

SECTION 10: PERMIT REQUIREMENTS

Contents

10.1. Development Permit	10-2
10.1.1. “Development”	10-2
10.1.2. Where required.....	10-2
10.1.3. Building permits.....	10-3
10.1.4. Public projects.....	10-3
10.1.5. Small projects.....	10-4
10.2. Non-Building Requirements	10-4
10.2.1. Subdivisions	10-5
10.2.2. Water and sewer systems	10-6
10.2.3. Hazardous materials.....	10-6
10.3. Permits from Other Agencies	10- 7
10.3.1. Local agencies.....	10-8
10.3.2. Soil and water conservation districts	10-8
10.3.3. State agencies.....	10-9
10.3.4. Federal agencies.....	10-11
10.3.5. The joint permit application.....	10- 13

Note: Permits are required to ensure that proposed development projects meet the requirements of the NFIP and local ordinance. Once a person applies for a permit, the floodplain administrator can review the plans and make sure the project complies. The first step, therefore, is to get people to apply for a permit.

10.1. DEVELOPMENT PERMIT

Basic Rule #2:

A permit is required for all development in the SFHA shown on a FIRM.

10.1.1. “Development”

The NFIP requirements are keyed to “development” in the floodplain. “Development” means “any man-made change to improved or unimproved real estate.” This includes, but is not limited to:

- ◆ Construction of new structures
- ◆ Modifications or improvements to existing structures
- ◆ Fencing
- ◆ Excavation
- ◆ Filling
- ◆ Paving
- ◆ Drilling
- ◆ Driving of piles
- ◆ Mining
- ◆ Dredging
- ◆ Land clearing
- ◆ Grading
- ◆ Permanent storage of materials and/or equipment

All “development” needs a permit from the community. This is a minimum requirement of the NFIP.

44 CFR 59. Definitions: “Development” means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

10.1.2. Where required

Development permits are required for all development projects in the SFHA shown on the FIRM. Communities are encouraged to require them outside the SFHA where there is a known flood hazard or where the ground elevation is lower than the base flood elevation.

44 CFR 60.3(a)(1) [*“60.3(a) communities” that do not have a FIRM must*] *Require permits for all proposed construction or other development in the community, including the placement of manufactured homes, so that it may determine whether such construction or other development is proposed within flood-prone areas;*

According to 44 CFR 60.3(a)(1), a 60.3(a) community (one that does not have a FIRM) must require a permit for all development projects throughout the community. Each project’s location must be reviewed to determine if it has a flood risk. If it does, the best way to protect a new building from flood damage is to obtain a base flood elevation for the site and require that the building be elevated or protected to or above that BFE.

10.1.3. Building permits

Most communities have long had a system for issuing building permits but many have not had a permit system for “development.” Regulating all development in floodplains is essential because fill or other material can obstruct flood flows just as structures can.

Because a “building permit” often covers only construction or modifications of buildings, this desk reference uses the term “development permit.” All permit systems should be checked to ensure that in the floodplain, permits are being required for all projects that meet the definition of development, not just “building” projects. The following must also be regulated in addition to the tradition building projects:

- ◆ Filling and grading
- ◆ Excavation, mining and drilling
- ◆ Storage of materials
- ◆ Erection of fences and walls
- ◆ Repairs to a damaged building that do not affect structural members
- ◆ Temporary stream crossings
- ◆ Activities by other government agencies, such as roads, bridges and school buildings

If a building permit system does not require permits for these activities, then the system must be revised to enact a new type of “development permit” or otherwise ensure that people apply for a permit for these non-building projects.

10.1.4. Public projects

It is important to note that a community in the NFIP is responsible for enforcing the floodplain management regulations on all development within its jurisdiction. This includes projects implemented by other public offices, even though they may not be used to applying for floodplain permits.

Section 8 discusses the limitations of statutory authority to regulate other local units of government. However, there is no such limitation on other offices within a unit of government. While the streets or sewers departments do not have to actually apply for a permit from the building department, the community needs some system to insure that their activities meet their ordinance's regulatory standards. The regular permit process is usually the best way to do this.

