needing tailored support.
- **Technology and Innovation:** Leveraging technology, such as AI, drones, databases, and geospatial tools, was recommended to improve damage assessments, streamline grant processes, and enhance situational awareness. Real-time data sharing and modernized systems were seen as critical to improving efficiency.
- **Tribal Sovereignty and Representation:** Tribal leaders emphasized the importance of respecting tribal sovereignty and maintaining direct government-to-government relationships. Unique challenges faced by tribal nations, such as geographic isolation and cultural impacts, were highlighted as areas requiring tailored solutions.
- **Public-Private and Private Nonprofit Partnerships:** Participants advocated for greater collaboration with private sector and nonprofit organizations, which were recognized as critical partners in disaster response and recovery. Pre-positioning contracts and integrating these entities into disaster plans were recommended.

Challenges Identified

- **Bureaucratic Complexity:** FEMA’s processes were repeatedly described as overly complex, slow, and resource-intensive, creating barriers for smaller jurisdictions and tribal nations with limited capacity.

- **Delays in Funding and Reimbursements:** Cash flow challenges and delays in FEMA reimbursements were identified as major obstacles for local governments and tribes, particularly smaller entities.
- **Workforce and Capacity Constraints:** High turnover among FEMA staff and limited capacity at the local level hindered effective disaster response and recovery.
- **Insurance and Risk Management:** Rising insurance costs and underinsurance were noted as significant barriers to recovery. Concerns about FEMA’s Risk Rating 2.0 system and its impact on flood insurance premiums were highlighted.
- **Environmental and Historic Preservation (EHP) Reviews:** EHP reviews were identified as a major bottleneck, delaying critical recovery projects. Participants called for streamlining these reviews and allowing local governments to conduct them.

Recommendations

- **Streamlining FEMA Processes:** (1) Simplify disaster declarations, grant applications, and project reviews. (2) Decentralize decision-making to FEMA regional offices and empower local governments to lead recovery efforts. (3) Have a single federal family individual assistance application.
- **Enhancing Funding Mechanisms:** (1) Increase funding for EMPG, HMGP, and BRIC programs. (2) Transition to block grants for disaster recovery funding, with safeguards to ensure fair distribution.
- **Investing in Mitigation and Resilience:** (1) Prioritize funding for pre-disaster mitigation and resilient infrastructure. (2) Incentivize communities to adopt stronger building codes and forward-looking plans.
- **Addressing Fairness:** (1) Tailor FEMA programs to address the unique needs of small, rural, and underserved communities. (2) Ensure fair access to resources for tribal nations and vulnerable populations.
- **Leveraging Technology:** (1) Adopt modern technology to improve damage assessments, streamline grant processes, and enhance situational awareness. (2) Invest in real-time data sharing and coordination platforms.
- **Strengthening Tribal Engagement:** (1) Respect tribal sovereignty and maintain direct government-to-government relationships. (2) Provide predictable, formula-driven funding allocations directly to tribes.
- **Building Local Capacity:** (1) Invest in training, technical assistance, and staffing for local emergency management agencies through federal standards delivered by states. (2) Expand FEMA’s training programs and support workforce development.
- **Public-Private and Private Nonprofit Partnerships:** (1) Integrate private sector and nonprofit organizations into disaster planning and operations. (2) Pre-position contracts and leverage private sector expertise in recovery efforts.

Feedback Mechanism #3 Analysis of Public Comments Submitted (11,708 Responses):

On March 26, 2025, the FEMA Review Council published Federal Register Notice DHS-2025-0013 to provide the general public an opportunity to provide input on how to reform FEMA as it

stands today. The Council received 11,708 responses to this notice, underscoring the critical role FEMA plays in disaster management. The public comments submitted in response to the FEMA Review Council’s request for feedback under Federal Register Notice DHS-2025-0013 reflect a broad spectrum of perspectives, experiences, and recommendations. These comments underscore the critical role FEMA plays in disaster response and recovery and provide actionable insights for reforming and strengthening the agency’s operations. The views expressed in the public comments are not endorsed by the Council but were taken into consideration during deliberations on recommendations. Below is a thematic analysis of the feedback:

FEMA’s Role and Structure

- **Insights:** FEMA is widely recognized as an essential agency in disaster response and recovery, particularly in coordinating multi-state disasters and providing resources to communities. Respondents emphasized the need for FEMA to focus on preparedness, soft skills training, and fostering strong relationships with local communities. Federal coordination and clear communication about FEMA’s capabilities and limitations are seen as critical to its success. In addition, there was lack of clarity regarding which Individual Assistance or Public Assistance programs will be available.
- **Recommendations:** (1) Improve internal feedback mechanisms to ensure continuous improvement. (2) Invest in training programs that emphasize diplomacy, cultural competence, and community engagement.

State and Federal Coordination

- **Insights:** The Council of Governors submitted a detailed letter advocating for FEMA reforms, emphasizing that states cannot manage catastrophic disasters alone. Governors highlighted the importance of federal support in disaster response and recovery, particularly in standardizing and expanding Individual Assistance programs and improving interagency coordination.
- **Recommendations:** (1) Create a unified federal disaster assistance application to streamline survivor access to aid. (2) Ensure consistent funding for FEMA programs to support state and local recovery efforts. (3) Leverage state and local expertise to expedite recovery and improve efficiency.

Strengthening FEMA’s Capabilities

- **Insights:** Respondents overwhelmingly opposed dismantling or downsizing FEMA, citing the increasing frequency and severity of disasters. FEMA’s support was viewed as indispensable for states and communities, which lack the capacity to handle large-scale disasters independently. The public also said timely aid and resources provided by FEMA are critical to helping disaster survivors rebuild their communities and mitigate future risks.
- **Recommendations:** (1) Maintain and enhance FEMA’s capabilities to better serve communities nationwide. (2) Focus on improving the speed and efficiency of aid delivery to ensure disaster survivors receive timely support.

Community Feedback and Support

- **Insights:** Community members, particularly in disaster-prone areas like Houston, Texas, shared both positive and negative experiences with FEMA. While FEMA’s support was appreciated, concerns were raised about inconsistencies in assistance, lengthy wait times, and

communication challenges. Issues such as disparities in aid distribution, language barriers, and difficulties with the application process were frequently noted.

- **Recommendations:** (1) Standardize assistance programs to ensure fair and consistent distribution of aid. (2) Enhance training for FEMA staff to improve communication skills and cultural awareness. (3) Increase transparency in FEMA’s processes to foster trust and confidence among disaster survivors.

Diverse Regional and Stakeholder Perspectives

- **Insights:** Feedback from various regions and stakeholders highlighted unique challenges and recommendations. Puerto Rico called for mobile outreach, alternative proof of ownership, and improved communication. Tribal Nations praised FEMA’s support but criticized some disaster reservists’ behavior. Gulf Coast areas urged restoration of FEMA funding and staffing. Nevada emphasized the importance of the National Flood Insurance Program and called for reforms. Florida highlighted positive experiences with FEMA during Hurricane Wilma but stressed the need for continued funding.
- **Recommendations:** (1) Tailor FEMA’s programs to address regional and stakeholder-specific needs. (2) Streamline grant processes and ensure equitable resource allocation. (3) Invest in better training for FEMA personnel to improve efficiency and professionalism (soft skill development).

Protecting FEMA’s Mission

- **Insights:** Respondents overwhelmingly emphasized the need to protect and strengthen FEMA rather than dismantle or weaken it. Shifting the burden of disaster response to states was viewed as less effective and potentially harmful to local communities. Respondents also stressed that FEMA reforms should be guided by science, equity, and the experiences of disaster survivors, rather than political ideology.
- **Recommendations:** (1) Oppose efforts to weaken FEMA and ensure reforms prioritize the needs of disaster survivors. (2) Strengthen FEMA’s capacity to respond to increasingly frequent and severe disasters. (3) Ensure reforms are informed by data, best practices, and input from affected communities.

The 11,708 public comments received reflect a strong consensus on the importance of FEMA’s role in disaster response and recovery. While respondents identified areas for improvement, including streamlining processes, enhancing communication, and addressing equity, there was widespread support for maintaining and strengthening FEMA’s capabilities. The feedback highlighted the need for FEMA to remain a robust and responsive agency that can effectively support communities during their most vulnerable times.

FEMA Review Council: Final Report

May 15, 2026

On Thursday, May 7, 2026, the FEMA Review Council (FRC), established by President Donald J. Trump to undertake a “full-scale review” of the agency, held its final meeting and voted to approve its final report of findings and recommendations.

Establishment of FEMA Review Council (FRC)

Executive Order (EO) 14180 established the FRC in January 2025 to evaluate FEMA’s operations, staffing levels, alleged political bias, and role in federal emergency management. At approximately the same time, President Trump dismissed all members of the National Advisory Council, which Congress established to advise the Administrator on all aspects of emergency management.

Under the terms of the E.O., the Secretaries of Homeland Security and Defense co-chaired the FRC; broader membership included FEMA and nonfederal representatives. In past meetings, then-Co-Chair Kristi Noem echoed the President’s calls to eliminate FEMA as it currently exists; other members advocated narrower reforms, including reducing FEMA assistance for smaller disasters.

The FRC was to publish a report with findings and recommendations in late 2025; subsequent EOs extended this deadline to no later than May 29, 2026. News reports described draft FRC reports and conflicts over proposed reforms, particularly a proposed 50% staffing cut.

FRC Requests for Information

The FRC solicited information from the public in March 2025 and received more than 11,700 comments. According one outside group’s analysis, most comments were “overwhelmingly supportive ... of maintaining FEMA’s capacity, and of making good-faith reforms.” The FRC summarized the feedback and cited as common problems “bureaucratic inefficiencies, delays in funding, inconsistent program administration, workforce constraints, and insufficient engagement with local governments.”

Additionally, the FRC reported receiving 1,387 survey responses (from nonfederal and non-governmental partners); engaging 50 states, territories, and at least 20 tribal nations; and conducting 17 listening sessions, including in the District of Columbia.

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Selected FRC Report Recommendations

A summary of selected FRC final approved recommendations and stakeholder perspectives are below.

- **Evaluating and redistributing FEMA’s workforce** beyond DC to “realize ... efficiencies while reducing staff.” Several key emergency management organizations implored the FRC to preserve FEMA’s workforce; according to the Government Accountability Office (GAO), recent staff reductions have exacerbated persistent workforce challenges.
- **Changing the criteria FEMA uses to evaluate whether the President should declare a major disaster.** The FRC proposed increasing the cost thresholds used to evaluate the need for assistance for rebuilding public and nonprofit facilities (i.e., Public Assistance (PA)), to account for inflation. It also proposed simplifying procedures to determining the need for Individual Assistance (IA), using factors like damage to primary residences. In recent years, GAO and FEMA have both determined that PA cost thresholds are too low. On multiple occasions, FEMA has suspended previous proposals to change how it evaluated the need for PA, following significant criticism. FEMA revised the procedures to evaluate the need for IA in 2019 to establish “more objective criteria.” Some states expressed concerns that the revised procedures lack transparency and do not adequately represent a state’s actual financial capacity to manage disasters.
- **Transforming PA to an up-front lump-sum formula grant** to a state, tribe, or territory (STT) based on hazard characteristics and affected population. This is a change from the current reimbursement-based model based on site-by-site damage assessments. In the new model, STTs would administer project funds, in part to reduce FEMA administrative costs. These changes echo some congressional and industry proposals; though some past awards based on up-front, large-scale estimates have experienced delays and cost overruns. The FRC further recommended implementing sliding scale cost shares for PA and mitigation, to incentivize STT preparedness measures.
- **Continuing the move to risk-based pricing for the National Flood Insurance Program (NFIP)** through Risk Rating 2.0, with premiums priced on risk to individual properties rather than community profiles. The FRC further recommended that FEMA evaluate the development of a centralized clearinghouse to transfer NFIP policies to private insurers.
- **Restructuring the Hazard Mitigation Grant Program** (post-disaster funding to reduce future disaster losses) by modifying advance assistance, available 30 days after a declaration, and prioritizing projects to mitigate repetitive losses and harden critical infrastructure. The future of pre-disaster mitigation funding is not discussed in the FRC report.
- **Expediting assistance to disaster survivors and reducing overhead costs** by consolidating existing IA programs that address housing and other critical disaster-related expenses into a single direct payment for survivors whose homes are rendered uninhabitable that is reflective of the disaster survivor’s needs (with limitations on the assistance amount). The existing IA program is not tied to uninhabitability, and some reports indicate concern that the FRC’s proposed change could mean survivors whose homes are not rendered uninhabitable may be ineligible to receive assistance for certain needs (e.g., funeral expenses, medical costs). The FRC further recommends FEMA focus on emergency/temporary housing and enable STTs and local governments to determine optimal local housing solutions.

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Implementation of Recommendations

Executive actions may implement several recommendations including [changing FEMA’s criteria to evaluate the need for a major disaster declaration](#). Other recommendations would more likely require legislation, including many proposed changes to the structure of disaster grants programs. The FRC indicated that it is “imperative” to implement recommendations in a phased approach over two to three years.

Relationship to Proposed Legislative Reforms

Several bills introduced within the 119th Congress (for example, H.R. 3251, H.R. 2247, H.R. 3347, H.R. 316) would fundamentally revise FEMA’s authorities to deliver disaster relief. One bill [incorporating fundamental reforms](#), H.R. 4669, the Fixing Emergency Management for Americans (FEMA) Act of 2025, was ordered to be reported as amended by the House Committee on Transportation and Infrastructure in September 2025. [News reports](#) indicated that Committee leadership planned to advance the FEMA Act of 2025 irrespective of FRC recommendations. No companion legislation has been introduced to date in the Senate; one [report indicates that](#) formal Senate action on the bill was likely on hold until the release of the FRC’s findings.

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ARTICLE 7: FLOOD DAMAGE PREVENTION

Section

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7.06 Legal status provisions

(A) Effect on rights and liabilities under the existing flood damage prevention ordinance

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(D) Effective date

Editor's note:

Ord. passed 4-2-2009 amended Ch. 8 Flood Damage Prevention in its entirety and enacted similar provisions as set out herein. The former Ch. 8 Flood Damage Prevention derived from Ord. passed 11-3-2005.

Staff's note:

Formerly Chapter 8, Flood Damage Prevention

Statutory references:

Floodplains generally, see G.S. §§ 143-215.51 et seq.

§ 7.01 STATUTORY AUTHORIZATION, FINDINGS OF FACTS, PURPOSE AND OBJECTIVES.

(A) Statutory authorization.

The Legislature of the State of North Carolina has in Part 6, Article 21 of Chapter 143; Article 6 of Chapter 153A; Article 8 of Chapter 160A; and Articles 1, 7, 9, and 11 of Chapter 160D of the North Carolina General Statutes, delegated to local governmental units the authority to adopt regulations designed to promote the public health, safety, and general welfare.

~~The legislature of the state has in G.S. Ch. 143, Art. 21, Part 6; G.S. Ch. 153A, Art. 6; G.S. Ch. 160A, Art. 8; and G.S. Ch. 160D, Art. 7, 9 and 11 (Effective January 1, 2021), delegated to local governmental units the responsibility to adopt regulations designed to promote the public health, safety and general welfare.~~ Therefore, the Board of Aldermen of North Topsail Beach, North Carolina, does ordain as follows.

(B) Findings of fact.

(1) The flood prone areas within the jurisdiction of the ~~town~~-Town are subject to periodic inundation which results in loss of life, property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures of flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

(2) These flood losses are caused by the cumulative effect of obstructions, both inside and outside the identified Special Flood Hazard Areas ~~in floodplains~~ causing increases in flood heights and velocities and by the occupancy in flood prone areas of uses vulnerable to floods or other hazards. These obstructions and occupancy by uses vulnerable to floods may be hazardous to other lands which are inadequately elevated, floodproofed, or otherwise unprotected from flood damages.

(C) Statement of purpose. It is the purpose of this article to promote public health, safety and general welfare and to minimize public and private losses due to flood conditions within flood prone areas by provisions designed to:

(1) Restrict or prohibit uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion, flood heights or velocities;

(2) Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;

(3) Control the alteration of natural floodplains, stream channels and natural protective barriers, which are involved in the accommodation of floodwaters;

(4) Control filling, grading, dredging and all other development that may increase erosion or flood damage; and

(5) Prevent or regulate the construction of flood barriers that will unnaturally divert floodwaters or which may increase flood hazards to other lands.

(D) Objectives. The objectives of this article are to:

(1) Protect human life, safety and health;

(2) Minimize expenditure of public money for costly flood control projects;

(3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

(4) Minimize prolonged business losses and interruptions;

(5) Minimize damage to public facilities and utilities (i.e., water and gas mains, electric, telephone, cable and sewer lines, streets and bridges) that are located in flood prone areas;

(6) Minimize damage to private and public property due to flood;

(7) Make flood insurance available to eligible properties in the community through the National Flood Insurance Program;

(8) Maintain the natural and beneficial functions of the floodplains;

(9) Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and

(10) Ensure that potential buyers are aware that property is in a special flood hazard area.

(Ord. passed 4-2-2009; Ord. passed 11-2-2011; Ord. passed 11-3-2016; Ord. 2020-01, passed 6-4-2020)

§ 7.02 DEFINITIONS.

Unless specifically defined in Article 11, Definitions, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application.

(Ord. passed 11-2-2011; Ord. passed 11-3-2016; Ord. 2020-01, passed 6-4-2020)

§ 7.03 GENERAL PROVISIONS.

(A) Lands to which this article applies. This article shall apply to all special flood hazard areas within the jurisdiction of the ~~town~~Town.

(B) Basis for establishing the special flood hazard areas. The special flood hazard areas are those identified under the Cooperating Technical State (CTS) agreement between the state and FEMA in its FIS dated June 19, 2020, for the county and associated DFIRM panels, including any digital data developed as part of the FIS, which are adopted by reference and declared to be a part of this article, and all revisions thereto.

(C) Establishment of floodplain development permit. A floodplain development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities within special flood hazard areas determined in accordance with the provisions of § 7.03(B).

(D) Compliance. No structure or land shall hereafter be located, extended, converted, altered or developed in any way without full compliance with the terms of this article and other applicable regulations.

(E) Abrogation and greater restrictions. This article is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions; however, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(F) Interpretation. In the interpretation and application of this article, all provisions shall be:

(1) Considered as minimum requirements;

- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

(G) Warning and disclaimer of liability. The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by human-made or natural causes. This article does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of the ~~town~~Town or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made hereunder.

(H) Penalties for violation. Violation of the provisions of this article or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a Class 1 misdemeanor pursuant to G.S. § 143-215.58. Any person who violates this article or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$100 ~~or imprisoned for not more than 30 days, or both~~. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the ~~town~~Town from taking such other lawful action as is necessary to prevent or remedy any violation.

(Ord. passed 11-2-2011; Ord. passed 11-3-2016; Ord. 2020-01, passed 6-4-2020)

§ 7.04 ADMINISTRATION.

(A) Designation of Floodplain Administrator. The Planning Director, hereinafter referred to as the "Floodplain Administrator", is hereby appointed to administer and implement the provisions of this article. The Floodplain Administrator may delegate performance of certain duties to other employees. In instances where the Floodplain Administrator receives assistance from others to complete tasks to administer and implement this article, the Floodplain Administrator shall be responsible for the coordination and community's overall compliance with the National Flood Insurance Program and the provisions of this article.

(B) Floodplain development application, permit and certification requirements.

(1) Application requirements. Application for a floodplain development permit shall be made to the Floodplain Administrator prior to any development activities located within special flood hazard areas. The following items shall be presented to the Floodplain Administrator to apply for a floodplain development permit:

(a) A plot plan drawn to scale which shall include, but shall not be limited to, zoning district, setbacks, percentage impervious surface, building height, area of environmental concern, CAMA setbacks, wetland delineation and the following specific details of the proposed floodplain development:

(i) The nature, location, dimensions and elevations of the area of development/disturbance; existing and proposed structures, utility systems, grading/pavement areas, fill materials, storage areas, drainage facilities and other development;

(ii) The boundary of the special flood hazard area as delineated on the FIRM or other flood map as determined in § 7.03(B), or a statement that the entire lot is within the special flood hazard area;

(iii) Flood zone(s) designation of the proposed development area as determined on the FIRM or other flood map as determined in § 7.03(B);

(iv) The boundary of the floodway(s) or non-encroachment area(s) as determined in § 7.03(B);

(v) The base flood elevation (BFE) where provided as set forth in §§ 7.03(B) and 7.04(C);

(vi) The old and new location of any watercourse that will be altered or relocated as a result of proposed development;

(vii) The boundary and designation date of the coastal barrier resource system (CBRS) area or otherwise protected areas (OPA), if applicable; and

(viii) The certification of the plot plan by a registered land surveyor or professional engineer.

(b) Proposed elevation, and method thereof, of all development within a special flood hazard area including, but not limited to:

(i) Elevation in relation to NAVD 1988 of the proposed reference level of all structures;

(ii) Elevation in relation to NAVD 1988 to which any non-residential structure in Zones A, AE, AH, AO or A99 will be floodproofed; and

(iii) Elevation in relation to NAVD 1988 to which any proposed utility systems will be elevated or floodproofed.

