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PART 3706 REGULATION OF CONSTRUCTION WITHIN FLOOD PLAINS

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3706.1210 Definitions

AUTHORITY: Implementing and authorized by the Rivers, Lakes and Streams Act [615 ILCS 5].

SOURCE: Filed February 18, 1975; amended at 2 Ill. Reg. 47, p. 89, effective November 27, 1978; amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979; codified at 7 Ill. Reg. 3024; recodified from 92 Ill. Adm. Code 706, Department of Transportation, to the Department of Natural Resources, at 22 Ill. Reg. 7362.

SUBPART A: AUTHORITY AND PURPOSE

Section 3706.110 Authority

- a) This Part is issued under the authority of "An Act in relation to the regulation of the rivers, lakes and streams of the State of Illinois", approved June 10, 1911, as amended, [615 ILCS 5] which authorizes the Department of Natural Resources to define flood plains and to establish a permit procedure for regulating construction within such defined flood plains.
- b) Flood plain definition and regulation is limited to townships related to projects of the Department authorized by the General Assembly, or as provided by law.

Section 3706.120 Purpose

Man's activities on flood plains are subject to periodic inundation which result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. It is the purpose of this Part to protect the public health, safety, and general welfare by restricting damageable flood plain improvements and uses which increase flood damage potential elsewhere. The regulation is more specifically adopted to:

- a) Protect adjacent, upstream, and downstream private and public landowners from increases in flood heights and velocities and resulting increases in flood damages.
- b) Minimize extraordinary direct and indirect costs to governmental units caused by developments within flood plains for roads, sewer and water, flood control works, flood relief and emergency services.
- c) Reduce health and safety risks to the individual or his family or guests, prevent blighting, and prevent economic losses which detract from community well-being and the tax base.
- d) Protect individuals from buying lands which are unsuited for intended purposes because of flood hazard.
- e) Prevent water pollution, nuisances due to floating structures and debris, and increased sedimentation.

Section 3706.130 Objectives

In order to achieve the objectives of this Part, it is necessary to prohibit damaging or potentially damaging increases in flood stage or velocity caused by alterations in or encroachments upon the regulatory flood plain. All calculations of damaging or potentially damaging increases in flood stage or velocity shall assume a reasonably equal degree of encroachment of existing and potential uses in the flood plain and shall take into account the cumulative impact of such encroachment. One or more approaches may be used to prevent increased flood heights and velocities and damages to flood plain uses:

- a) Location of structures, landfills, or other construction outside of the regulatory flood plain, thus preserving the flood plain for uses which have no significant effect on the storage and conveyance of flood waters.
- b) Location of limited construction in the flood fringe in accordance with Subpart E so that construction will be in itself safe from flood damage and will preserve a regulatory floodway designed to store and discharge flood waters with no significant increases in flood stage.
- c) Elevation of structures safely above the regulatory flood protection elevation by the use of elevating members.

SUBPART B: GENERAL PROVISIONS

Section 3706.210 Boundary of the Regulatory Flood Plain

- a) The boundary of the regulatory flood plain is located where the ground surface elevation equals the regulatory flood elevation. This boundary is plotted on the State Flood Plain Map. Where interpretation is needed as to the exact location of the boundary (for example when there appears to be a conflict between a mapped boundary and actual field conditions), the regulatory flood elevation for the point in question shall be the governing factor in locating the boundary on the land. Anyone contesting the location of a boundary shall be given reasonable opportunity to submit his own technical evidence.
- b) Determination of the regulatory flood protection elevation at any point along the stream shall be made from the regulatory flood profile.