10.1.5. Small projects

The floodplain administrator has some discretion to exempt obviously insignificant activities from the permit requirement, such as planting a garden, farming, putting up a mailbox, or erecting a flagpole. Routine maintenance, such as painting or re-roofing, may also be exempt.

The key is whether the project will present a new obstruction to flood flows, alter drainage, or have the potential to be a substantial improvement. These determinations can only be made by the permit official, not the builder, so make sure the exemptions are clear.

There should be no possibility of a misunderstanding resulting in construction of a flood flow obstruction or a substantial improvement without a permit. For example, such exemptions should not be allowed in drainage easements, floodways, or within 5 or 10 feet of a lot line.

Some communities specifically exempt small projects in their ordinances. This is the recommended approach, as it avoids challenges that the permit official arbitrarily decides what projects need permits. Both the northeastern Illinois and downstate model ordinance have the following language:

Development does not include maintenance of existing buildings and facilities such as re-roofing or re-surfacing of roads when there is no increase in elevation, or gardening, plowing, and similar agricultural practices that do not involve filling, grading, or construction of levees.

The floodplain administrator may be able to exempt projects (other than filling, grading, or excavating) valued at less than, say, \$1,000, or accessory buildings and sheds smaller than 70 square feet. Before doing so, IDNR/OWR and/or the FEMA Regional Office should be contacted.

10.2. NON-BUILDING REQUIREMENTS

The primary driving force of the NFIP regulations is to protect insurable buildings and reduce future exposure to flood hazards. Section 12 is devoted to the rules for ensuring that buildings comply with the NFIP and IDNR/OWR requirements.

There are some additional requirements that help ensure that the buildings stay habitable and additional flood problems are not created. This section reviews the requirements for these “non-building” development projects.

10.2.1. Subdivisions

As noted in Section 9, larger subdivisions downstate and all subdivisions in northeastern Illinois must provide base flood elevations and floodways if they are not already provided with the FIRM and Flood Insurance Study. With these data, new buildings must be properly elevated or floodproofed.

NFIP requirement - Subdivisions must also be reviewed to ensure their infrastructure is reasonably safe from flood damage.

44 CFR 60.3(a)(4) *[The community must] Review subdivision proposals and other proposed new development including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that (i) all such proposals are consistent with the need to minimize flood damage within the flood-prone area, (ii) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and (iii) adequate drainage is provided to reduce exposure to flood hazards;*

This review applies to subdivisions and other large developments, such as apartments, parks, shopping centers, schools, mobile home parks, and planned unit developments. If one is flood-prone, the builder should:

- ◆ Minimize flood damage by locating structures on the highest ground.
- ◆ Have public utilities and facilities located and constructed so as to minimize flood damage.
- ◆ Provide adequate drainage for each building site.

The site plans for new developments and proposed plats for subdivisions can usually be designed to minimize the potential for flood damage while still achieving the economic goals of the project.

Developers should be encouraged to view the floodplain as an amenity to be kept open to provide habitat and recreation and aesthetic benefits for the future occupants. For example, lot size could be reduced and the lots clustered on high ground, with building sites having views of the floodplain (see also the discussion in Section 13 and Figure 13-1).

State laws - There are two Illinois statutes specifically for subdivisions. The first is Public Act 85-267 which requires that new plats must show the location of any SFHA, base flood elevation data, and floodway delineations on the plat and must be signed, sealed, and certified by an Illinois Professional Land Surveyor.

The other statute is the Plat Act (765 ILCS 205/2). It requires that plats or plans for new subdivisions, mobile home parks, and planned unit developments (PUDs) must include a signed statement by a Licensed Professional Engineer that the plat or plans “account for changes in the drainage of surface waters.” This law is not limited to the floodplain – it affects all subdivisions throughout the watershed.

10.2.2. Water and sewer systems

44 CFR 60.3(a)(5) *[The community must] Require within flood-prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of flood waters into the systems; and*

44 CFR 60.3(a)(6) *[The community must] Require within flood-prone areas (i) new and replacement sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters and (ii) onsite waste disposal systems to be located to avoid impairment to them or contamination from them during flooding.*

The objective of these requirements is to ensure that a building that is protected from flood damage can still be used after the flood recedes.

