NAVIGATING ENVIRONMENTAL LAND USE ISSUES WHEN REMEDIATING SITES

Commerce and Industry Association of New Jersey / Environmental Business Council (EBC)

Fall Conference

Monday, September 29, 2014
Pines Manor – Edison, New Jersey

Presented by: Michael Nevins, PWS
Senior Project Manager
Langan Engineering & Environmental Services, Inc.
“Water” means a collection of water on the surface of the ground

- A Water includes but is not limited to a bay, brook, creek, ditch, lake, pond, reservoir, river or stream,
- The path or depression through which water flows or is confined
- A Water that is piped or modified remains a Water
- A storm sewer is not a Water unless it was constructed to replace a pre-existing Water
Regulated “Waters”
(N.J.A.C. 7:13-2.2)

- All “Waters” are regulated Except:
  - Manmade canals
  - Coastal wetlands
  - Segments of Waters draining less than 50 acres that:
    - Have no discernible channel OR
    - Are manmade (not man-altered) OR
    - Are isolated
A REGULATED WATER HAS TWO DISTINCT ADJACENT REGULATED AREAS

- Flood Hazard Area (Floodway + Flood Fringe)
- Riparian Zone
FIGURE A: THE FLOOD HAZARD AREA IS COMPRISED OF THE FLOODWAY AND FLOOD FRINGE
Flood Hazard Area (FHA)

- A regulated flood hazard area (FHA) exists along every Water that drains 50 acres or more

- The FHA Rules provide acceptable methods to delineate the FHA and floodway along regulated Waters
Methods of Delineating the FHA

Flood Hazard Mapping Techniques:

- Method 1 – Department delineation
- Method 2 – FEMA tidal method
- Method 3 – FEMA fluvial method
- Method 4 – FEMA hydraulic method
- Method 5 – Approximation method
- Method 6 – Calculation method
RIPARIAN ZONE (RZ)

• Land and vegetation within and adjacent to every regulated Water
• Portion of the RZ outside of the regulated Water is generally measured landward from the top of both banks
RIPARIAN ZONES

HOW WIDE?

• 300 feet along Category One Waters (C1) and upstream tributaries within same HUC-14 watershed

• 150 feet along Waters that are Trout Production (and upstream tributaries), Trout Maintenance (and upstream tributaries within 1 mile), or flow through T & E habitat (and upstream tributaries within 1 mile), or areas that contain acid producing soils

• 50 feet along all other regulated waters
Any action that results in one or more of the following is a regulated activity if undertaken in a regulated area:

- excavation, grading and/or placement of fill;
- clearing, cutting and/or removal of vegetation;
- creation of impervious surfaces;
- storage of unsecured material;
- construction, reconstruction and/or enlargement of a structure.
Borings/Monitoring Well Installation in the FHA or Riparian Zone
Flush Mounted Wells
TYPES OF FLOOD HAZARD AREA PERMITS

Permits-By-Rule (46)

Examples Applicable to Remedial Activities:

- Construction in a disturbed RZ or at or below grade in a FHA
- Construction in a tidal flood fringe that does not require a coastal permit
- Jacking an underground utility line beneath a water
- Repaving a roadway or parking area outside a floodway
TYPES OF FLOOD HAZARD AREA PERMITS

General Permits – 16

Examples that may apply to remedial activities for waters draining less than 50 acres:

• Utility lines
• Roadways or driveways and
• stormwater outfalls
• ?
TYPES OF FLOOD HAZARD AREA PERMITS

Individual Permits

Policies Applicable to RI and RAWP

• Individual Permit (IP) application requires the submission of a FHA verification

• Buildings, roads and parking areas - must be elevated at least one foot above the flood hazard area design flood elevation (rules recognize that this is not always possible)

• Lowest finished floor and roadways must be one foot above the flood hazard area elevation, even in tidal flood areas

• Bank Stabilization and Channel Restoration- Natural
FILL MATERIAL

- 0% Net Fill in fluvial FHA
- Net Fill does not apply to tidal flood hazard areas
- Net fill rule applies to both the space between the flood hazard area design flood and 10-year flood (V-1), and the space between the 10-year flood and the ground (V-2)
- Up to 20% displacement is allowed on a site however, all fill must be compensated for
- Requirements for type of fill placed below and above the FHA elevation (Alternative Fill vs. Clean Fill)
RIPARIAN ZONES

- FHA Rules define maximum allowable disturbance to riparian zone vegetation based on activity
- Certain disturbances in riparian zones need to be compensated for on a 2:1 basis for all cleared, cut and removed vegetation
- For remedial activities compensation at 1:1 ratio if entire RZ is restored post remediation
- Redevelopment provisions for riparian zone in developed areas:
  - Public walkways acceptable along waterway
  - Re-establish natural riparian zone within 25 feet of top of bank
PERMIT APPLICATIONS

- Engineering Report - net fill, stormwater management, stability analysis, bank stabilization analysis (i.e. wave action)
- Environmental Report
- Public Notice
- Application Fees (annually adjusted)
  - Verification of flood hazard area design flood elevation
  - Permit condition compliance review
  - Stormwater review (for major developments)
APPROVALS FOR EXTRAORDINARY SITUATIONS

- Hardship Exception for Individual Permits
- Emergency Permits
QUESTIONS?