(c) Floodproofing is prohibited in lieu of elevation. However, if non-residential floodproofing is used, a floodproofing certificate (FEMA Form ~~FF-206-FY-22-153 086-0-34~~) with supporting data, an operational plan, and an inspection and maintenance plan that include, but are not limited to, installation, exercise and maintenance of floodproofing measures;

(d) A foundation plan, drawn to scale, which shall include details of the proposed foundation system to ensure all provisions of this article are met. These details include, but are not limited to:

(i) The proposed method of elevation, if applicable (i.e., fill, solid foundation perimeter wall, solid backfilled foundation, open foundation on columns/posts/piers/piles/sheer walls);

(ii) Openings to facilitate automatic equalization of hydrostatic flood forces on walls in accordance with § 7.05(B)(4)(~~cd~~) when solid foundation perimeter walls are used in Zones V, A, AE, AH, AO and A99; and

(iii) The following, in coastal high hazard areas and Coastal A Zones, in accordance with the provisions of §§ 7.05(B)(4)(e) and §7.05(G) (~~§ 7.05(H), if applicable~~):

1) V-Zone certification with accompanying plans and specifications verifying the engineered structure and any breakaway wall designs. Prior to the certificate of compliance/occupancy issuance, the Floodplain Administrator may require that a registered professional engineer or architect certify the finished construction is compliant with the design, specifications and plans for VE Zone construction;

2) Plans for open wood latticework or insect screening, if applicable; and

3) Plans for non-structural fill, if applicable. If non-structural fill is proposed, it must be demonstrated through coastal engineering analysis that the proposed fill would not result in any increase in the BFE or otherwise cause adverse impacts by wave ramping and deflection on to the subject structure or adjacent properties.

(e) Usage details of any enclosed areas below the lowest floor;

(f) Plans and/or details for the protection of public utilities and facilities such as sewer, gas, electrical and water systems to be located and constructed to minimize flood damage;

(g) Certification that all other local, state and federal permits required prior to floodplain development permit issuance have been received;

(h) Documentation for placement of recreational vehicles and/or temporary structures, when applicable, to ensure that the provisions of §§ 7.05(B)(6) and (7) are met; and

(i) A description of proposed watercourse alteration or relocation, when applicable, including an engineering report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and a map (if not shown on plot plan) showing the location of the proposed watercourse alteration or relocation.

(2) Permit requirements. The floodplain development permit shall include, but not be limited to:

(a) A complete description of all the development to be permitted under the floodplain development permit (i.e. house, garage, pool, septic, bulkhead, cabana, pier, bridge, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials, etc.) including a cost estimate;

(b) The special flood hazard area determination for the proposed development in accordance with the available data specified in § 7.03(B);

(c) The regulatory flood protection elevation required for the reference level and all attendant utilities;

(d) The regulatory flood protection elevation required for the protection of all public utilities;

(e) All certification submittal requirements with timelines;

(f) A statement that no fill material or other development shall encroach into the floodway or non-encroachment area of any watercourse unless the requirements of § 7.05(F) have been met;

(g) The flood openings requirements, ~~if in zones A, AE, AH, AO or A99;~~

(h) Limitations of below BFE enclosure uses (i.e., parking, building access and limited storage only);

(i) A statement that there shall be no alteration of sand dunes which would increase potential flood damage;

(j) A statement, if in Zone VE and Coastal A Zones, that there shall be no fill used for structural support; and

(k) A statement, if in Coastal High Hazard Areas and Coastal A, that all materials below BFE/RFPE must be flood-resistant materials.

(3) Certification requirements.

(a) Plot plans and elevation certificates.

(i) A plot plan and an elevation certificate (FEMA Form ~~FF-206-FY-22-152 086-0-33~~) is required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to mean sea level. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder prior to the beginning of construction. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.

(ii) A foundation plan and an elevation certificate (FEMA Form ~~FF-206-FY-22-152 086-0-33~~) is required after the reference level is established. Within seven calendar days of establishment of the reference level elevation, it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the elevation of the reference level, in relation to mean sea level. Any work done within the seven-day calendar period and prior to submission of the certification shall be at the permit holder's risk. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to submit the certification or failure to make required corrections shall be cause to issue a stop-work order for the project.

(iii) A final as-built survey and a final finished construction elevation certificate (FEMA Form FF-206-FY-22-152 ~~086-0-33~~) is required after construction is completed and prior to certificate of compliance/occupancy issuance. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of final as-built construction of the elevation of the reference level and all attendant utilities. The Floodplain Administrator shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to certificate of compliance/occupancy issuance. In some instances, another certification may be required to certify corrected as-built construction. Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a certificate of compliance/occupancy. The finished construction elevation certificate certifier shall provide at least two photographs showing the front and rear of the building taken within 90 days from the date of certification. The photographs must be taken with views confirming the building description and diagram number. To the extent possible, these photographs should show the entire building including foundation. If the building has split-level or multi-level areas, provide at least two additional photographs showing side views of the building. In addition, when applicable, provide a photograph of the foundation showing a representative example of the flood openings or vents. All photographs must be in color and measure at least three inches by three inches. Digital photographs are acceptable.

(b) Floodproofing certificate. Floodproofing is prohibited in lieu of elevation for residential structures. However, if non-residential floodproofing is used to meet the regulatory flood protection elevation requirements:

(i) If non-residential floodproofing is used to meet the Regulatory Flood Protection Elevation requirements, a floodproofing certificate (FEMA Form FF-206-FY-22-153 ~~086-0-34~~), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level. Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to permit approval. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a certificate of compliance/occupancy.

(ii) A final finished construction floodproofing certificate (FEMA Form FF-206-FY-22-153), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the issuance of a certificate of compliance/occupancy. It shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to NAVD 1988. Floodproofing certificate shall be prepared by or under the direct supervision of a professional

engineer or architect and certified by same. The Floodplain Administrator shall review the certificate data, the operational plan, and the inspection and maintenance plan. Deficiencies detected by such review shall be corrected by the applicant prior to certificate of occupancy. Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit. Failure to construct in accordance with the certified design shall be cause to deny a certificate of compliance/occupancy.

(c) **Manufactured home.** If a manufactured home is placed within Zones A, AE, AH, AO, and A99 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of § 7.05(B)(3)(b).

(d) **Watercourse.** If a watercourse is to be altered or relocated, a description of the extent of watercourse alteration or relocation, a professional engineer's certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream, and a map showing the location of the proposed watercourse alteration or relocation shall all be submitted by the permit applicant prior to issuance of a floodplain development permit.

(e) **Certification exemptions.** The following structures, if located within Zones A, AE, AH, AO, and A99, are exempt from the elevation/floodproofing certification requirements specified in items (a) and (b) of this subsection:

- (i) Recreational vehicles meeting requirements of § 7.05(B)(6)(c-a);
- (ii) Temporary structures meeting requirements of § 7.05(B)(7); and
- (iii) Accessory structures that are 150 square feet or less or that is a minimal investment of \$5,000 or less and meeting requirements of § 7.05(B)(8).

(f) **V-Zone certification.** A V-Zone certification with accompanying design plans and specifications is required prior to issuance of a floodplain development permit within coastal high hazard areas and Coastal A zones. It shall be the duty of the permit applicant to submit to the Floodplain Administrator said certification to ensure the design standards of this article are met. A registered professional engineer or architect shall develop or review the structural design, plans, and specifications for construction and certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this article. This certification is not a substitute for an elevation certificate. Prior to the certificate of compliance/occupancy issuance, the Floodplain Administrator may require that a registered professional engineer or architect certify the finished construction is compliant with the design, specifications and plans for VE Zone construction.

(4) **Substantial Improvement/Damage** determinations for existing buildings and structures. For applications for building permits to improve buildings and structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any

other improvement of or work on such buildings and structures, the Floodplain Administrator, in coordination with the Building Official, shall:

(a) Estimate the market value, or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building or structure before the start of construction of the proposed work; in the case of repair, the market value of the building or structure shall be the market value before the damage occurred and before any repairs are made;

(b) Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;

(c) Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; and

(d) Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the flood-resistant construction requirements of the North Carolina Building Code and this article is required.

(C) Duties and responsibilities of the Floodplain Administrator. The Floodplain Administrator shall perform, but not be limited to, the following duties:

(1) Review all floodplain development applications and issue permits for all proposed development within special flood hazard areas to assure that the requirements of this article have been satisfied;

(2) Review all proposed development within special flood hazard areas to assure that all necessary local, state and federal permits have been received, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334;

(3) Notify adjacent communities and the State Department of Public Safety, Division of Emergency Management, State Coordinator for the National Flood Insurance Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA);

(4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is maintained;

(5) Prevent encroachments into floodways and non-encroachment areas unless the certification and flood hazard reduction provisions of § 7.05(F) are met;

(6) Obtain actual elevation (in relation to mean sea level) of the reference level and all attendant utilities of all new and substantially improved structures, in accordance with § 7.04(B)(3);

(7) Obtain actual elevation (in relation to mean sea level) to which all new and substantially improved structures and utilities have been floodproofed, in accordance with the provisions of § 7.04(B)(3);

(8) Obtain actual elevation (in relation to mean sea level) of all public utilities in accordance with the provisions of § 7.04(B)(3);

(9) When floodproofing is utilized for a particular structure, obtain certifications from a registered professional engineer or architect in accordance with the provisions of §§ 7.04(B)(3) and 7.05(B)(2);

(10) Where interpretation is needed as to the exact location of boundaries of the special flood hazard areas, floodways or non-encroachment areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article;

(11) When BFE data has not been provided in accordance with § 7.03(B), obtain, review and reasonably utilize any BFE data, along with floodway data or non-encroachment area data available from a federal, state or other source, including data developed pursuant to § 7.05(D)(2)(c), in order to administer the provisions of this article;

(12) When BFE data is provided but no floodway or non-encroachment area data has been provided in accordance with § 7.03(B), obtain, review and reasonably utilize any floodway data or non-encroachment area data available from a federal, state or other source in order to administer the provisions of this article;

(13~~14~~) Permanently maintain all records that pertain to the administration of this article and make these records available for public inspection, recognizing that such information may be subject to the Privacy Act of 1974, as amended;

(14~~15~~) Make on-site inspections of work in progress. As the work pursuant to a floodplain development permit progresses, the Floodplain Administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local article and the terms of the permit. In exercising this power, the Floodplain Administrator has a right, upon presentation of proper credentials, to enter on any premises within the jurisdiction of the community at any reasonable hour for the purposes of inspection or other enforcement action;

(15~~16~~) Issue stop-work orders as required. Whenever a building or part thereof is being constructed, reconstructed, altered or repaired in violation of this article, the Floodplain Administrator may order the work to be immediately stopped. The stop-work order shall be in writing and directed to the person doing or in charge of the work. The stop-work order shall state the specific work to be stopped, the specific reason(s) for the stoppage, and the condition(s) under which the work may be resumed. Violation of a stop-work order constitutes a misdemeanor;

(16~~17~~) Revoke floodplain development permits as required. The Floodplain Administrator may revoke and require the return of the floodplain development permit by notifying the permit holder in writing stating the reason(s) for the revocation. Permits shall be revoked for any substantial departure from the approved application, plans and specifications; for refusal or failure to comply with the requirements of state or local laws; or for false statements or misrepresentations made in securing the permit. Any floodplain development permit mistakenly issued in violation of an applicable state or local law may also be revoked;

(17~~18~~) Make periodic inspections throughout the special flood hazard areas within the jurisdiction of the community. The Floodplain Administrator and each member of his or her inspections department shall have a right, upon presentation of proper credentials, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action;

(18~~19~~) Follow through with corrective procedures of § 7.04(D);

(19~~20~~) Review, provide input and make recommendations for variance requests;

(20~~21~~) Maintain a current map repository to include, but not limited to, historical and effective FIS report, historical and effective FIRM and other official flood maps and studies adopted in accordance with § 7.03(B), including any revisions thereto including letters of map change, issued by FEMA. Notify state and FEMA of mapping needs; and

(21~~22~~) Coordinate revisions to FIS reports and FIRMs, including letters of map revision based on fill (LOMR-Fs) and letters of map revision (LOMRs).

(22~~23~~) Make substantial improvement and post event damage assessments and determinations:

(a) Conduct damage assessments for damaged structures located within the

(b) Complete substantial improvement/damage determinations in accordance with the provisions of 7.05 (B)(4).

—(23~~13~~) When the lowest floor and the lowest adjacent grade of a structure or the lowest ground elevation of a parcel in a special flood hazard area is above the BFE, advise the property owner of the option to apply for a letter of map amendment (LOMA) from FEMA. However, if the property is to be removed from the V Zone it must not be located seaward of the landward toe of the primary frontal dune. Maintain a copy of the LOMA issued by FEMA in the floodplain development permit file;

(D) Corrective procedures.

(1) Stop Work Order: The community may issue a stop work order, which shall be served on the applicant or other responsible person. The stop work order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise remedied the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other

responsible person to take the necessary remedial measures to remedy such violation or violations.

(2) Notice of Violation. If the community determines that an owner, occupant, applicant or other responsible person has failed to comply with the terms and conditions of a permit, or the provisions of this ordinance, it shall issue a written notice of violation, by certified return receipt mail, to such applicant or other responsible person. Where the person is engaged in activity covered by this ordinance without having first secured a permit, the notice shall be served on the owner or the responsible person in charge of the activity being conducted on the site. The notice of violation shall contain:

- (a) The name and address of the owner or the applicant or the responsible person;
- (b) The address or other description of the site upon which the violation is occurring;
- (c) A statement specifying the nature of the violation;
- (d) A description of the remedial measures necessary to bring the action or inaction into compliance with the permit or this ordinance and the date for the completion of such remedial action;
- (e) A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed, and;
- (f) A statement that the determination of violation may be appealed to the community by filing a written notice of appeal within thirty days after the notice of violation (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient).

(3) Additional Enforcement Actions. If the remedial measures described in the Notice of Violation have not been completed by the date set forth for such completion in the Notice of Violation, any one or more of the following enforcement actions may be enacted against the person to whom the Notice of Violation was directed. Before taking any of the following actions or imposing any of the following penalties, the Town shall first notify the owner, applicant or other responsible person in writing of its intended action. The Town shall provide reasonable opportunity, of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hour notice shall be sufficient) to remedy such violation. In the event the applicant or other responsible person fails to remedy such violation after such notice and remedial period, the Town may take or impose any one or more of the following enforcement actions or penalties:

- (a) Termination of utility service and/or withhold or revoke Certificate of Occupancy: The community may terminate utilities and/or refuse to issue and/or revoke a certificate of occupancy for the building or other improvements and/or repairs conducted or being conducted on the site until the applicant or other responsible person has taken the

remedial measures set forth in the notice of violation or has otherwise remedy the violation or violations described therein.

(b) Suspension, revocation, or modifications of permit: The community may suspend, revoke, or modify the permit authorizing the development project. A suspended, revoked, or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise remedy the violations described therein, provided such permit may be reinstated (upon such conditions as the community may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.

(c) Civil penalties: Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions shall constitute a Class 1 misdemeanor pursuant to North Carolina General Statute § 143-215.58.

(i) Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$100. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the Town from taking such other lawful actions, pursuant to North Carolina General Statute § 153A, 160A, and 160D, as is necessary to prevent or remedy any violation.

(ii) Enforcement by an appropriate equitable remedy issuing from a court of competent jurisdiction may be pursued if the offender fails to remedy the violation, pays assessed fines, and/or fails to file an appeal within the prescribed period of time. In such cases, the general court of justice shall have jurisdiction to issue such orders as may be appropriate.

(4) Administrative appeal; judicial review. Any person receiving a Notice of Violation may appeal the determination of the community, including but not limited to the issuance of a stop work order, the assessment of an administratively-imposed monetary penalty, the suspension, revocation, modification, or grant with condition of a permit by the community upon finding that the holder is in violation of permit conditions, or that the holder is in violation of any applicable ordinance or any of the community's rules and regulations, or the issuance of a notice of bond forfeiture.

(a) Any person receiving a Notice of Violation may appeal the determination of the floodplain administrator to the local elected governing body. The Notice of Appeal must be in writing and be received by the floodplain administrator and the clerk within thirty (30) days of the date of the Notice of Violation. In the absence of an appeal, the determination of the floodplain administrator shall be final.

(b) All appeals shall be heard and decided by the community's designated Appeal Board, which shall be the Board of Adjustments. The Appeal Board shall hear an appeal within a reasonable time and shall have the power to affirm, modify, or reject the original penalty, including the right to increase or decrease the amount of any monetary penalty and the right to add or delete remedial actions required for correction of the violation and compliance with the

community's flood damage prevention ordinance, and any other applicable local, state, or federal requirements. In the absence of a petition for review of a quasi-judicial decision, the decision of the Appeal Board shall be final.

(c) A petition for review of a quasi-judicial decision can be requested by any person with standing aggrieved by a decision or order of the community, after exhausting his/her administrative remedies. The petition shall be received by the clerk of superior court within 30 days of the date of the local governing body decision.

(5) Section 1316 Declaration: Section 1316 of the National Flood Insurance Act authorizes FEMA to deny flood insurance to a property declared by the State, County, or Municipal government to be in violation of the local floodplain management ordinance. A Section 1316 declaration shall be used when all other legal means to remedy a violation have been exhausted and the structure remains noncompliant. The community must coordinate a request for Section 1316 declaration to the FEMA Regional Office through the State NFIP Coordinator.

Once invoked, the property's flood insurance coverage will be terminated and no new or renewal policy can be issued; no flood insurance claim can be paid on any policy on the property, and disaster assistance will be denied. If a structure that has received a Section 1316 declaration is made compliant with the community's floodplain management ordinance, then the Section 1316 declaration can be rescinded by FEMA and flood insurance eligibility restored.

~~(1) Violations to be corrected. When the Floodplain Administrator finds violations of applicable state and local laws, it shall be his or her duty to notify the owner or occupant of the building of the violation. The owner or occupant shall immediately remedy each of the violations of law cited in such notification.~~

~~—(2) Actions in event of failure to take corrective action. If the owner of a building or property shall fail to take prompt corrective action, the Floodplain Administrator shall give the owner written notice, by certified or registered mail to the owner's last known address or by personal service, stating:~~

~~—(a) That the building or property is in violation of the floodplain management regulations;~~

~~—(b) That a hearing will be held before the Floodplain Administrator at a designated place and time, not later than ten days after the date of the notice, at which time the owner shall be entitled to be heard in person or by counsel and to present arguments and evidence pertaining to the matter; and~~

~~—(c) That following the hearing, the Floodplain Administrator may issue an order to alter, vacate or demolish the building, or to remove fill as applicable.~~

~~(3) Order to take corrective action. If, upon a hearing held pursuant to the notice prescribed above, the Floodplain Administrator shall find that the building or development is in violation of the flood damage prevention article, they shall issue an order in writing to the owner, requiring the owner to remedy the violation within a specified time period, not less than 60 calendar days, nor more than 180 calendar days. Where the Floodplain Administrator finds~~

~~that there is imminent danger to life or other property, they may order that corrective action be taken in such lesser period as may be feasible.~~

~~—(4) Appeal. Any owner who has received an order to take corrective action may appeal the order to the local elected governing body by giving notice of appeal in writing to the Floodplain Administrator and the Clerk within ten days following issuance of the final order. In the absence of an appeal, the order of the Floodplain Administrator shall be final. The local governing body shall hear an appeal within a reasonable time and may affirm, modify and affirm, or revoke the order.~~

~~—(5) Failure to comply with order. If the owner of a building or property fails to comply with an order to take corrective action for which no appeal has been made or fails to comply with an order of the governing body following an appeal, the owner shall be guilty of a Class 1 misdemeanor pursuant to G.S. § 143-215.58 and shall be punished at the discretion of the court.~~

(E) Variance procedures.

(1) The Board of Adjustment as established by the ~~town~~Town, hereinafter referred to as the "Appeal Board", shall hear and decide requests for variances from the requirements of this article.

(2) Any person aggrieved by the decision of the Appeal Board may appeal such decision to the Court, as provided in G.S. Ch. 7A.

(3) Variances may be issued for:

(a) The repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and that the variance is the minimum necessary to preserve the historic character and design of the structure;

(b) Functionally dependent facilities if determined to meet the definition as stated in Article 11, Definitions, provided provisions of § 7.04(E)(9)(b),(c) and (e) have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; and

(c) Any other type of development provided it meets the requirements of this section.

(4) In passing upon variances, the Appeal Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and:

(a) The danger that materials may be swept onto other lands to the injury of others;

(b) The danger to life and property due to flooding or erosion damage;

(c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

- (d) The importance of the services provided by the proposed facility to the community;
 - (e) The necessity to the facility of a waterfront location as defined under Article 11 as a functionally dependent facility, where applicable;
 - (f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
 - (g) The compatibility of the proposed use with existing and anticipated development;
 - (h) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (k) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.
- (5) A written report addressing each of the above factors shall be submitted with the application for a variance.
- (6) Upon consideration of the factors listed above and the purposes of this article, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purposes and objectives of this article.
- (7) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the BFE and the elevation to which the structure is to be built and that such construction below the BFE increases risks to life and property, and that the issuance of a variance to construct a structure below the BFE may result in increased premium rates for flood insurance up to \$25 per \$100 of insurance coverage. Such notification shall be maintained with a record of all variance actions, including justification for their issuance.
- (8) The Floodplain Administrator shall maintain the records of all appeal actions and report any variances to the FEMA and the state upon request.
- (9) Conditions for variances:
- (a) Variances shall not be issued when the variance will make the structure in violation of other federal, state or local laws, regulations or ordinances;
 - (b) Variances shall not be issued within any designated floodway or non- encroachment area if the variance would result in any increase in flood levels during the base flood discharge;
 - (c) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

- (d) Variances shall only be issued prior to development permit approval; and
- (e) Variances shall only be issued upon:
 - (i) A showing of good and sufficient cause;
 - (ii) A determination that failure to grant the variance would result in exceptional hardship; and
 - (iii) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or this article.