In most instances, these criteria can be met through careful system design. Manholes should be raised above the 100-year flood level or equipped with seals to prevent leakage. Pumping stations should have electrical panels elevated above the BFE.

Septic tanks and on-site waste disposal systems should be located to ensure they are accessible during a flood and that they will not release contamination in a flood. The first objective should be to locate the system outside the flood hazard area, if that is feasible. At a minimum, an automatic backflow valve should be installed to prevent sewage from backing up into the building during flooding.

The floodplain administrator should check their municipal or county health department – it may already prohibit septic systems in the floodplain or have special design requirements that account for the wet conditions.

10.2.3. Hazardous materials

If either of the IDNR/OWR model ordinances has been adopted, then the local ordinance should have a section that reads:

No developments in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials below the flood protection elevation (FPE).

The FPE is discussed in Section 12. This provision is not a State or Federal mandate. However, it is good practice and if it's in the local ordinance, it needs to be enforced. It would be wise to have specific standards in the local ordinance.

The following lists were taken from the Corps of Engineers' Flood Proofing Regulations. The first is of items that are extremely hazardous or vulnerable to flood conditions so they should be prohibited from the SFHA or even the 500-year floodplain:

Acetone	Hydrocyanic (Prussic) acid
Ammonia	Magnesium
Benzene	Nitric acid
Calcium carbide	Oxides of nitrogen
Carbon disulfide	Phosphorus
Celluloid	Potassium
Chlorine	Sodium
Hydrochloric acid	Sulfur

The following items are sufficiently hazardous that larger quantities should be prohibited in any space below the base flood elevation:

Acetylene gas containers	Gasoline
Storage tanks	Charcoal/coal dust
Lumber /buoyant items	Petroleum products

Larger quantities of the following items should be prohibited in any space below the base flood elevation:

- Drugs
- Food products
- Matches/sulfur products
- Soaps/detergents
- Tires

10.3. PERMITS FROM OTHER AGENCIES

As required by 44 CFR 60.3(a)(2), all NFIP communities must ensure that other Federal and State permits have been obtained. A local permit should not be issued until the floodplain administrator is certain that the other agencies' requirements are met.

Minimum standards for communities are as follows: ...

(2) Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334;

The purpose of this requirement is to help assure that coordination occurs between various levels of government on projects impacting on floodplains. The requirement has the added benefit of protecting permit applicants by making sure they are aware of and obtain all of the permits necessary for a floodplain development prior to making irreversible financial investments. Permit applicants are not well served if they are allowed to proceed with a project only to have work stopped later by a Federal or State agency because they have not obtained proper permits.

Some communities allow their permit officials to issue the local permit on the condition that other required permits are obtained. However, this is not as effective as holding the local permit until the applicant can show that the other agencies have issued or will issue their permits. Otherwise, the project may get under way before being sure that it meets all legal requirements.

To implement this requirement, floodplain administrators are encouraged to develop a list of what permits are required in their jurisdiction. IDNR/OWR should be able to help.

10.3.1. Local agencies

The floodplain administrator should first check with other local offices. Each office may have some permit review authority, or interest, so the floodplain administrator must decide which projects, if any, should be run by them before issuing a floodplain development permit. The floodplain administrator should coordinate permit efforts with the following offices within the community government:

- ◆ Building department
- ◆ Planning department
- ◆ Zoning department
- ◆ Health department
- ◆ Fire marshall
- ◆ Engineer
- ◆ Public works, streets, or highways

The floodplain administrator should also check with other local governments. The following local authorities that may have jurisdiction over some aspects of floodplain development:

- ◆ The county
- ◆ Adjacent municipalities (pursuant to intergovernmental agreements)
- ◆ Drainage districts
- ◆ Levee district
- ◆ Sanitary district
- ◆ River conservancy district
- ◆ Park district
- ◆ County health department

10.3.2. Soil and water conservation districts

The soil and water conservation district can be especially helpful. Many communities have entered into intergovernmental agreements with their local district to review the impact of a

development on natural resources. The district's staff can provide an expert technical review of how the project will affect other concerns as well as flooding.

