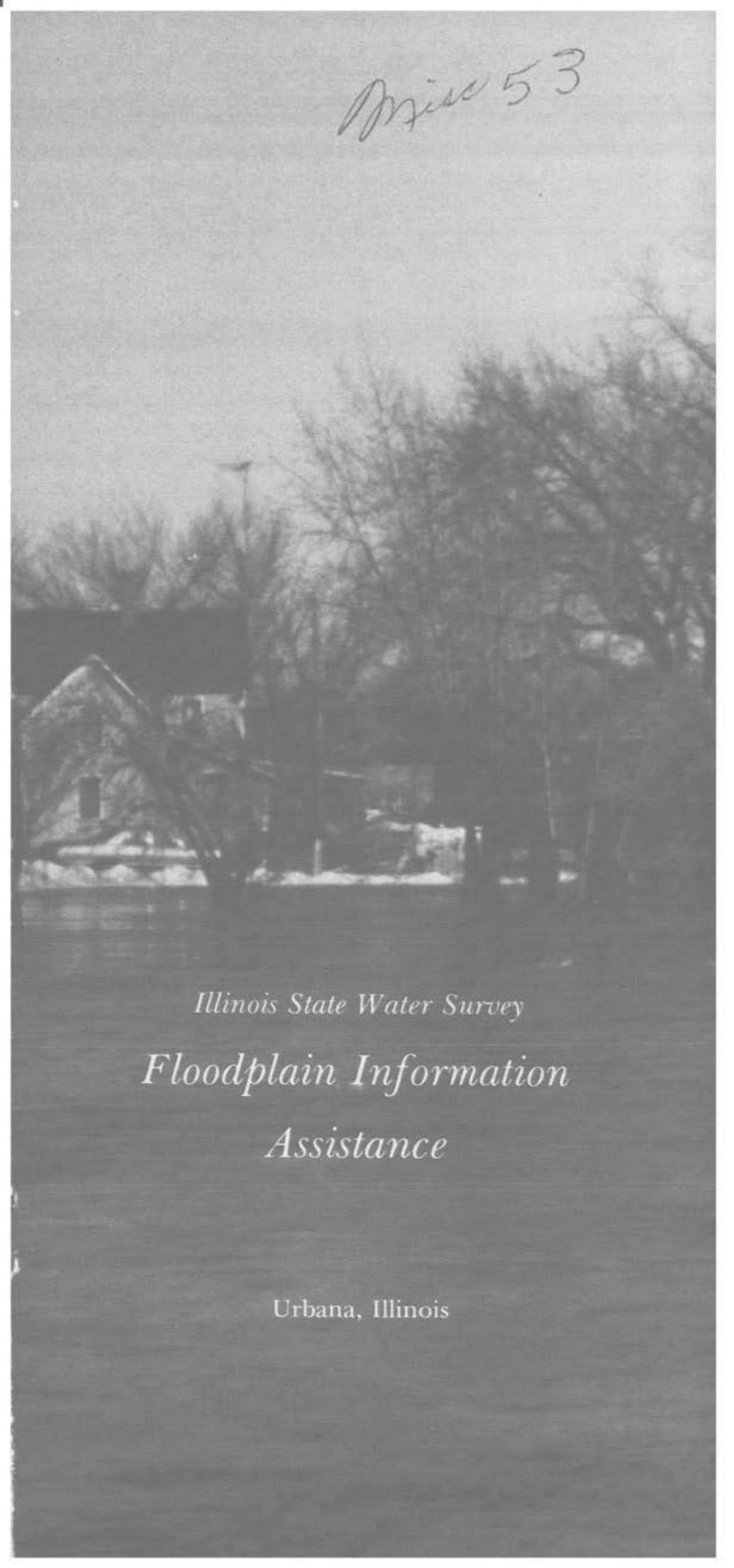


Miss 53



*Illinois State Water Survey*  
*Floodplain Information*  
*Assistance*

Urbana, Illinois

**Prepared  
in cooperation with  
Division of Water Resources  
Illinois Department of Transportation**

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# ILLINOIS FLOODPLAIN INFORMATION REPOSITORY

In cooperation with the Illinois Department of Transportation, Division of Water Resources (IDOT-DWR), the Illinois State Water Survey (ISWS) now provides two important services for local officials, engineers, and planners. This brochure summarizes the Illinois Floodplain Information Repository and ISWS review of regulatory floodplain data. A detailed explanation of these and other ISWS floodplain services is available by writing to ISWS, (see page 4) or by calling (217) 333-0447.

## 1. The Illinois Floodplain Information Repository

### A. Data Entered

The Repository is a library of engineering studies done on Illinois rivers. Currently there are over 300 federal, state, and private studies at ISWS. The following information about each study is on computer file:

- Title of report
- Author
- Type of report (flood insurance study, flood protection plan, etc.)
- Date of report
- Location of report (if not at ISWS)
- Whether the discharges are certified (see below)
- Number of streams and tributaries studied

For each stream or tributary in the reports, the following information is entered into the computer file:

- Stream name
- County
- USGS hydrologic unit number
- Limit of study
- Method of establishing profile
- Priority ranking (see below)

### B. How It Works

The computer program cross references all of

these items of information. Therefore, if an engineer or local official wants to know what studies have been done on a certain stream, the computer can produce a list of all of them. The floodplain data are not on file but can be obtained from the author.

