



Natural Resources & Environment of Taylortown

2022 CLUP Work Session Four

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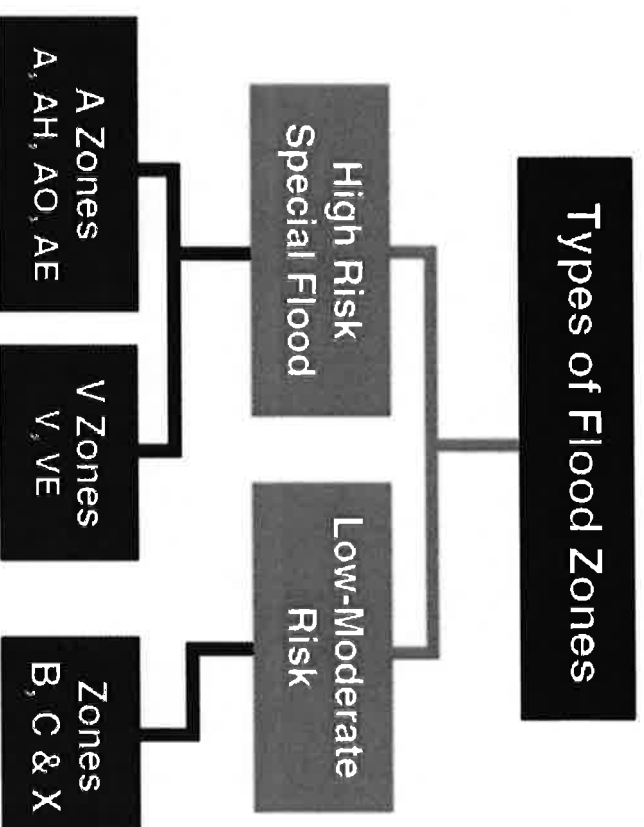
May 31, 2022

Hydrology of Taylortown, NC

- Taylortown is in the Cape Fear River Basin.
 - Every drop of water that lands within the Town eventually ends up in the Cape Fear River, via a system of tributary streams, creeks, and rivers.
- Taylortown contains only one natural stream or body of water: Joe's Fork
 - Joe's Fork is a 2nd order tributary stream that discharges to Nick's Creek about 2 miles north of Pinehurst
- Most of the discussion in this presentation will revolve around Joe's Fork and the obstacles/benefits it has in relation to zoning and development.