Generally, each county in Illinois has its own soil and water conservation district. Check in the county seat's telephone book under the county's name, e.g., "Kankakee County Soil and Water Conservation District." The districts are separate from county government and are co-located with the local office of the U.S. Department of Agriculture's Natural Resources Conservation Service.

10.3.3. State agencies

The Illinois Department of Natural Resources, Office of Water Resources -IDNR/OWR administers the Rivers, Lakes and Streams Act (615 ILCS 5). Under this authority, permits are required for dams, any construction within a public body of water, and construction within floodways.

In addition, map revision approvals may be required by IDNR/OWR. Here are the agencies' regulatory programs. While these may look overwhelming, things are greatly facilitated by the joint permit process discussed at the end of this section.

- **Lake Michigan:** All projects in or along Lake Michigan are subject to the Regulation of Public Waters rules (17 Illinois Administrative Code, Part 3704).
- **Northeastern Illinois:** For Cook, Lake, McHenry, DuPage, Kane, and Will Counties - all projects within designated floodways are subject to the Floodway Construction Rules (17 Illinois Administrative Code, Part 3708). Dams are subject to the Rules for Construction and Maintenance of Dams (17 Illinois Administrative Code, Part 3702).

Section 24 lists contacts for the current name, address and phone number for State permit agencies.

All projects in public waters are subject to the Regulation of Public Waters rules (17 Illinois Administrative Code, Part 3704). All floodway construction projects are subject to the Construction in Floodways of Rivers, Lakes and Streams rules (17 Illinois Administrative Code, Part 3700).

- **Downstate:** Dams are subject to the Rules for Construction and Maintenance of Dams (17 Illinois Administrative Code, Part 3702). All projects in public waters are subject to the Regulation of Public Waters rules (17 Illinois Administrative Code, Part 3704). All floodway construction projects are subject to the Construction in Floodways of Rivers, Lakes, and Streams rules (17 Illinois Administrative code, Part 3700).

Dam Safety - Construction of a dam may require an IDNR/OWR permit. "Dams" are defined as "all obstructions, walls, embankments, or barriers, together with their abutments and appurtenant works, if any, constructed for the purpose of storing or diverting water or creating a pool (not including underground or elevated tanks)."

Permit requirements for dams are determined based on the hazard classification and the dam size. All intermediate and high hazard dams require a permit. Small, low hazard dams do not

require a permit, while larger low hazard dams do. Because the hazard classification is determined by the Department of Natural Resources' Office of Water Resources, the floodplain administrator should call that office for a determination of whether a proposed dam construction project needs a permit.

Other IDNR programs - The Illinois Department of Natural Resources is also responsible for implementing statutes that conserve and preserve the State's natural resources. Under the provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661-664), IDNR is given permit review responsibilities relative to Corps of Engineers permit applications (see next section).

IDNR also administers the Interagency Wetland Policy Act of 1989 which is applicable to State agency actions and the Illinois Endangered Species Protection Act (Section 341). Consultation with IDNR under these Acts may be necessary in addition to these permit requirements. Questions pertaining to this portion of the Department's role should be addressed to IDNR's Office of Realty and Environmental Planning.

Illinois Environmental Protection Agency - The Illinois Environmental Protection Agency (IEPA) provides water quality certification pursuant to Section 401 of the Clean Water Act. This certification is mandatory for all projects requiring a Corps of Engineers Section 404 permit (see next section).

In addition to determining that the proposed work will not violate the applicable water quality standards, the IEPA makes a determination of additional permit requirements pursuant to the Illinois Pollution Control Board Rules and Regulations. Additional permits may be required for activities such as construction of sanitary sewers, water mains, wastewater and water treatment plants, landfill and mining activities, special waste hauling, disposal of dredged material, and other miscellaneous activities. Under the National Pollution Discharge Elimination System (NPDES), the IEPA also manages stormwater runoff from urban and suburban areas, construction sites, and industrial sites. Separate applications are necessary if it is determined that an IEPA permit is required.

Illinois Commerce Commission - If the project involves the construction of a power plant, utility pipelines, electric transmission or distribution lines, Illinois Commerce Commission approval may be required.

