Floodplain Administrator's Guidebook

DNR Indiana Department of Natural Resources

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(*Cover: Elevated home in Carroll County, along the Tippecanoe River; photo by DNR staff)*

References:

Answers to Questions about the NFIP

DNR Division of Water's Floodplain Management in Indiana Quick Guide

fema.gov

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I. ACRONYMS

BAFL	Best Available Floodplain Layer
BFE	Base Flood Elevation
BRIC	Building Resilient Infrastructure and Communities
CFR	Code of Federal Regulations
CLOMA	Conditional Letter of Map Amendment
CLOMR	Conditional Letter of Map Revision
CLOMR- F	Conditional Letter of Map Revision, based on Fill
CRS	Community Rating System
DoWORC	Division of Water's Online Research Center
e-FARA	Electronic Floodplain Analysis and Regulatory Assessment
FARA	Floodplain Analysis and Regulatory Assessment
FEMA	Federal Emergency Management Agency
FIMA	Flood Insurance & Mitigation Administration
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FMA	Flood Mitigation Assistance
FPG	Flood Protection Grade
GIS	Geographic Information System
HMGP	Hazard Mitigation Grant Program
ICC- ES	International Code Council – Evaluation Services
IDEM	Indiana Department of Environmental Management
IDHS	Indiana Department of Homeland Security
Indiana DNR	Indiana Department of Natural Resources
INFIP	Indiana Floodplain Information Portal
ISDH	Indiana State Department of Health
LOMA	Letter of Map Amendment
LOMC	Letter of Map Change
LOMR	Letter of Map Revision
LOMR-F	Letter of Map Revision, based on Fill
NFIP	National Flood Insurance Program
NRCS	Natural Resources Conservation Service
NWS	National Weather Service
OFIA	Office of the Flood Insurance Advocate
PMR	Physical Map Revision
SFHA	Special Flood Hazard Area
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey
WYO	Write Your Own

II. INTRODUCTION

A. The National Flood Insurance Program (NFIP) in Indiana

The NFIP was created in 1968 as a partnership between the federal and local governments to alleviate some of the problems associated with flooding. The program established national floodplain construction standards to mitigate future damage caused by flooding. To be eligible for participation in the program, a community must adopt and enforce an ordinance incorporating all applicable state and federal floodplain regulations. Participation in the program allows property owners and tenants in the community to be eligible for the purchase of flood insurance. This includes residential, non-residential (commercial/business) and residential condominium building association policies.

Currently in Indiana, there are 451 communities participating in the NFIP. Local governmental units participating in the program are given assistance on various levels within the partnership of the NFIP. The Indiana DNR Division of Water functions as the administrator of the NFIP in the State of Indiana. The Division of Water's Floodplain Management staff work in conjunction with local, state, and federal entities to assist those communities that have recognized the need to enforce floodplain management standards.

In Indiana, the two major drainage basins are the Great Lakes and the Mississippi River basins. These basins contain water resources from groundwater, streams, and over 1,000 public freshwater lakes, reservoirs, and ponds. Through participation in the NFIP, land areas are mapped and determined to be Special Flood Hazard Areas (SFHAs). Despite the amount of land designated as SFHAs in Indiana, only a small percentage of structures within these areas is covered by flood insurance. As of October 15, 2020, there were 19,700 active flood insurance policies in Indiana.

B. Flood Insurance

NFIP coverage is available to all owners of insurable property (a building and/or its contents) in a community participating in the NFIP, regardless of flood zone designation. Almost every type of walled and roofed building that is principally above ground and not entirely over water may be insured if it is in a participating community. In most cases, this includes manufactured (i.e., mobile) homes anchored to permanent foundations, but does not include travel trailers or converted buses or vans. Contents of insurable walled and roofed buildings also may be insured under separate coverage.

After a community joins the NFIP, a policy may be purchased from any licensed property and casualty insurance agent or broker who is in good standing in the state in which the agent is licensed. A policy may also be obtained through an agent

representing a Write Your Own (WYO) company or an employee of the company authorized to issue the coverage.

The WYO Program, started in 1983, is a cooperative undertaking of the insurance industry and the FIA. The WYO Program allows participating property and casualty insurance companies to write and service the Standard Flood Insurance Policy in their own names. The companies receive an expense allowance for policies written and claims processed while the federal government retains responsibility for underwriting losses. The WYO Program operates within the context of the NFIP and is subject to its rules and regulations.

III. STATE AND FEDERAL FLOODPLAIN REGULATIONS

A. State Legislation

Indiana Flood Control Act (IC 14-28-1)

In 1945, the Indiana General Assembly determined that it was in the best interest of the citizens of the state to prevent and limit the damaging effects of floods by regulating, supervising, and coordinating the construction, operation, and design of flood control works; the alteration of streams; and efforts to keep floodways free and clear. The Natural Resources Commission (Commission) has been given primary authority concerning flood control activities in the state.

The Act provides that it is illegal to construct a permanent abode or place of residence in a floodway. Any other structure, obstruction, deposit, or excavation in the floodway of any stream in the state must first be approved by the Commission. The DNR Division of Water (Division) has been given authority from the Commission to act on its behalf concerning flood control activities in the state. The Division recognizes a floodway for any stream or watercourse with an upstream drainage area greater than one square mile. Proposed construction activities in a floodway are reviewed by the Department of Natural Resources to determine if the work will:

- adversely affect the efficiency of or unduly restrict the capacity of the floodway,
- create an unreasonable hazard to the safety of life or property, or
- result in unreasonably detrimental effects upon the fish, wildlife, and botanical resources.

Changes have since been made to the Act to now authorize the construction of residences in the floodway of a boundary river, which is the Ohio River, provided they comply with state and federal regulations. (IC 14-28-1-26.5)

Other changes to the Flood Control Act now allow reconstruction of existing residences located in the floodway that have been substantially damaged, provided they comply with state and federal regulations. (IC 14-28-24)

Indiana Floodplain Management Act (14-28-3)

In 1973, the General Assembly directed the Natural Resources Commission to establish minimum standards for the delineation and regulation of all flood hazard areas within the state. The Commission promulgated rules and regulations (312 IAC 10) that are the minimum standards by which local units of government can develop floodplain management ordinances to regulate the flood hazard areas within their jurisdictions.

B. Federal Legislation

National Flood Insurance Act

The NFIP, enacted in 1968, was designed to alleviate damage to communities and individual hardships caused by flood. Under this program, insurance was made available to homeowners and businesses. New construction in an SFHA was required to be located and built in such a way that the potential for damages and loss of life would be kept at a minimum. The economic justification for the program was the potential to reduce the need for dependence on massive flood disaster relief through safer construction.

Flood Disaster Protection Act

The 1968 NFIP Act was expanded in 1973 by the Flood Disaster Protection Act. This act provided for affordable flood insurance through a federal subsidy. In return, communities were required to adopt and administer local measures that protect lives and regulate construction in the floodplain.

The Act provides that:

- limits on insurance coverage are increased;
- the emergency program (the initial phase of a community's participation) is continued, assuring that individuals and communities can obtain otherwise unavailable flood insurance;
- insurance is required on all federal or federally assisted financing of construction in flood-prone areas; and
- federal flood elevation determinations are accelerated.

Minimum regulation standards for a community enrolling in the NFIP require that permits be issued for all construction and substantial improvements in a flood hazard

zone and that all permits must be reviewed to assure that sites are reasonably free from flooding. In addition, communities must require:

- proper anchoring of structures;
- the use of construction materials and methods that will minimize flood damage; and
- new or replacement utility systems to be located and designed to prevent flood loss.

Unified National Program for Floodplain Management (1976)

This program accomplishes the following:

- sets forth a conceptual framework for floodplain management;
- identifies available tools and strategies;
- assesses the implementation capability of existing federal and state agencies and programs;
- makes recommendations for achieving a unified national floodplain management program.

The program offers guidance applicable to both government and private interests.

Executive Order 11988

This floodplain management executive order signed on May 24, 1977, requires federal agencies to avoid, to the extent possible, the long-term and short-term adverse impacts associated with the occupancy and modifications of floodplains and to avoid the direct or indirect support of floodplain development whenever there is a practicable alternative. The preferred method for satisfying this requirement is to avoid sites within the floodplain. If an action must be located within the floodplain, the executive order requires that agencies minimize potential harm to people, property and to natural and beneficial floodplain values by incorporating current floodplain management standards into the project.

National Flood Insurance Reform Act of 1994

- Created a new Mitigation Insurance Benefit
- Improved compliance with mandatory flood insurance purchase requirement
- Created a new Mitigation Assistance Program
- Increased flood insurance coverage limits
- Codified the Community Rating System
- Increased the flood insurance policy waiting period to 30 days

Disaster Mitigation Act of 2000 (DMA 2000)

DMA 2000 (Public Law 106-390) provided the legal basis for FEMA mitigation planning requirements for state, local and Indiana tribal governments as a condition of mitigation grant assistance. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act by repealing the previous mitigation planning provisions and replacing them with a new set of requirements that emphasize the need for state, local and American Indian tribal entities to closely coordinate mitigation planning and implementation efforts. The requirement for a state mitigation plan is continued as a condition of disaster assistance, adding incentives for increased coordination and integration of mitigation activities at the state level through establishment of requirements for two different levels of state plans. DMA 2000 also established new requirements for local mitigation plans authorized up to 7 percent of HMGP funds available to a state or for development of state, local, and tribal mitigation plans.

The Biggert-Waters Flood Insurance Reform Act of 2012

The Biggert-Waters Flood Insurance Reform Act of 2012 (Biggert-Waters) authorized and funded the national mapping program and certain rate increases to ensure the fiscal soundness of the program by transitioning the program from subsidized rates, also known as artificially low rates, to offer full actuarial rates reflective of risk.

Homeowner Flood Insurance Affordability Act of 2014

The Homeowner Flood Insurance Affordability Act of 2014 (HFIAA) repealed certain part of the previous law – Biggert-Waters, restoring grandfathering, putting limits on certain rate increases, and updating the approach to ensuring the fiscal soundness of the fund by applying an annual surcharge to all policyholders.

Disaster Recovery Reform Act of 2018 (DRRA)

On Oct. 5, 2018, the Disaster Recovery Reform Act of 2018 was signed into law as part of the Federal Aviation Administration Reauthorization Act of 2018. These reforms acknowledge the shared responsibility for disaster response and recovery, aim to reduce the complexity of the Federal Emergency Management Agency (FEMA), and build the nation's capacity for the next catastrophic event.

The law contains 56 distinct provisions that require FEMA policy or regulation changes for full implementation, as they amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act. An overview of each provision of the act can be found on FEMA's website: https://www.fema.gov/disasters/disaster-recovery-reform-act-2018.