(10) A variance may be issued for solid waste disposal facilities or sites, hazardous waste management facilities, salvage yards and chemical storage facilities that are in special flood hazard areas if all of the following conditions are met.

- (a) The use serves a critical need in the community;
- (b) No feasible location exists for the use outside the special flood hazard area;
- (c) The reference level of any structure is elevated or floodproofed to at least the regulatory flood protection elevation;
- (d) The use complies with all other applicable federal, state and local laws; and
- (e) The ~~town~~-Town has notified the Secretary of the State Department of Public Safety of its intention to grant a variance at least 30 calendar days prior to granting the variance.

(Ord. passed 4-2-2009; Ord. passed 11-2-2011; Ord. passed 11-3-2016; Ord. 2020-01, passed 6-4-2020; Ord. passed 10-1-2020)

§ 7.05 PROVISIONS FOR FLOOD HAZARD REDUCTION.

- (A) General standards. In all special flood hazard areas, the following provisions are required.
- (1) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse and lateral movement of the structure.
 - (2) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage in accordance with the FEMA Technical Bulletin 2, flood damage-resistant materials requirements.
 - (3) All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damages.
 - (4) All new electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall be located at or above the RFPE or designed and installed to prevent water from entering or accumulating within the components during the occurrence of the base

flood. These include, but are not limited to, HVAC equipment, water softener units, bath/kitchen fixtures, ductwork, electric/gas meter panels/boxes, utility/cable boxes, hot water heaters and electric outlets/switches.

(a) Replacements part of a substantial improvement, electrical, heating, ventilation, plumbing, air conditioning equipment, and other service equipment shall also meet the above provisions.

(b) Replacements that are for maintenance and not part of a substantial improvement, may be installed at the original location provided the addition and/or improvements only comply with the standards for new construction consistent with the code and requirements for the original structure.

(5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

(6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.

(7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

(8) Nothing in this article shall prevent the repair, reconstruction or replacement of a building or structure existing on the effective date of this article and located totally or partially within the floodway, non-encroachment area or stream setback, provided there is no additional encroachment below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction or replacement meets all of the other requirements of this article.

(9) New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards and chemical storage facilities shall not be permitted, except by variance as specified in § 7.04(E)(10). A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a special flood hazard area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified in accordance with the provisions of § 7.04(B)(3).

(10) All subdivision proposals and other development proposals shall be consistent with the need to minimize flood damage.

(11) All subdivision proposals and other development proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(12) All subdivision proposals and other development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(13) All subdivision proposals and other development proposals shall have received all necessary permits from those governmental agencies for which approval is required by federal or state law, including § 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § 1334.

(14) When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

(15) When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest BFE shall apply.

(16) Fill used to elevate or support a structure is prohibited in the SFHA. This includes prohibiting Conditional Letters or Letters of Map Revision - Based on Fill (CLOMR-F or LOMR-F). Fill supporting transportation (bridges, culverts, roadways, greenways, etc.), stream restoration, repair of existing levees or berms, and similar projects can be permitted within the SFHA. ~~Fill shall not be used for structural support. This includes not approving conditional letters or letters of map revision - based on fill (CLOMR-F or LOMR-F).~~

(B) Specific standards. In all special flood hazard areas where BFE data has been provided, as set forth in §§ 7.03(B) or 7.05(D), the following provisions, in addition to the provisions of § 7.05(A), are required:

(1) Residential construction. New construction and substantial improvement of any residential structure (including manufactured homes) shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as defined in Article 11.

(2) Non-residential construction. New construction and substantial improvement of any commercial, industrial or other non-residential structure shall have the reference level elevated no lower than the regulatory flood protection elevation, as defined in Article 11. Structures located in Zones V, VE, A, AE, AH, AO and A99 may not be floodproofed to the regulatory flood protection elevation in lieu of elevation.

(3) Manufactured homes.

(a) New and replacement manufactured homes shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as defined in Article 11.

(b) Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by certified engineered foundation system, or in accordance with the most current edition of the state regulations for manufactured homes adopted by the Commissioner of Insurance pursuant to G.S. § 143-143.15. Additionally, when the elevation would be met by an elevation of the chassis 36 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or

engineered foundation. When the elevation of the chassis is above 36 inches in height, an engineering certification is required.

(c) All enclosures or skirting below the lowest floor shall meet the requirements of § 7.05(B)(4).

(d) An evacuation plan must be developed for evacuation of all residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Floodplain Administrator and the local Emergency Management Coordinator.

(4) Elevated buildings. Fully enclosed area, of new construction and substantially improved structures, which is below the reference level as defined in Article 11. Definitions: ~~lowest horizontal structural member in VE zones:~~

(a) Shall not be designed or used for human habitation, but shall only be used for parking of vehicles, building access or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas;

(b) ~~May be temperature controlled or conditioned;~~

(~~eb~~) Shall be constructed entirely of flood-resistant materials at least to the regulatory flood protection elevation;

(~~dc~~) Shall include, ~~in Zones A, AE, AH, AO and A99,~~ flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:

(i) A minimum of two flood openings on different sides of each enclosed area subject to flooding;

(ii) The total net area of all flood openings must be at least one square inch for each square foot of enclosed area subject to flooding;

(iii) If a building has more than one enclosed area, each enclosed area must have flood openings to allow floodwaters to automatically enter and exit;

(iv) The bottom of all required flood openings shall be no higher than one foot above the higher of the interior or exterior adjacent grade;

(v) Flood openings may be equipped with screens, louvers or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and

(vi) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

(d) Shall not be temperature-controlled or conditioned.

(e) Shall, in coastal high hazard areas (Zones VE and AE) and Coastal A zones, meet the requirements of § 7.05(G).

(f) Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor shall not be improved, finished or otherwise converted to habitable space; the Town will have the right to inspect the enclosed area. The Town will conduct annual inspections. This agreement shall be recorded with the Onslow County Register of Deeds and shall transfer with the property in perpetuity.

(5) Additions/improvements.

(a) Additions and/or improvements to pre-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(i) Not a substantial improvement, the addition and/or improvements must be designed to minimize flood damages and must not be any more nonconforming than the existing structure; or

(ii) A substantial improvement, with modifications/rehabilitations/improvements to the existing structure or the common wall is structurally modified more than installing a doorway, both the existing structure and the addition must comply with the standards for new construction.

(b) Additions to pre-FIRM and post-FIRM structures, except in VE and Coastal A zones, that are a substantial improvement with no modifications/rehabilitations/improvements to the existing structure other than a standard door in the common wall, shall require only the addition to comply with the standards for new construction.

(c) Additions and/or improvements to post-FIRM structures when the addition and/or improvements in combination with any interior modifications to the existing structure are:

(i) Not a substantial improvement, the addition and/or improvements only must comply with the standards for new construction consistent with the code and requirements for the original structure; and

(ii) A substantial improvement, both the existing structure and the addition and/or improvements must comply with the standards for new construction.

(d) Any combination of repair, reconstruction, rehabilitation, addition or improvement of a building or structure taking place during a one-year period, the cumulative cost of which

equals or exceeds 50% of the market value of the structure before the improvement or repair is started must comply with the standards for new construction. For each building or structure, the one-year period begins on the date of the first improvement or repair of that building or structure subsequent to the effective date of this article. Substantial damage also means flood-related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25% of the market value of the structure before the damage occurred. ~~(The repetitive loss portion is optional, but will be required for flood insurance policy holders to be eligible for increased cost of compliance (ICC) benefits for repetitive losses.)~~ If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The requirement does not, however, include either:

(i) Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assume safe living conditions; or

(ii) Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

(6) Recreational vehicles. Recreational vehicles shall either:

(a) Placement of a Recreational Vehicle in the VE Flood Zone is prohibited. This includes both temporary and permanent placement.

(b) Temporary placement.

(i) Be on site for fewer than 180 consecutive days; or

(ii) Be fully licensed and ready for highway use. (A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and has no permanently attached additions.)

~~(b)~~ (c) Permanent placement. Recreational vehicles that do not meet the limitations of temporary placement shall meet all the requirements for new construction.

(7) Temporary non-residential structures. Prior to the issuance of a floodplain development permit for a temporary structure, the applicant must submit to the Floodplain Administrator a plan for the removal of such structure(s) in the event of a hurricane, flash flood or other type of flood warning notification. The following information shall be submitted in writing to the Floodplain Administrator for review and written approval:

(a) A specified time period for which the temporary use will be permitted. Time specified should not exceed three months, renewable up to one year;

(b) The name, address and phone number of the individual responsible for the removal of the temporary structure;

(c) The time frame prior to the event at which a structure will be removed (i.e., minimum of 72 hours before landfall of a hurricane or immediately upon flood warning notification);

(d) A copy of the contract or other suitable instrument with the entity responsible for physical removal of the structure; and

(e) Designation, accompanied by documentation, of a location outside the special flood hazard area, to which the temporary structure will be moved.

(8) Accessory structures.

(a) When accessory structures (sheds, detached garages, etc.) with a footprint of no more than 600 square feet are placed within A, AO, AH, AE and A99 flood zones, and no more than 100 square feet in VE and Coastal A zones, wet floodproofing may be permitted when the following criteria are met:

(a) Accessory structures shall not be used for human habitation (including working, sleeping, living, cooking or restroom areas);

(b) Accessory structures shall not be temperature-controlled;

(c) Accessory structures shall be designed to have low flood damage potential;

(d) Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

(e) Accessory structures shall be firmly anchored in accordance with the provisions of § 7.05(A)(1);

(f) Accessory structures, regardless of the size or cost, shall not be placed below elevated buildings in Coastal A and VE zones;

(g) All service facilities such as electrical shall be installed in accordance with the provisions of § 7.05(A)(4); and

(h) Flood openings to facilitate automatic equalization of hydrostatic flood forces shall be provided below regulatory flood protection elevation in conformance with the provisions of § 7.05(B)(4)(d).

(b) All other accessory structures exceeding the size restrictions in 7.05(B)(8)(a) above must comply with the elevation or floodproofing standards and certification requirements in accordance with 7.04, (B)(3) and 7.05(B)(2).

(c) An accessory structure with a footprint ~~less than~~ of 150 square feet or less in A, AO, AH, AE and A99 zones ~~that is a minimal investment of \$5,000 or less and satisfies~~ satisfying the criteria outlined above in § 7.05(B)(8)(a) is not required to meet the elevation or floodproofing certification requirements of § 7.04(B)(3). All other accessory structures must comply with the elevation or floodproofing certifications ~~are required~~ requirements for all other accessory structures in accordance with § 7.04(B)(3).

(9) Tanks. When gas and liquid storage tanks are to be placed within a special flood hazard area, the following criteria shall be met:

(a) Underground tanks. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads during conditions of the design flood, including the effects of buoyancy assuming the tank is empty;

(b) Above-ground tanks, elevated. Above-ground tanks in flood hazard areas shall be elevated to or above the regulatory flood protection elevation on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood. Tank-supporting structures shall meet the foundation requirements of the applicable flood hazard area;

(c) Above-ground tanks, not elevated. Above-ground tanks that do not meet the elevation requirements shall be not be permitted in V, VE, A, AE, and Coastal A Zones. Tanks may be permitted in other flood hazard areas provided the tanks are designed, constructed, installed, and anchored to resist all flood-related and other loads, including the effects of buoyancy, during conditions of the design flood and without release of contents in the floodwaters or infiltration by floodwaters into the tanks. Tanks shall be designed, constructed, installed, and anchored to resist the potential buoyant and other flood forces acting on an empty tank during design flood conditions.

(d) Tank inlets and vents. Tank inlets, fill openings, outlets and vents shall be:

(i) At or above the regulatory flood protection elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood; and

(ii) Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

(10) Other development.

(a) Fences in regulated floodways and NEAs that have the potential to block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the limitations of § 7.05(F).

(b) Retaining walls, sidewalks and driveways in regulated floodways and NEAs. Retaining walls and sidewalks and driveways that involve the placement of fill in regulated floodways shall meet the limitations of § 7.05(F).

(c) Roads and watercourse crossings in regulated floodways and NEAs. Roads and watercourse crossings, including roads, bridges, culverts, low-water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, that encroach into regulated floodways shall meet the limitations of § 7.05(F).

(d) Commercial storage facilities are not considered “limited storage” as noted in this article, and shall be protected to the Regulatory Flood Protection Elevation as required for commercial structures.

(C) Reserved.

(D) Standards for floodplains without established base flood elevations. Within the special flood hazard areas designated as Approximate Zone A and established in § 7.03(B), where no BFE data has been provided by FEMA, the following provisions, in addition to the provisions of § 7.05 (A), shall apply:

(1) No encroachments, including fill, new construction, substantial improvements or new development shall be permitted within a distance of 20 feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(2) The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria.

(a) When BFE data is available from other sources, all new construction and substantial improvements within such areas shall also comply with all applicable provisions of this article and shall be elevated or floodproofed in accordance with standards in § 7.05(A) and (B).

(b) When floodway or non-encroachment data is available from a federal, state or other source, all new construction and substantial improvements within floodway and non-encroachment areas shall also comply with the requirements of § 7.05(B) and (F).

(c) All subdivision, manufactured home park and other development proposals shall provide BFE data if development is greater than five acres or has more than 50 lots/manufactured home sites. Such BFE data shall be adopted by reference in accordance with § 7.03(B) and utilized in implementing this article.

(d) When BFE data is not available from a federal, state or other source as outlined above, the reference level shall be elevated or floodproofed (non-residential) to or above the regulatory flood protection elevation, as defined in Article 11. All other applicable provisions of § 7.05(B) shall also apply.

(E) Standards for riverine floodplains with base flood elevations but without established floodways or non-encroachment areas. Along rivers and streams where BFE data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a special flood hazard area on the FIRM or in the FIS report, the following requirements shall apply to all development within such areas:

(1) Standards of § 7.05(A) and (B); and

(2) Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

(F) Floodways and non-encroachment areas. Areas designated as floodways or non-encroachment areas are located within the special flood hazard areas established in § 7.03(B). The floodways and non-encroachment areas are extremely hazardous areas due to the velocity of floodwaters that have erosion potential and carry debris and potential projectiles. The following provisions, in addition to standards outlined in § 7.05(A) and (B), shall apply to all development within such areas:

(1) No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:

(a) It is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood discharge, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Floodplain Administrator prior to issuance of floodplain development permit; or

(b) A Conditional Letter of Map Revision (CLOMR) has been issued by FEMA for proposed encroachments resulting in increases in the flood levels during the occurrence of the base flood discharge. A Letter of Map Revision (LOMR) must be obtained within six months of completion of the proposed encroachment. ~~A conditional letter of map revision (CLOMR) has been approved by FEMA. A letter of map revision (LOMR) must also be obtained within six months of completion of the proposed encroachment.~~

(c) A Letter of Map Revision (LOMR) must be obtained within six months of completion of the proposed encroachment, permitted in accordance with 7.05(F)(1)(a), if the encroachment results in changes to the floodway/non-encroachment area widths, and/or changes to the stream location.

(2) If § 7.05(F)(1) is satisfied, all development shall comply with all applicable flood hazard reduction provisions of this article.

(3) Manufactured homes may be permitted provided the following provisions are met:

(a) The anchoring and the elevation standards of § 7.05(B)(3); and

(b) The encroachment standards of § 7.05(F)(1).

(4) Placement of recreational vehicles in the regulatory floodway is prohibited.

(G) Coastal high hazard area (Zones VE and AE) ~~and Coastal A zones~~. ~~Coastal high hazard areas~~ are special flood hazard areas established in § 7.03(B) and designated as Zones VE and AE. These areas have special flood hazards associated with high velocity waters from storm surges or seismic activity and, therefore, all new construction and substantial improvements shall meet the following provisions, in addition to the provisions of § 7.05 (A) and (B):

(1) All new development, ~~substantial improvement~~, and accessories shall:

(a) Be located landward of the ocean hazard setback for development as determined by the Division of Coastal Management in 15A NCAC 07H.0306, and any amendments thereto;

(b) ~~Comply with all applicable ocean hazard setbacks for development in 15A NCAC 07H.0309 except for 15A NCAC 07H.0309(a)(5) (unenclosed, uninhabitable gazebos with a footprint of 200 square feet or less), (6) uninhabitable, single-story storage sheds with a foundation or floor consisting of wood, clay, packed sand or gravel, and a footprint of 200 square feet or less), and (9) (swimming pools) which are hereby prohibited within the ocean hazard setback.~~ ~~Comply with all applicable CAMA setback requirements.~~

(2) All new construction and substantial improvements shall be elevated so that the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings or columns) is no lower than the regulatory flood protection elevation. Floodproofing shall not be utilized on any structures in ~~coastal~~ ~~Coastal high~~ ~~High hazard~~ ~~Hazard areas~~ ~~Areas~~ or ~~Coastal A zones~~ to satisfy the regulatory flood protection elevation requirements.

(3) All new construction and substantial improvements shall have the space below the bottom of the lowest horizontal structural member of the lowest floor ~~either be free of~~ obstruction or constructed with breakaway walls, open wood latticework or insect screening, provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action without causing damage to the elevated portion of the building or supporting foundation system or otherwise jeopardizing the structural integrity of the building. The following design specifications shall be met:

(a) Material shall consist of open wood or plastic lattice having at least 40% of its area open; ~~or~~

(b) Insect screening; or

(c) Breakaway walls shall meet the following design specifications:

(1) Breakaway walls shall have flood openings that allow for the automatic entry and exit of floodwaters to minimize damage caused by hydrostatic loads, per § 7.05 (B)(4) ~~(d) (i)~~ ~~(vi)(c)~~; and

(2) Design safe loading resistance shall be not less than ten nor more than 20 pounds per square foot; or

(3) Breakaway walls that exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by state or local codes) shall be certified by a

registered professional engineer or architect that the breakaway wall will collapse from a water load less than that which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). The water loading values used shall be those associated with the base flood. The wind loading values used shall be those required by the North Carolina State Building Code.

(4) All new construction and substantial improvements shall be securely anchored to pile or column foundations. All pilings and columns and the structure attached thereto shall be anchored to resist flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components.

(a) Water loading values used shall be those associated with the base flood.

(b) Wind loading values used shall be those required by the current edition of the State Building Code.

(5) For concrete pads, including patios, decks, parking pads, walkways, driveways, pool decks etc., the following is required:

(a) Pad thickness shall not exceed four inches;

(b) Shall be structurally independent of the primary structural foundation system of the structure and shall not adversely affect structures through redirection of floodwaters or debris; and

(c) Shall be constructed to break away cleanly during design flood conditions, shall be frangible and shall not produce debris capable of causing damage to any structure. (The installation of concrete in small segments (approximately four feet by four feet) that will easily break up during the base flood event, or score concrete in four feet by four feet maximum segments is acceptable to meet this standard); and

(d) Reinforced, including welded wire fabric, shall not be used in order to minimize the potential for concrete pads being a source of debris; or

(e) Provide a design professional's certification stating the design and method of construction to be used meet the applicable criteria of this section.

(6) For swimming pools and spas, the following is required:

(a) Be designed to withstand all flood-related loads and load combinations. Flotation calculations should assume the pools/spas are empty.

(b) Be elevated so that the lowest horizontal structural member is elevated above the RFPE, or

(c) Be located and installed in-ground in compliance with either of the following ~~designed and constructed to break away during design flood conditions without producing debris capable of causing damage to any structure;~~

1. Designed and constructed to break away during design flood conditions without producing debris capable of causing damage to any structure; or
2. Designed and constructed to remain in the ground during design flood conditions without obstructing flow that results in damage to any structure.

~~—(d) Be sited to remain in the ground during design flood conditions without obstructing flow that results in damage to any structure;~~

(ed) Registered design professionals must certify to local officials that a pool or spa beneath or near a ~~VE Zone~~ building will not be subject to flotation or displacement that will damage building foundations or elevated portions of the building or any nearby buildings during a coastal flood; ~~or~~.

(fe) Pool equipment shall be located above the RFPE whenever practicable. Pool equipment shall not be located beneath an elevated structure.

(7) All elevators, vertical platform lifts, chair lifts and the like, the following is required:

(a) Elevator enclosures must be designed to resist hydrodynamic and hydrostatic forces as well as erosion, scour and waves.

(b) Utility equipment in coastal high hazard areas (VE and AE Zones) must not be mounted on, pass through or be located along breakaway walls.

(c) The cab, machine/equipment room, hydraulic pump, hydraulic reservoir, counterweight and roller guides, hoist cable, limit switches, electric hoist motor, electrical junction box, circuit panel, and electrical control panel are all required to be above RFPE. When this equipment cannot be located above the RFPE, it must be constructed using flood damage-resistant components.

