Permitting 101

KAMM Regional Training
Why do we issue permits?

✓ Permits are a tool to help ensure protection for property owners and governmental entities
✓ May be required by federal, state, local agencies depending on activity
✓ This presentation will focus on floodplain and water quality (401/404) permitting
Environmental Permits - KY

✔ Kentucky One Stop

➢ Environmental Licenses/Permits
  □ [http://onestop.ky.gov/start/Pages/environmental.aspx](http://onestop.ky.gov/start/Pages/environmental.aspx)
  □ Natural Resource Management
  □ Environmental Protection
  □ Public Utilities
  □ Conservation
Environmental Protection

KY Department for Environmental Protection

Division for Air Quality
- Regulates air contaminant sources

Division of Waste Management
- Regulates and assists with recycling, Superfund sites, solid waste, underground storage tanks, and hazardous waste products

Division of Water
- Regulates sewer/waste discharge into KY waters, withdrawal of water exceeding 10,000 gallons per day, construction and physical disturbance activities along streams and other water-related activities
State Floodplain Permitting

☑ Kentucky Division of Water (KDOW) **Floodplain Management** section has the primary responsibility for the approval or denial of proposed construction and other activities in the 1% annual chance floodplain of all streams in the Commonwealth

- **KDOW Floodplain Permit Application**

☑ Typical activities permitted are: dams, bridges, culverts, residential and commercial buildings, placement of fill, stream alterations or relocations, small impoundments and water and wastewater treatment plants

☑ Activities that result in physical disturbances to wetlands or streams may also require a **Water Quality Certification**
State Floodplain permitting

✔ Permits required by KRS 151

- **KRS 151.250**, establishes the requirements for obtaining a floodplain development permit
- **KRS 151.280**, establishes penalties for commencing without a permit and requires notification for any deviations in permitted activities
- **KRS 151.320**, requires the judge executive of each county or the mayor or chief executive officer of each city to concurrently enforce with the cabinet, within their respective counties and cities, the provisions of **KRS 151.250** or **151.280** and the rules and regulations issued thereunder.

✔ Applicable regulations in **401 KAR 4:060**
KDOW Basic Floodplain Permitting Requirements
Administration

✓ With some exceptions, state floodplain permits are required for development along or across a stream with one square mile drainage area or greater

✓ A state and local floodplain permit is required for all construction activity in the Special Flood Hazard Area (SFHA) or that area inundated by the 1-percent annual chance flood. SFHAs are designated as A and AE zones on the community’s Flood Insurance Rate Maps (FIRMs).

✓ Local floodplain ordinances may be more stringent than state and federal regulations
Floodways

- Nothing may be placed within a floodway that will cause any rise in Base Flood Elevation (BFE)
  - Engineering analysis required
- In Zone A SFHAs (no floodway identified), proposed encroachments (fill, construction, etc.) must not result in more than one foot increase in BFE
Floodways

FLOODPLAIN SCHEMATIC

FLOODWAY + FLOODWAY FRINGE = 100 YEAR FLOODPLAIN
SURCHARGE NOT TO EXCEED 1.0 FEET
Residential Development/Substantial Improvement in SFHAs

- The lowest floor of any new or substantially improved structure (including basement) must be elevated to or above the BFE
- Fully enclosed areas below the lowest floor require at least a minimum of two openings having a total net area of not less than 1 square inch per square foot of enclosed area
  - The bottom of the openings shall be no higher than 1 foot above grade
- The applicant must submit an Elevation Certificate to the floodplain administrator when the building foundation is complete
Manufactured Homes in SFHAs

✓ For a manufactured home outside of an existing manufactured home park or subdivision, the requirements are the same as for site-built homes
   - Manufactured homes must be anchored to a permanent foundation

✓ Within an existing manufactured home park or subdivision the community has the option of either requiring the home to be elevated at or above the BFE; or have the home elevated on reinforced concrete piers, blocks, etc., to at least 36 inches above grade

✓ In the event of substantial damage (over 50 percent of pre-damage value), a replacement manufactured home must be elevated to or above the BFE
Nonresidential Development in SFHAs

✓ The building must be elevated to or above the BFE

✓ In lieu of elevation, the building may be floodproofed to a minimum of 1 foot above the BFE

➢ If floodproofed, the applicant must submit an "as built" Floodproofing Certificate certified by a professional engineer or architect

☐ FEMA Form 086-0-34
Tips for State Floodplain Permits

- Provide site map and FIRM of proposed site
- Provide latitude/longitude of proposed site
  - Submit site and development plans
- Explain type of development (fill, structure, streambank stabilization, etc.)
- Provide public notice
- Provide proof of easement rights
  - Owner/permittee initial/acknowledgement
- Owner/permittee and local floodplain administrator’s signatures are present
Tips for State Floodplain Permits

✔ Download application here:

✔ Interesting to note: Application for permit to construct along or across a stream and Water Quality Certification are the **same**

APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM AND / OR WATER QUALITY CERTIFICATION

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. **If the project involves work in a stream, such as bank stabilization, dredging or relocation, a 101 Water Quality Certification (WQC) from the Division of Water will be required.** This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb more than 1 acre of soil, A Notice of Intent for Storm Water Discharges will also be required. Both forms must be returned to the Floodplain Management Section of the Division of Water.