IV. LOCAL FLOODPLAIN ADMINISTRATION

A. Become Familiar with Flood Risks

Local officials should use their flood maps, including both the community's Flood Insurance Rate Map (FIRM) as well as any DNR best available flood mapping to become familiar with the flood risks in their area. The most effective way to become familiar with those high-risk areas is to also tour the SFHAs in the community. As a best practice, a list of the structures at risk should be compiled during the SFHA tour. Additionally, if the community has Geographic Information System (GIS) staff, it may be able to compile and update this information into an electronic reference for future use.

B. Permit Process

Correct Permitting of Development Activities

By ensuring that new construction is compliant with the local floodplain ordinance, the need for future mitigation is eliminated or significantly reduced. Thus, when a flood occurs, the number of flood-damaged structures should be reduced. During a Community Assistance Visit (CAV), a community may also save time and effort in the future since information is contained in the permit file. All floodplain permit files shall be maintained in perpetuity.

1. Determining Floodplain Status

The first step in identifying if a permit(s) is/are required, is to determine the proposed or existing development's floodplain status (e.g., floodway, flood fringe). This process can be accomplished by using the community's flood maps, reviewing the Indiana Floodplain Information Portal (https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/) Best Available Floodplain Layer (BAFL) or Division of Water's Online Research Center (https://www.in.gov/dnr/water/online-research-center/), or by having a site-specific evaluation known as a Floodplain Analysis and Regulatory Assessment (FARA) initiated for the structure or development in question. A FARA is required for all "Zone A" flood hazard areas published on the FIRM, areas not on the published FIRM but identified on the BAFL, or areas designated by the local official as flood hazard areas. A FARA provides the floodplain status and the base flood elevation (BFE) for the area. Once the floodplain status is determined, state and local regulations can then be applied according to each situation.

2. Building Protection Requirements

All structures located in a community's Special Flood Hazard Area (SFHA) are required to be protected from flood damage below the Flood Protection Grade (FPG). The FPG is defined as the elevation of the regulatory flood plus 2 feet at any given location in the SFHA(312 IAC 10). The following requirements are outlined in 44 CFR 60.3 and apply to the following situations:

a. Construction or placement of all residential structures and any other new structure having a floor area greater than 400 square feet*;

b. Addition or improvement made to any existing structure where the cost of the improvement equals or exceeds 50%* of the value of the existing structure (excluding the land).

c. Reconstruction or repairs made to a damaged structure, the cost of which equals or exceeds 50%***** of the market value of the structure (excluding the value of the land) before damage occurred.

d. Installing a manufactured home on a new site or a new manufactured home on an existing site. This does not apply to returning an existing manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage and*,

e. Installing a travel trailer or recreational vehicle on a site for more than 180 days*.

**The above standards are minimum requirements. Any floodplain management regulations that are more restrictive than the criteria set forth above by the state or your community that are more restrictive are encouraged and shall take precedence (44 CFR 60.1(d)). You should refer to your community's ordinance to verify any additional requirements that may apply.*

3. Determining Cost of Repair/Improvement

This portion of the permit process typically applies to only Pre-FIRM structures in the SFHA. These are the structures built before the flood maps were developed for the community participating in the NFIP. Therefore, these structures most likely to have their lowest floor elevation below the BFE or the FPG and are at greater risk of flood damage.

Post-FIRM structures (those built after the community adopted its original flood maps) should be built in compliance with the community's floodplain ordinance and should not sustain damage unless a flood occurs that is greater than the 1% annual chance flood. Please note that any structure in an SFHA is still at risk of damage if a great enough flood event were to occur.

When determining the cost of repair/improvement, the permit official needs to have two pieces of information—the structure's pre-repair/improvement fair market value and the cost of the repair/improvement. A main objective for the permit official is to use consistency in the method used. Being consistent allows little room for argument about equality. It is important to maintain all documentation in the permit file. This will become especially important when the DNR or FEMA evaluates the community for NFIP compliance. Note that this procedure is necessary for damage sustained by a structure and includes damage from fire, wind, or other storm related damage.

a. Structure's Pre-Damaged/Improved Value

The structure's value is the fair market value of the structure only, excluding the land. Some ways of determining this value are an appraisal, a bill of sale (e.g., mobile, manufactured homes), an insurance settlement, or tax assessment records. Refer to the Substantial Improvement/Substantial Damage Desk Reference, FEMA P-758 for more detailed information.

b. Cost of Repairs/Improvements

The two main items on a cost of repair/improvement list are the materials used and the cost of labor. When looking at the materials used relative to repair/improvement cost, one must use the fair market value for these materials. This also applies to those materials that are donated. To determine the cost of labor, the Marshall & Swift Residential Cost Handbook or R.S. Means estimating guides can be a source for determining the prevailing wage in different parts of the country. Some exclusions in the cost of repair/improvement list may include debris removal, cleanup, building plans, survey costs, and permit fees. Refer to the Substantial Improvement/Substantial Damage Desk Reference, FEMA P-758, for more detailed information.

4. Substantial Improvement/Damage

Substantial improvement/damage occurs when the cost of repairs/improvements equals or exceeds 50%***** of the fair market value of the pre-damaged/improved structure.

**The above standard is the minimum requirement. Any floodplain management regulations that are more restrictive than the criteria set forth above by the state or your community that are more restrictive are encouraged and shall take precedence (44 CFR 60.1(d)). You should refer to your community's ordinance to verify any additional requirements that may apply.*

5. Building Protection Requirements/Options

Currently, the two building protection requirements/options are elevation and dry floodproofing of structures. Structures that are required to have their lowest floor elevated must be built to the FPG, which is 2 feet above the BFE. Note that other building protection requirements also apply, such as locating utilities/mechanical equipment at least to the FPG, anchoring to resist flotation and using only flood resistant materials below the FPG. Care must be taken to ensure that any enclosures beneath the lowest floor, such as a crawlspace, are constructed in compliance with the community's ordinance. **An elevation certificate containing the actual constructed lowest floor elevation should be obtained and placed in the permit file for the structure.** Should engineered flood vents be installed in an enclosed area beneath the lowest floor, an engineering certification and/or ICC-ES Report specific to the make/model of flood vent installed must be attached to the elevation certificate. Dry floodproofing applies only to non-residential structures floodproofed to the FPG. A floodproofing certificate must be obtained and maintained in the permit file.

6. Additional Permits

Depending on the site, additional permits other than the local permit may be required. For example, the Indiana Flood Control Act (IC-14-28-1) requires a state permit for construction in the floodway. Another example is a permit for a seawall along the shoreline of a Public Freshwater Lake under the Lake Preservation Act (IC-14-26-2). Other possible permits needed may be from the ISDH, IDEM, USFWS, and/or the USACE. It is important to obtain all required local, state and federal permits prior to initiating development activities.

A resource for determining what permits may be necessary from DNR and IDEM is the Indiana Waterways Inquiry Request https://www.in.gov/waterways/. This site was developed to help Indiana citizens determine when or if they need a permit to complete a project. By using this site, the applicant can easily determine if development will require a Section 401 Water Quality Certification, an Isolated Wetland Permit, a Construction in the Floodway permit, or any other permits related to development near a stream, lake, or dam.

7. Pursuing Violations

A violation occurs when construction or repairs are done without the proper permit(s) being obtained or by the failure to follow permit specifications. In these instances, the violations must be pursued. The permit official should ensure that due process is given to the violator. All options must be exhausted before harsher measures such as notification on deed (title) or denial of flood insurance are instituted. For example, a chronological timeframe of due process would include:

a. Issuing letter(s) informing of need for permit
b. Injunctions (e.g., stop work order)
c. Fines (e.g., refer to local ordinance)
d. Mitigating to the fullest extent practicable to include elevation certificate for actuarial rating
e. Notification on Deed* or Title (a legal record that a structure is not built in compliance with local code); or,
f. Request Denial of Flood Insurance* (1316) from FEMA.

**Contact the DNR Floodplain Management Section for further information.*

C. Public Awareness Campaign

To increase awareness about the risk of flooding in the community, newspaper articles or other forms of media can be used. In addition, information and educational programs can be implemented within the community. Some resources for these programs are the DNR, regional planning agencies, FEMA, USACE, NRCS, and the private sector. By bringing these issues to the forefront, the public will become more knowledgeable about the risks of building in SFHAs. As a result, individuals can make better-informed choices when dealing with this issue.

D. Develop Post-Flood Standard Operating Procedure (SOP)

In developing an SOP, a community should first develop an inventory of its resources. Individuals and groups within the community that are directly involved with flooding issues should compile a list of actions to be taken in time of flooding. Examples of individuals and/or groups are local permit official, sheriff, emergency manager, police department, fire department, veterinarian, county surveyor, volunteer groups (e.g., Red Cross), DNR, local Soil and Water Conservation District, County Cooperative Extension Service, community officials, Board of Health, Solid Waste Management Districts, and local utility companies. This team approach to floodplain management will enable the community to collaborate ideas through a diversified group effort.

One possible element to incorporate in your SOP is the establishment of a flood warning and response system. This system should include flood forecasting, warning, and emergency preparedness. The local community can coordinate with the IDHS, NWS, FEMA, and the USACE for assistance in developing a flood warning and response system.

E. Evaluation

To make your floodplain management program more efficient, you should periodically evaluate the activities that have been performed. By examining your SOP, permit process, and pursuit of violations, your community can continue to build expertise,

enhance public awareness, and ensure compliance with program requirements. By permitting new construction and substantial improvements correctly, your community and its citizens will benefit from safer structures and reduced risk of damage from flooding.

V. INDIANA LOCAL FLOODPLAIN PERMITTING PROCEDURES: A STEP-BY-STEP GUIDE

STEP 1

The first step in identifying if a permit(s) is/are required, is to determine the proposed or existing development's floodplain status (e.g., floodway, flood fringe). This process can be accomplished by using the community's flood maps, reviewing the Indiana Floodplain Information Portal (https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/) Best Available Floodplain Layer (BAFL) or Division of Water's Online Research Center (https://www.in.gov/dnr/water/online-research-center/), or by having a site-specific evaluation, known as a Floodplain Analysis and Regulatory Assessment (FARA), initiated for the structure or development in question. A FARA is required for all Zone A flood hazard areas published on the FIRM, areas not on the published FIRM but identified on the BAFL, or areas designated by the local official as flood hazard areas. A FARA provides the floodplain status and the base flood elevation (BFE) for the area. Once the floodplain status is determined, state and local regulations can then be applied according to each situation. Some communities choose to have both the National Flood Hazard Layer (NFHL) and BAFL maps added to their local GIS maps when available.

If the site of the proposed development is obviously outside of the SFHA, (Zone A, AE, AO, AH, V, or VE on the FIRM **and outside the floodway** and **fringe according to the BAFL**), the floodplain regulations do not apply. If the site of the proposed development is in the SFHA on the FIRM, but the BAFL shows the site as outside of the SFHA, then the applicant should submit a request for a FARA to obtain the BFE for the site. Once the BFE is obtained, then ground elevations at the site should be obtained. If the ground elevation data shows that the elevation is higher than the BFE, then you may regulate the site as if it is not located in the SFHA, provided the site is outside of the floodway. Keep in mind that not all streams with an upstream drainage area greater than 1 square mile have been delineated on the BAFL. It is a good practice to verify the drainage area of smaller streams at https://www.in.gov/dnr/water/online-research-center/.