~~—(d) Drainage must be provided for the elevator pit.~~

~~—(e) Flood damage resistant materials can also be used inside and outside the elevator cab to reduce flood damage. Use only stainless steel doors and door frames below the BFE. Grouting in of door frames and sills is recommended.~~

(fd) If an elevator is designed to provide access to areas below the BFE, it shall be equipped with a float switch system that will activate during a flood and send the elevator cab to a floor above the RFPE.

(8) Accessory structures, regardless of size or cost, shall not be permitted below elevated structures.

~~— (9) A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions of §§ 7.04(B) and 7.05(G)(3) and (4), on the current version of the North Carolina V-Zone Certification form or equivalent local version. Prior to the certificate of compliance/occupancy issuance, the Floodplain Administrator may require that a registered professional engineer or architect certify the finished construction is compliant with the design, specifications and plans for VE Zone construction.~~

(109) Fill/grading:

(a) Minor grading and the placement of minor quantities of non-structural fill may be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.

(b) The fill material must be similar and consistent with the natural soils in the area.

(c) The placement of site-compatible, non-structural fill under or around an elevated building is limited to two feet. Fill greater than two feet must include an analysis prepared by a qualified registered design professional demonstrating no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent elevated buildings and structures.

(d) Non-structural fill with finished slopes that are steeper than five units horizontal to one unit vertical shall be permitted only if an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent elevated buildings and structures.

(e) Fill for structural support is prohibited in the SFHA which should be consistent with § 7.05(A)(17).

~~(110)~~ There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.

(11) For decks and patios, the following is required:

~~(14)~~ (a) A deck that is structurally attached to a building or structure shall have the bottom of the lowest horizontal structural member at or above the regulatory flood protection elevation and any supporting members that extend below the regulatory flood protection elevation shall comply with the foundation requirements that apply to the building or structure, which shall be designed to accommodate any increased loads resulting from the attached deck. The increased loads must be considered in the design of the primary structure and included in the V-Zone Certification required under § 7.04(B)(3)(f).

~~(15)~~ (b) A deck or patio that is located below the regulatory flood protection elevation shall be structurally independent from buildings or structures and their foundation systems, and shall be designed and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable

of causing structural damage to the building or structure or to adjacent buildings and structures.

(1612) Development activities other than buildings and structures shall be permitted only if also authorized by the appropriate state or local authority; if located outside the footprint of, and not structurally attached to, buildings and structures; and if analyses prepared by qualified registered design professionals demonstrate no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent buildings and structures. Such other development activities include but are not limited to:

(a) Bulkheads, seawalls, retaining walls, revetments and similar erosion control structures; and

(b) Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the design flood or otherwise function to avoid obstruction of floodwaters.

~~—(c) Docks, piers, and similar structures.~~

(13) Placement of recreational vehicles in VE zones are prohibited. ~~Recreational vehicles may be permitted in coastal high hazard areas provided that they meet the recreational vehicle criteria of § 7.05(B)(6)(a).~~

~~—(14) A deck that is structurally attached to a building or structure shall have the bottom of the lowest horizontal structural member at or above the regulatory flood protection elevation and any supporting members that extend below the regulatory flood protection elevation shall comply with the foundation requirements that apply to the building or structure, which shall be designed to accommodate any increased loads resulting from the attached deck. The increased loads must be considered in the design of the primary structure and included in the V-Zone Certification required under § 7.04(B)(3)(f).~~

~~—(15) A deck or patio that is located below the regulatory flood protection elevation shall be structurally independent from buildings or structures and their foundation systems, and shall be designed and constructed either to remain intact and in place during design flood conditions or to break apart into small pieces to minimize debris during flooding that is capable of causing structural damage to the building or structure or to adjacent buildings and structures.~~

(14) No more than four (4) electrical outlets and no more than four (4) electrical switches may be permitted below RFPE unless required by building code.

(1215) No manufactured homes shall be permitted except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and elevation standards of this Section have been satisfied.

(16) Property owners shall be required to execute and record a non-conversion agreement prior to issuance of a building permit declaring that the area below the lowest floor, or the

detached accessory building shall not be improved, or otherwise converted; the Town will have the right to inspect the enclosed area. This agreement shall be recorded with the Onslow County Register of Deeds and shall transfer with the property in perpetuity.

(917) A registered professional engineer or architect shall certify that the design, specifications, plans and construction are compliant with the provisions of 7.04(B) and 7.05 (G) (2), (3), and (4), on the current version of the North Carolina V-Zone Certification form or equivalent local version pursuant to 7.04(B)(3)(f). Prior to the certificate of compliance/occupancy issuance, the Floodplain Administrator may require that a registered professional engineer or architect certify the finished construction is compliant with the design, specifications and plans for VE Zone construction.

~~(H) Standards for Coastal A Zones (Zone CAZ) LIMWA. Structures in CAZs shall be designed and constructed to meet V Zone requirements, including requirements for breakaway walls. However, the NFIP regulations also require flood openings in walls surrounding enclosures below elevated buildings in CAZs (see Technical Bulletin 1, openings in foundation walls and walls of enclosures). Breakaway walls used in CAZs must have flood openings that allow for the automatic entry and exit of floodwaters to minimize damage caused by hydrostatic loads. Openings also function during smaller storms or if anticipated wave loading does not occur with the base flood.~~

~~—(1) All new construction and substantial improvements shall be elevated so that the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings or columns) is no lower than the regulatory flood protection elevation. Floodproofing shall not be utilized on any structures in Coastal A Zones to satisfy the regulatory flood protection elevation requirements.~~

~~—(2) All new construction and substantial improvements shall have the space below the lowest horizontal structural member free of obstruction or constructed with breakaway walls, open wood latticework or insect screening, provided they are not part of the structural support of the building and are designed so as to break away, under abnormally high tides or wave action without causing damage to the elevated portion of the building or supporting foundation system or otherwise jeopardizing the structural integrity of the building. The following design specifications shall be met:~~

~~—(a) Material shall consist of open wood or plastic lattice having at least 40% of its area open;~~

~~—(b) Insect screening; or~~

~~—(c) Breakaway walls shall meet the following design specifications:~~

~~—(1) Breakaway walls shall have flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet or exceed the design criteria in § 7.05(B)(4)(d);~~

~~— (2) Design safe loading resistance shall be not less than 10 nor more than 20 pounds per square foot; or~~

~~— (3) Breakaway walls that exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by state or local codes) shall be certified by a registered professional engineer or architect that the breakaway wall will collapse from a water load less than that which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). The water loading values used shall be those associated with the base flood. The wind loading values used shall be those required by the North Carolina State Building Code.~~

~~— (3) Concrete pads, including patios, decks, parking pads, walkways, driveways and the like must meet the provisions of § 7.05(G)(5).~~

~~— (4) All new construction and substantial improvements shall meet the provisions of § 7.05(G)(3).~~

~~— (5) A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions of §§ 7.04(B) and 7.05(G)(3) and (4), on the current version of the North Carolina V-Zone certification form or a locally developed V-Zone certification form.~~

~~— (6) Recreational vehicles may be permitted in Coastal A Zones provided that they meet the recreational vehicle criteria of § 7.05(B)(6)(a).~~

~~— (7) Fill/grading must meet the provisions of § 7.05(G)(11).~~

~~— (8) Fill for structural support is prohibited in the SFHA which should be consistent with § 7.05(A)(17).~~

~~— (9) Decks and patios must meet the provisions of § 7.05(G)(15) and (16).~~

~~— (10) In coastal high hazard areas, development activities other than buildings and structures must meet the provisions of § 7.05(G)(17).~~

~~(Ord. passed 11-2-2011; Ord. passed 11-3-2016; Ord. 2020-01, passed 6-4-2020; Ord. passed 10-1-2020; Ord. passed 1-8-2025)~~Reserved.

I. Reserved.

J. Reserved.

§ 7.06 LEGAL STATUS PROVISIONS.

(A) Effect on rights and liabilities under the existing flood damage prevention ordinance.

(1) This article in part comes forward by re-enactment of some of the provisions of the flood damage prevention ordinance enacted May 2, 1990, as amended, and it is not the intention to repeal but rather to re-enact and continue to enforce without interruption of such existing provisions, so that all rights and liabilities that have accrued thereunder are reserved and may be enforced. The enactment of this article shall not affect any action, suit or proceeding instituted or pending. All provisions of the flood damage prevention ordinance of the ~~town~~Town enacted on May 2, 1990, as amended, which are not reenacted herein are repealed.

(2) The date of the initial flood damage prevention ordinance for the county is July 2, 1987.

(B) Effect upon outstanding floodplain development permits. Nothing herein contained shall require any change in the plans, construction, size or designated use of any development or any part thereof for which a floodplain development permit has been granted by the Floodplain Administrator or his or her authorized agents before the time of passage of this article; provided, however, that when construction is not begun under such outstanding permit within a period of six months subsequent to the date of issuance of the outstanding permit, construction or use shall be in conformity with the provisions of this article.

(C) Severability. If any section, clause, sentence, or phrase of the article is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this article.

(D) Effective date. This article shall become effective **July 1, 2026**.

(Ord. passed 11-2-2011; Ord. passed 11-3-2016; Ord. 2020-01, passed 6-4-2020)

SECTION E. ADOPTION CERTIFICATION.

I hereby certify that this is a true and correct copy of the Flood Damage Prevention Ordinance as adopted by the Board of Aldermen of the Town of North Topsail Beach, North Carolina, on the 1st day of July, 2026.

WITNESS my hand and the official seal of Alexis "Lexi" Stanfield NCCCC, Town Clerk, this the 1st day of July, 2026.

(signature)

§ 11.02 DEFINITIONS.

Unless specifically defined below, words or phrases used in this development ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

A ZONE. The Special Flood Hazard Area subject to inundation by the 1% annual chance flood where base flood elevations have NOT been determined.

AE ZONE. The Special Flood Hazard Area subject to inundation by the 1% annual chance flood where base flood elevations have been determined by detailed or limited detailed methods.

ABANDONMENT. A property, use or structure that has been physically and objectively discontinued, ceased, relinquished, vacated or not maintained for a consecutive period of 180 days or more days and regardless of any condition or circumstance beyond the control of such parties that prevent a continuation of the use or occupancy of the structure or property.

ABUTTING. See ADJACENT, ADJOINING LOT OR LAND.

ACCESS. A way of approaching or entering a property, access also includes ingress, the right to enter, and egress, and the right to leave.

ACCESSORY DWELLING UNIT. A residential dwelling unit, located on the same lot as a single-family dwelling unit, either within the same building as the single-family dwelling unit or in a detached building. Secondary dwelling units shall be developed in accordance with the standards set forth in this ordinance and only in those zoning districts where the use is listed as a special use.

ACCESSORY STRUCTURE (APPURTENANT STRUCTURE). A structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Garages, carports and storage sheds are common ACCESSORY STRUCTURES. Poles, barns, hay sheds and the like qualify as accessory structures on farms, and may or may not be located on the same parcel as the farm dwelling or shop building.

ACCESSORY USE. A use on the same lot or in the same building with the principal use of the lot or building, the nature and extent of which is clearly incidental or subordinate to that of the principal use.

ACCRETED LAND. Accretion is defined as the natural addition of land by the slow action of wind or water. Heavy rain, river or ocean action would have this effect by either washing up sand or soil or by a permanent retreat of the high water mark. In general, ACCRETED LAND will be considered to maintain the same zoning designation as the adjacent land. In

any case, the landowner would have the right to attempt to have the accreted land rezoned, following the usual rezoning process.

ADDITION (TO AN EXISTING BUILDING). An extension or increase in the floor area or height of a building or structure.

ADJACENT, ADJOINING LOT OR LAND. A lot or parcel of land that shares all or part of a common lot line or boundary with another lot or parcel of land or that is directly across a public street or right-of-way.

ADMINISTRATIVE HEARING. A proceeding to gather facts needed to make an administrative decision.

ADULT BUSINESS AND RELATED DEFINITIONS. See definitions in North Topsail Beach Town Code Chapter 4, Art. III, Adult and Sexually Oriented Businesses.

ADULT DAY CARE CENTER. See DAY CARE CENTER.

AH ZONE. The Special Flood Hazard Area with a 1% annual chance of shallow flooding (usually areas of ponding), where average depths are between one (1) and three (3) feet. Base flood elevations derived from detailed hydraulic analyses are shown in this zone.

ALLEY. A public or private right-of-way primarily designed to serve as secondary access to the side or rear of those properties whose principal frontage is on a street and is not intended for general traffic.

ALTERATION. Any change or expansion in the size, configuration or location of a structure; or any change or expansion in the use of a structure or lot, from a previously approved or legally existing size, configuration, location or use.

ALTERATION OF A WATERCOURSE. A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other form of modification which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

ALTERNATIVE ANTENNA SUPPORT STRUCTURES (AASS). Structures which are functionally and legally capable of supporting wireless communication antennae, including, but not limited to, buildings, water towers and utility poles as an ancillary use of the primary structure.

AMENDMENT. Any change by the Board of Aldermen to the unified development ordinance such as text amendments or changes to the official zoning map.

AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION (AMTA). A Washington, D.C. based industry trade group which serves to support its specialized mobile radio (SMR) operator members through lobbying and networking efforts.

ANTENNA. Any apparatus or group of apparatus, designed for the transmitting and/or receiving of electromagnetic waves that includes, but is not limited to: telephonic, radio or

television communications. ANTENNAS include omni-directional (whip) antennas, sectorized (panel) antennas, microwave dish antennas, multi or single bay (FM and amp; TV), or parabolic (dish) antennas, but do not include satellite earth stations.

ANTENNA, DISH. A parabolic, spherical or elliptical antenna intended to receive wireless communications.

ANTENNA, FLUSH MOUNTED. An antenna that is attached flush to an antenna-supporting structure, without the use of sidearms or other extension devices.

ANTENNA, PANEL. A directional antenna designed to transmit and/or receive signals in a directional pattern that is less than 360 degrees and is not flush-mounted or dish antenna.

ANTENNA, SURFACE MOUNTED. An antenna that is attached flush to the surface or facade of a building or structure other than an antenna-supporting structure.

ANTENNA, WHIP. A cylindrical, omni-directional antenna designed to transmit and/or receive signals in a 360-degree pattern.

AO ZONE. The Special Flood Hazard Area with a 1% annual chance of shallow flooding (usually sheet flow on sloping terrain) where average depths are between one (1) and three (3) feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone.

APPEAL. A request for a review of the Zoning or Floodplain Administrator's interpretation of any provision of this ordinance.

APPROVAL AUTHORITY. The Board of Aldermen, Board of Adjustment, Planning Board, Planning Director or official designated by this development ordinance or by the town as being authorized to grant the specific zoning or land use permit or approval that constitutes a site-specific development plan.

ARCHITECTURAL FEATURE. A prominent or significant part or element of a building, structure or site.

AREA OF ENVIRONMENTAL CONCERN (AEC). The foundation of the CRC's permitting program for coastal development. An AEC is an area of natural importance: The CRC classifies areas as AECs to protect them from uncontrolled development, which may cause irreversible damage to property, public health or the environment. The CRC has established four categories of AECs:

- (1) The estuarine and ocean system;
- (2) The ocean hazard system;
- (3) Public water supplies; and
- (4) Natural and cultural resource areas.

AREA OF SHALLOW FLOODING. A designated Zone AO or AH on a community's flood insurance rate map (FIRM) with base flood depths determined to be from one to three feet.

These areas are located where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

AREA OF SPECIAL FLOOD HAZARD. See SPECIAL FLOOD HAZARD AREA (SFHA).

AS-BUILT PLANS. Plans showing location of all existing and constructed features, certifying that a project was built in accordance with the permit.

ATTIC. The unfinished space between the ceiling joists of the top story and the roof rafters.

BALCONY, EXTERIOR. An exterior floor projecting from and supported by a structure without additional independent supports.

BANNER. A sign intended to be hung either with or without a frame, possessing characters, letters, illustrations or ornamentation's applied to plastic or fabric of any kind excluding flags.

BASE FLOOD. The flood having a 1% chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION (BFE). A determination of the water surface elevations of the base flood as published in the flood insurance study. When the BFE has not been provided in a "special flood hazard area", it may be obtained from engineering studies available from a federal, state or other source using FEMA-approved engineering methodologies. This elevation, when combined with the two-foot "freeboard", establishes the "regulatory flood protection elevation".

BASEMENT. Any area of the building having its floor subgrade (below ground level) on all sides.

BED AND BREAKFAST. A building other than a hotel or motel where, a resident family, for compensation, provides temporary lodging and meals.

BEDROOM. Sleeping room. A room designated as sleeping or bedroom on the plans and permit application.

BILLBOARD. A sign that identifies, advertises and/or directs the public to a business, merchandise, service, entertainment or product that is located at a place other than the property on which such sign is located. See also SIGN, OFF-PREMISES.

BLOCK. A tract of land or a lot or group of lots bounded by streets, public parks, golf courses, railroad rights-of-way, watercourses, lakes, unsubdivided land or a boundary line or lines of the town or any combination of the above.

BLOCK FRONTAGE. The portion of a block which abuts a single street.

BOARD OF ADJUSTMENT. A local body, created by ordinance, whose responsibility is to hear appeals from decisions of the Zoning Administrator and to consider requests for variances from the terms of the unified development ordinance.

BOARD OF ALDERMEN. The governing body of the Town of North Topsail Beach.

BOAT LAUNCH/RAMP. Facility to launch and retrieve recreational boats from a trailer.

BOAT SLIP. A berthing place for one or two watercraft where the watercraft can be securely moored to cleats, piling, or other devices while the boats are in the water. **BOAT SLIPS** are commonly configured as “side-ties” or as single or double loaded “U” shaped berths.

BONA FIDE FARM PURPOSES. Agricultural activities as set forth in G.S. § 160D-903.

BREAKAWAY WALL. A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

BUFFER. A fence, wall, hedge or other planted area or device used to enclose, screen or separate one use or lot from another.

BUILDING. See **STRUCTURE**.

BUILDING, EXISTING. A building erected prior to the adoption of this code, or one for which a legal building permit has been issued.

BUILDING, HEIGHT OF. The vertical distance of the highest point of the roof or any rooftop deck, fence, railing, widow’s walk or other rooftop structure as measured from the top of the lowest slab and if no slab measured from lowest adjacent grade as specified on the elevation certificate.

BUILDING LINE/SETBACK. The line established by this ordinance, beyond which a building shall not extend, except as specifically provided.

BUILDING PERMIT. A permit obtained from the town for the construction, repair, alteration or addition to a structure, which sets the inspection schedule and construction techniques for a particular project and specified use in accordance with this ordinance and adopted building ordinances and other prevailing standards for construction, and includes the town’s necessary zoning approval.

BUILDING, PRINCIPAL (MAIN). A building in which is conducted the principal use of the plot on which it is situated.

BULKHEAD. A vertical wall structure designed to retain shoreline material and prevent erosion due to wave activity.

CALIPER. The size of tree’s trunk diameter as measured 36 inches above the ground.

CAMOUFLAGED TOWER. A tower which is designed to blend into the surrounding environment, such as a tower designed to resemble a tree or, if erected on an existing structure, an integral part of the building.

CAMPER. A structure manufactured of metal, wood, canvas, plastic or other materials, or any combination thereof, mounted on wheels and designed for travel, recreation or vacation use. A CAMPER is not designed or intended to be used as a permanent dwelling. CAMPERS include the following:

(1) **TRAVEL TRAILER.** A vehicular, portable structure built on chassis, designed to be towed by a self-propelled vehicle for use for travel, recreation or vacation purposes. A travel trailer is not designed or meant to be used as a permanent dwelling.

(2) **RECREATIONAL VEHICLE.** A self-propelled vehicle or portable structure mounted on such a vehicle designed as temporary dwelling for travel, recreation and vacation.

(3) **TENT.** A portable shelter of canvas, plastic or skins stretched over a supporting framework of poles with skins stretched over a supporting framework of poles with ropes and pegs.

CAMPER SPACE. A plot of land within a campground designed for the accommodation of one camper.

CAMPGROUND. Any lot upon which multiple campers or tent spaces are provided for temporary occupancy according to requirements as set forth in this ordinance. A CAMPGROUND shall also be known as a RECREATIONAL VEHICLE PARK or TRAVEL TRAILER PARK.

CARPORT. A covered parking area opened on at least two sides.

CELLULAR TELECOMMUNICATIONS INDUSTRY ASSOCIATION (CTIA). A family of representative companies that support the cellular, PCS and enhanced SMR carriers industry through lobbying, research and policy efforts.

CERTIFICATE OF OCCUPANCY. A document issued by the Building Inspector allowing the occupancy or use of a building and certifying that the structure or use has been constructed or will be used in compliance with this ordinance and all other applicable regulations.

CERTIFICATE OF ZONING COMPLIANCE. Official certification that a premises conforms to provisions of the unified development ordinance (and building code) and may be used or occupied, subject to issuance of a certificate of occupancy by the Building Inspector. Such a certificate is granted for new construction or for alterations or additions to existing structures or a change in use. Unless such a certificate is issued, a structure cannot be occupied.

CHANGE OF USE. See USE, CHANGE OF.