✔ Also note: Stormwater control may be required
Local Community Floodplain Permit Process
Local Floodplain Permitting

✓ Determine if project meets the definition of “development”

✓ Compile applicable hazards data
  ➢ Flood hazard maps (http://msc.fema.gov)
  ➢ KY Water Health Portal (http://watermaps.ky.gov)
  ➢ Wetlands (http://www.fws.gov/wetlands/Data/Mapper.html)

✓ Determine what type of permits may be required (USACE, KDOW floodplain, water quality, etc.)

✓ Provide guidance to applicant for applicable federal, state and local permits
Permit process

- Assist applicant with state floodplain permit
  - Floodplain construction, dam construction and water quality certification all use the same permit application
- Once federal and state permits have been obtained, review and issue/deny local permits
- Inspect development
- Ensure compliance/issue stop work orders
- Compile documentation
  - Plans
  - Permits
  - Elevation Certificates
- Conduct additional inspections
Local Floodplain Permitting - A Closer Look
Know Your Ordinance

✓ Read and understand

✓ Educate the governing body

✓ Conduct outreach to the public
  ➢ Website
  ➢ Newspaper notices
  ➢ Radio announcements
Floodplain Permitting

✓ **Avoiding and Minimizing FP impacts**
  - Work with applicants to avoid or minimize impacts
  - Avoid development in the floodway

✓ **Floodway Encroachments**
  - Development in the floodway must be supported by engineering analysis
    - “No-impact” certification
    - Conditional Letter of Map Revision (CLOMR)
    - Letter of Map Revision (LOMR)
Floodplain Permitting

✔ Create a Log for FP Permit Actions

➢ The maintenance of a log or permit system is critical
➢ Your log or system should record:
  □ Permit Number
  □ Property Address
  □ Flood Zone
  □ Nature of Work
  □ Elevation Certificate, if applicable
  □ FIRMette or snapshot of NFHL
Floodplain Permitting

✓ Special Considerations

- Manufactured Homes are extremely vulnerable to flood damage.
- You may wish to require an engineered foundation to ensure structural stability.
- Anchoring, tie-down, & permanent foundation requirements must be outlined in the FP permit.

Terms and Definitions:

Permanent Foundation does not include dry stacked block.
Floodplain Permitting

✓ *Altering a Watercourse*
  - The carrying capacity of watercourse cannot be altered to be less than natural capacity
  - An alteration cannot cause an increase in flooding upstream or downstream
    - If so, CLOMR and LOMR should be obtained
  - Notify adjacent communities, KDOW, and FEMA
Floodplain Inspections

Inspection of Development

- No matter how careful you are when you issue a permit, good inspection and enforcement procedures are critical
- Required setback distances
- Foundations
- Fill
- Manufactured homes
Floodplain Inspections

✓ Foundation Inspection

- The single most important part of FPM, is making sure that structures are elevated properly
  - The best time to inspect is during stake-out, but no later than the footing inspection
- Require the builder/owner to submit an EC for construction drawings and when the floor elevation is set
- Check the elevation of the lowest floor
Floodplain Inspections

✓ Crawl Spaces
  ➢ They must have vents or openings.
  ➢ Ensure that the interior grade is at or above the exterior grade.

✓ Flood Openings/Vents
  ➢ Plans for solid wall foundations must show the required number of openings, their location, size, and height above ground level.
Good vents
Bad vent...does not meet foundation requirements
Floodplain Inspections

✓ Fill Inspection
  - Inspect the fill during placement to ensure clean material, proper compaction, and slope requirements
  - The elevation of the fill must be checked before building construction starts
  - Letter of Map Revision Based on Fill (LOMR-F)
Floodplain Inspections

- **Manufactured Homes**
  - Safe foundations are vital
  - Pilings must be permanent and reinforced, and not dry-stacked blocks
Floodplain Inspections

✓ Final Inspection

- During the final, you should check:
  - Verify that utilities and other building elements are above the BFE;
  - Check flood openings and vents;
  - Check for approved use of enclosed areas below the BFE;
  - Check that fill has been placed according to plans
  - Verify that only flood-resistant materials are used below BFE
  - Collect the proper certificates
  - Document compliance
Floodplain Inspections

✓ Future Inspections

➢ You should conduct windshield tours and look for new or un-permitted activity in the SFHA
➢ Take enforcement actions that are outlined by your ordinance.
Floodplain Inspections

✓ Post-Damage Inspections

- After damage of any kind, you must check for damage that may trigger substantial damage requirements.
- Use the RSDE program in your damage assessments
- Post-disaster efforts should include community outreach concerning permits and the availability of Increased Cost of Compliance (ICC).
Documentation