If the project site is in an SFHA or is a borderline situation, proceed to Step 2.

STEP 2

Determine if the project meets the NFIP or local ordinance definition of “development”.

“Development” includes:

• construction, reconstruction, or placement of a building or any addition to a building;
• installing a manufactured home on a site, preparing a site for a manufactured home or installing a recreational vehicle on a site for more than 180 days;
• installing utilities, erection of walls and fences, construction of roads, or similar projects;
• construction of flood control structures such as levees, dikes, dams, channel improvements, etc.;
• mining, dredging, filling, grading, excavation, or drilling operations;
• construction and/or reconstruction of bridges or culverts;
• storage of materials; or
• any other activity that might change the direction, height, or velocity of flood or surface waters.

“Development” does not include activities such as the maintenance of existing buildings and facilities such as painting, re-roofing; resurfacing roads; or gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent buildings.

If the project does not meet the definition for “development”, floodplain regulations do not apply.

If the project meets this definition, continue to Step 3.

STEP 3

Have the applicant complete and submit a local Floodplain Permit Application form. The applicant must also provide location information and detailed plans for the proposed project.

A location or plat map of the site should be attached to every application form. Plans for the proposed development should also be attached showing existing and proposed conditions, including all appropriate dimensions and elevations. Continue to Step 4.

STEP 4

Now that you have more detailed information for the development, check to see if the proposed site is located in the regulatory floodway by measuring the floodway width on

the FEMA FIRM (if available) and comparing this distance to the proposed project's actual ground location. You will then want to check the Indiana Floodplain Information Portal (https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/) map to determine if the site is in a DNR-delineated floodway. (**Should there be a nearby stream without a mapped floodplain, the upstream drainage area at the site should be verified to determine if the area is larger than 1 square mile and possibly in DNR jurisdiction (i.e., is in a floodway). It is a good practice to verify the drainage area of smaller streams at https://www.in.gov/dnr/water/online-research-center/.)

If the site is located in a regulatory floodway, do not issue the local permit until the applicant obtains either an DNR permit/authorization or verification/documentation that a DNR permit is not required. A copy of the DNR permit/authorization or verification/documentation should be kept with the local permit application. Remember that a local permit cannot be less restrictive than a state-issued permit/authorization. If the site is not located in a regulatory floodway, near a public freshwater lake or a dam, only local floodplain regulations apply, and no DNR permit/authorization is needed.

If the site is in the flood fringe, as shown on the community's FIRM, the site is subject to the local floodplain regulations and does not require a permit from DNR unless it is near a public freshwater lake or within 150 feet of a dam.

If the site is in a floodplain where the floodway limits have not been identified and *the drainage area is greater than 1 square mile**, the applicant must request and obtain a FARA from DNR Division of Water that includes the base flood elevation and floodway limits. The FARA can either be obtained by sending in a FARA request form, which is available online at **in.gov/dnr/water** under "forms", or an electronic FARA (e-FARA) that can be requested online through the Indiana Floodplain Information Portal (https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/) at **INFIP.dnr.IN.gov**.

If the site is located in the floodway or in a floodplain where the floodway limits have not been identified, and the *drainage area is less than 1 square mile**, the applicant must provide an engineering analysis including a base flood elevation for the site.

**If it is uncertain whether the drainage area is greater than 1 square mile, you may request a drainage area determination from DNR. Most streams with an upstream drainage area greater than 1 square mile are also delineated and shown on the Division of Water's Online Research Center (*https://www.in.gov/dnr/water/online-research-center/*) stream drainage area map layer.*

Continue to Step 5.

STEP 5

Determine if the project includes construction of a new building or substantial improvement of an existing building.

A “building” is a structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a manufactured home, or a prefabricated building. The term also includes recreational vehicles to be installed on a site for more than 180 days.

A “substantial improvement” means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50%* of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “substantial damage” regardless of the actual repair work performed. The term does not include improvements of structures to correct existing violations of state or local health, sanitary, or safety code requirements, or any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure.”

**The above standard is the minimum requirement. Any floodplain management regulations that are more restrictive than the criteria set forth above by the state or your community that are more restrictive are encouraged and shall take precedence (44 CFR 60.1(d)). You should refer to your community’s ordinance to verify any additional requirements that may apply.*

If the project includes a new building or a substantial improvement to a building, proceed to Step 6.

If the project does not include a new building or a substantial improvement made to an existing building, go to Step 8.

STEP 6

Determine the base flood elevation (BFE) for the site. If your community has BFE information for the site in the profiles found in the FIS for the stream in question, you should determine the BFE for the proposed site from this source. Should you find this task difficult, or you require assistance, you can request a BFE for the site through the FARA process using either the FARA request form by mail or by using INFIP to request an e-FARA.

If the applicant in Step 4 previously obtained a FARA from DNR, that applicant should use the BFE information provided by DNR.

If the BFE information is not available from the FIS profile or FIRM and not previously obtained from DNR, have the applicant request the BFE for the site from the DNR Division of Water.

DNR Division of Water can only provide floodplain information for sites with upstream drainage areas greater than 1 square mile. For sites with upstream drainage areas that are less than 1 square mile, you must require the applicant to provide a hydraulic analysis that includes the BFE for the site. If it is uncertain whether the drainage area is greater than 1 square mile, you can request a drainage area determination from DNR.

Proceed to Step 7

STEP 7

If the development is the placement of a new structure, general standards must be applied, including anchoring to resist flotation, location of utilities/mechanical equipment serving the building at least to the FPG, use of only flood resistant materials below the FPG, and compliant construction (including) flood openings for enclosure below the FPG. Buildings having a floor area greater than 400 square feet*, or a substantial improvement, must either be elevated at least to the FPG or dry floodproofed at least to the FPG (non-residential only), in addition to the general standards. Review the construction plans to make sure the structure will meet the specific requirements of your community's ordinance. Protecting buildings to the FPG can be achieved by one of three methods:

a. Elevating on fill: Check the plans to ensure that the top of the fill is at or above the FPG and meets all other requirements of local, state, and federal standards. Ensure that fill extends 5-10 feet beyond the foundation of the building (in accordance with your local floodplain ordinance) before sloping below the BFE. The slopes should be no steeper than 3 feet horizontal to 1 foot vertical when using vegetative cover

b. Elevating on posts piers, columns, an enclosure below the elevated structure, or other types of similar foundation: Check the plans to ensure that:

- the structure will be properly anchored to resist collapse or flotation;
- materials used below the lowest floor are resistant to flood damage;
- all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters are located at or above the flood protection grade;
- all water and sewer pipes, electrical and telephone lines located below the flood protection grade are waterproof; and,

- if an enclosure is used, there must be permanent openings, the bottom of which are no higher than 1 foot above adjacent grade (openings of at least 1 square inch for every square foot of enclosed area subject to flooding.)

c. Floodproofing: ***This is only an option for non-residential buildings.*** A registered professional engineer must certify that the building has been designed so that below the flood protection grade, the structure and attendant utility facilities are watertight and capable of resisting the effects of the regulatory flood. The registered professional engineer must sign and certify a floodproofing certificate.

d. **Wet floodproofing: This is only an option for accessory structures with an enclosed floor area of 400 square feet or less**. Check plans to ensure:

- the structure will be properly anchored to resist collapse or flotation;
- materials used below the flood protection grade are resistant to flood damage;
- all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters are located at or above the flood protection grade.
- all water and sewer pipes and electrical and telephone lines below the flood protection grade are waterproof; and,
- the structure will be equipped with flood openings that are either designed and certified by a registered professional engineer or architect or have an ICC-ES report (engineered flood openings), or meet minimum standards for non-engineered flood openings (net open area of at least 1 square inch for every square foot of enclosed area subject to flooding.) to automatically equalize hydrostatic flood forces exerted on walls by allowing for the entry and exit of floodwaters. Flood openings must have the bottom of the openings within 1 foot of the adjacent grade.

*Some communities may be more restrictive.

Proceed to Step 8.

STEP 8

Once you are assured that the proposed project satisfies all the applicable local, state, and federal regulations pertaining to development/construction, a permit may be issued. Be sure to maintain all appropriate documentation in the applicant's permit file for your records.

Proceed to Step 9.

STEP 9

Perform site inspections to ensure that the project is proceeding in accordance with the permitted plans. For new or substantially improved structures/buildings, obtain documentation of the as-built lowest floor elevations. It is strongly suggested that this documentation be placed on an approved FEMA Elevation Certificate or Floodproofing Certificate (non-residential). If engineered flood openings/vents were installed, either an engineer's certification or ICC-ES report for the specific model installed must be obtained and a copy retained as part of the permit file.

Proceed to Step 10.

STEP 10

If it is your community's practice to issue occupancy certificates, one may be issued once all federal, state, and local requirements have been met.

Continue to Step 11.

STEP 11

Maintain a permanent record of all permit files in perpetuity (including any FARAs, e-FARAs, associated maps, elevation certifications, engineering certifications, ICC-ES reports, and floodproofing certifications), both issued and denied.

VI. PERMIT PROCEDURE FLOWCHART

See Flowchart on following page or https://www.in.gov/dnr/water/files/wa-PermitProcessFlowchart.pdf

VII. NFIP MAPS AND STUDIES

Floodplain data is furnished to participating NFIP communities by the Federal Emergency Management Agency (FEMA) to serve as the basis for local administration and enforcement of the program. For those high-risk flood areas (i.e., those with upstream drainage areas of greater than 1 square mile) either not identified on a FEMA map or not included in a FEMA detailed study, communities must obtain and use best available flood data provided by DNR.

To effectively administer the NFIP's floodplain management standards, the local officials need information on the location and characteristics of the floodplain in their communities. Specifically, local officials need to know:

Where flood hazard areas have been designated;

Whether there are floodways designated;

What the projected base flood elevation (BFE) is at various points in the community; and

How to locate development sites relative to designated flood hazard areas in order to determine flood zone designations, establish which NFIP standards apply to projects, and determine the applicable flood protection elevation for projects.

The type and amount of data and degree of detail provided varies with the phase of the NFIP in which a community is enrolled. The principal informational documents provided are the Flood Insurance Study and Flood Insurance Rate Map.

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the NFIP. The latest generation MSC serves as a streamlined product portal that provides both general and advanced user with intuitive, powerful, and free-of-charge access to flood hazard products and tools such as FIRMs, FIS, and other information that can be accessed and downloaded.

Flood Insurance Study

A Flood Insurance Study (FIS) is a published report by FEMA that examines, evaluates, and determines flood hazards for a participating NFIP community. It forms the basis for development of the Flood Insurance Rate Map and Flood Boundary Floodway Map, which are used in the administration of the NFIP's land management and construction standards during the Regular Phase of the program.