Illinois Historic Preservation Agency - The Illinois Historic Preservation Agency has authority to identify and protect certain prehistoric and historic properties. Contact the agency before permitting development, remodeling or reconstruction of historic sites or buildings.

Executive Order Number 5 (2006) - In May 1979, Governor Thompson signed Executive Order #4 (EOIV). That order established a process to ensure that all floodplain construction activities undertaken by any State Agencies are done wisely. In March 2006, EOIV was replaced with Executive Order Number 5 (2006).

In brief, Executive Order Number 5 (2006) directs all state agencies which plan, promote, regulate or permit activities, as well as those which administer grants or loans in the State's floodplain areas, to ensure that all projects meet the standards of the state floodplain regulations or the National Flood Insurance Program (NFIP) whichever is more stringent. These standards

require that new buildings be protected from damage by the 100-year flood and that construction activities in the floodplain do not cause increases in flood heights or damage to other properties. In addition, the Executive Order Number 5 (2006) requires that critical facilities be elevated above the 500-year flood. The order is closely related to Federal Executive Order 11988.

If a community suspects that a State or Federal agency is involved in any unpermitted floodplain development activities, the community should contact the IDNR/OWR. The State agency charged with the enforcement of Executive Order Number 5 (2006) is IDNR/OWR.

10.3.4. Federal agencies

FEMA - The Department of Homeland Security's Federal Emergency Management Agency (FEMA) does not directly permit development projects. The agency's role is to set minimum standards for local regulations and to provide assistance to local officials.

FEMA is involved in map revisions and often requests for map changes go hand in hand with development proposals, especially larger ones. Map revision procedures are explained in Section 7.

Executive Order 11988 - Executive Order 11988 sets minimum requirements for Federal agencies to follow when they build in the floodplain, fund projects in the floodplain, or are otherwise responsible for floodplain development. The Order does not prohibit floodplain development. It requires agencies to "consider alternatives to avoid adverse effects and incompatible development in the floodplains."

Each agency publishes its own regulations on how it administers the requirements of Executive Order 11988. Most agencies follow guidelines published by the U.S. Water Resources Council (which has since been disbanded).

Federal guidelines recommend an eight-step decision making process. The numbering of Steps 1 through 8 does not mean that the steps have to be followed sequentially. As information is gathered throughout the decision-making process, and as additional information is needed, reevaluation of lower-numbered steps may be necessary.

The following description of the eight-step decision making process has been taken from FEMA's regulations, 44 CFR Part 9, Section 9.6. Most agencies have similar language.

Step 1. Determine whether the proposed action is located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions); and whether it has the potential to affect or be affected by a floodplain or wetland.

Step 2. Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process.

Step 3. Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions, and the "no action" option). If a

practicable alternative exists outside the floodplain or wetland, FEMA must locate the action at the alternative site.

- Step 4.** Identify the potential direct and indirect impacts associated with the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action.
- Step 5.** Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step 4; restore and preserve the natural and beneficial values served by floodplains; and preserve and enhance the natural and beneficial values served by wetlands.
- Step 6.** Reevaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at Step 3 are practicable in light of the information gained in Steps 4 and 5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location.
- Step 7.** Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative.
- Step 8.** Review the implementation and post-implementation phases of the proposed action to ensure that the requirements ... are fully implemented. Oversight responsibility shall be integrated into existing processes.

U.S. Army Corps of Engineers - The primary Federal agency with permit authority over floodplain activities is the U.S. Army Corps of Engineers. The Corps has two major programs:

- ◆ Regulation of the discharge of dredged or fill materials into rivers, lakes, streams, and adjacent wetlands (Section 404 of the Clean Water Act, 33 USC 1334).
- ◆ Regulation of all construction activities on navigable waterways (Section 10 of the River and Harbor Act of 1889, 33 USC 403).

How did the Army get into floodplain management? During the 19th century, the U.S. Army Corps of Engineers was the nation's main public works agency. It had primary responsibility for facilitating water transportation. The Section 10 authority was given to the Corps in 1899 when Congress passed the Rivers and Harbors Act. Until 1968, the Rivers and Harbors Act was administered to protect only navigation and the navigable capacity of this nation's waters.