✓ Should consist of:
  - Permit application, including plans and notes
  - Copy of FIRM panel, FIRMette, or NFHL screen shot
  - BFE determination, if applicable
  - Elevation Certificate
  - FEMA LOMC (if required)
  - Issued permit
  - Documentation of inspections
  - Any damage assessments or improvements
Elevation Certificate

- Used to certify building elevations in SFHA
- Ensures compliance with community floodplain ordinances
- Required to properly rate structures for flood insurance
- Does not provide a waiver for flood insurance
- Required for CRS
Clean Water Act and Section 401
Clean Water Act

 ✓ Title IV of CWA includes:
   - Water Quality Certification (Section 401)
   - Dredge and fill (Section 404)

 ✓ Goal of CWA – to restore and maintain the physical, chemical & biological integrity of nation’s waters.

 ✓ CWA is the framework for making our waters “fishable and swimmable.”

 ✓ Section 401 is written very broadly with respect to states’ ability to regulate activities and protect water quality.
Background

- Section 401 Water Quality Certification is issued by the Kentucky Division of Water.
- Certifies U.S. Army Corps of Engineers Section 404 permits.
- State level of authorization for dredge or fill activities or operations is below the Ordinary High Water Mark (OHWM) of a jurisdictional stream or wetland.
USACE 404 Permits

✓ The US Army Corps of Engineers uses Nationwide Permits (NWP) and Individual Permits (IP) to regulate physical impacts to streams and wetlands

✓ DOW must “certify” NWPs every 5 years

✓ 3 outcomes
  - Certify as written
  - Certify with conditions
  - Deny Water Quality Certification for a NWP
    - Individual certification needed
Certification Decisions

**General Certification**
- Suitable for smaller impacts (usually under 300 linear feet for streams; 0.5 acre for wetlands)
- Usually reviewed and issued within 30 days or less
- Less extensive review

**Individual Certification**
- Used for larger impacts
- More extensive review
- Detailed plans required
- Projects reviewed within 30 days of receipt to determine if additional information is required. Usually within 180 days, a certification will be issued
- Requires public notification and may require an Individual Water Quality Certification Fee
General Certification

General Certifications associated with emergency stream work have certified the following USACE’s Nationwide Permits with conditions:

- **Maintenance Work** (KDOW General Certification for Nationwide Permit #3).
- **Bank Stabilization Work** (KDOW General Certification for Nationwide Permit #13).
- **Minor Discharges** (KDOW General Certification for Nationwide Permit #18).
- **Emergency Watershed Protection (EWP) Work** (KDOW General Certification for Nationwide Permit #37).

Conditions include, but are not limited to stream impact lengths less than 300 linear feet and less than 0.5 acres of wetland impact.

The project will not occur in a KDOW designated Special Use Water reach of stream (http://eppcapp.ky.gov/spwaters/).
Individual Certification

- Projects with stream impacts in excess of 300 linear feet or 0.5 acres of wetland impacts do not qualify for general certification.

- Projects that propose excessive use of certain materials (such as grouted rip rap) may not qualify for general certification.

- Projects proposed to occur within a KDOW designated Special Use Water reach of stream do not qualify for general certification.
Projects Exempt from WQC

✓ Projects that follow the “Guidelines for the Removal of Stream Flow Obstructions” also known as the “One Step Removal Process” are exempt from review and Water Quality Certification authorization KDOW

➢ Highlights of “One Step Removal Process”:
  - Keep equipment out of the stream channel
  - Remove all collected material to an upland location (outside the floodplain)
  - Limits on the time of year that work can be performed
    - Not during fish spawning season
  - Gravel bar excavation is limited to the material 12-inches and above the normal water level
  - Do not push material against the sides of the stream banks
Projects with impacts that exceed certain thresholds may require compensatory mitigation by the USACE. There are three methods of providing mitigation for a site:

- Mitigation Banks
- In-Lieu Fee Mitigation
- Permittee-Responsible Mitigation
Types of Mitigation

✓ Mitigation Banks
  - A private organization restores, preserves, or enhances an aquatic resource. Permittees purchase credits from this bank to offset the impacts accrued during the course of their project.

✓ In-Lieu Fee Mitigation
  - Program generally administered by a government agency or non-profit organization that conducts preservation and restoration of aquatic resources.
  - In Kentucky, the In-Lieu Fee program is administered by the KDFWR and NKU Center for Ecological Restoration.

✓ Permittee-Responsible Mitigation
  - Permittee provides mitigation by restoring or preserving an aquatic resource. This can be done near or at the impact site (on-site mitigation), within the watershed, but at a different location or at an alternate location (off-site mitigation).
Example Activities Regulated by 401
Dredge and Fill
Utility Line Crossings
Stream channel relocation

[Image of a stream channel relocation project with rocks and soil.]
Bank stabilizations
Stream Restoration Activities
Wetland Restoration Projects
Questions?