In addition to describing the study methodology and providing background on the community's flooding history, the FIS contains flood profiles used to calculate water-surface elevations for various flooding conditions, including the base flood elevation or 1% annual chance (100-year) flood. Data on the width, base flood elevation, and cross-sectional area of floodways are also given in the FIS for each stream segment studied in detail. ***See Figure VII-1***

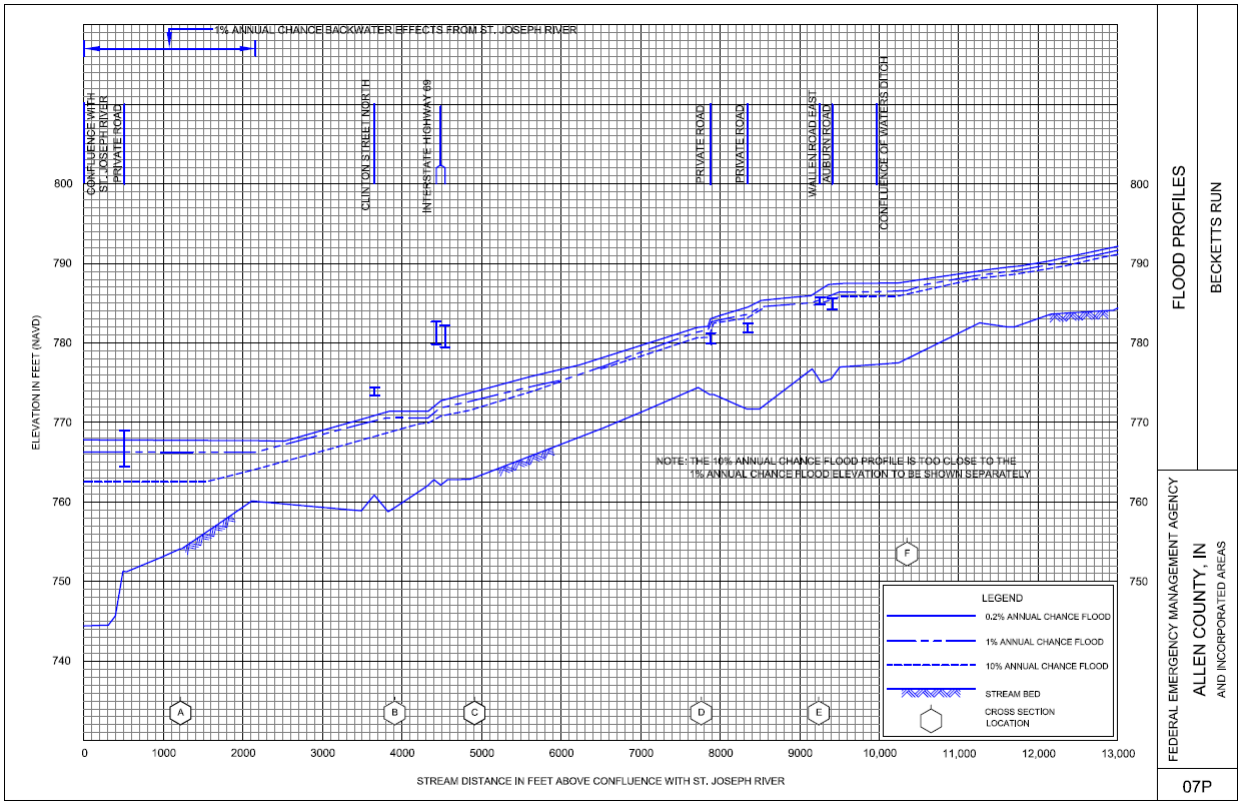

Figure VII-1 Flood Profile

Flood Insurance Studies are developed and published following a standard procedure. After a community is identified as flood-prone, and the community joins the NFIP, FEMA contracts for an FIS of the community. FEMA, its contractor, and staff from the State Coordinating Agency (DNR Division of Water) meet with local officials to determine areas of the community that are developed or are expected to be developed. These areas are examined in detail by the study contractor using hydrologic and hydraulic modeling. Parts of the community judged likely to remain undeveloped are studied by less costly approximate methods. When the contractor completes a preliminary draft of the study, a second community meeting is held to review the results. DNR Division of Water also reviews the draft study. The preliminary maps are transformed into the NFIP's standard mapping format. Review drafts of the FIS and its accompanying map(s)

are produced. After further public review and revision, these documents are finalized, accepted by the community, and published by FEMA.

Flood Insurance Rate Map

After completion of the Flood Insurance Study, a Flood Insurance Rate Map (FIRM) is issued, allowing the community's entry into the Regular Phase of the NFIP. ***See Figure VII-2***

FIRMs are used by citizens, community officials, insurance agents, lenders, federal agencies, and state agencies to determine the nature and extent of flood hazards in various portions of the community. They provide data needed to identify areas subject to flooding, determine the base flood elevation and flood risks of specific properties, and locate reference marks needed to establish the elevation of specific sites.

FIRMs are now available for viewing and printing through the FEMA Map Service Center's website. Participating communities may also have hard copies of their respective FIRM panels. A map index panel is provided for all FIRM Sets. All FIRMs provide basic orientation and location data, including cultural features such as the corporate boundaries of the community, roads, and streets (more detail may be provided in flood hazard areas), railroads, and water bodies. FIRMs also list and locate a series of ground elevation reference points or "bench" marks in flood hazard areas. These are included to assist developers and local administrators in assuring that floodplain construction conforms to the NFIP elevation requirements.

The most significant data provided on FIRMs are the calculated base (1% annual chance/100-year) flood elevations, which are given for all areas studied in detail. Flood elevation data are denoted by wavy lines crossing the floodplain (generally perpendicular to the stream) at periodic intervals. The base flood elevation is given at each line, expressed in feet above mean sea level (i.e., rounded to the nearest foot). Newer FIRMs denote the base flood elevation to the nearest tenth of a foot at each cross-section line crossing the floodplain.

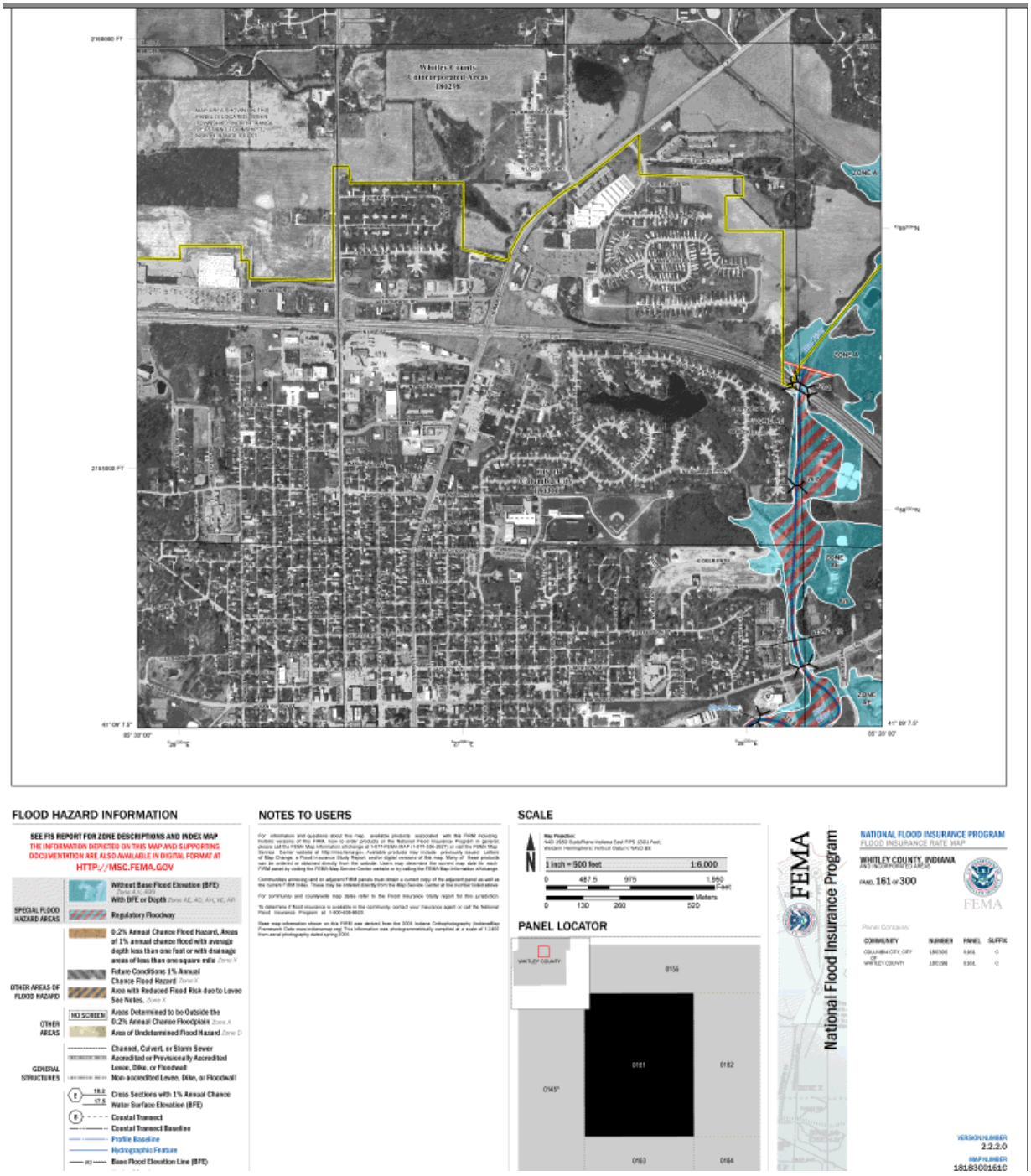

Figure VII-2 Digital Flood Insurance Rate Map

Flood Insurance Rate Map Zones:

AE ZONES Areas of 1% annual chance (100-year) flood, base flood elevations determined (post-1986 maps).

A ZONES Areas of 1% annual chance (100-year) flood, base flood elevations NOT determined.

AO ZONES Areas of 1% annual chance (100-year) shallow flooding between 1 foot and 3 feet depth, average depths determined. If depth is not shown on the FIRM, then 2 feet is assumed.

AH ZONES Areas of 1% annual chance (100-year) shallow flooding (generally ponding), base flood elevations determined.

A99 ZONES Areas of 1% annual chance (100-year) flood to be protected by construction of federal flood protection system, base flood elevations NOT determined.

X ZONES (dark shaded) Areas of the 0.2% annual chance (500-year) flood; areas of 1% annual chance (100-year) flood with depths of less than 1 foot or less than 1 square mile drainage area, or areas of 1% annual chance (100-year flood) protected by levees (post-1986 maps).

