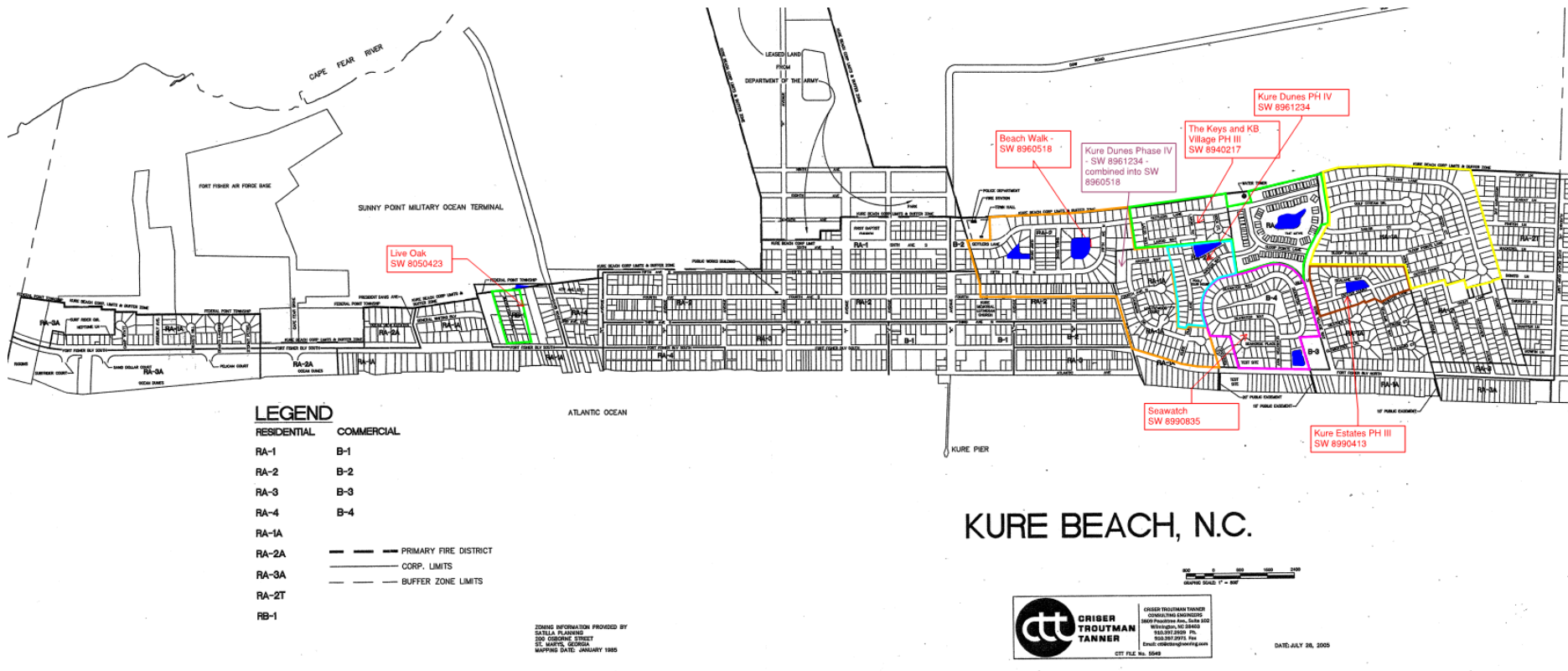


# Stormwater Update

David W. Heglar, PE  
Emergency Response  
Coordinator

- Potential Tropical Cyclone 8 brought >17” of rain in less than 12 hours on September 16, 2024
- Every stormwater system in the town was overwhelmed by this reported 1000 year flood. This amount of rainfall exceeded the design capacity of all stormwater systems within the town – resulting in over 147 homes experiencing flooding into the living spaces.
- Properties in every area of town were impacted with as this rainfall backed up and filled the low lying areas in each neighborhood.
- The amount of rainfall in this short duration exceeded Hurricane Florence (2018) (during 2-4am) and Hurricane Floyd (1999).

# Cape Fear River – 4 outfalls – Henniker’s Ditch, K Ave Ditch, Ditch through disc golf course, 5<sup>th</sup> street to Davis Road ditch



Atlantic Ocean – 15 outfalls (2 owned by DOT, 13 TOKB maintained pipes)

# Town Actions

- **Public Works**

- Ensured lift stations were not flooded / released to environment
  - 2 lift stations required manual pumping actions during event
  - With 4 others alarming throughout the event
- Ensured drain systems were not clogged during event – all personnel were in town moving from system to system throughout the early morning until late in the evening when the systems caught up and flooding began to subside..
- Once rain stopped – systems operated as designed and within 30 mins to 4 hours all roads were passable and areas were clearing
- No system failures detected – and no reported damage from any permitted stormwater system.

# Fire Department

- 24 requests for rescue from vehicles and private property occurred.
- At the worst of the storm in late morning to early afternoon – access to citizens was restricted to the brush truck and NHC High water rescue vehicle
- Additional assistance as department was in community and observed issues

# Police Department

- KBPD requested high-water vehicle from NHC Emergency Management – which was available late in event
- Road Closures during event-
  - Multiple roads were closed by police – additionally roads became impassible throughout much of the town unless in high clearance vehicles.
  - Multiple people were stopped by PD and Emergency personnel driving too fast in high water – pushing water into homes.

# Development and Compliance Department

- Surveyed all properties in Kure Beach for Damage Assessment as required by the State/Federal government (with assistance from New Hanover County Building Inspections Department)
- Shared FEMA recovery information
- Offered contact information (New Hanover County) to affected citizens for Mitigation Grant Funding

# Admin/Finance/Legal

- Worked to coordinate contracts for debris removal immediately following the storm.
- Debris pick-up began 7 days after event.
- Reported all public spending for storm related issues to state. This was a key piece of getting both State and Federal disaster declarations



# Support actions

- State Actions
  - 10/16/24 – Type 1 disaster declaration
    - Public Assistance
    - Individual Assistance – potentially grants or loans based on SBA factors
    - Disaster Recovery Center – 10/21-10/28
      - 1121 N Lake Park Blvd (Carolina Beach Recreation Center)

# Support Actions

- Federal Actions
  - 10/19/24 - Federal Disaster declaration
  - North Carolina Potential Tropical Cyclone Eight (DR-4837-NC)