Any agency that has produced a floodplain study is requested to contribute to the Repository. If a copy of the report cannot be spared, ISWS will send Data Entry Forms to be filled out by the author.

### **C. Priority Ranking**

Some studies are prepared by more detailed methods and are reviewed closely by local and state officials. When two reports have been made on the same stream, the report that has received the extra attention is more appropriate for floodplain regulations. Therefore, when a report is entered into the file, ISWS assigns a priority ranking to the 100-year flood elevation data as follows:

1. *State Certified Data*: Elevation data prepared for a Flood Insurance Study or IDOT-DWR Floodplain Regulations. These elevations are based on detailed cross-sectional information and a backwater analysis. They have undergone extensive review by state and local officials.
2. *Detailed Data Prepared for a Federal or State Agency*: Elevation data prepared with detailed cross-sectional information and a backwater analysis but not certified by IDOT-DWR.
3. *Other Detailed Data*: Elevations based on detailed cross-sectional information and backwater analysis but prepared for some other organization.
4. *Adjusted Flood of Record*: Elevations derived from field observations and/or historical flood elevations. This type of study uses engineering judgment to develop 100-year flood data.
5. *Flood of Record*: Elevations taken from high water marks. This type of report makes no attempt to compute the 100-year flood.

If the Repository has no studies for a stream, the requestor is advised to try one of two other sources:

6. *IDOT Bridge Computations*: Calculations done in order to receive an IDOT-DWR Work in Water Permit. The information should be available for almost every bridge built in the last 20 years. Requests should be sent to:

Illinois Department of Transportation  
Division of Water Resources  
Floodplain Management Section  
2300 South Dirksen Parkway  
Springfield, IL 62764  
(217)782-3862

7. *Depth and Frequency of Floods in Illinois*. This manual, prepared by the U.S. Geological Survey, presents a method for estimating flood data on rural streams flowing under natural conditions (no bridges, levees, ice jams, etc.). ISWS will send information on this technique to requestors.

## **2. Review of Regulatory Flood Data**

When floodplain data are to be used for regulation of construction and development, it is vital that regulating agencies use the best data available. To assist them, ISWS provides two floodplain data review services.

### **A. Flood Insurance Study Review**

All flood insurance studies that produce new detailed information go through the State Review Procedure in order to be certified by IDOT-DWR. The ISWS role is to review the 100-year flood discharges in accordance with the State Standard Method (SSM). The SSM compares the discharges with discharges compiled from a regression equation prepared by the U.S. Geological Survey.

IDOT-DWR compares the reported profiles and floodways with other studies and coordinates study review by local officials. The end result is that all flood insurance studies have their basic data double-checked and are consistent with other regulatory and 100-year flood studies. Studies that successfully make it through the State Review Procedure are certified by IDOT-DWR. Certification puts a study at the top of the priority ranking.

### **B. Review of Local Regulatory Studies**

For many areas, the only floodplain information provided by the National Flood Insurance Program (NFIP) are Flood Hazard Boundary Maps or approximate flood insurance study data. However,

other agencies or private firms may have prepared flood studies for such areas. Section 1910.3(b)4 of the *NFIP Rules and Regulations* (24 CFR, Section 1909-1910) requires local governments to obtain, review, and utilize such studies in their floodplain regulations.

Upon receipt of a flood study and a completed request form, ISWS will issue a letter stating whether such study is the best one available to the Repository and whether it should be used to meet the NFIP requirements.

There are three other types of local regulatory studies that can be reviewed by ISWS:

1. Studies done to comply with Section 1910.3(b) (3) of the *NFIP Rules and Regulations* (requires flood elevation studies for developments larger than 5 acres).
2. Studies done to comply with Section 1910.3(c) (10) (requires encroachment (floodway) studies for new construction when a flood insurance study provides only flood elevation).
3. Studies done to appeal a Flood Hazard Boundary Map or flood insurance study. ISWS will tell the requestor whether the appeal study has better data than those which went into the **NFIP** map.

### **C. Requesting a Study Review**

Copies of the Local Floodplain Study Review Request Form and the Discharge Review Form are available from the ISWS (address below). These forms explain what additional information is needed. In all four of the study review efforts by ISWS, the following requirements apply:

The request for review must come from an official of a community or county in the NFIP.

The study must be prepared by a registered professional engineer.

One copy of the submitted study will be kept for the Repository file.

**Illinois State Water Survey  
Floodplain Information Repository  
Box 232, Urbana, IL 61801**

**State Water Survey Division**

Illinois Institute of  
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