X ZONES (no shading) Areas determined to be outside 500-year floodplain (post-1986 maps)

V ZONES Coastal areas in which flood hazards are subject to wave action and velocity forces where the BFEs are not shown on the FIRM.

VE ZONES Coastal areas in which flood hazards are subject to wave action and velocity forces where the BFEs are shown on the FIRM.

FIS Floodway Data Table

The FIS Floodway Data Table indicates the locations and designations of stream cross-sections, or points along a river or stream course for which detailed data on the dimensions and flood characteristics of the floodway are provided.

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE-FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
SPY RUN CREEK								
A	4,699	160	760	3.1	757.6	757.6	757.7	0.1
B	5,861	170	855	2.7	759.8	759.8	759.8	0.0
C	7,234	69	496	4.7	762.0	762.0	762.1	0.1
D	7,762	265	866	2.7	762.8	762.8	762.9	0.1
E	8,501	250	637	3.7	764.6	764.6	764.6	0.0
F	9,557	48	302	7.8	765.7	765.7	765.8	0.1
G	10,243	275	769	3.1	768.6	768.6	768.6	0.0
H	10,560	250	529	4.4	769.5	769.5	769.5	0.0
I	11,088	259	1,364	1.7	771.6	771.6	771.6	0.0
J	11,880	540	2,121	1.1	772.2	772.2	772.3	0.1
K	14,414	540	2,034	1.2	775.3	775.3	775.4	0.1
L	14,784	195	831	2.8	775.5	775.5	775.6	0.1
M	16,685	146	730	2.2	778.5	778.5	778.6	0.1
N	19,589	455	1,372	1.2	783.7	783.7	783.8	0.1
O	21,067	281	1,030	1.6	786.9	786.9	787.0	0.1
P	22,229	85	502	2.9	790.5	790.5	790.6	0.1
Q	23,760	150	634	2.3	794.7	794.7	794.7	0.0
R	24,869	180	810	1.5	795.9	795.9	796.0	0.1
S	26,189	305	1,135	1.1	798.7	798.7	798.7	0.0

[1]Feet above confluence with St. Marys River

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

ALLEN COUNTY, IN
AND INCORPORATED AREAS

FLOODWAY DATA

SPY RUN CREEK

Figure VII-3 Floodway Data Table

Summary of Stillwater Elevations

Table 7: Summary of Stillwater Elevations

Flooding Source & Location	Elevation (Feet, NAVD 1988) 10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Big Long Lake	*	*	957.2	*
Big Turkey Lake	*	*	932.0	*
Cedar Lake	*	*	873.8	*
Dallas Lake	*	*	900.5	*
Fish Lake	*	*	939.9	*
Hackenburg (Indian Lakes)	*	*	900.5	*
Lake of the Woods	*	*	952.6	*
Little Turkey Lake	*	*	930.0	*
Martin Lake	*	*	901.9	*
Messick (Indian Lakes)	*	*	900.5	*
North Twin Lakes	*	*	845.6	*
Olin Lake	*	*	901.9	*
Oliver Lake	*	*	901.9	*
Pigeon Lake	*	*	847.7	*
Pretty Lake	*	*	967.1	*
South Twin Lake	*	*	845.6	*
Westler (Indian Lakes)	*	*	900.5	*
Witmer (Indian Lakes)	*	*	900.5	*

Public Freshwater Lakes

Public Freshwater Lakes that are primarily located in the northern part of the state may have different permitting requirements through DNR, depending on the type of development and the location in relationship to the shoreline. The summary of the still-water elevations (example above) for these lakes is typically shown in a community's FIS and has an SFHA that is mapped on the FIRM. A listing of the public freshwater lakes can be found at https://www.in.gov/dnr/water/statutes-and-rules/. Refer to the permitting guide in the appendix for sites that require a permit near a freshwater lake.

VIII. LETTERS OF MAP CHANGE

A. Why so many mapping problems?

Flood Insurance Rate Maps (FIRMS) typically use the best available approved topographic data at the time of map production and any approved detailed studies at the time of map production. Nevertheless, there is an inherent margin of error resulting in small areas that may not have been accurately captured on the mapping.

B. Legal status of the FEMA maps.

The FIRMs portray the SFHA, within which the purchase of flood insurance is required as a condition for granting a mortgage from a federally backed or federally regulated lending institution. The lender must use the boundaries of the SFHAs shown on the currently effective FIRMs to determine if mandatory flood insurance applies. Although an elevation survey may indicate that a home site is above the BFE and is technically outside the floodplain, if the home site is within the SFHA (Zones A, AE, AH, AR, A99, AO, V, or VE) on the map, flood insurance must be required by a lender.

C. How does FEMA correct the maps?

FEMA amends/revises its maps to reflect better survey or topographic information, new flood studies, channel improvements, drainage programs, or new land developments through the various type of Letter of Map Change (LOMC) processes. Letters are issued by FEMA formally removing lots or portions of lots, by legal description, from the SFHA or changing the boundaries of the SFHA. One type, Letter of Map Revision (LOMRs) are accompanied by “annotated map panels” (a portion of the FIRM showing the revised SFHA boundaries) and may include revised pages of the FIS. All are dated and distributed to the applicant. Copies are also provided to DNR and the municipality or county within which the property is located.

D. Letter of Map Amendment (LOMA):

This type of LOMC is used to revise the SFHA boundary based on detailed elevation surveying and/or topographic mapping of **natural conditions**. If the natural ground elevation of a site is at or **above** the BFE, FEMA can **amend** the map to remove the property or structure from the SFHA. A LOMA allows mandatory flood insurance purchase requirements to be removed; however, the lender always has the option of requiring flood insurance as a private banking policy. For example, a home site might be just a few inches above the BFE, so the lender thinks that there is still a threat of flood damage to their “secured property”. On the plus side, once the flood zone has been changed to X, the building qualifies for a *PREFERRED RISK POLICY*, which is the least expensive flood insurance available.

E. Letter of Map Revision, based on fill (LOMR-F):

When fill dirt is placed on property to raise the building site above the BFE, FEMA can remove the raised area from the boundaries of the SFHA, thus **revising** the FIRM. This is a man-made change to the floodplain. ***If the revision includes a change in the BFE or limits of a published floodway, FEMA must obtain concurrence from DNR.*** As with the LOMA, a LOMR-F lifts the mandatory flood insurance purchase requirement. Again, however, the lender always has the option of requiring flood insurance.

F. Letter of Map Revision (LOMR):

This is used for new detailed flood studies, drainage improvements, channel alterations, etc., for which the boundaries of the SFHA are altered. ***If the revision includes a change in the BFE or limits of the floodway, FEMA must obtain concurrence from DNR.***

G. What is a "Conditional" LOMA or LOMR?

A "Conditional" LOMA or LOMR (CLOMA or CLOMR) is one that is approved tentatively, based on construction plans. "As-built" survey information must be submitted in order for approval to be finalized. Two separate letters are issued. The LOMA or LOMR is not legally valid until the as-builts are submitted and acknowledged by the second letter.

H. What is a PMR (Physical Map Revision)?

A PMR incorporates changes to floodplains, floodways, or flood elevations that result in the production and community adoption of one or more FIRM map panels with new effective dates and may require an updated FIS. These are usually based on a complete restudy of a series of streams in a community. These are reviewed by FEMA and DNR.

I. Can only a portion of a parcel be removed?

Yes. If FEMA is provided with a legal description of the land area above the base flood elevation, they can issue a LOMA or LOMR for only a portion of the parcel. Or the LOMA or LOMR may state that only the immediate building site is removed from the SFHA, but that portions of the property remain within the SFHA, subject to all floodplain management regulations.

J. How can someone apply for a LOMA or LOMR?

A completed application form should be submitted to FEMA. The application must be accompanied by supporting survey/elevation documentation. The following forms are available for these processes:

1. MT-EZ. Used by a property owner or lessee to request removal of a single structure or single parcel of land from a designated SFHA. ***(LOMA)***

2. MT-1. Used by a property owner, lessee, or developer to remove a single structure, single parcel of land, or multiple lots from a designated SFHA. ***(LOMA, CLOMA, LOMR-F, CLOMR-F)***

3. MT-2. Used by a property owner or person with legal authority to represent a group/firm/organization or other entity to request a revision of the current FEMA map to show changes to floodplains, floodways, or flood elevations. ***(LOMR, PMR)***

K. How much does it cost?

A LOMA is free because it is based on natural conditions and **corrects** the FEMA map; however, fees are charged for LOMR-Fs and LOMRs because these are based on man-made changes. The fee is considered part of the cost of developing in a floodplain. For a current fee schedule, you can go to https://www.fema.gov/flood-maps/change-your-flood-zone/status/flood-map-related-fees or call FEMA at **1-877-FEMA MAP**.

How to Obtain LOMA/LOMR Forms:

Forms can be downloaded from https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms or call, email, or write:

Indiana Department of Natural Resources
Division of Water
402 W. Washington St., Rm. W264
Indianapolis, IN 46204
(317) 232-4160
toll free 877-928-3755
FAX (317) 233-4579
water_inquiry@dnr.IN.gov

IX. COMMUNITY RATING SYSTEM

The CRS is a component of the NFIP. Under the CRS, there is an incentive for communities to do more than just regulate construction of new buildings to minimum national standards. Under this voluntary program, flood insurance premiums are adjusted to reflect community activities that reduce flood damage to existing buildings, manage development in areas not mapped by the NFIP, protect new buildings beyond the minimum NFIP protection level, help insurance agents obtain flood data, and help people obtain flood insurance.

The objective of the CRS is to reward communities that are doing more than meeting the minimum NFIP requirements to help their citizens prevent or reduce flood losses. The CRS also provides an incentive for communities to initiate new flood protection activities. The goal of the CRS is to encourage, by use of flood insurance premium adjustments, community and state activities beyond those required by the NFIP to:

1) Reduce flood losses by

a) protecting public health and safety
b) reducing damage to buildings and contents
c) preventing increases in flood damage from new construction
d) reducing the risk of erosion damage
e) protecting natural and beneficial floodplain functions

2) Facilitate accurate insurance rating

3) Promote the awareness of flood insurance

If your community is interested in the CRS program you can find more information in the most recent CRS factsheet. You may also wish to consult with your regional planner about the requirements for application to the program.

X. INDIANA MODEL ORDINANCE

The Model Ordinance for Flood Hazard Areas is provided to assist communities in developing an ordinance that will comply with the minimum participating criteria of the National Flood Insurance Program (NFIP). It is recommended that a Community's attorney(s) consider necessary additions and include all required information and delegations to the model. It is not intended that this model, if adopted, will serve all of a Community's needs as related to floodplain management, land use, or zoning. Any Community may adopt standards that are more restrictive than the minimum NFIP standards.

The current version of the model ordinance is posted on the DNR Division of Water website, https://www.in.gov/dnr/water/files/IndianaModelOrdinance.pdf. Prior to adoption, communities should submit a draft of a proposed floodplain ordinance to the Floodplain Management Section of the DNR Division of Water for review.