CHEMICAL STORAGE FACILITY. A building, portion of a building, or exterior area adjacent to a building used for the storage of any chemical or chemically reactive products.

CHILD CARE HOME. A home occupation providing for day care of no more than seven children See also HOME OCCUPATION and DAY CARE FACILITY.

CITATION. A notice by a governmental authority indicating a violation or possible violation of this ordinance or other applicable government regulations applicable to the property.

CLEARING. The removal of trees and brush from the land, but shall not include the ordinary mowing of grass.

CLUB OR LODGE (PRIVATE NONPROFIT, CIVIC OR FRATERNAL). Buildings and facilities, owned or operated by a corporation, association, person or persons, for a social, educational or recreational purpose, to which membership is required for participation.

COASTAL AREA MANAGEMENT ACT (CAMA). North Carolina's Coastal Area Management Act, along with the Dredge and Fill Law and the Federal Coastal Zone Management Act, is managed through North Carolina Department of Environment and Natural Resources' (NCDENR's) North Carolina Department of Environmental Quality (NCDEQ) Division of Coastal Management (DCM).

COASTAL A ZONE (CAZ). An area within a special flood hazard area, landward of a V zone or landward of an open coast without mapped V zones; in a Coastal A Zone, the principal source of flooding must be astronomical tides, storm surges, seiches or tsunamis, not riverine flooding. During the base flood conditions, the potential for wave heights shall be greater than or equal to one and one-half feet. COASTAL A ZONES are not normally designated on FIRMs (see LIMIT OF MODERATE WAVE ACTION (LiMWA)).

COASTAL BARRIER RESOURCES SYSTEM (CBRS). Consists of undeveloped portions of coastal and adjoining areas established by the Coastal Barrier Resources Act (CoBRA) of 1982, the Coastal Barrier Improvement Act (CBIA) of 1990, and subsequent revisions, and includes areas owned by federal or state governments or private conservation organizations identified as otherwise protected areas (OPA).

COASTAL HIGH HAZARD AREA. A special flood hazard area extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on a FIRM or other adopted flood map as determined in § 7.03(B), as zones VE and AE.

CO-LOCATION. The siting of two or more wireless telecommunication antennae on the same wireless telecommunication support structure.

COMMERCIAL USE. Any use permitted by this ordinance in one or more of the B-1 or B-2 zoning district, or as otherwise permitted by this ordinance. Unless otherwise indicated, the meaning and use of the term "commercial" or "business" are similar and the terms are interchangeable.

COMMUNITY. Any State or area or political subdivision thereof, or any Indian tribe or authorized tribal organization, which has authority to adopt and enforce flood plain management regulations for the areas within its jurisdiction.

COMMUNITY BOATING FACILITY. A private, nonprofit boating facility including a dock, pier and/or launching ramp on property having water frontage, the use of which is intended to serve more than one residential lot. The right to use such facility must be conferred by an easement appurtenant to the residential lot it is intended to serve. No commercial activities of any kind shall be allowed within the confines of the facility. The facility shall be limited to one slip per one residential dwelling unit, not to exceed ten slips.

COMMUNITY RATING SYSTEM (CRS). A program developed by the Federal Insurance Administration to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

COMPREHENSIVE PLAN. The comprehensive plan, land-use plan, small area plans, neighborhood plans, transportation plan, capital improvement plan, and any other plans regarding land use and development that have been officially adopted by the Board of Aldermen pursuant to G.S. § 160D-501.

CONDITIONAL ZONING. A legislative zoning map amendment with site-specific conditions incorporated into the zoning map amendment.

CONDOMINIUM. Ownership of single units in a multi-unit structure with common areas and facilities in accordance with G.S. Ch. 47A.

CONDOMINIUM HOTEL or CONDOTEL. See HOTELMINIUM.

CONTIGUOUS. Abutting directly or immediately adjacent to a boundary or separated only by a street or public utility right-of-way.

CONVALESCENT HOME (NURSING HOME). An institution, which is advertised, announced or maintained for the express or implied purpose of providing nursing or convalescent care for persons unrelated to the licensee. A CONVALESCENT HOME is a home for chronic or nursing patients who, on admission, are not as a rule acutely ill or who do not usually require special facilities, such as an operating room, X-ray facilities, laboratory facilities and obstetrical facilities.

CONVENIENCE STORE. A small store or shop used as a convenient supplement to main shopping that stocks a range of everyday items such as groceries, toiletries, alcoholic and soft drinks.

COUNTY. Any one of the counties listed in G.S. § 153A-10.

CRITICAL FACILITY (ALSO CALLED CRITICAL ACTION). The facilities for which the effects of even a slight chance of flooding would be too great. The minimum floodplain of concern for critical facilities is the 0.2 percent chance flood level. Critical facilities include, but are not limited to facilities critical to the health and safety of the public such as: emergency operations centers, designated public shelters, schools, nursing homes, hospitals, police, fire and emergency response installations, vital data storage centers, power generation and water and other utilities (including related infrastructure such as principal points of utility

systems) and installations which produce, use or store hazardous materials or hazardous waste.

CROSSOVER (DUNE). Wooden walkway and steps providing access to the beach, which protect dunes by eliminating foot traffic.

CUL-DE-SAC. See STREET, CUL-DE-SAC.

DAY CARE CENTER. A day care facility as defined in G.S. § 110-86(3) as well as a center providing day care on a regular basis for more than two hours per day for more than five adults or children.

DECISION MAKING BOARD. The Board of Aldermen, Planning Board, Board of Adjustment or other board assigned to make quasi-judicial decisions under this ordinance.

DECK. An accessory structure, with or without a roof, directly adjacent to a principal building, which may be constructed of any materials and may either be freestanding or attached to a building and supported by pillars or posts.

DEDICATION. A gift, by the owner, or a right to use of land for a specified purpose or purposes. Because a transfer of property rights is entailed, dedication must be made by written instrument, and is completed with an acceptance.

DENSITY. A ratio expressed as the number of dwelling units per acre (DUA). The ratio is derived by dividing the total number of dwelling units by the total land area (in acres).

DESIGN FLOOD. See REGULATORY FLOOD PROTECTION ELEVATION.

DETERMINATION. A written, final, and binding order, requirement, or determination regarding an administrative decision.

DEVELOPER. Any person who engages in development either as the owner or as the agent of an owner of property.

DEVELOPMENT.

(1) Any of the following:

(a) The construction, erection, alteration, enlargement, renovation, substantial repair, movement to another site, or demolition of any structure.

(b) The excavation, grading, filling, clearing, or alteration of land.

(c) The subdivision of land as defined in G.S. § 160D-802.

(d) The initiation or substantial change in the use of land or the intensity of use of land.

(e) Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.

(2) This definition does not alter the scope of regulatory authority granted by this ordinance.

DEVELOPMENT ACTIVITY. Any activity defined as DEVELOPMENT which will necessitate a floodplain development permit. This includes buildings, structures and non-structural items, including (but not limited to) fill, bulkheads, piers, pools, docks, landings, ramps and erosion control/stabilization measures.

DEVELOPMENT APPROVAL. An administrative or quasi-judicial approval made pursuant to this article that is written and that is required prior to commencing development or undertaking a specific activity, project, or development proposal. DEVELOPMENT APPROVALS include, but are not limited to, zoning permits, site plan approvals, special use permits, variances, and certificates of appropriateness. The term also includes all other regulatory approvals required by regulations adopted pursuant to this article, including plat approvals, permits issued, development agreements entered into, and building permits issued.

DEVELOPMENT REGULATION. A unified development ordinance, zoning regulation, subdivision regulation, erosion and sedimentation control regulation, floodplain or flood damage prevention regulation, mountain ridge protection regulation, stormwater control regulation, wireless telecommunication facility regulatio

DIAMETER AT BREAST HEIGHT (DBH). The diameter of a tree measured four and one-half feet above the ground.

DIGITAL FLOOD INSURANCE RATE MAP (DFIRM). The digital official map of a community, issued by the Federal Emergency Management Agency (FEMA), on which both the special flood hazard areas and the risk premium zones applicable to the community are delineated.

DIRECT LIGHT. Light emitted directly from the lamp, off of the reflector or reflector diffuser, or through the refractor or diffuser lens, of a luminaire.

DISPOSAL. As defined in G.S. § 130A-290(a)(6), the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste into or on any land or water so that the solid waste or any constituent part of the solid waste may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

DISTRICT. An area delineated on the official zoning district map for which this ordinance sets forth standards and guidelines for development.

DISTURBED AREA. The portion of the lot that is allocated for land disturbing activities and construction of structures and associated improvements.

DOCK. A pier, wharf or platform for the unloading of materials or living beings.

DOUBLE FRONTAGE LOT or THROUGH LOT. See LOT, DOUBLE FRONTAGE.

DRAINAGE SYSTEM. The system through which water flows from the land. It includes all watercourses, water bodies and wetlands.

DRIVEWAY, PRIVATE. A roadway serving two or fewer lots, building sites or other division of land and not intended to be public ingress or egress. That portion of the property area that consists of a travel lane bounded on either side by an area that is not part of the vehicle accommodation area. A driveway includes the driveway ramp or entrance at the road, throat, travel lane and parking stall connected to either a private, public or state road.

DRY FLOODPROOFING. A combination of measures that make a building and attendant utilities and equipment watertight and substantially impermeable to floodwater, with structural components having the capacity to resist flood loads. Please refer to Technical Bulletin 3, *Requirements for the Design and Certification of Dry Floodproofed Non-Residential and Mixed-Use Buildings*, and available from the FEMA.

DUNE. A naturally placed mound of earth or sand, vegetated or un-vegetated, that can be independent or part of an incorporated system. The word DUNE shall include:

(1) Estuarine frontal dunes: the first mounds of sand located landward of the estuarine waters of the intercoastal and having a minimum elevation equal to mean flood level plus six feet;

(2) Frontal dunes: the first mound of sand located landward of the ocean beach having sufficient vegetation, height, continuity and configuration to offer protective value;

(3) Interior dunes: all dunes located in the town that are not considered frontal dunes; and

(4) Primary dunes: the first mounds of sand located landward of the ocean beaches having an elevation equal to mean flood level for the area plus six feet. Primary dunes extend landward to the lowest elevation in the depression behind the same mound of sand.

DUPLEX. A building containing two dwelling units: where the building is designed to be occupied by two families living independently from each other. The DUPLEX must have a continuous common wall and/or floor assemblies having less than a one-hour fire-resistance rating. A breezeway or porch connection will not be considered a common or party wall.

DWELLING. Any building, structure, manufactured home, or mobile home, or part thereof, used and occupied for human habitation or intended to be so used, and includes any outhouses and appurtenances belonging thereto or usually enjoyed therewith. For the purposes of this ordinance, the term does not include any recreational vehicle.

DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

EASEMENT. A grant by the property owner of a strip of land for a specified purpose and use by the public, a corporation or persons.

EDUCATIONAL SERVICES. Comprises uses that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities and training centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and accommodation services to their students. EDUCATIONAL SERVICES are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise and direct learning. Instruction is imparted in diverse settings, such as educational institutions, the workplace, or the home through correspondence, television or other means. It can be adapted to the particular needs of the students, for example sign language can replace verbal language for teaching students with hearing impairments. All industries in the sector share this commonality of process, namely, labor inputs of instructors with the requisite subject matter expertise and teaching ability.

ELEVATED BUILDING. A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings or columns.

ENCROACHMENT. The advance or infringement of uses, fill, excavation, buildings, structures or development into a special flood area, which may impede or alter the flow capacity of a floodplain.

ENVIRONMENTAL ASSESSMENT (EA). An assessment of a project's environmental impact as defined in the National Environmental Policy Act of 1969.

EROSION. The wearing away of the land surface by wind, water, ice or other geologic agents. Erosion occurs naturally from weather or runoff, but is often intensified by human land use practices.

EVIDENTIARY HEARING. A hearing to gather competent, material and substantial evidence in order to make findings for a quasi-judicial decision required by a development regulation adopted under this ordinance.

EVCS LEVEL 1. May be allowed in residential as accessory to the primary permitted use. Such stations located at single-family, two-family, and multi-family land uses shall be designated as private restricted use only. Must meet requirements of Article 7 and building, electrical and accessibility codes.

EVCS LEVEL 2. May be allowed in residential or commercial districts. Such stations located at single family, two-family, and multi-family land uses shall be designated as private restricted use only. Must meet requirements of Article 7 and building, electrical and accessibility codes.

EVCS LEVEL 3. May be allowed in commercial districts. Must meet requirements of Article 7 and building, electrical and accessibility codes.

EXISTING BUILDING and EXISTING STRUCTURE. Any building and/or structure for which the START OF CONSTRUCTION commenced before the community entered the NFIP, dated June 2, 1987.

EXISTING MANUFACTURED HOME PARK or MANUFACTURED HOME SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before the community entered the NFIP, dated June 2, 1987.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FALL RADIUS. A physical radius prescribed by the total effective height of any tower which includes an area which theoretically could be penetrated by the collapse of that tower.

FAMILY. One or more persons living together as a single housekeeping unit.

FAMILY CARE HOME. A dwelling that provides room and board for not more than six persons who because of age, illness, handicap or specialized program, require personalized services or a supervised living arrangement in order to assure their safety and comfort that is regulated by the state. (For purposes of FAMILY CARE HOMES, a "handicapped person" as defined in G.S. § 168-21(2) means a person with a temporary or permanent physical, emotional or mental disability including but not limited to mental retardation, cerebral palsy, epilepsy, autism, hearing and sight impairments, emotional disturbances and orthopedic impairments but not including mentally ill persons who are dangerous to others as defined in G.S. § 122C-3(11)b. If the home is not licensed under G.S. Ch. 31D, Article 1 or is exempt from state licensing, the home shall be considered a group home and shall be subject to all applicable requirements of this ordinance.

FARMERS MARKET. A specialty market with or without a structure principally for the sale of produce, plants and flowers. Value-added agricultural products such as honey or jam, along with handmade craft items, may be sold, provided their sale is ancillary to the sale of produce, plants and flowers.

FEDERAL AVIATION ADMINISTRATION (FAA). The Federal Agency responsible for regulating aviation in the United States.

FEDERAL COMMUNICATIONS COMMISSION (FCC). The Federal Agency responsible for regulating telecommunications in the United States.

FLEA MARKET. A specialty market, where the use involves the setting up of two or more booths, tables, platforms, racks or similar display areas for the purpose of selling, buying or trading merchandise, goods, materials, products or other items offered for sale outside an enclosed building. FLEA MARKETS shall not include any of the following activities which occur at the same location four or fewer days in any calendar year: garage sales, produce stands or fundraising activities done by a nonprofit organization.

FLOOD OR FLOODING.

- (a) A general and temporary condition of partial or complete inundation of normally dry land areas from:
- (1) The overflow of inland or tidal waters.
 - (2) The unusual and rapid accumulation or runoff of surface waters from any source.
 - (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- (b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

FLOOD BOUNDARY and FLOODWAY MAP (FBFM). An official map of a community, issued by the FEMA, on which the special flood hazard areas and the floodways are delineated. This official map is a supplement to and shall be used in conjunction with the flood insurance rate map (FIRM).

FLOOD HAZARD BOUNDARY MAP (FHBM). An official map of a community, issued by the FEMA, where the boundaries of the special flood hazard areas have been defined as Zone A.

FLOOD INSURANCE. The insurance coverage provided under the national flood insurance program.

FLOOD INSURANCE RATE MAP (FIRM). An official map of a community, issued by the FEMA, on which both the special flood hazard areas and the risk premium zones applicable to the community are delineated (see also DFIRM).

FLOOD INSURANCE STUDY (FIS). An examination, evaluation and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones and other flood data in a community issued by the FEMA. The flood insurance study report includes flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), if published.

~~—FLOOD OR FLOODING. A general and temporary condition of partial or complete inundation of normally dry land areas from:~~

~~—(a) The overflow of inland or tidal waters; and/or~~

~~—(b) The unusual and rapid accumulation of runoff of surface waters from any source.~~

FLOOD OR SPOT LIGHT. Any light fixture or lamp that incorporates a reflector or a refractor to concentrate the light output into a directed beam in a particular direction.

FLOOD PRONE AREA. See FLOODPLAIN.

FLOOD ZONE. A geographical area shown on a flood hazard boundary map or flood insurance rate map that reflects the severity or type of flooding in the area.

FLOODPLAIN. Any land area susceptible to being inundated by water from any source.

FLOODPLAIN ADMINISTRATOR. The individual appointed to administer and enforce the floodplain management regulations.

FLOODPLAIN DEVELOPMENT PERMIT. Any type of permit that is required in conformance with the provisions of this ordinance prior to the commencement of any development activity.

FLOODPLAIN MANAGEMENT. The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including, but not limited to, emergency preparedness plans, flood control works, floodplain management regulations and open space plans.

FLOODPLAIN MANAGEMENT REGULATIONS. This unified development ordinance and other zoning, flood damage prevention ordinances, subdivision regulations, building codes, health regulations, special purpose flood damage prevention ordinances and other applications of police power. This term describes federal, state or local regulations, in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

FLOODPROOFING. Any combination of structural and non-structural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitation facilities, structures and their contents.

FLOOD-RESISTANT MATERIAL. Any building product (material, component or system) capable of withstanding direct and prolonged contact (minimum 72 hours) with floodwaters without sustaining damage that requires more than low-cost cosmetic repair. Any material that is water-soluble or is not resistant to alkali or acid in water, including normal adhesives for above-grade use, is not flood-resistant. Pressure-treated lumber or naturally decay-resistant lumbers are acceptable flooring materials. Sheet-type flooring coverings that restrict evaporation from below and materials that are impervious, but dimensionally unstable are not acceptable. Materials that absorb or retain water excessively after submergence are not flood-resistant. Please refer to Technical Bulletin 2, Flood Damage-Resistant Materials Requirements, and available from the FEMA. Class 4 and 5 materials, referenced therein, are acceptable flood-resistant materials.

FLOODWAY. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

FLOODWAY ENCROACHMENT ANALYSIS. An engineering analysis of the impact that a proposed encroachment into a floodway or non-encroachment area is expected to have on the floodway boundaries and flood levels during the occurrence of the base flood discharge. The evaluation shall be prepared by a qualified state licensed engineer using standard engineering methods and hydraulic models meeting the minimum requirement of the National Flood Insurance Program.

FLOOR AREA. For determining off-street parking and loading requirements: the sum of the gross horizontal areas of each floor of the principal building, and any accessory buildings or structures, measured from the exterior walls or from the center line of party walls. The term does not include any area used exclusively for the surface parking of motor vehicles or for building or equipment access, such as stairs, elevator shafts and maintenance crawl space.

FLOOR AREA, GROSS. The total square footage on all floors within a building.

FREEBOARD. The height added to the BFE to account for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge openings, and the hydrological effect of urbanization of the watershed. The BFE plus the FREEBOARD establishes the “regulatory flood protection elevation”.

FRONTAGE. The lot boundary that coincides with a public thoroughfare or space; the facade of a structure facing the street.

FULL CUT-OFF TYPE FIXTURE. A luminaire or light fixture that by design of the fixture housing does not allow any light dispersion or direct glare to shine above a 90-degree horizontal plane from the base of the fixture.

FUNCTIONALLY DEPENDENT FACILITY. A facility which cannot be used for its intended purpose unless it is located in close proximity to water, limited to a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, or ship repair. The term does not include long-term storage, manufacture, sales or service facilities.

FUTURE CONNECTION. The extension of a street to an external property line to facilitate future roadway connection and reduce traffic impacts on the road network.

GARAGE APARTMENT. A structure above a private garage in which provision is made for one dwelling unit. See also ACCESSORY DWELLING UNIT.

GARAGE (PRIVATE). A building used as an accessory to or a part of the main building permitted in any residential district, and providing for the storage of motor vehicles and in which no business, or service for profit is in any way conducted.

GAZEBO. A freestanding roofed, open-sided structure providing a shady resting place.

GEOGRAPHIC SEARCH AREA. An area designated by a wireless provider or operator for a new base station facility, produced in accordance with generally accepted principles of wireless engineering.

GOLF COURSE. A tract of land designed and laid out for the game of golf having at least nine holes, each with a tee, fairway, green and one or more hazards. A clubhouse, pool and other facilities associated with a country club built around a golf course are considered part of the GOLF COURSE. This definition does not include miniature golf.

GOVERNING BOARD. The City Council or Board of County Commissioners. The term is interchangeable with the terms “Board of Aldermen” and “Boards of Commissioners” and means any Board of Aldermen without regard to the terminology employed in charters, local acts, other portions of the General Statutes, or local customary usage. The Board of Aldermen for North Topsail Beach is the Board of Aldermen.

GRADE. The finished ground level adjoining the building at all exterior walls.

GROUP HOME. A dwelling operated under state regulations that provides room and board for more than six, but less than 13 individuals who as a result of age, illness, handicap or some specialized program, require personalized services or a supervised living arrangement in order to assure their safety and comfort. Additional requirements may be imposed by the International Building Code with North Carolina Amendments.

GUESTHOUSE. A separate residence for guests.

HALF-STREET. A street whose center line coincides with a subdivision plat boundary, with one-half the street right-of-way width being contained within the subdivision plat. Also, any existing street to which the parcel of land to be subdivided abuts on only one side.