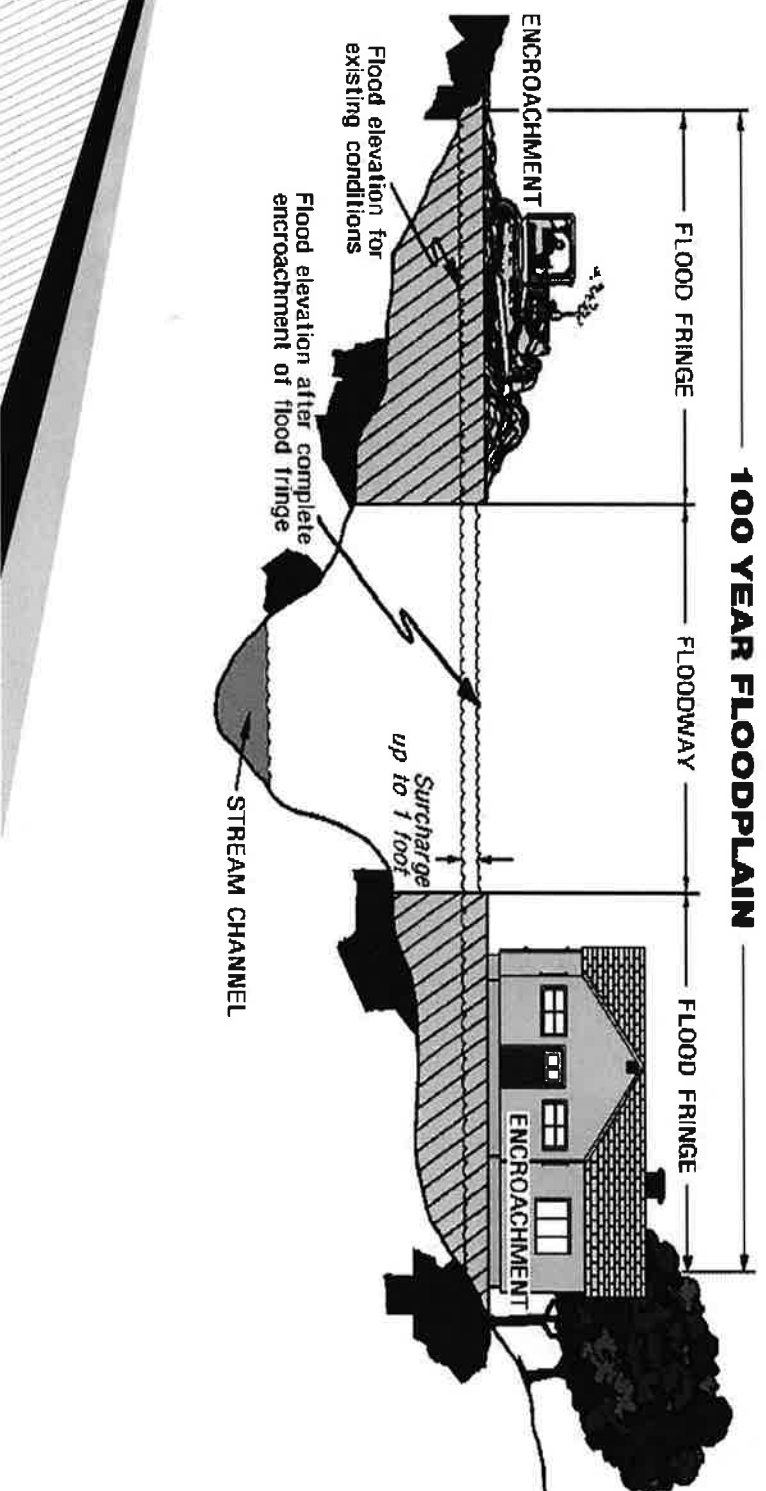
Flood Zones

- Flood zones are geographic areas defined by FEMA according to varying levels of flood risk.
- FEMA categorizes zones in three different levels of risk:
 - High-Risk Areas: 100-year Flood Plain
 - 1 in 100 chance of flooding in any given year (1% annual chance)
 - Moderate to Low-Risk Areas: 500-year floodplain
 - 1 in 500 chance of flooding in any given year (0.2% annual chance)
 - Undetermined Risk Areas: Areas where flood hazards are possible, but no analysis has been conducted
- A portion of the Town of Taylortown lies within the 100-year floodplain.
 - The flood source for the floodplain is Joe's Fork.