XI. HAZARD MITIGATION

Hazard Mitigation is any action taken to reduce or permanently eliminate the long-term risk to human life and property from natural hazards.

A. Hazard Mitigation Grant Program (HMGP)

The HMGP was created in November 1988 by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Act. The HMGP assists states and local communities in implementing long-term hazard mitigation measures after a major disaster declaration.

The program's objectives are:

• to implement state and local hazard mitigation plans;

• to prevent future losses of lives and property due to disasters;

• to provide funding for previously identified mitigation measures that benefit the disaster area; and

• to enable mitigation measures to be implemented during immediate recovery from a disaster.

State and local governments, certain private non-profit organizations or institutions, and tribes or authorized tribal organizations are eligible to participate in the program. The HMGP can be used to fund projects to protect either public or private property. Some examples of these projects are structural hazard control, such as debris basins or floodwalls; retrofitting, such as floodproofing to protect structures from future damage; acquisition and relocation of structures from hazard-prone areas; and development of state or local standards to protect new and substantially improved structures from disaster damage.

To be eligible for the HMGP funds, the anticipated benefits of a proposed mitigation project must exceed the total project cost. Funding is based on 15% of the federal funds spent on public and individual assistance programs (minus administrative expenses) for each disaster. FEMA can fund up to 75% of the eligible costs of each project. State or local match does not need to be cash. For example, in-kind services may be used.

Once a community applies for HMGP funding, the Indiana Department of Homeland Security (IDHS) notifies the DNR of the potential project. DNR conducts a community assistance visit to evaluate the community and determine NFIP compliance. The findings of the Community Assistance Visit are provided to IDHS to incorporate in the evaluation procedure. Proposed projects must meet certain minimum criteria. These criteria are designed to ensure that the most cost-effective and appropriate projects are selected for funding. For further information, call IDHS at 317-232-2222.

B. Flood Mitigation Assistance (FMA)

FMA assists states and communities in planning and developing projects to reduce claims against the NFIP. Unlike the HMGP, this program is not dependent upon a major disaster declaration.
The main objective of the FMA is to provide technical assistance in the planning and project implementation process of the acquisition of flood-prone structures. The program is funded through an annual allotment based on each state's flood insurance policy foundation. Like the HMGP, this assistance is a 75/25 cost share program. This

program is also administered by the IDHS. For further information, contact IDHS at 317-232-2222.

C. Building Resilient Infrastructure and Communities (BRIC)

Building Resilient Infrastructure and Communities (BRIC) supports states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the prior Pre-Disaster Mitigation (PDM) program.

The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

This new program for pre-disaster mitigation began receiving applications in 2020. For further information go to https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities or contact IDHS at 317-232-2222.

XII. APPENDIX

A. GLOSSARY

A-Zone: See “Zone A”

Base Flood Elevation (BFE): The elevation of the crest of the base flood.

Base Flood: The flood having a 1% chance of being equaled or exceeded in any given year (often called the 1% annual chance flood, 100-year flood, or Regulatory Flood).

Basement: Any fully enclosed area of a building below grade on all sides.

Best Available Data: The most recent hydraulic and hydrologic information to show what the 1% annual flood elevations and floodplain boundaries are for a particular area. (Unless the drainage area of the site is less than a square mile, this data should be reviewed and approved by the DNR.)

Best Available Floodplain Layer: The “Best Available Data” in the form of a map layer for GIS applications that was developed by DNR Division of Water for most streams in the state that have an upstream drainage area 1 square mile or more and not shown on FEMA’s FIRM maps.

Building: A structure that is principally above ground and is enclosed by walls and a roof, including manufactured homes and prefabricated buildings. The term also includes recreational vehicles and travel trailers to be installed on a site for more than 180 days.

Code of Federal Regulations (CFR): A master coding system to identify the federal agency regulations that have been published in the Federal Register. 44 CFR includes all the regulations published by the Federal Emergency Management Agency.

Community Rating System (CRS): A program of the Federal Insurance Administration where communities who regulate floodplain areas above and beyond minimum NFIP requirements are rewarded for their efforts through reduced flood insurance premiums for the citizens of that community.

Development: Any man-made change to the ground that may affect flood flows. Development includes construction of buildings, filling, channel changes, dredging, grading, excavating, and storage of materials.

Elevation Certificate: A form supplied by the Federal Emergency Management Agency (FEMA) used to document pertinent elevation information such as the lowest floor of a structure and its lowest adjacent grade.

Federal Emergency Management Agency (FEMA): The federal government agency that administers the NFIP.

Federal Insurance & Mitigation Administration (FIMA): A component of FEMA that administers the NFIP and mitigation measures.

Flood Insurance Study (FIS): A booklet that provides detailed information on a community's flood hazard areas. The FIS normally includes topographic information, floodplain and floodway data charts, study information, stream profiles and, in some communities, still-water elevation tables.

Flood Fringe: Those portions of the floodplain lying outside of the floodway.

Flood Insurance Rate Map (FIRM): A FEMA map published after a FIS is completed for a community that shows areas within the 1% annual chance flood boundary.

Floodplain: The channel proper and the areas adjoining any wetland, lake or watercourse that have been or hereafter may be covered by the regulatory flood. The floodplain includes both the floodway and flood fringe.

Floodproofing: Measures taken to protect a building from flood damage that is not elevated above the FPG. Floodproofing consists of ensuring that the walls and floor are watertight and capable of withstanding hydrostatic pressures and hydrodynamic forces.

Floodway: The channel of a river or stream and those portions of the floodplains adjoining the channel that are reasonably required to efficiently carry and discharge the peak flood flow of the regulatory flood of any river or stream.

Flood Protection Grade (FPG): The elevation of the regulatory flood plus 2 feet at any given location in the SFHA.

Hydrodynamic Forces: The forces on a structure from currents, waves, debris, ice, etc.

Hydrostatic Pressure: The pressure standing water places on the walls and floor of a structure. Hydrostatic pressure of 3-4 feet of standing water can collapse walls or buckle basement floors.

Local Floodplain Administrator: The person responsible for administering and enforcing a community's floodplain ordinance. Depending on the local ordinance, this person could be the city engineer, zoning administrator, building inspector, mayor, clerk, or other official.

Letter of Map Change (LOMC) is a general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They include Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Letter of Map Revision based on Fill (LOMR-F). The definitions are presented below:

> **Letter of Map Amendment (LOMA)** means an amendment by letter to the currently effective FEMA map that establishes that a property is not located in an SFHA through the submittal of property-specific elevation data. A LOMA is only issued by FEMA.
>
> **Letter of Map Revision (LOMR)** means an official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.
>
> **Letter of Map Revision Based on Fill (LOMR-F)** means an official revision by letter to an effective NFIP map. A LOMR-F provides FEMA's determination concerning whether a structure or parcel has been elevated on fill above the BFE and excluded from the SFHA.

National Flood Insurance Program (NFIP): A federal program enabling property owners to purchase insurance protection against losses from flooding. Participation in the NFIP is voluntary and based on an agreement between local communities and the federal government that states that if a community will implement and enforce measures to reduce future flood risks to new construction in SFHAs, the federal government will

make flood insurance available within the community as a financial protection against flood losses that occur.

1% annual chance flood: The flood that has 1% chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A is subject to the 1% annual chance flood. See “Regulatory Flood”.

Special Flood Hazard Area (SFHA): Those lands within the jurisdiction of the city, town, or county that are subject to inundation by the regulatory flood.

Substantial Repair/Improvement: Repairs/improvements to a building whereby the cost of the repair/improvement equals or exceeds 50% of the market value of the building before the repair/improvement took place.

Zone A Floodplain where no base flood elevation data is provided.

Zone AE Floodplain base flood elevations are provided.

Zone AO Floodplain with sheet flow or shallow flooding, base flood depths are provided.

Zone AH Floodplain characterized by shallow ponding, base flood depths are provided.

Zone A99 Floodplain area that will ultimately be protected upon completion of an under-construction federal flood protection system.

Zone AR Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection. Mandatory flood insurance purchases requirements apply.

Zone V: The coastal area subject to a velocity hazard (wave action) where the BFEs are not determined on the FIRM.

Zone VE: The coastal area subject to a velocity hazard (wave action) where the BFEs are shown on the FIRM.

Zone X: Areas determined on newer floodplain maps to be outside the 1% annual chance flood zone (used instead of B and C zones on newer FEMA maps).

Zone X (shaded): Areas of moderate flood hazard, usually the area between the limits of the 1% annual chance (100-year) and the 0.2% annual chance (500-year) floods.

B. FORMS

1. SAMPLE APPLICATION FOR FLOODPLAIN DEVELOPMENT PERMIT

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

Office Use Only
Date Received:
File Number:

PLANNING AND BUILDING DEPARTMENT
[Address of Building and Planning Department]
Phone: **[Phone Number]**

SECTION I: Applicant and Project Information

GENERAL INFORMATION

1. No work of any kind may begin in a floodplain area designated as AE until a floodplain development permit is issued.
2. Permit application is required for development as defined in the Flood Hazard Area Ordinance that requires a Building Permit for an area designated as AE.
3. The permit may be revoked if any false statements are made in this application.
4. If revoked, all work must cease until a permit is re-issued.
5. The development may not be used or occupied until a **Certificate of Occupancy** is issued.
6. The permit will expire if no work is commenced within 6 months of the date of issue.
7. The permit will not be issued until any other necessary local, state or federal permits have been obtained.
8. By signing and submitting this application, the Applicant gives consent to the local Floodplain Administrator or his/her representative to make reasonable inspections prior to the issuance of a **Certificate of Occupancy**.
9. By signing and submitting this application, the Applicant certifies that all statements contained in the application, and in any additional attachments submitted by the Applicant, are true and accurate.

OWNER INFORMATION

Property Owner(s): _____ Mailing Address: _____

Telephone Number: _____ City, State, Zip: _____

Fax Number: _____ E-Mail Address: _____

Signature(s) of Property Owners listed above[1]:

_____

[1]Attach additional forms if there are more property owners. This permit application will not be accepted without the signature of all property owners. The signature is an acknowledgement and consent to this floodplain development permit application.