Section 3706.220 Elevations

All elevations shown on the State Flood Plain Map and on the associated regulatory flood profiles shall refer to mean sea level (1929 adjustment) or other standard datum. The datum used shall be indicated.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

Section 3706.230 Unlawful Construction on Flood Plain

- a) All construction including major structural modifications, additions, or replacement of existing structures shall be unlawful if undertaken on the herein defined regulatory flood plain after the effective date of this Part without a permit from the Department of Natural Resources. Permits will ordinarily be granted for construction which does not have significant flood damage potential and which will not increase present or future flood damages on upstream, downstream, or adjacent lands. No construction will be permitted which will singly, or cumulatively, cause significant increases in flood stage or velocity.
- b) The principles included in this Part will be followed by the Department of Natural Resources in making permit approval decisions to meet the objectives of the regulation. These principles shall be used as guidelines rather than rigid specifications and the Department shall exercise such discretion in their application as may be necessary to produce reasonable decisions.

Section 3706.240 Compliance with Requirements

Before undertaking construction on the regulatory flood plain, an applicant shall comply with all requirements set forth in applicable local government ordinances with respect to submission and

approval of preliminary and final subdivision plats, improvement plans, building and zoning permits, inspections, appeals and similar matters, as well as with those set forth in this Part and as may be required by Illinois statutes and regulations of other departments of the State of Illinois. Construction undertaken with receipt of a flood plain construction permit shall comply with all standard and special conditions of that permit.

Section 3706.250 Intention of Regulation

It is not intended by this Part to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where this Part imposes greater restrictions, the provisions of this Part shall prevail. Counties, cities and villages may adopt and enforce ordinances with greater restrictions than those of this Part.

Section 3706.260 Minimum Requirements

In their interpretation and application, the provisions of this Part shall be held to be minimum requirements and shall be liberally construed in favor of the State and shall not be deemed a limitation or repeal of any other State Statutes.

Section 3706.270 Degree of Flood Protection

- a) The degree of flood protection required by this Part is considered reasonable for regulatory purposes and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions. Flood stages may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This Part does not imply that areas outside the regulatory flood plain or construction within such flood plain will be free from all flooding or flood damages.
- b) This Part shall not create liability on the part of the Department of Natural Resources or any officer or employee thereof for any flood damages that result from reliance on this Part or any administrative decision lawfully made thereunder.

Section 3706.280 Severability

If any part of this Part is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this Part shall not be affected thereby.

SUBPART C: DELINEATION OF REGULATORY FLOOD PLAIN

Section 3706.310 Regulatory Flood

The regulatory flood generally has an average frequency of the 100-year recurrence interval flood,

based on reasonable anticipated future urbanization of the watershed.

Section 3706.320 Maps and Drawings

At the time of implementation of this Part for an individual basin, maps showing the boundaries of the regulatory flood plain and the encroachment limits, and drawings showing the bottom profile, water surface profile of the regulatory flood and regulatory flood protection elevation profile shall be developed. These maps may be used as an aid in determining whether a specific parcel of land lies within or without the regulatory flood plain. The final decision, however, shall be based on the relation of the surveyed ground elevation and the appropriate regulatory flood elevation.

SUBPART D: REGULATORY FLOODWAY

Section 3706.410 Determination of Regulatory Floodway

- a) The regulatory floodway shall be determined as that portion of the flood plain required to store and discharge flood waters without causing significant damaging or potentially damaging increases in flood heights and velocities. It is the area subject to higher velocities and inundation with appreciable depths at frequent intervals.
- b) The encroachment limits form the landward boundaries of the regulatory floodway. The encroachment limits are based on hydraulic analysis to define the outer portions of the flood plain which do not significantly contribute to conveyance or to valley storage.

Section 3706.420 Prohibited Construction

Construction which results in increased flood heights or velocities, or causes pollution, erosion, sedimentation, fire hazards, other hazards, or nuisances is prohibited.

Section 3706.430 Channel Relocation and Modification

Channel relocation and modification may be permitted provided conditions (a)(1)-(4) of Section 3706.650 are met.