How Flood Zones Impact Zoning and Development

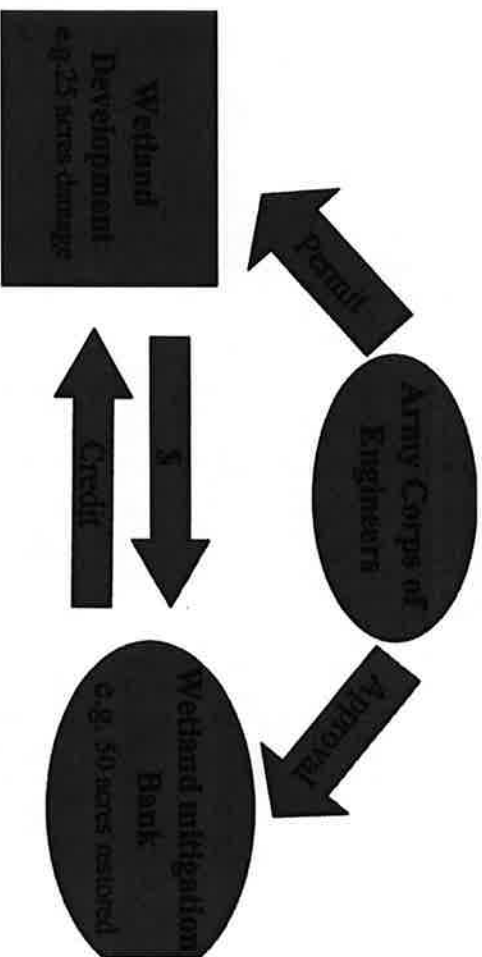
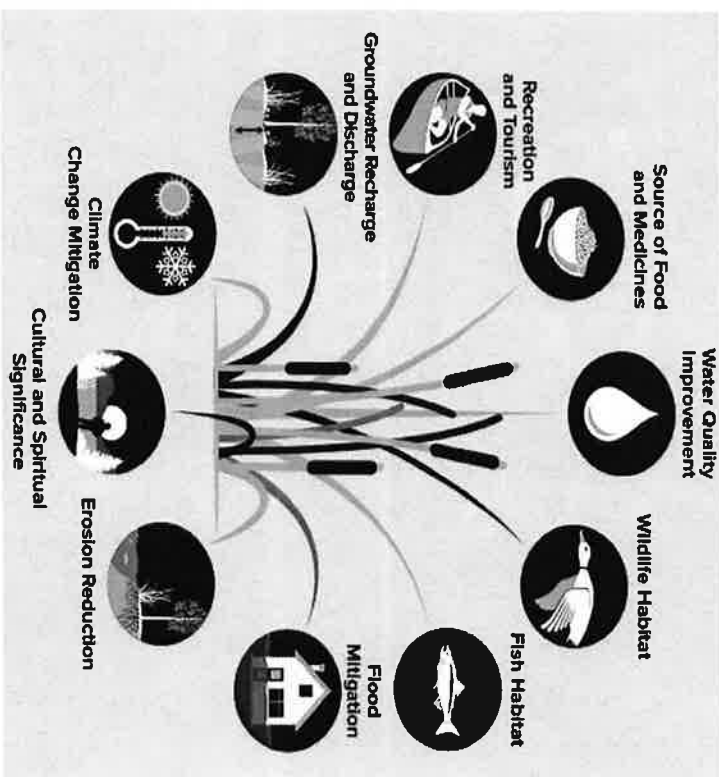
- Building in Flood Zones:
 - Requires additional permits
 - Has additional costs associated with construction
 - Elevating structures above the base flood level (BFE)
 - Additional requirements to meet regulations
 - Results in higher insurance costs for homeowners/building owners
- Developers will hesitate to build in flood zones and homeowners will hesitate to move into homes prone to flood risks.



Wetlands

- Wetlands provide an abundance of beneficial services:
 - Protecting and improving water quality
 - Storing floodwaters (commonly are within flood zones)
 - Ample fish and wildlife habitats
 - Helping maintain surface water flow during dry periods
 - *Improve the quality of life in communities*

- However, wetlands can be a hurdle to overcome when it comes to developing land:
 - Requires additional permitting to begin construction
 - The US has a “No Net Loss” policy on wetlands
 - Lost wetland functions must be restored through the process of creating new wetlands or preserving existing wetlands



Using “Obstacles” to Your Advantage

- Don't let the hydrology of your Town deter you from your vision
- Wetlands or Flood Zones could be utilized as natural “buffers” or boundaries between zoning categories.
 - Draw a “line” between commercial and residential
 - Example shown below
- Great opportunities for recreation and promoting community involvement
 - Parks
 - Trails



Next Month's Meeting: Formulation of Planning Goals & Objectives

- Presentation will provide data, findings, and facilitate *group discussion* on the following:
 - Infrastructure
 - Land Use Considerations
 - Tax Base Factors
 - Development Objectives
 - Cultural Influences