APPLICANT INFORMATION

Applicant: _____ Notes:

Telephone Number: _____

Fax Number: _____

Signature of Applicant listed above:

_____

PROJECT INFORMATION

Project: _____ Lot: _____ Block: _____

Address: _____ Subdivision: _____

_____ Legal Description: _____

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

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SECTION I: Applicant and Project Information (continued)

A. Structural Development (Please check all that apply)

Type of Structure:

- ☐ Residential (1 to 4 families)
- ☐ Residential (More than 4 families)
- ☐ Non-Residential
  - ☐ Elevated
  - ☐ Floodproofed
- ☐ Combined Use (Residential and Non-Residential)
- ☐ Manufactured (mobile) Home
  - ☐ Located within a Manufactured Home Park
  - ☐ Located outside a Manufactured Home Park

Type of Structural Activity:

- ☐ New Structure
- ☐ Addition to Existing Structure[2]
- ☐ Alteration of Existing Structure[2]
- ☐ Relocation of Existing Structure[2]
- ☐ Demolition of Existing Structure
- ☐ Replacement of Existing Structure

[2]Estimated Cost of Project: _____

B. Other Development Activities

- ☐ Excavation (not related to a Structural Development listed in Part A.)
- ☐ Clearing
- ☐ Placement of fill material
- ☐ Grading
- ☐ Mining
- ☐ Drilling
- ☐ Dredging
- ☐ Watercourse alteration
- ☐ Drainage improvement (including culvert work)
- ☐ Individual water or sewer system
- ☐ Road, street or bridge construction
- ☐ Other development not listed above (specify): _____

[2] If the value of an addition or alteration to a structure equals or exceeds 50% of the value of the structure before the addition or alteration, the entire structure must be treated as a substantially improved structure. A relocated structure must be treated as a new structure.

SECTION II: Flood Information

1. The Proposed development is located on FIRM map panel: _____(number and suffix)
2. The date on the FIRM:_____
3. The proposed development is located in _____ (AE, shaded X or unshaded X)

   If located in shaded/unshaded X, then no Floodplain Development Permit is required.
4. If the proposed development is located within a regulatory floodway of Zone AE? ☐ Yes ☐ No
5. If YES, refer to the IDNR for Construction in a Floodway. If NO, continue.

Note: If the proposed development is located within Zones AE or shaded X (critical facilities only), apply the criteria of the Flood Hazard Area Ordinance to minimize flood damages to the proposed Development and to adjacent properties as well.

For structures, the provisions of the ordinance specify that the lowest floor, including utilities, be elevated above the base flood elevation. Therefore, it is necessary that the following information be provided:

6. Base flood elevation at the site:_____ Feet above mean sea level (MSL)
7. Vertical datum used in the Flood Insurance Study, on flood maps and in surveys is_____
8. Source of the base flood elevation (BFE) ☐ FIRM (flood map)
   ☐ Flood Insurance Study Profile #: _____ ☐ Other Source (specify):_____

   (This elevation must be greater than the BFE. For non-residential structures, floodproofing may be used for protection.)
9. Elevation to which any nonresidential structure will be floodproofed: _____Feet above MSL

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

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SECTION II: Flood Information (continued)

The following documents will be required as applicable (check the included documentation):

- ☐ Plans including location of structures, water bodies, roads, lot dimensions and proposed development (grading, watercourse relocation and/or landform alterations).
- ☐ Plans drawn to scale including where applicable: details for anchoring structures, proposed elevation of lowest floor (including basement), types of water-resistant materials, floodproofing details of utilities and details of enclosures below the first floor.
- ☐ Changes in water elevation (feet) ____ Meets ordinance limits on elevation increases? ☐ Yes ☐ No
- ☐ Approval from IDNR – if the proposed development is in a "regulatory floodway"
- ☐ A copy of Wetlands Permit from the U.S. Army Corps of Engineers if required; and other local, state Federal permits. Other permit numbers:_____

SIGNATURE

I certify that to the best of my knowledge the information contained in this application is true and accurate.

Printed Name | Signature | Date

SECTION III: (Forms which may be required by the Floodplain Administrator)

ELEVATION CERTIFICATE

Required per Flood Hazard Area Ordinance (§152.26) upon placement of the lowest floor before framing continues and upon completion of construction. Certificates require completion by a Professional Land Surveyor or Registered Professional Engineer.
Refer to FEMA website for other versions of the form: Elevation Certificate

FLOODPROOFING CERTIFICATE

Required per Flood Hazard Area Ordinance (§152.26) when floodproofing is utilized for a structure. Certificates require completion by a Professional Land Surveyor or Registered Professional Engineer.
Refer to FEMA website for other versions of the form: Non-Residential Floodproofing Certificate

NO-RISE CERTIFICATE

Any project in a floodway must be reviewed by IDNR to determine if the project will increase flood heights. An engineering analysis must be conducted before a permit can be issued. The community's permit file must have a record of the results of this analysis, which can be in the form of a No-Rise Certification. This No-rise Certification must be supported by technical data and signed by a registered professional engineer. The supporting technical data should be based on the standard step-backwater computer model used to develop the 100-year floodway shown on the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM). Attached (Submit only if required to do so by the Floodplain Administrator).

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

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[Address of Building and Planning Department]
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SECTION IV: (completed by the Floodplain Administrator)

I have determined that the proposed development

- ☐ IS
- ☐ IS NOT (non-conformances to be described in a separate document)

In conformance with the Flood Hazard Area Ordinance **[Ordinance No.]** dated **[Ordinance Adoption Date]**.

A Floodplain Development Permit

- ☐ WILL
- ☐ WILL NOT (reasons for denial to be described in a separate document)

be issued, subject to any conditions attached to and made part of this permit.

Date the Floodplain Development Permit was issued by the FPA:_____

APPEALS:

Appealed to the Board of Zoning Appeals? ☐ Yes ☐ No

Hearing Date:_____

Board of Zoning Appeals decision – Approved? ☐ Yes ☐ No

Reasons/Conditions: _____

_____

NOTES:

FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

Office Use Only
Date Received:
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PLANNING AND BUILDING DEPARTMENT
[Address of Building and Planning Department]
Phone: **[Phone Number]**

SECTION V: CONSTRUCTION & CERTIFICATION (completed by the Floodplain Administrator)

ELEVATION CERTIFICATION OR FLOODPROOFING CERTIFICATION

The Applicant to provide certification of the elevation of the lowest floor or floodproofing before framing or other construction continues.

Type of certification provided: ☐ Elevation Certification ☐ Floodproofing Certification

Date of Certification: _____ Date Received: _____

Certification signed by: ☐ Professional Engineer ☐ Architect

CONTRUCTION INSPECTIONS

The Floodplain Administrator will complete this section as applicable based on inspection of the development to ensure compliance with the community's local flood damage prevention ordinance.

Inspections:

Date:_____ By:_____ Deficiencies? ☐ Yes ☐ No

Date:_____ By:_____ Deficiencies? ☐ Yes ☐ No

Date:_____ By:_____ Deficiencies? ☐ Yes ☐ No

Date:_____ By:_____ Deficiencies? ☐ Yes ☐ No

Date:_____ By:_____ Deficiencies? ☐ Yes ☐ No

"AS-BUILT" ELEVATION

The Applicant to provide as-builts and an Elevation Certification or Floodproofing Certification upon completion of construction.

Date of Certification: _____ Date Received: _____

1. The Actual ("As-Built") elevation of the top of the lowest floor, including the basement, is
   _____Feet above MSL, vertical datum:
2. The Actual ("As-Built") elevation of floodproofing protection, is
   _____Feet above MSL, vertical datum: _____

CERTIFICATE OF OCCUPANCY

I have determined that the development is in conformance with the Flood Hazard Area Ordinance (2009-13) dated August 27, 2009 and a Certificate of Occupancy

☐ MAY

☐ MAY NOT

be issued, subject to any conditions attached to and made part of this permit.

Date the Certificate of Occupancy was issued by the FPA:_____

2. SAMPLE CERTIFICATE OF OCCUPANCY

_____, INDIANA

Certificate of Occupancy

Improvement (Floodplain) Location Permit No. _____

Certificate of Occupancy No. _____ Issued: _____, 19_____

Issued to: _____

This certifies that the action of work for which an Improvement Location Permit was issued for the premises identified as:

Address: _____
_____

Other description as follows: _____

_____

_____

has been inspected and found to be in compliance with the applicable laws of the State of Indiana and the _____, _____.
(Community's floodplain ordinance)

_____

_____ (Title of Official)

_____, Indiana (Name of Community)

3. FEMA ELEVATION CERTIFICATE

The current link to the form:
https://www.fema.gov/sites/default/files/2020-07/fema_nfip_elevation-certificate-form-instructions_feb-2020.pdf

Please check on-line at fema.gov to ensure that you are using the most up-to-date form.

4. FEMA FLOODPROOFING CERTIFICATE

The current link to the form:
https://www.fema.gov/sites/default/files/2020-05/FF-086034_Nonres_Floodproofing_RE_11Feb2020.pdf

Please check on-line at fema.gov to ensure that you are using the most up-to-date form.

5. FEMA MT-EZ FORM

The following is the form in effect at the time of this publication. The current link to the form:
https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms

Please check on-line at fema.gov to ensure that you are using the most up-to-date form.

6. Sample Model Floodplain Variance and Appeals Record for Indiana

Model Floodplain Variance and Appeal Record for Indiana

A variance is a grant of relief given by a community from the terms of specific standards required in its floodplain regulations. The issuance of a variance is for floodplain management purposes only. Insurance premium rates are determined by the federal government according to actuarial risk and will not be modified by the granting of a variance. ANY VARIANCE GRANTED BY A COMMUNITY MUST BE CONSISTENT WITH THE NFIP GUIDELINES AND WITH STATE AND LOCAL LAW.

Name of Applicant: _____

Property Address: _____

Type of structure and intended use: _____

_____

1. *Floodplain Status (check which one applies)*

Floodway _____

(Note: no variances for the construction of new residences in the floodway are allowed that are not in accordance with IC 14-28-1)

Flood Fringe _____

The variance applicant must meet all criteria under Ordinance (Resolution) No. _____, IC 14-28-1, §60.6(a) of the Code of Federal Regulations (CFR), and in accordance with §60.3(d)(3) CFR, demonstrate that no increase in flood stages will result. If the applicant cannot meet all of the aforementioned codes and regulations, then do not grant the variance.

2. *Has the applicant shown that there exists a good and sufficient cause for the requested variance?*

Yes* _____ *(continue to next question)*

No _____ (*variance should not be granted)*

*A variance request by an applicant that is based on good and sufficient cause is one that solely deals with the physical characteristics of the property, subdivision lot, or land parcel under question. For further explanation, please refer to FEMA's Variance Guidelines handbook.

Please state what the good and sufficient cause is: _____

_____

_____

_____

3. *Has the applicant shown that the strict application of the terms of Ordinance (Resolution) No. _____ will constitute an exceptional hardship?*

Yes* _____ *(continue to next question)*

No _____ (*variance should not be granted)*

*The hardship that would result from failure to grant a requested variance must be exceptional, unusual, and peculiar to the property involved. Economic or financial hardship, inconvenience, aesthetic considerations, physical handicaps, personal preferences, the disapproval of one's neighbors, or homeowners' association restrictions likewise cannot, as a rule, qualify as exceptional hardship. For further explanation, please refer to Variance Guidelines.