HANDICAPPED PERSON. A person with a temporary or permanent physical, emotional or mental disability including, but not limited to, mental retardation, cerebral palsy, epilepsy, autism, hearing and sight impairments, emotional disturbances and orthopedic impairments but not including mentally ill persons who are dangerous to others as defined in G.S. § 122C-3(11)b.

HAZARDOUS WASTE MANAGEMENT FACILITY. As defined in G.S. Ch. 130A, Art. 9, a facility for the collection, storage, processing, treatment, recycling, recovery or disposal of hazardous waste.

HIGHEST ADJACENT GRADE (HAG). The highest natural elevation of the ground surface, prior to construction, immediately next to the proposed walls of the structure.

HISTORIC STRUCTURE. Any structure that is:

(1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register;

(2) Certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the secretary to qualify as a registered historic district;

(3) Individually listed on a local inventory of historic landmarks in communities with a “certified local government (CLG) program”; or

(4) (a) Certified as contributing to the historical significance of a historic district designated by a community with a “certified local government (CLG) program”.

(b) Certified local government (CLG) programs are approved by the U.S. Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966, as amended in 1980.

HOME OCCUPATION. A commercial activity conducted within a residential structure.

HOTEL or MOTEL. A building or other structure kept, used, maintained, advertised as or held out to the public to be a place where sleeping accommodations are supplied for pay to transient or permanent guests or tenants, where rooms are furnished for the accommodation of such guests; and may have one or more dining rooms, restaurants or cafes where meals are served.

HOTELMINIUM. A structure containing individually owned hotel or efficiency units, and operated in the manner of a hotel or motel.

ICE VENDING MACHINE. A freestanding building or modular unit (not to exceed 200 square feet and heights limited to 15 feet) that produces, stores, bags and/or vends ice to the consumer in an automated fashion.

IMPERVIOUS SURFACE. Any surface which in whole or in part, restricts or prevents the natural absorption of water into the ground. Such surfaces may include, but not be limited to compacted earth (such as marl and coquina), concrete, asphalt or other paving material, and all area covered by the footprint of buildings or structures. Porous pavement, gravel, uncovered wooden slatted decks and the water area of a swimming pool are considered pervious.

INCOMPATIBLE USE. A use or service which is unsuitable for direct association and/or contiguity with certain other uses because it is contradictory, incongruous or discordant.

INOPERATIVE VEHICLE. Any vehicle, designed to be self-propelled, which by virtue of broken or missing component parts, is no longer capable of self-propulsion. For the purpose of this ordinance, any vehicle which is registered with the North Carolina Department of Motor Vehicles and has a current North Carolina motor vehicle registration license affixed to it shall not be considered INOPERATIVE.

INTERESTED PARTY. Any person that has an interest in any proceeding or action being proposed or taken.

JUNK. Old or scrap copper, brass, rope, rags, batteries, paper, trash, rubber, debris, waste or junked, dismantled or wrecked automobiles, or parts thereof, iron, steel and other old or scrap ferrous or nonferrous material.

(G.S. § 136-143)

JUNKYARD. An establishment or place of business which is maintained, operated or used for storing, keeping, buying or selling junk, or for maintenance or operation of an

automobile graveyard, and the term shall include garbage dumps and sanitary fills. An establishment or place of business which stores or keeps for a period of 15 days or more materials within the meaning of JUNK as defined above which had been derived or created as a result of industrial activity shall be deemed to be a JUNKYARD. (G.S. § 136-143)

KENNEL. A commercial non-incidentual or nonprofit establishment used as housing, leasing, sealing, training, rehabilitating, breeding, grooming or fostering of any species, excluding domesticated livestock.

LAND AREA. The total square footage within a development project property boundary.

LANDOWNER OR OWNER. The holder of the title in fee simple. Absent evidence to the contrary, the town may rely on the county tax records to determine who is a LANDOWNER. The LANDOWNER may authorize a person holding a valid option, lease, or contract to purchase to act as his or her agent or representative for the purpose of making applications for development approvals.

LANDSCAPE LIGHTING. Luminaries mounted in or at grade (but not more than three feet above grade) and used solely for landscape rather than any area lighting.

LANDSCAPING. The installation and maintenance, usually of a combination of trees, shrubs, plant materials or other ground cover, including grass, mulch, decorative stone and similar materials, but excluding bare soil, uncultivated vegetation, impervious pavement materials and gravel. Any live plant material such as trees, shrubs, ground cover and grass areas left in their natural state.

LATTICE-TYPE STRUCTURE. A self-supporting, three- or four-sided open steel frame structure used to support telecommunications equipment.

LEGISLATIVE DECISION. The adoption, amendment, or repeal of a regulation under this article or an applicable local act. The term also includes the decision to approve, amend, or rescind a development agreement consistent with the provisions of G.S. Ch. 160D, Art. 10.

LEGISLATIVE HEARING. A hearing to solicit public comment on a proposed legislative decision.

LETTER OF MAP CHANGE (LOMC). An official determination issued by FEMA that amends or revises an effective flood insurance rate map or flood insurance study. LETTERS OF MAP CHANGE include:

(1) **LETTER OF MAP AMENDMENT (LOMA).** An official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA is based on technical data showing that a property had been inadvertently mapped as being in the floodplain, but is actually on natural high ground above the base flood elevation. A LOMA amends the current effective flood insurance rate map and establishes that a specific property, portion of a property or structure is not located in a special flood hazard area.

(2) **LETTER OF MAP REVISION (LOMR).** A revision based on technical data that may show changes to flood zones, flood elevations, special flood hazard area boundaries and floodway delineations, and other planimetric features.

(3) LETTER OF MAP REVISION BASED ON FILL (LOMR-F). A determination that a structure or parcel of land has been elevated by fill above the BFE and is, therefore, no longer located within the special flood hazard area. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community's floodplain management regulations.

(4) CONDITIONAL LETTER OF MAP REVISION (CLOMR). A formal review and comment as to whether a proposed project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective flood insurance rate map or flood insurance study; upon submission and approval of certified as-built documentation, a letter of map revision may be issued by FEMA to revise the effective FIRM.

LIGHT DUTY TRUCK. Any motor vehicle rated at 8,500 pounds gross vehicular weight rating or less which has a vehicular curb weight of 6,000 pounds or less and which has a basic vehicle frontal area of 45 square feet or less as defined in 40 CFR 86.082-2 and is:

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle;

(2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or

(3) Available with special features enabling off-street or off-highway operation and use.

LIGHTING, OUTDOOR. The night-time illumination of an outside area or object by any manmade device located outdoors that produces light by any means.

LIMIT OF MODERATE WAVE ACTION (LiMWA). The boundary line given by FEMA on coastal map studies marking the extents of Coastal A Zones (CAZ).

LOADING SPACE, OFF-STREET. Space logically and conveniently located for bulk pickups and deliveries, scaled to delivery vehicles expected to be used, and accessible to such vehicles. Required OFF-STREET LOADING SPACE is not to be included as off-street parking space in computation of required OFF-STREET PARKING SPACE.

LOCAL ACT. As defined in G.S. § 160A-1(5).

LOCAL AND STATE GOVERNMENT ADVISORY COMMITTEE (LSGAC). An FCC-established group which works with both carriers and communities on antenna siting solutions.

LOCAL GOVERNMENT. A city or county.

LOT. A parcel of land in single ownership occupied or intended for occupancy by a principal building, together with its accessory buildings; including the open space required under this ordinance. For the purpose of this ordinance, the word LOT shall be taken to mean any number of contiguous lots of record for location of one principal building and its accessory buildings.

LOT, CORNER. A lot abutting the intersection of two or more streets or a lot abutting on a curved street or streets shall be considered a corner lot if straight lines drawn from the foremost points of the side lot lines to the foremost point of the lot at the apex meet at any angle of less than 135 degrees. In such a case the apex of the curve forming the CORNER LOT shall be considered as the intersection of street lines for the purpose of this ordinance, such as in corner visibility requirements.

LOT COVERAGE. The built-upon area that is covered by impervious or partially impervious cover including buildings, pavement, recreation facilities, but not including decking.

LOT DEPTH. The depth of a lot is the average distance between the front and back lot lines measured at right angles to its frontage and from corner to corner.

LOT, FLAG. A large lot not meeting minimum lot frontage requirements and where access to a public or private street is provided by means of a long, narrow driveway between abutting lots.

LOT, INTERIOR. A lot other than a corner lot.

LOT LINE. The line bounding a lot.

LOT OF RECORD. A lot that is shown on a subdivision recorded in the office of Register of Deeds, or a lot described by metes and bounds, the description of which has been recorded in the office of the Register of Deeds prior to the incorporation of the town.

LOT, REVERSE FRONTAGE. A key lot or the first lot to the rear of a corner lot, the front lot line of which is a continuation of the side lot line of the corner lot, and fronting on the street that intersects the street upon which the corner lot fronts and/or that faces the street upon which the side of a corner lot abuts.

LOT, THROUGH (ALSO LOT, DOUBLE FRONTAGE). An interior lot having frontage on two streets.

LOT WIDTH. The straight line distance between the points where the building setback line intersects the two side lot lines.

LOWEST ADJACENT GRADE (LAG). The lowest elevation of the ground, sidewalk or patio slab immediately next to the building, or deck support, after completion of the building.

LOWEST FLOOR. The lowest floor of the lowest enclosed area. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or limited storage in an area other than a basement area is not considered a building's LOWEST FLOOR, provided that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

LUMINAIRE, FULLY SHIELDED (FULL CUTOFF). A luminaire emitting no light above the horizontal plane.

LUMINAIRE (LIGHT FIXTURE). A complete lighting unit consisting of one or more electric lamps, the lamp holder, any reflector or lens, ballast (if any), and any other components and accessories.

MANUFACTURED HOME. A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term MANUFACTURED HOME does not include a “recreational vehicle”.

MANUFACTURED HOME PARK OR SUBDIVISION. A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

MAP REPOSITORY. The location of the official flood hazard data to be applied for floodplain management. It is a central location in which flood data is stored and managed; in North Carolina, FEMA has recognized that the application of digital flood hazard data products carries the same authority as hard copy products. Therefore, the NCEM’s Floodplain Mapping Program websites house current and historical flood hazard data. For effective flood hazard data, the NC FRIS website (<https://fris.nc.gov/http://FRIS.NC.GOV/FRIS>) is the map repository, ~~and for historical flood hazard data the FloodNC website (<http://FLOODNC.GOV/NCFLOOD>) is the map repository.~~ Repositories of historical flood hazard data are available on the Flood.NC website (<https://flood.nc.gov/ncflood/>) and the FEMA Flood Map Service Center website (<https://msc.fema.gov/portal/home>).

MARINA. Any publicly or privately owned dock, basin or wet boat storage facility constructed to accommodate more than ten boats and providing any of the following services: permanent or transient docking spaces, dry storage, fueling facilities, haulout facilities and repair service. Excluded from this definition are boat ramp facilities allowing access only, temporary docking and none of the preceding services. Boat ramp facilities providing access only are excluded.

(NCAC 10B.1401(9))

MARKET VALUE. The building value, not including the land value and that of any accessory structures or other improvements on the lot. MARKET VALUE can be established by independent certified appraisal; replacement cost depreciated for age of building and quality of construction (actual cash value); or adjusted tax assessed values.

MOBILE OFFICE. A structure identical to a manufactured home except that it has been converted, or originally designed and constructed, for commercial or office use.

MODULAR HOME. A dwelling unit constructed in accordance with the standards set forth in the North Carolina State Building Code and composed of components substantially assembled in a manufacturing plant and transported to the building site for final assembly on a permanent foundation. Among other possibilities, a MODULAR HOME may consist of two or more sections transported to the site in a manner similar to a manufactured home (except that the modular home meets the North Carolina State Building Code), or a series of panels or room sections transported on a truck and erected or joined together on the site.

MONOPOLE TOWERS. A slender, open-telescoping, self-supporting tower used to support telecommunications equipment.

NATURAL AREA. The portion of the lot that is required to remain undisturbed in its natural state and retain its natural vegetation. Disturbance of the NATURAL AREA and the removal of natural vegetation shall be permitted only as specifically authorized in this ordinance.

NEW CONSTRUCTION. Structures for which the “start of construction” commenced on or after the effective date of the initial floodplain management regulations and includes any subsequent improvements to such structures.

NEW MANUFACTURED HOME PARK OR SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

NONCONFORMING BUILDING OR STRUCTURE. A structure that does not conform or comply with the dimensional regulations of this ordinance for the district in which it is located, either at the effective date of this ordinance or the regulation from which it derives, or as a result of one or more subsequent amendments to them.

NONCONFORMING LOT. A lot existing at the effective date of this ordinance (May 2, 1990) or any amendment to it (and not created for the purpose of evading the restrictions of this ordinance) that cannot meet the minimum dimensional requirements of the district in which the lot is located.

NONCONFORMING SIGN. Any sign lawfully existing on the effective date of this ordinance or of the regulations from which it arises, or amendment to them, that renders such sign nonconforming because it does not conform to all the standards and regulations of the adopted or amended ordinance or regulation.

NONCONFORMING USE. The use of a building, manufactured home or land which does not conform to the use regulations of this ordinance for the district in which it is located, either at the effective date of this ordinance (May 2, 1990) or as a result of subsequent amendments which may be incorporated into this ordinance.

NON-CONVERSION AGREEMENT. A document stating that the owner will not convert or alter what has been constructed and approved. Violation of the agreement is considered a violation of the ordinance and, therefore, subject to the same enforcement procedures and penalties. The agreement must be filed with the recorded deed for the property. The agreement must show the clerk’s or recorder’s stamps and/or notations that the filing has been completed.

NON-ENCROACHMENT AREA (NEA). The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without

cumulatively increasing the water surface elevation more than one foot as designated in the flood insurance study report.

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). The official vertical datum in the National Spatial Reference System (NSRS) for the Conterminous United States and Alaska. A vertical datum is a surface of zero ground elevation to which heights of various points are referenced. Mean sea level was not a good reference due to differences at various locations.

NUISANCE. Anything that interferes with the use or enjoyment of property.

NURSING HOME. See CONVALESCENT HOME.

OBTRUSIVE LIGHT. Spill light that causes glare, annoyance, discomfort or loss of visual ability. Light pollution.

OFFICIAL MAPS OR PLANS. Any maps or plans officially adopted by the North Topsail Beach Board of Aldermen.

OPEN SPACE.

(1) Any land or area, the preservation of which in its present use would:

(a) Conserve and enhance natural or scenic resources;

(b) Protect streams or water supply;

(c) Promote conservation of soils, wetlands, beaches or tidal marshes;

(d) Enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries; or

(e) Enhance recreation opportunities.

(2) **OPEN SPACE.** Shall not include lands below mean high water.

ORDINANCE. This unified development ordinance, text and map including any amendments. Whenever the effective date of the **ORDINANCE** is referred to, the reference includes the effective date of any amendment to it.

OTHERWISE PROTECTED AREA (OPA). See **COASTAL BARRIER RESOURCES SYSTEM (CBRS)**.

OVERLAY ZONING. Zoning which crosses other zoning lines which may add additional requirements to each line crossed or "overlaid". Note: does not include areas established by the state or federal government such as the inlet hazard area or the coastal resource barrier system.

OWNER. Any person, agent, firm or corporation having a legal or equitable interest in the property.

PARK. Land consisting of open space, in grasses, trees and possibly with shrubbery, sometimes providing paths for walking and bicycling, maintained as a public or semi-public use. PARKS are usually either a formal landscape, or maintained in basically a natural state.

PARKING LOT. Any public or private area, providing ten or more parking spaces designed and used for parking or storing motor vehicles.

PARKING SPACE. A storage space of not less than 160 square feet for one automobile.

PERSON. An individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, the State of North Carolina and its agencies and political subdivisions, or other legal entity.

PERVIOUS SURFACE. Any material that permits full or partial absorption of stormwater into previously unimproved land.

PIER. A water-related structure extending into the water from the shore, whether floating or fixed to the bottom, for use as a boat landing place or promenade, constructed of pylons and decking for mooring and access to a boat or watercraft. May also include structures designed and constructed to serve as a means of recreational access (fishing and the like) to the ocean and sound waters.

PLANNED UNIT DEVELOPMENT (PUD).

- (1) A zoning overlay;
- (2) A special use designed to provide for developments incorporating a single type or a variety of residential and related uses which are planned and developed as a unit. Such development may consist of individual lots and common building sites. Common open space must be an element of the plan related to affecting the long-term value of the entire development; or
- (3) A subdivision designed to permit flexibility and allow creative approaches to residential development not usually associated with conventional subdivisions. Flexible setbacks and lot sizes are considered.

PLANNING AND DEVELOPMENT REGULATION JURISDICTION. The geographic area defined in § 1.05 of this ordinance within which the town may undertake planning and apply the development regulations authorized by G.S. Ch. 160D.

PLANNING BOARD. The town's committee empowered to prepare a comprehensive plan and to evaluate proposed changes in land use, either by public or private developers, for conformance with the plan.

PLAT. A document, prepared by a registered surveyor or engineer, that delineates property lines and shows monuments and other landmarks for the purpose of identifying property.

POST-FIRM. Construction or other development for which the “start of construction” occurred on or after July 2, 1987, the effective date of the initial flood insurance rate map.

POSTAL SERVICE. Comprises establishments primarily engaged in operating the national postal service. Establishments primarily engaged in performing one or more **POSTAL SERVICES**, such as sorting, routing and/or delivery, on a contract basis (except the bulk transportation of mail) are included in this industry.

PRE-FIRM. Construction or other development for which the “start of construction” occurred before July 2, 1987, the effective date of the initial flood insurance rate map.

PREMISES. A single piece of property as conveyed in a deed or a lot or a number of adjacent lots on which is situated a land use, a building, or group of buildings designed as a unit or on which a building or group of buildings are to be constructed.

PRIMARY FRONTAL DUNE (PFD). A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

PRINCIPAL BUILDING. See **BUILDING, PRINCIPAL**.

PRINCIPALLY ABOVE GROUND. That at least 51% of the actual cash value of the structure is above ground.

PRIVATE CLUBS. See **CLUB OR LODGE**.

PROPERTY. All real property subject to land-use regulation by the town. The term includes any improvements or structures customarily regarded as a part of real property.

PUBLIC ADMINISTRATION. Consists of establishments of federal, state and local government agencies that administer, oversee and manage public programs and have executive, legislative or judicial authority over other institutions within a given area.

PUBLIC ROAD OR STREET. A road or street that has been dedicated for use and maintenance by the town or the state and serves as the principal means of access to abutting properties.

PUBLIC SAFETY and/or NUISANCE. Anything which is injurious to the safety or health of an entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal or basin.

PUBLIC SEWAGE DISPOSAL SYSTEM. An approved sewage disposal system serving two or more connections including private, municipal and sanitary district sewage systems located and constructed according to specifications of the County Health Department in consultation with the division of health services and/or the division of environmental management of the department of environment, health and natural resources. This

definition is not to be inferred as limited to publicly owned or operated systems, as such systems may be owned and operated by either public or private enterprise.

PUBLIC WATER SUPPLY SYSTEM. An approved water supply system serving 15 or more connections including county, municipal and sanitary district water systems designated to serve particular subdivisions at full development and constructed to specifications of the county health office in consultation with the division of health services and/or the division of environmental management of the department of environment, health and natural resources. This definition is not to be inferred as limited to publicly owned or operated systems, as such systems may be owned and operated by either public or private enterprise.

QUASI-JUDICIAL DECISION. A decision involving the finding of facts regarding a specific application of a development regulation and that requires the exercise of discretion when applying the standards of the regulation. The term includes, but is not limited to, decisions involving variances, special use permits, certificates of appropriateness, and appeals of administrative determinations. Decisions on the approval of subdivision plats and site plans are QUASI-JUDICIAL in nature if the regulation authorizes a decision-making board to approve or deny the application based not only upon whether the application complies with the specific requirements set forth in the regulation, but also on whether the application complies with one or more generally stated standards requiring a discretionary decision on the findings to be made by the decision-making board.

RECREATIONAL VEHICLE (RV).

- (1) A vehicle which is:
 - (a) Built on a single chassis;
 - (b) Four hundred square feet or less when measured at the largest horizontal projection;
 - (c) Designed to be self-propelled or permanently towable by a light-duty truck;
 - (d) Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use; and
 - (e) Is fully licensed and ready for highway use.
 - (f) Has no attached deck, porch, or shed, and
 - (g) Has quick-disconnect sewage, water, and electrical connectors.

(2) For the purpose of this ordinance, “tiny homes/houses” and park models that do not meet these items listed above are not considered RECREATIONAL VEHICLES and should meet the standards of and be permitted as residential structures.

REFERENCE LEVEL. The bottom of the lowest horizontal structural member of the lowest floor for structures within all special flood hazard areas.

REGULATORY FLOOD PROTECTION ELEVATION. The base flood elevation plus the freeboard. In special flood hazard areas where base flood elevations (BFEs) have been determined, this elevation shall be the BFE plus two feet of freeboard. In special flood hazard areas where no BFE has been established, this elevation shall be at least two feet above the highest adjacent grade.

REMEDY A VIOLATION. To bring the structure or other development into compliance with state and community floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the flood damage prevention ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

RENTAL, SHORT-TERM. See SEASONAL RENTAL.