In 1968, in response to a growing national concern for environmental values, the policy for review of Section 10 permit applications was revised to include additional factors besides navigation: fish and wildlife, conservation, pollution, aesthetics, ecology and general welfare. This new type of review was identified as a "public interest review."

The Corps of Engineers' regulatory function was expanded again when Congress passed the Federal Water Pollution Control Act

See Figure 10-2 for the address and phone number of the local Corps District office.

Amendments of 1972 and then the Clean Water Act Amendments in 1977. The purpose of the Clean Water Act was to restore and maintain the chemical, physical, and biological integrity of this nation's waters.

Under the Clean Water Act, the Corps regulated wetlands until January 1, 2001, when the Supreme Court ruled on the Solid Water Agency of Northern Cook County (SWANCC) case. This ruling effectively removed the Corps' authority to regulate intrastate, isolated waters/wetlands not tributary to a navigable waterway. Now the Corps is responsible for determining the jurisdictional limits of wetlands and other "waters of the United States." Only those wetlands that are tributary to a navigable waterway are regulated by the Corps under the CWA. Some countywide ordinances are now regulating the isolated waters/wetlands that were previously regulated by the Corps.

Advice on permitting: It is recommended to contact the appropriate U.S. Army Corps of Engineers' District to discuss whether their office has jurisdiction over the project. Equally important is to contact the appropriate State and local agencies that will also be reviewing the project. Contact Federal and State regulatory agencies and request the most recent instructions and application forms due to changes in the law and updates to the regulations. The preference of most permitting agencies is to schedule a pre-application meeting to facilitate the permitting process. Pre-application meetings allow the regulatory agencies to have input on the project prior to site planning which can save the applicant time and money throughout the permitting review process.

10.3.5. The joint permit application

As the preceding sections show, there are three main agencies with floodplain-related permit programs:

- ◆ Illinois Department of Natural Resources (IDNR)
- ◆ Illinois Environmental Protection Agency (IEPA)
- ◆ U.S. Army Corps of Engineers ("COE")

While they have their own statutory authority and concerns, their interests overlap. To facilitate their permit review process, they have developed a joint permit application form (cover shown in Figure 10-1). That form is required of:

"Anyone proposing to construct, operate or maintain any dam, dock, pier, wharf, sluice, levee, dike, building, utility crossing, piling, wall, fence or other structure in, or dredge, fill or otherwise alter the bed or banks of any stream, lake, wetlands floodplain or floodway subject to State or Federal regulatory jurisdiction..."

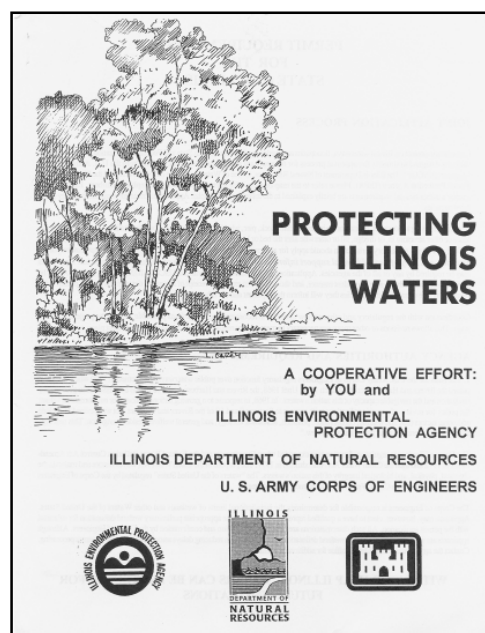


Figure 10-1: Illinois' joint application form

Copies of the joint application form and attachments are sent to each of the three agencies. Approvals may be required by any or all of the agencies. Applications filed simultaneously with them are processed concurrently and result in expedited receipt of all agency determinations. If a permit is not required by one of the agencies, they will inform the applicant and the other agencies.

Coordination with the agencies is recommended as early as possible during the project planning stage. This allows revisions or other measures necessary to meet agency requirements to be made before project plans are finalized.