Please state what the exceptional hardship is: _____

_____

_____

_____

_____

4. *Has the applicant shown that the approval of the requested variance will not increase flood heights, create additional threats to public safety, cause additional public expense, create nuisances, cause fraud or victimization of the public or conflict with existing laws or ordinances?*

Yes _____

No _____ (*variance should not be granted)*

*Please refer to the Variance Guidelines before answering this question.

Please state why the approval of the variance would not cause the occurrence of the aforementioned items in question #4: _____

_____

_____

_____

_____

_____

If the proposed construction meets the requirements of question #1, and questions #2, #3, and #4 were <u>all</u> answered "yes", then the body of government responsible for granting appeals may issue a variance to the terms and provisions of Ordinance (Resolution) No. _____ subject to the following standards and conditions:

(Please refer to <u>Variance Guidelines</u> for assistance in meeting the following standards and conditions.):

1. ***If the requested variance is an exception to the flood protection elevation requirements, the lot should be one-half acre or less in size and contiguous to and surrounded by lots with existing structures constructed below the flood protection elevation.***

(Reminder: If the lot is greater than one-half acre in size, applicant must submit technical justification. Please attach justification.)

2. ***If the requested variance or exception is for the construction of a structure listed on the National Register of Historic Places or the State Historic Register, please attach a letter or appropriate documentation from either agency that shows that the structure is a historic building.***

3. ***Variances are issued only to give the minimum relief necessary. Please describe what the applicant is required to do in order to provide the maximum practical flood protection. (i.e., raise all utilities to or above the base flood elevation, use flood resistant materials, and use watertight sealant)*** _____

_____

_____

4. ***The appointed body of government needs to issue a written notice to the petitioner of the variance or exception that the proposed construction will be subject to increased risks to life and property and could require payment of excessive flood premiums (Up to $25 per $100 for structural coverage). Please attach a copy of this notice.***

AN APPLICANT RECEIVING A VARIANCE TO BUILD A STRUCTURE WITH THE LOWEST FLOOR ELEVATION BELOW THE BASE FLOOD ELEVATION (One-percent Annual Chance/100-YEAR) IS HEREBY NOTIFIED THAT THE REDUCED FLOOR ELEVATION WILL RESULT IN INCREASED PREMIUM RATES FOR FLOOD INSURANCE UP TO AMOUNTS AS HIGH AS $25 PER $100 OF INSURANCE COVERAGE. CONSTRUCTION BELOW THE BASE FLOOD LEVEL INCREASES RISKS TO LIFE AND PROPERTY.

_____ _____

Applicant's Signature Date Administrator's Signature Date

RECORD OF VARIANCE ACTIONS

Variance request submitted to _____on_____(date)____

In accordance with the criteria and guidelines of the floodplain regulations in Ordinance (Resolution) No. _____ the _____ (appeal board) _____ (community name) hereby approves [ ], denies [ ] the above request for variance.

By: _____(Signature) _____, _____Title_____

Date: _____

Decisions (vote) of the board: _____

_____

Special provisions of Variance Approval: _____

_____

_____

Note: As provided in _____, those aggrieved by the decision of the appeal board may appeal such decisions to the _____.

7. FEMA's Floodplain Management Bulletin: Variances and the National Flood Insurance Program

The National Flood Insurance Program (NFIP) variances procedures are designed to help local governments protect their citizens and property from flood damages. Allowing variance to the local floodplain management standards may significantly increase the property's flood insurance rate and decrease the community's resilience. Therefore, by implementing the NFIP variance procedures, a community will ensure that alternative actions are taken that protect and encourage safe development in the floodplain. The publication below outlines the floodplain management variance criteria as set forth in Title 44 Code of Federal Regulations (CFR) Part 60, Criteria for Land Management and Use, Subpart A – Requirements for Floodplain Management Regulations, Section 60.6 (44CFR§60.6).

FEMA P-993 / July 2014

The floodplain management bulletin can be found here: Variances and the National Flood Insurance Program (P-993)

You may also contact the Division of Water for assistance in obtaining a copy at water_inquiry@dnr.IN.gov

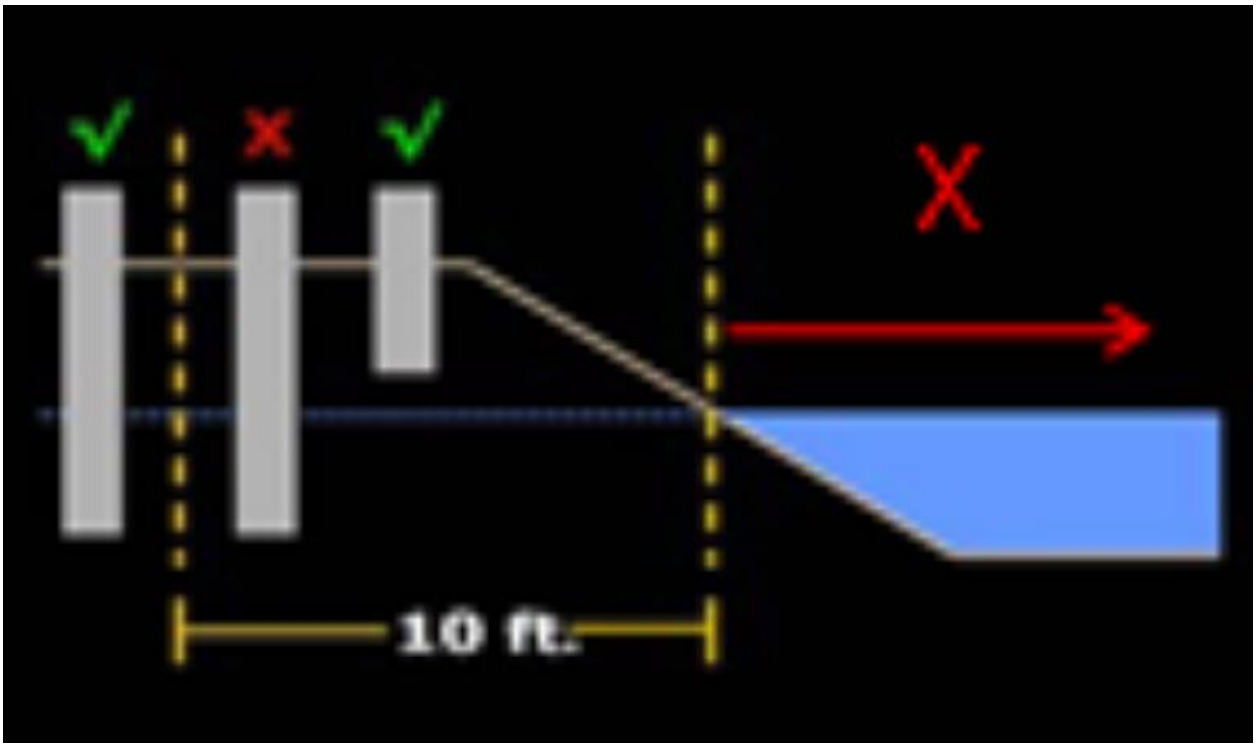
8. FEMA Publications for Assistance:

FEMA has several publications to assist property owners and local Floodplain Administrators. You can find the publications on FEMA's website at www.fema.gov. Below are a few of the publication titles that are helpful in Indiana:

The National Flood Insurance Manual
Joining the NFIP FMEA 496
CRS Coordinators Manual
FEMA Technical Bulletins 0 – 10
Increased Cost of Compliance Coverage Guidance for State and Local Officials
Answers to Questions about the NFIP F-084
Substantial Improvement/Substantial Damage Desk Reference P – 758
Above the Flood, Elevating Your Floodprone House
Elevated Residential Structures
Floodproofing Non-Residential Structures
Homeowners Guide to Retrofitting
Protecting Building Utility Systems from Flood Damage
Protecting Manufactured Homes from Floods and Other Hazards
Repairing Your Flooded Home
Variances and the National Flood Insurance Program (P-993)

9. DNR Public Freshwater Lake Jurisdiction:

DNR's authority is confined to the area at or lakeward of the shoreline of the lake, and within 10 feet of the shoreline if an impermeable structure (wall) is proposed below the Legal Lake Level (LLL). The green checkmarks in the image below indicate projects that do not require prior approval from DNR.



C. CONTACTS FOR ASSISTANCE

Indiana Department of Natural Resources (DNR)
Division of Water
402 W. Washington St., Rm W264
Indianapolis, IN 46204
317-232-4160
877-928-3755 (toll free)
water_inquiry@dnr.IN.gov

Federal Emergency Management Agency (FEMA)
Region V
536 South Clark St., 6th Floor
Chicago, IL 60605
(312) 408-5500

U.S. Army Corps of Engineers, Detroit
477 Michigan Avenue, Room 603
Detroit, MI 48231-1027
800-493-6838 (toll free)

U.S. Army Corps of Engineers, Louisville
P.O. Box 59
Louisville, KY 40201-0059
(502) 315-6766

Indiana Department of Environmental Management (IDEM)
100 N. Senate Ave.
Indianapolis, IN 46204
(317) 232-8603
800-451-6027 (toll free)

Indiana State Department of Health
100 North Senate Avenue, Room N 855
Indianapolis, IN 46204
(317) 233-7173

Indiana Department of Homeland Security
302 W. Washington St., Room E208
Indianapolis, IN 46204
(317) 232-2222

U.S. Department of Agriculture (USDA)
Natural Resources Conservation Service (NRCS)
6013 Lakeside Boulevard
Indianapolis, IN 46278-2933
(317) 290-3200

For additional information on the topics covered in this handbook please contact:
DNR Division of Water
Floodplain Management Section
402 W. Washington St., Room W264
Indianapolis, IN 46214
317-232-4160
877-928-3755 (toll free)
Fax (317)233-4579
DOWFPM@dnr.IN.gov

D. ADDITIONAL RESOURCES AND WEBSITES

Association for State Floodplain Managers (ASFPM)
8301 Excelsior Drive
Madison, WI 53717
608-828-3000
Fax (608) 828-6319
www.floods.org

Indiana Association for Floodplain and Stormwater Management (INAFSM)
PO Box 30558
Indianapolis, IN 46230
317-643-8773
Email: info@inafsm.net
www.inafsm.net

Floodproofing.com
430 Andbro Drive, Unit 1
Pitman, NJ 08071
800-507-0865
Email: info@floodproofing.com
www.floodproofing.com

Smart Vent: www.smartvent.com

Flood Flaps: www.floodflaps.com

Crawl Space Door Systems, INC
5741 Bayside Road #105
Virginia Beach, BA 23455
757-363-0005
Email: info@crawlspacedoors.com
www.crawlspacedoors.com

Risk Reduction Plus Group
866-599-7066
Fax: 856-269-4465
Email: info@riskreductionplus.com
www.riskreductionplus.com

FEMA Map Service Center: https://msc.fema.gov/portal/home

FEMA: https://www.fema.gov/

Indiana Floodplain Information Portal: https://www.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/

Division of Water Online Research Center (DoWORC): https://www.in.gov/dnr/water/online-research-center/