REPETITIVE LOSS. Flood-related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25% of the market value of the structure before the damage occurred.

REPETITIVE LOSS PROPERTY. Any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling 10-year period, since 1978. At least two of the claims must be more than ten days apart but, within ten years of each other. A RL property may or may not be currently insured by the NFIP.

RESERVATION. A reservation of land does not involve any transfer of property rights, it simply constitutes an obligation to keep property free from development for a stated period of time.

RESERVE STRIP. A narrow strip of land overlying a dedicated street reserved to the town or NCDOT for control of access until such time as additional right-of-way is accepted by the town or NCDOT for the continuation or widening of the street.

RESTAURANT. A commercial establishment where food and drink are prepared, served and consumed primarily within the principal building.

RETAINING WALL. A human-made barrier constructed for the purpose of stabilizing soil, retarding erosion or terracing a parcel or site.

RETREAT CENTER. A new or existing facility operated by a corporation or association of persons or churches for social and recreational purposes. A RETREAT CENTER may be owned by a profit or not-for-profit organization.

RIVERINE. Relating to, formed by or resembling a river (including tributaries), stream, brook and the like.

SALVAGE YARD. Any non-residential property used for the storage, collection, and/or recycling of any type of equipment, and including but not limited to vehicles, appliances and related machinery.

SAND DUNES. Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

SATELLITE DISH ANTENNA(S) (SATELLITE EARTH STATIONS). A single or group of satellite parabolic (or dish) antennas. These dishes are mounted to a supporting device that may be a pole or truss assembly attached to a foundation in the ground, or in some other configuration. A SATELLITE EARTH STATION may include the associated separate equipment enclosures necessary for the transmission or reception of wireless communications signals with satellites.

SCREENING. A fence, wall, hedge, landscaping, earth berm, buffer area or any combination of these provided to create a visual and/or physical separation between certain land uses. SCREENING may be located on the property line or elsewhere on the site.

SEASONAL RENTAL. The rental of residential property for vacation, leisure or recreation purposes for fewer than 90 days by a person who has a place of permanent residence to which he or she intends to return, as defined by the NC Vacation Act 42A-4, as amended.

SECTION 1316. The section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that FEMA finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that are intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

SETBACK. The required distance between every structure and the lot lines of the lot on which it is located.

SEVERE REPETITIVE LOSS STRUCTURE. Any insured property that has met at least one of the following paid flood loss criteria since 1978, regardless of ownership. In either case, two of the claim payments must have occurred within ten years of each other. Multiple losses at the same location within ten days of each other are counted as one loss, with the payment amounts added together.

1. Four or more separate claim payments of more than \$5,000 each (including building and contents payments); or
2. Two or more separate claim payments (building payments only) where the total of the payments exceeds the current market value of the property.

SEWAGE SYSTEM, PUBLIC OR COMMUNITY. See PUBLIC SEWAGE DISPOSAL SYSTEM.

SHALL. The term, when used in this ordinance, is construed as mandatory.

SHEAR WALL. Walls used for structural support but not structurally joined or enclosed at the end (except by breakaway walls). SHEAR WALLS are parallel or nearly parallel to the flow of the water.

SHOPPING CENTER. A group of commercial establishments planned and constructed as a single unit with off-street parking and loading facilities provided on the property and related in location size and type of shops to the trade area which the unit serves.

SIGN. A communication device, structure or fixture used to attract attention or convey a message, when the same is placed in view of the general public and includes every billboard, freestanding ground sign, wall sign, roof sign, illuminated sign, projecting sign and temporary sign.

SIGN, ABANDONED. A sign pertaining to or associated with an event, business or purpose which is no longer ongoing and which has been inactive or out of business for a period of 90 consecutive days or longer; or a sign which contains structural components but no display for a period of 90 consecutive days or longer.

SIGN, ADVERTISING. A sign that has as its purpose to promote, advertise or sell a product or service obtainable on the premises upon which the sign is located, and not to identify the premises.

SIGN AREA. Shall be measured by the smallest square, rectangle, triangle, circle or combination thereof, which will encompass the entire advertising copy area including architectural trim and structural members. In computing AREA, only one side of a double-faced sign shall be considered.

SIGN, COMBINATION. A sign incorporating any combination of the features of the pole, projecting and roof signs.

SIGN, DIRECTIONAL. Any on-premises sign that includes information assisting in the flow of pedestrian or vehicular traffic such as enter, exit and one-way.

SIGN, DISPLAY. The area made available by the sign structure for the purpose of displaying the advertising message.

SIGN, ELECTRIC. A sign containing electrical wiring, but not including signs illuminated by an exterior light source.

SIGN, FREESTANDING. Any sign supported wholly or in part by some structure other than the building or buildings housing the business to which the sign pertains, or any sign which projects more than five feet from the side of the building to which it is attached.

SIGN, GROUND. A billboard or similar type of sign which is supported by one or more uprights, poles or braces in or upon the ground other than a combination sign or pole sign, as defined by the ordinance.

SIGN, IDENTIFICATION. A sign used to display only the name, address, crest or trademark of the business, individual, family, organization or enterprise occupying the premises, the profession of the occupant or the name of the building on which the sign is displayed; or a permanent sign announcing the name of a subdivision, shopping center, tourist home, group housing project, church, school, park or public or quasi-public structure, facility or development and the name of the owners or developers.

SIGN, OFF-PREMISES. A sign which directs attention to a business, commodity, service or entertainment not exclusively related to the premises where such sign is located or to which it is affixed.

SIGN, POLE. A sign wholly supported by a sign structure in the ground.

SIGN, PORTABLE DISPLAY SURFACE. A display surface temporarily fixed to a standardized advertising structure which is regularly moved from structure to structure at periodic intervals.

SIGN, PRINCIPAL USE OR ON-PREMISES. Any sign advertising an establishment, a service commodity, or activity conducted upon the premises where the sign is located.

SIGN, PROJECTING. A sign other than a wall sign, which projects from and is supported by a wall of a building or structure.

SIGN, REAL ESTATE (OFF-SITE). A readily removable sign announcing the proposed sale or rental of property other than the property upon which the sign is located and providing directions to the subject property.

SIGN, REAL ESTATE (ON-SITE). A sign announcing the sale or rental of the property upon which the sign is located.

SIGN, ROOF. A sign erected upon or above a roof or parapet of a building or structure.

SIGN, SNIPE. A sign which is attached to trees, poles or to other objects, with a message appearing on it that does not apply to the present use of the premises or structure upon which the sign is located. Any sign in the state or town right-of-way is a SNIPE SIGN, unless a minor easement and permit has been issued by the town.

SIGN STRUCTURE. Any structure which supports or is capable of supporting a sign as defined in the ordinance.

SIGN, WALL. Any sign attached to or erected against the wall of a building or structure, with the exposed face of the sign in a plane parallel to the plane of said wall.

SINGLE-FAMILY DWELLING. A building containing one dwelling unit only, where the building is designed to be occupied by one family.

SITE PLAN. A scaled drawing and supporting text showing the relationship between lot lines and the existing or proposed uses, buildings, or structures on the lot. The SITE PLAN may include site-specific details such as building areas, building height and floor area, setbacks from lot lines and street rights-of-way, intensities, densities, utility lines and locations, parking, access points, roads, and stormwater control facilities that are depicted to show compliance with all legally required development regulations that are applicable to the project and the site plan review. A SITE PLAN approval based solely upon application of objective standards is an administrative decision and a site plan approval based in whole or in part upon the application of standards involving judgment and discretion is a quasi-judicial decision. A SITE PLAN may also be approved as part of a conditional zoning decision.

SITE-SPECIFIC DEVELOPMENT PLAN.

(1) A plan of land development submitted to the town for purposes of obtaining one of the following zoning or land use permits:

(a) Subdivision plans as referenced in the subdivision ordinance in effect at the time a vested right is requested; or

(b) Conditional use district and/or permit and planned unit development (PUD) as referenced in the zoning ordinance in effect at the time a vested right is requested.

(2) All SITE-SPECIFIC DEVELOPMENT PLANS shall conform to the referenced ordinances as well as the following:

(a) The approximate boundaries of the site;

(b) Significant topographical and other natural features affecting development of the site;

(c) The approximate location on the site of the proposed buildings, structures and other improvements;

(d) The approximate dimensions, including height, of the proposed buildings and other structures; and

(e) The approximate locations of all existing and proposed infrastructure on the site, including water, sewer, roads and pedestrian walkways.

(3) Notwithstanding the foregoing, neither a variance, a sketch plan nor any other document that fails to describe with reasonable certainty the type and intensity of use for a specified parcel or parcels of property shall constitute a SITE-SPECIFIC DEVELOPMENT PLAN.

SOLID WASTE DISPOSAL FACILITY. Any facility involved in the disposal of solid waste, as defined in G.S. § 130A-290(a)(35).

SOLID WASTE DISPOSAL SITE. As defined in G.S. § 130A-290(a)(36), any place at which solid wastes are disposed of by incineration, sanitary landfill or any other method.

SPECIAL FLOOD HAZARD AREA (SFHA). The land in the floodplain subject to a 1% or greater chance of being flooded in any given year, as determined in § 7.03(B).

SPECIALTY MARKET. Rented spaces at a location other than a permanent retail store, to others for the purpose of selling goods at retail or offering goods for sale at retail (i.e., flea market, farmers market).

SPELL LIGHT. Light from a lighting installation that falls outside of the boundaries of the property on which it is located. Usually results in obtrusive light.

START OF CONSTRUCTION. Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair,

reconstruction, rehabilitation, addition placement or other improvement was within 180 days of the permit date. The actual START means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual START OF CONSTRUCTION means the first alteration of any wall, ceiling, floor or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

STEALTH WIRELESS TRANSMISSION FACILITY. A wireless transmission facility that is screened, disguised, concealed or otherwise camouflaged as a natural structure, structure or part of a structure such that the wireless transmission facility is indistinguishable from other natural structures, structures or the structure that it is attached to or within.

STREET. A thoroughfare which affords the principal means of access to abutting property.

STREET, CUL-DE-SAC. A street designed with a closed end, terminated by a vehicular turnaround and does not intersect with another street.

STREET, PRIVATE. Any road or street which:

(1) Is not publicly owned and maintained and is used for access by the occupants of the development, their guests, and the general public; and

(2) Requires a subdivision streets disclosure statement pursuant to G.S. § 136-102.6, as amended.

STRUCTURAL ALTERATIONS. Any change in the supporting members of a building, such as bearing walls, columns, beams or girders except for repair or replacement.

STRUCTURE. A walled or roofed building, a manufactured home, or a gas, liquid, or liquefied gas storage tank that is principally above ground.

SUBDIVIDER. Any person, firm or corporation who subdivides or develops any land deemed to be a subdivision as herein defined.

SUBDIVISION. The division of land for the purpose of sale or development as specified in G.S. § 160D-802.

SUBDIVISION REGULATION. The subdivision regulation contained in Article 5 of this ordinance and authorized by G.S. Ch. 160D, Art. 8.

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a structure during any one-year period whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage

occurred. See definition of SUBSTANTIAL IMPROVEMENT. SUBSTANTIAL DAMAGE also means flood-related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25% of the market value of the structure before the damage occurred. (Note: The last sentence is required for eligibility for increased cost of compliance (ICC) benefits for repetitive losses.)

SUBSTANTIAL IMPROVEMENT. Any combination of repairs, reconstruction, rehabilitation, addition or other improvement of a structure, taking place during any one-year period for which the cost equals or exceeds 50% of the market value of the structure before the START OF CONSTRUCTION of the improvement. This term includes structures which have incurred SUBSTANTIAL DAMAGE, regardless of the actual repair work performed. The term does not, however, include either:

(1) Any correction of existing violations of state or community health, sanitary or safety code specifications which have been identified by the community code enforcement official and which are the minimum necessary to assure safe living conditions; or

(2) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure and the alteration is approved by variance issued pursuant to § 7.04(E).

SWIMMING POOL. Any permanent outdoor structure intended for swimming or recreational bathing that contains water over 24 inches deep including in-ground, above-ground and on-ground swimming pools, hot tubs and spas, but not including temporary or inflatable pools having a depth of 24 inches or less. A structure is considered "outdoor" if it is not totally contained within a roofed structure and surrounded on all four sides by the walls of the enclosing structure.

TAXI SERVICE. Comprises establishments primarily engaged in providing passenger transportation by automobile or van, not operated over regular routes and on regular schedules. Establishments of taxicab owner/operators, taxicab fleet operators or taxicab organizations are included in this industry.

TECHNICAL BULLETIN and TECHNICAL FACT SHEET.

(1) A FEMA publication that provides guidance concerning the building performance standards of the NFIP, which are contained in 44 CFR 60.3. The bulletins and fact sheets are intended for use primarily by state and local officials responsible for interpreting and enforcing NFIP regulations and by members of the development community, such as design professionals and builders. New bulletins, as well as updates of existing bulletins, are issued periodically as needed. The bulletins do not create regulations, rather they provide specific guidance for complying with the minimum requirements of existing NFIP regulations.

(2) It should be noted that technical bulletins and technical fact sheets provide guidance on the minimum requirements of the NFIP regulations. State or community requirements that exceed those of the NFIP take precedence. Design professionals should

contact the community officials to determine whether more restrictive state or local regulations apply to the building or site in question. All applicable standards of the state or local building code must also be met for any building in a flood hazard area.

TEMPERATURE CONTROLLED. Having the temperature regulated by a heating and/or cooling system, built-in or appliance.

TOWAIR. Landing facility slope calculations designed to avoid obstruction by towers to aircraft.

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

USE, CHANGE OF. The replacement of an existing use by a new use, or a change in the nature of an existing use, but not including, a change of ownership, tenancy or management where the previous nature of the use, line of business or other function is substantially unchanged.

USE, PERMITTED. A use which is permitted in a district for which a zoning permit may be issued by the Zoning Administrator.

USE, SPECIAL. A use which is permitted under certain conditions in a district only after review by the Planning Board and final approval by the Board of Aldermen after review by the Planning Board.

UTILITIES. Comprises uses engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply and sewage removal. Within this sector, the specific activities associated with the utility services provided vary by utility: electric power includes generation, transmission and distribution; natural gas includes distribution; steam supply includes provision and/or distribution; water supply includes treatment and distribution; and sewage removal includes collection, treatment and disposal of waste through sewer systems and sewage treatment facilities. Excluded from this sector are establishments primarily engaged in waste management services classified in Subsector 562, Waste Management and Remediation Services. These establishments also collect, treat and dispose of waste materials; however, they do not use sewer systems or sewage treatment facilities.

VARIANCE. A grant of relief from the requirements of this ordinance.

VE ZONE. The Special Flood Hazard Areas subject to inundation by the 1% annual chance of flooding and high velocity wave action from storm surges and seismic activity. Base flood elevations have been derived from detailed hydraulic analyses.

VIOLATION. The failure of a structure or other development to be fully compliant with this ordinance. Also, a structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in §§ 7.04 and 7.05 is presumed to be in violation until such time as that documentation is provided.

WALKWAY or BOARDWALK. A wooden walkway for pedestrians providing a common path through wetlands or to crossovers of coastal dunes and other sensitive environments.

WATER DEPENDENT STRUCTURES. Those structures that require access or proximity to or sitting within surface waters to fulfill its purpose, such as boat ramps, boat houses, docks, and bulkheads. Ancillary facilities such as restaurants, outlets for boat supplies, parking lots, and commercial boat storage areas are not water dependent structures. Reference 15A NCAC 02B.0202.

WATER SURFACE ELEVATION (WSE). The height, in relation to NAVD 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

WATERCOURSE. A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. WATERCOURSE includes specifically designated areas in which substantial flood damage may occur.

WETLANDS. Waters defined to be wetlands as determined by the North Carolina Department of Environmental Quality and/or the United States Army Corps of Engineers. WETLANDS shall also include all waters defined as wetlands by NC Session Law 2023-63/NC Senate Bill 582, as may be amended from time to time.

WIRELESS TELECOMMUNICATIONS ATTACHMENTS (WTA). Devices mounted onto a support structure, principally intended to radiate or receive a source of non-ionizing electromagnetic radiation (NIER), and accessory equipment related to broadcast services, including, but not limited to, private radio services, cellular or digital telephone services, pagers, beepers, wireless data repeaters and common carriers (as regulated by the FCC), including AM, FM, two-way radio, fixed point microwave dishes, commercial satellite, HDTV, cellular and PCS communication systems. The term WTA does not include electrical or telephone transmission lines or supporting distribution structures, antennas of amateur radio (ham) operators, and amateur club services licensed by the FCC.

WIRELESS TELECOMMUNICATIONS SUPPORT STRUCTURE (WTSS). All freestanding monopole, self-supported, guyed or similar structures whose primary design is to provide for support and placement of wireless telecommunications antennas.

X ZONES. Areas determined to be low to moderate risk flood zones and are located outside the community's delineated Special Flood Hazard Area (SFHA) and include the following:

(a) Shaded - is the area of moderate flood hazard and can represent:

- (1) 0.2% annual chance flood hazard area (500-year flood zone),
- (2) Areas of 1% annual chance flood with average depth less than one (1) foot, or
- (3) Areas of 1% annual chance flood with drainage areas of less than one (1) square mile

(b) Unshaded - is the area of minimal flood hazard determined to be outside of the 0.2% annual chance flood (500-year flood zone).

YARD. An open space on the same lot with a building (including the area of steps, eaves and uncovered porches, but not including the areas of covered porches) unoccupied and

unobstructed from the ground upward, except by trees or shrubbery or as otherwise provided herein.

YARD, FRONT. A yard across the full width of the lot, extending from the front line of the building to the front line of the lot.

YARD, REAR. A yard extending across the full width of the lot and measured between the rear line of the lot and the rear line of the main building.

YARD, SIDE. An open unoccupied space on the same lot with a building between the building and the side line of the lot extending through from the front building line to the rear yard or, where no rear yard is required, to the rear line of the lot.

ZERO LOT LINE. A concept commonly used in planned developments where individual commercial buildings or dwellings, such as townhouses (row houses), duplex town homes and patio homes, are sold along with a small yard or patio area. Such commercial or residential units are grouped in buildings with two or more units per building, usually including common walls or married walls. With ZERO LOT LINE development styles, the minimum interior side yard requirements are relaxed. Construction takes place right up to the lot line.

ZONING. A police-power measure, enacted primarily by general-purpose units of local government, in which the community is divided into districts or zones within which permitted and conditional uses are established as are regulations governing lot size, building bulk, placement and other development standards. Requirements vary from district to district, but they must be uniform within districts. The unified development ordinance consists of two parts: a text and a map.

ZONING. A police-power measure, enacted primarily by general-purpose units of local government, in which the community is divided into districts or zones within which permitted and conditional uses are established as are regulations governing lot size, building bulk, placement and other development standards. Requirements vary from district to district, but they must be uniform within districts. The unified development ordinance consists of two parts: a text and a map.

ZONING MAP AMENDMENT or REZONING. An amendment to a zoning regulation for the purpose of changing the zoning district that is applied to a specified property or properties. The term also includes (i) the initial application of zoning when land is added to the territorial jurisdiction of the town that has previously adopted zoning regulations and (ii) the application of an overlay zoning district or a conditional zoning district. The term does not include (i) the initial adoption of a zoning map by the town, (ii) the repeal of a zoning map and readoption of a new zoning map for the entire planning and development regulation jurisdiction, or (iii) updating the zoning map to incorporate amendments to the names of zoning districts made by zoning text amendments where there are no changes in the boundaries of the zoning district or land uses permitted in the district.

ZONING REGULATION. The zoning regulation contained in Article 4 of this ordinance and authorized by G.S. Ch. 160D, Art. 7.

ZONING VESTED RIGHT. A right pursuant to G.S. § 153A-344.1 to undertake and complete the development and use of land under the terms and conditions of an approved site development plan even if the zoning or zoning district requirements are changed prior to development.

(Ord. passed 12-2-2004; Ord. passed 3-3-2005; Ord. passed 6-1-2006; Ord. passed 5-6-2010; Ord. passed 11-2-2011; Ord. 2015-4, passed 5-7-2015; Ord. passed 11-3-2016; Ord. passed - -; Ord. passed 7-1-2021; Ord. passed 7-1-2023; Ord. passed 4-5-2023; Ord. passed 10-4-2023)

TABLE 11-1 ABBREVIATIONS

Below is a list of abbreviations and their meanings found throughout the ordinance.