This joint application form process also assures that other State and Federal agencies with a possible interest in the project will be advised. This includes the U.S. Fish and Wildlife Service, which reviews projects for their impact on endangered species.

REGULATORY JURISDICTIONAL BOUNDARIES

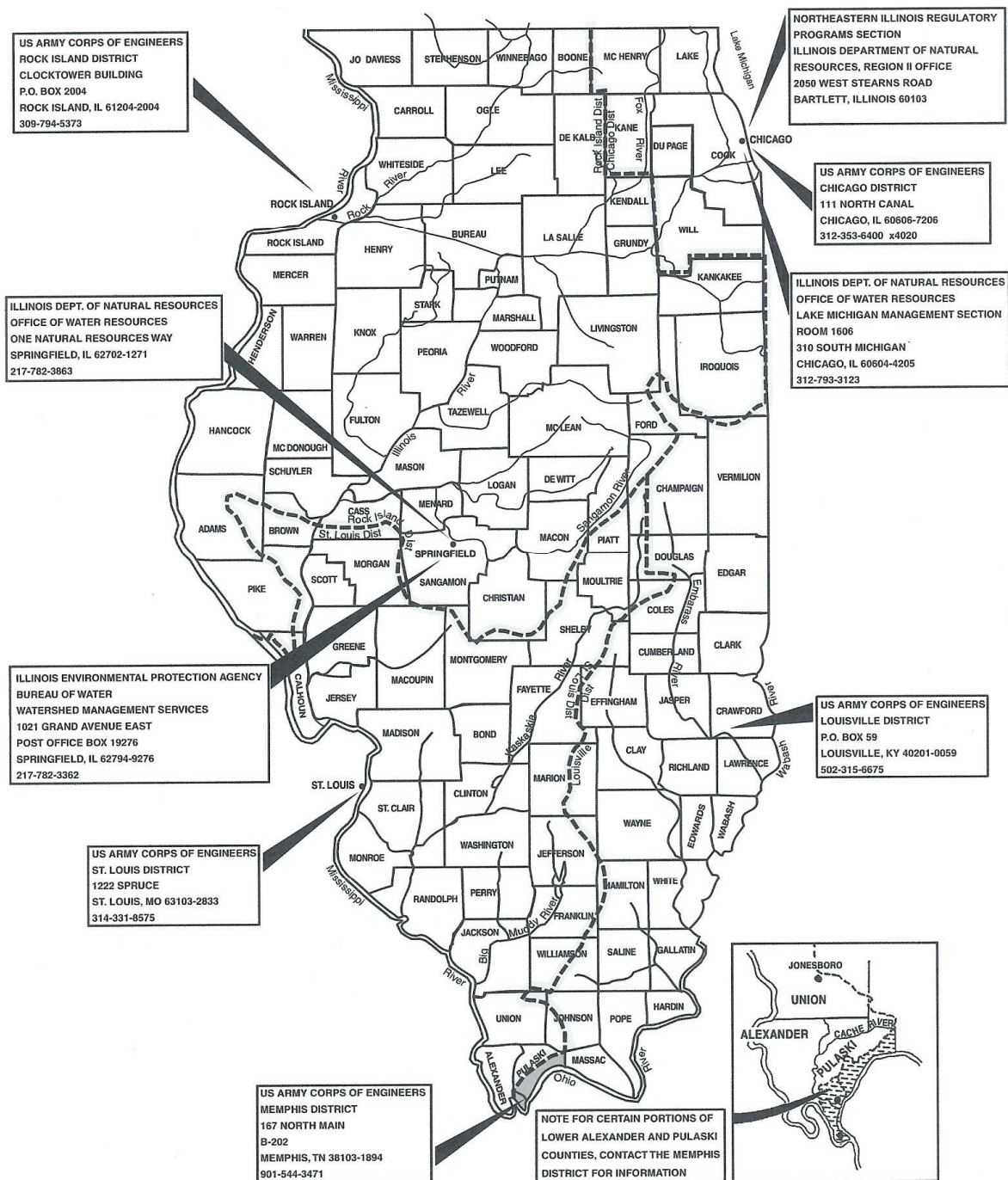


Figure 10-2: Jurisdictional boundaries for the joint permit agencies