# Local Planning and Regulation: Options to Minimize Risk and Vulnerability

and the importance of taking action despite uncertainty







## **NH Enabling Statutes**

RSA 672:1 Planning and Zoning – Declaration of Purpose

RSA 674:2 Master Plan – Purpose and Description

RSA 674:16 Duties of the Planning Board

RSA 674:21 Innovative Land Use Controls

## **NH Enabling Statutes**

RSA 674:56 (I) Floodplain Zoning, (II) Fluvial Erosion Hazard Zoning

RSA 674:57 FEMA Flood Insurance Rate Maps (FIRMs)

RSA 482-A Water Management & Protection - Wetland Regulations

RSA 483-B:9 Minimum Shoreland Protection Standards (SWQPA-Shoreland Water Quality Protection Act)

#### **Master Plan**

Establish broad goals for

- Public health and safety
- Future growth
- Environment/resources

Master Plan Master Plan

Municipal actions and regulatory approaches must be supported in master plan



## **Municipal Audit**



Review policies, zoning, regulations and plans

Identify level of protection for areas vulnerable to natural hazards

Linking public safety with development standards can promote safe growth and resiliency both before and after a flood

# Fluvial Erosion Hazard Zones "meander zone"



Land adjacent to a river, where active river processes are predicted to occur in the future

Options – limit new development and prohibit management or control of river processes

### Floodplain Property Buyout

Acquisition of properties using state and federal \$

Restoration of critical flood storage areas, floodplain functions



## **Transfer of Development Rights**

Preserve high risk areas with compensation to property owner; shift development and investment to designated growth areas

### Designate High-Risk as No-Build Zones

Preserve strategic lands where erosion or flooding is severe via land acquisition or protective easements

Prevention is a cost-effective tool for minimizing risk and vulnerability



#### **Shoreland and Wetland Standards**

**SWQPA** and Water Management and Protection Statutes

Setbacks, buffers, impervious surface cover, stormwater management, preserve vegetation

Uplands provide critical flood storage



Strengthened when paired with fluvial erosion hazard zones

# Zoning Ordinance

Overlay District Floodplains Buffers Water Quality **Drinking Water Environment-Natural** Resource Protection Public Health and Safety Design-Performance **Standards** 

# Land Development Regulations

Site Plan Review Regulations
Subdivision Regulations

Site Design Standards
Stormwater Management
Water Quality
Building Footprint
Structure Setbacks
Impervious Surface Cover
Buffers/Landscaping

### **Hazard Mitigation Plan**

- Plans for construction of sustainable, disasterresilient infrastructure
- Provides for reconstruction standards that ensure communities reduce future vulnerability/loss

### Response and Recovery Plan

- Identifies existing and future flood hazard areas
- Provides a clear pathway for safe and comprehensive planning (reuse) after a flood

See Association of State Floodplain Managers at www.floods.org

## **Capital Improvement Plan**



Limit investments in infrastructure located in flood hazard areas

Decrease the amount of vulnerability and risk from flooding by planning for future conditions and needs

Apply new designs, PPT data, technology

### No Adverse Impact Performance Standard

Handbook

May 2007

Asserts no new development can increase the likelihood or magnitude of flooding or damage to other properties



Association of State Floodplain Managers www.floods.org

#### **Questions for Speakers**

#### **Group Discussion -**

#### NH has experienced extreme weather events!

(flooding, drought, increased precipitation, more ticks, more allergies)

#### Q? - How are communities and individuals responding?

(zoning and land use changes, generators, electric line trimming, public outreach)

#### Q? - What Have We Learned?

climate change, preparedness, perception, solutions?

#### **Q? - Theory to Practice**

some people call it adaptation, some people call it common sense

#### **Q? - Unlikely Partnerships**

who should be our partners in adaptation planning (EMDs, public health, planners?)