AASS	Alternative antenna support structures
AEC	Area of environmental concern
AMTA	American Mobile Telecommunications Association
BFE	Base flood elevation
BOA	Board of Aldermen
CAMA	Coastal Area Management Act
CBRS	Coastal barrier resources system
CLOMR	Conditional letter of map revision
dbh	Diameter at breast height
DENR	North Carolina Department of Environment and Natural Resources
DWQ	Division of Water Quality
FAR	Floor area ratio
Fc	Foot-candles
FEMA	Federal Emergency Management Agency
FIRM	Flood insurance rate map
FIS	Flood insurance study
GIS	Geographic information system
G.S.	North Carolina General Statutes
HAG	Highest adjacent grade
HQW	High quality water
LAG	Lowest adjacent grade
LOMR	Letter of map revision
LSGAC	Local and State Government Advisory Committee
NCDOT	North Carolina Department of Transportation
NFIP	National flood insurance program
NGVD	National geodetic vertical datum

OPA	Otherwise protected area
P	Permitted use
PB	Planning Board
ROW	Right-of-way
RV	Recreational vehicle
SFHA	Special flood hazard area
S	Special use
TDM	Transportation demand management
TIA	Traffic impact analysis
TRC	Technical Review Committee
UDO	Unified development ordinance
USDA	United States Department of Agriculture
USGS	United States Geologic Survey
WSE	Water surface elevation
WTSS	Wireless telecommunication support structures
ZBA	Board of Adjustment

(Ord. passed 11-2-2011)



Gold Standard Development Practices for Watershed Protection

This document was created by Waterkeepers Carolina with assistance from the Southern Coalition for Social Justice, in order to support community members and local governments who seek to secure stronger protections for waterways, environmental resources, and the human communities who rely on them, based on the authority delegated to North Carolina localities. Each of the following recommendations provide examples of vetted, science-backed, legally viable, and accessible opportunities to raise the bar for environmental protection.

The following recommendations may serve as a menu of options for local governments to consider incorporating within Unified Development Ordinances, or as a list of gold standards that developers can offer as proffers or in conditional rezoning applications. While not all recommendations are suitable for all places, it is ultimately up to local decision-makers and communities to determine which policies are best for their specific geographical locations and needs. Our hope is that this guide may be useful for community members, local government staff and local elected officials alike in supporting development practices that protect water quality and promote flood-resilient communities.

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Key terms

- **Sediment:** Naturally occurring material that is transported from one area and deposited in another, including gravel and finer materials like sand and clay.
- **Turbidity:** the level of sediment and other light-blocking suspended particles in water that make the water murkier. Construction and other land-disrupting activities can create high sediment levels in waterbodies during storms due to stormwater runoff. High levels of turbidity prevent photosynthesis for aquatic plants, therefore reducing oxygen levels in the water and harming aquatic ecosystems, and shield harmful bacteria, viruses, and parasites from disinfection (like chlorination) which can harm health.
- **Riparian Buffers:** Areas of greenery immediately adjacent to streams, lakes, and other waterbodies. These riparian buffers can reduce erosion and intercept sediment that may otherwise flow into waterways. Riparian buffers are typically divided into zones, with the closest area to the river, Zone 1, consisting of tree cover that shades the water for aquatic ecosystem benefits and provides a habitat for wildlife, with Zone 2 consisting of shrubbery for wildlife and Zone 3 consisting of grassy areas to intercept sediment.
- **Impervious surface:** A hard, non-porous surface that water cannot penetrate and is thus unable to be absorbed into the ground. These surfaces include materials like concrete, asphalt, brick, stone, or plastic, and are commonly found in roads, driveways, sidewalks, parking lots, and rooftops. Instead of being absorbed, rainwater and snowmelt flow over these surfaces, often causing stormwater runoff.
- **Setback:** A set amount of space required between any development and any property line, street, or structure
- **Buffer:** Space between different types of land uses, which often must remain vegetated
- **Stormwater Management Pond:** A system that holds back stormwater to prevent the sediment-filled water from flowing directly into nearby waterbodies. A dam holds the water back to give the sediment time to sink to the bottom while the water at the top is released slowly to prevent erosion and flooding. There are different types, including sediment basins, sediment ponds/traps, dry storage, and wet storage.
- **Sediment Basin:** A temporary, man-made pit that holds stormwater runoff from a construction site. Construction sites typically build these temporary pits in low-elevation

areas on construction sites designed to capture rainfall that lands on—and therefore absorbs—sediment on the construction site. Once the water sits in these ponds for a while, the sediment naturally sinks to the bottom, reducing the turbidity/murkiness of the water and allowing it to be released into nearby bodies of water. Sediment basins are typically designed for larger areas (5+ acres) and may be turned into a permanent stormwater facility. Typically these are dry storage (explained below)

- **Sediment Pond/Trap:** Smaller and temporary version of a sediment basin, often for areas of five acres or less. These are typically dry storage (explained below).
- **Wet ponds/storage:** Stormwater management ponds that always contain water. Runoff from a storm enters the pond and partially displaces the water from previous storms. They provide improved water quality and can be used for flood control. The pool prevents re-suspension of sediments and other pollutants deposited during prior storms.
- **Dry ponds/storage:** Stormwater systems built for controlling the volume of stormwater do not hold a permanent pool of water on the pond floor. They are designed to reduce peak water flows by temporarily storing runoff on the dry pond floor. Volume-only dry ponds are built for flood control and not for water quality improvements.
- **Triassic Basin:** The triassic basin areas in North Carolina include primarily central NC counties including Durham County, western Wake County, Lee County, Moore County, and Anson County; these areas are geological formations characterized by sedimentary rocks like mudstone, sandstone, and conglomerate, formed during the Triassic period, which have clay-heavy soils extra prone to erosion and water pollution.

Zoning Overlays: A Rezoning Overlay is a land use regulation that functions as an additional layer of restrictions or requirements applied to a specific geographical area that already belongs to a base zoning district. Overlays are a helpful tool used to manage unique local concerns, such as historic preservation, flood control, and environmental protection, ensuring they are addressed more tightly than the general zoning rules would allow.

Riparian Buffers

Purpose:

Riparian buffers are critical to healthy waterways. By stabilizing streambanks with root systems, intercepting pollutants carried by runoff, shading streams to maintain stable temperatures, and providing habitat for key species, healthy bankside vegetation is one of the key indicators of stream health. While planting new trees is better than leaving the ground exposed, leaving old trees in place is the gold standard for water quality and wildlife habitat protection. Riparian buffers help filter bacteria, sediment and other pollutants from stormwater before it reaches surface waterways. The goal of strong riparian buffer measures are to:

- Protect streambanks from erosion caused by loss of vegetation
- Protect water quality by reducing pollutants carried by stormwater into waterways
- Protect sensitive aquatic species
- Mitigate flood hazards and reduce volume of stormwater runoff
- Combat a warming climate by lowering stream temperature along vegetated corridors

Since requiring larger riparian buffers wholesale is typically preempted by the state legislature, the following policy recommendations can be achieved through use of conditional rezonings or proffers, or within specific zoning overlays intended to protect water quality, such as watershed protection overlays.

Policy Recommendation:

- Require that any permanent waterways (rivers, lakes, and wetlands that are present throughout the year) have 100 feet of vegetation on either side. Utilize watershed protection zoning overlays to require larger riparian buffers than currently mandated by baseline state policy.
 - Science backed studies demonstrate that 100ft riparian buffers are the minimum best management practice to achieve the goals articulated above. Some environmentally sensitive areas, like aquatic Natural Heritage sites, require larger riparian buffers in order to protect sensitive habitat and species.
- Require 350ft riparian buffers for waterways that are mapped as Aquatic Natural Sites by the Natural Heritage Registry in order to protect sensitive habitat and species.
- *Lengths of the buffer should be measured horizontally from the top of the bank.

Greenspace and Tree Retention

Purpose:

An important opportunity to protect environmental resources is to ensure sufficient tree-retention. Trees stabilize the soil with their root systems, and prevent runoff of sediment into waterways. Trees and vegetation also filter water, helping with water quality, while also helping prevent erosion by reducing the volume of water that flows from construction sites and into streams. While planting new trees is better than leaving the ground exposed, leaving old trees in place is the gold standard for water quality and wildlife habitat protection.

Policy Recommendations:

- Require that tree preservation minimums are met through tree retention instead of cutting and replanting young trees
- Limit mass grading to 15 acres to minimize area of exposed soil, enhance ground stabilization and reduce runoff potential. In sensitive soil areas like the Triassic basin, consider limiting mass grading to 10 acres or less.
- Prioritize habitat connectivity by ensuring that the post-development condition maintains connectivity of all *significant natural resources*, both within the tract and between adjacent tracts. Key goals of retaining habitat connectivity include:
 - Reducing habitat fragmentation: habitat fragmentation is when habitats are fractured and divided by development
 - Implementing wildlife corridors
 - Directing development to existing towns/cities, away from boundaries of managed areas
- Require that all applications for grading, building, demolition, land use, change of use, or rezoning shall include a tree protection plan of all tree save areas and tree protection zones
- Incentivize retention over replacement
 - Possibilities:
 - Process development applications and building permits faster in exchange for additional tree preservation
 - Provide credit for preserving individual trees (such as heritage trees) or stands of trees to meet landscaping requirements.
 - Reduce the required setback area in exchange for the preservation of existing vegetation or an increase in the tree save area that goes beyond a required standard.
- Require planting of only native trees and grasses when replanting occurs.
- Require strong enforcement of tree retention requirements:

- Require on-site supervision during land clearing phase to ensure tree retention requirements are being met
- Require that at least one (1) identified landscape protection supervisor shall be present on the development site at all times when activity that could damage or disturb soil and adjacent landscape elements occurs
- Assess a penalty for illegal removal of trees in tree-save areas should be an immediate stop work order (a written directive that requires individuals or organizations to immediately halt all or a specific portion of work on a project), plus at least the cost of reforestation

Wetland Protection

Purpose:

Wetlands are our best natural tool for mitigating flooding, filtering our water and protecting our communities from the impacts of climate change. Wetlands act as sponges, soaking up floodwaters and holding them back so that they do not end up in our homes and communities. Unfortunately, wetlands protections have come under attack due to changes in federal and state policy that rolled back protections for many wetlands in North Carolina. Still, local governments have the right to determine what areas are important to flood mitigation and water quality in their communities. A local wetlands ordinance can offer needed consistency in determining which wetland areas are entitled to protection.

Policy Recommendations:

- Require protection of wetlands that lost jurisdictional status after the Sackett v. EPA Supreme Court decision and state of North Carolina's policy change in response.
- Require a protected buffer of at least 75ft for all dredging/filling operations around wetlands
- Require a no-build setback of 15ft around wetland buffers

Construction Sediment and Erosion Control Practices

Purpose:

Sediment is the greatest water quality pollutant by volume in North Carolina. Each year, construction and land use changes contribute significant sediment pollution to North Carolina's waterways that impact aquatic health and carry health risks for human communities who drink and interact with the water downstream. North Carolina General Statute § 113A-60 allows local governments to develop jurisdiction specific sedimentation and erosion control ordinances that reflect locally specific needs and

concerns. Local sedimentation and erosion control programs may include provisions that exceed the minimum standards established in the Sedimentation Pollution Control Act, N.C. Gen. Stat. §113A-50 et seq. The goal of strong sediment and erosion control measures is to prevent sedimentation from leaving construction sites and entering water bodies. The best way to achieve this goal is to adopt proactive measures to prevent soil runoff, which requires special attention to challenging conditions such as sensitive soils, steep topographies and climate impacts. Overall, strong sedimentation and erosion control measures prioritize ground stabilization, planning to settle and filter small particulate soils (if present on the landscape), and planning for larger storms.

Policy Recommendations:

- Require use of advanced settling devices: encourage small particulate soils to settle to the bottom of sediment and erosion control (S&EC) measures
 - Use of flocculants on S&EC measures
 - Polyacrylamides (PAMs), etc
 - Additional information regarding flocculants and their usage on construction sites is also available at <https://cals.ncsu.edu/crop-and-soilsciences/>
- Use other settling devices such as perforated risers, baffles, skimmers and other outlet devices
- Use multiple cell construction in stormwater basins
- Plan for bigger storms: prepare for more precipitation due to a changing climate; mitigate impacts from significant rain events
 - Increase the size of stormwater storage to prepare for massive storms that are increasing in size and frequency due to climate change
 - Construction-stormwater management shall be so planned, designed and constructed as to provide protection from the calculated maximum peak of runoff from the 50 or 100yr storm
- Require that groundcover be established within one week of soil disturbance for flat slopes, five days for moderate slopes, and within three days for steep slopes.
- Increase utilization of Stop Work Order penalties when on-site violations resulting in pollution of surface waterways are found by inspectors.

Turbidity Monitoring for Clean Water

Purpose:

While North Carolina's Sedimentation and Pollution Control Act is intended to prevent construction sediment from leaving construction sites, there are many cases in which

attaching clean water standards to sedimentation and erosion control regulations can help provide assurances that the rules are working to protect public waterways. In sensitive landscapes such as drinking watersheds and triassic basins, it is especially important that sedimentation and erosion control plans include provisions for self-monitoring. Two ways to do this are to a.) monitor discharge from sediment basins that are being de-watered after rain events, and b.) to measure surface waterways that occur on sites and flow into waters of the state. Tying water quality requirements to construction practices is arguably the best way to ensure that land clearing practices are not resulting in sediment pollution of public waterways.

Policy Recommendations:

- Adopt turbidity standards for effluent discharged from sediment pond dewatering operations on construction sites to prevent the discharge of sediment-laden waters that exceed the state turbidity standard and result in the pollution of downstream waters of the state. This standard should be required in high quality, and impaired waterways, and in within the triassic basin.
 - Adopt the [EPA 2022 Turbidity Benchmark Monitoring Recommendation for Dewatering Operations](#): Effluent from sediment pond dewatering operations sampled for turbidity/TSS to ensure sediment levels in exceedances of state water quality standards are not being discharged
 - Option 1: Effluent from sediment pond dewatering operations on development site sampled for turbidity/TSS to ensure sediment levels in exceedances of state water quality standards are not being discharged
 - Option 2: Require monitoring of receiving surface watersRequire third-party upstream/downstream turbidity monitoring of receiving waterways
- On construction sites larger than 10 acres, require construction permittees to conduct turbidity sampling in surface waterways on construction sites that qualify as waters of the state.
 - Waters in triassic basin areas should be independently monitored because these soils are more prone to erosion; specifically, for construction sites greater than 10 acres, the waters nearby should be sampled for any changes in turbidity
- Make turbidity sampling data from dewatering discharge and on-site surface water sampling available to the public through public records requests.

Post-Construction Stormwater Management

Purpose:

Stormwater runoff is a top pollution source for our rivers and streams. In areas with high percentages of impervious surfaces, urban runoff can contribute significant amounts of contaminants like bacteria, heavy metals, sediment and nutrients into our waterways. Climate change presents an even greater stormwater challenge by bringing bigger storms with more rainfall affecting our landscapes and waterways. To prepare for this, forward-thinking stormwater policies seek to plan for these larger storms by promoting climate-resilient stormwater policies.

Policy Recommendations

- Stormwater devices shall be so planned, designed and constructed as to match post-development to pre-development maximum peak runoff flows from the 50 or 100yr storm, rather than typical 10 year baselines.
- Match post-development to pre-development flows
 - Require analysis of pre-development peak flows
 - Implement on-site stormwater BMPs to best match post-development to pre-development peak flows - Performance standards to control the volume of discharges and to mimic the pre-construction hydrology of a site will lead to implementation of BMPs and green stormwater infrastructure to infiltrate, evapotranspire, and/or harvest and beneficially use stormwater (EPA fact sheet). Examples include:
 - Bioretention - Also known as “rain gardens,” this is a lower elevation area filled with plants and soil designed to capture rainwater and filter out sediment
 - Cisterns – A tank for storing water
 - Pocket wetlands – Small, constructed wetlands used to manage stormwater and improve water quality in small developments, parks, and residential areas
 - Green roofs in urban areas, etc. – vegetative areas on top of roofs, while costing more than traditional roofs, decrease long term energy costs, last longer than traditional roofs, manage stormwater, and help manage stormwater
- Require use of on-site Green Stormwater Infrastructure to meet the goal of matching post-development to pre-development peak flows
- Limit Impervious Surface Cover
 - Impervious surfaces are areas composed of any material that impedes or prevents infiltration of water into the soil. Impervious surfaces should be minimized to reduce stormwater runoff, mitigate flooding impacts and

protect water quality. The impervious surface is calculated over the entire tract and includes the conserved area.

- For environmentally sensitive areas such as locations in a drinking watershed, require a maximum of 15% impervious surface on an entire tract (Duke Ordinance).
- Limit impervious surface to 30% for all new developments over 10 acres in size.
- Encourage utilization of Low Impact Development in site design.
- Prohibit stormwater from being discharged directly to the significant natural resources without vegetated filtration and energy dissipation (Duke Ordinance).
- Require developers to update basin hydrology and hydraulic modeling as new development projects are proposed upstream or downstream, or when known drainage concerns are brought forth.

Natural Resource Protection

Purpose:

Natural resources such as critical habitats, sensitive and threatened plant and animal species, and unique ecological communities should receive special protections from the impacts of land use changes. While most of these resources are documented by North Carolina's Natural Heritage Program and Wildlife Resources Commission, many of these resources do not enjoy regulatory protections. Instead, protecting these resources is often voluntary and left up to the discretion of the developer. Thankfully, municipalities have the authority to establish protections for unique and sensitive resources to ensure that they are safeguarded when land use changes are underway. Below are various avenues available toward formalizing those protections in local development codes.

Policy Recommendations:

- Establish Conservation Management Plans (Conservation Management Districts are intended to preserve and enhance land as permanent open space to meet the passive and recreational needs of a city/county)
 - Local governments that administer their own sedimentation and erosion control program should ensure that natural resource conservation plan approval occurs prior to grading or sedimentation and erosion control plan approval.
- Establish Natural Resource Zoning Overlay Districts (an overlay district is a zoning district that adds additional protections to a specific geographic area)
 - Use the [Biodiversity and Wildlife Habitat Assessment map](#) created by the NC Department of Environment and Natural Resources, as well as the [NC Conservation Planning Tool](#) to delineate natural resource overlay district boundaries.

- The NC Natural Heritage Program’s Natural Resource Data Explorer provides more in-depth information about known locations of specific unique, threatened and endangered species and habitats.
- For development activities that do occur in areas with known unique, threatened, and endangered species or habitats, follow the NC Natural Heritage Program’s recommendations for protecting these natural resources. The NCNHP is responsible for establishing Dedicated Nature Preserves and Registered Heritage Areas and within that process, provide recommendations for the intentional protection of Primary Riparian areas along stream, rivers, lakes and wetlands. These “riparian zones” are conserved to maintain or restore the functions associated with riparian ecosystems including stability of banks and instream habitat, water quality, temperature, and allochthonous food inputs.
 - NCNHP recommendations are for a 300 foot protected riparian zone along any NCNHP Aquatic Habitat, 200 ft along any stream that flows to an NCNHP Aquatic Habitat that supports Federally listed aquatic species, and 100 ft along all other streams.
- Protect Heritage trees–Map and protect trees greater than 24” DBH, as they provide environmental, aesthetic, climate, and community health benefits.
- Require Wildlife Impact reports whenever a project is located within critical wildlife habitats (protected habitats where endangered species live as designated under the Endangered Species Act), significant natural areas, or wildlife corridors (designated areas for wildlife to pass between habitats) shown on conservation maps in the county’s comprehensive plan
- Require developers to pursue Section 10 consultation with the federal Fish and Wildlife Service if a land use change poses potential impacts to federally endangered species, whether on-site or downstream. If it is determined that a project would likely “take” endangered species, developers are required to work with the FWS to develop a Habitat Conservation Plan for those species.

Utility Infrastructure

Purpose:

Installing new utility infrastructure can be the most impactful part of a construction project. Often, utility construction occurs along waterways, and significant harm to waterways can be done when pipes are installed across stream channels. Especially in places without existing infrastructure in place, the construction of new sewer and water lines can create additional pollution issues for waterways. The best way to reduce impacts from utility construction is to site new utility corridors away from water resources.

Policy Recommendations

- Include location of all utility lines, crossings (installing pipes or cables in a way that crosses a stream or riverbed) and boring plans in approved site plans available to regulators and the public.
- Avoid utility crossings to avoid construction of stormwater, sewer and/or electric lines across streams or riverbeds.
- Prohibit construction of sewer lines, water lines, and other utility *infrastructure* within 100 feet of perennial and intermittent streams to the maximum extent possible.
- Use bridges for all permanent roadway crossings of streams and associated wetlands.

Resources

- **Riparian Buffers & Tree Protection**
 - [Protecting and Maintaining Trees: A Guide for Municipalities in North Carolina](#)
 - [Riparian buffers increase future baseflow and reduce peakflows in a developing watershed - ScienceDirect](#)
 - [Understanding-the-science-riparian-buffers-wq.pdf](#)
 - [North Carolina's Riparian Buffers: A Scientific Review by NCDEQ](#)
- **Green Growth Ordinances & Toolkits**
 - [Duke Environmental Law and Policy Clinic Model Natural Resource Conservation Ordinance](#)
 - [Green Growth Toolkit](#)
- **Natural Resource Protection**
 - [Biodiversity and Wildlife Habitat Assessment map](#)
 - [NC Wildlife Resources Commission Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality](#)
- **Stormwater**
 - [Schueler, 2009—"Is Impervious Cover Still Important?"](#)
 - [Wake County GSI Best Practices_09.09.2024.pdf](#)
- **Sedimentation and Turbidity**
 - [EPA 2022 Turbidity Benchmark Monitoring Recommendation for Dewatering Operations](#)
- **Wetlands**
 - [North Carolina legislature's elimination of wetlands protections increases flood risks and endangers communities and fisheries - Southern Environmental Law Center](#)
 - [Wetlands as nature-based solutions for water management in different environments - ScienceDirect](#)
 - [Evidence for the Multiple Benefits of Wetland Conservation in North America](#)