Section 3706.440 Modifications, Additions or Replacement of Existing Structures

a) Modifications, additions, or replacement of existing structures which legally comply with all codes and regulations may be permitted so long as the new construction does not increase the flood damageable floor area (excluding basement floor area) of the existing structure by more than twenty (20) percent, and does not obstruct flood

flows. Existing structures, as used in this Part, are structures in existence at the time the State Flood Plain Regulations become effective for the watershed in which the structure is located.

b) Floodproofing activities are permitted and encouraged, but must comply with Department and local floodproofing ordinances.

(Source: Amended at 2 Ill. Reg. 47, p. 89, effective November 27, 1978)

SUBPART E: REGULATORY FLOOD FRINGE

Section 3706.510 Determination of Regulatory Flood Fringe

Where appropriate, the regulatory flood fringe shall be determined. The flood fringe, subject only to shallow inundation and low velocity flows, plays a relatively insignificant role in storing and discharging flood flows. Encroachment limits which form the channelward boundary of the flood fringe shall be determined using hydraulic engineering principles. Equal portions of conveyance shall be removed from each side of the flood plain.

Section 3706.520 Use of Flood Fringe

- a) If computed as described in Section 760.510 the flood fringe may be filled or otherwise used without significantly increasing flood heights, velocities or damages.
- b) A wide range of uses may be permitted in the flood fringe providing such uses are protected to the regulatory flood protection elevation. Several methods may be used to provide this protection as specified in Section 3706.530. However, no use will be permitted which results in water pollution, increased sedimentation, internal drainage problems, increased threats of fire or other nuisance or threats to public safety. Protection of construction to the regulatory flood protection elevation must, in most instances, be provided through landfill. However, other methods of flood plain development which causes no significant increase in stage or velocity may be permitted if supported by adequate engineering data. Construction undertaken with a flood plain construction permit shall comply with the standard and special conditions of that permit.
- c) Once an area has been filled or otherwise protected in compliance with an approved construction permit, subsequent construction within the protected area, above the regulatory flood protection elevation, may proceed without further permits if all local requirements such as zoning and building permits are met.

Section 3706.530 Providing Flood Protection

The following are acceptable methods for providing flood protection:

a) Permanent Landfills

Permanent landfills may be permitted as a means of providing safe construction sites, provided:

- 1) The landfill, except in exceptional circumstances, is contiguous with the boundary of the regulatory flood plain and shaped, in plan, so as not to create adverse velocities or current patterns.
- 2) The surface of the landfill is at or above the regulatory flood protection level.
- The channelward face of the fill shall be protected against erosion. If protected by vegetative cover, slopes shall be no steeper than 3 horizontal to 1 vertical. Steeper slopes shall be protected by riprap. A vertical bulkhead may be used if adequately founded and protected against scour.
- 4) Fill shall be of such material and so compacted to provide adequate support under saturated conditions and shall be otherwise suitable for the use intended.
- 5) Adequate

b) Elevated Structures

Structures may be permitted provided:

- 1) The superstructure and its major access is raised above the regulatory flood protection elevation by elevating members.
- 2) The structure and its intended use will not be damaged by the regulatory flood.
- 3) The elevating members are designed to withstand saturated conditions, hydrostatic pressure, and to minimize scouring.
- 4) The size, shape, spacing, and alinement of elevating members are selected to minimize turbulence and deflection of current patterns, and to facilitate easy passage of ice and debris.
- 5) Superstructures and major access shall have low steel or low concrete at or

above the regulatory flood protection elevation.

6) Utility services to the structure shall be elevated above the regulatory protection elevation or adequately floodproofed.

c) Structural floodproofing

Structural floodproofing will be permitted only in special circumstances where other techniques for flood protection are impossible or impractical. Floodproofing measures shall be designated consistent with the regulatory flood protection elevation for the particular area, flood velocities, durations, rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with regulatory flood. The Department may require that the applicant submit a plan or document certified by a registered professional engineer that the floodproofing measures are consistent with the regulatory flood protection elevation and associated flood factors for the particular area. The following floodproofing measures may be required (without limitation because of specific enumeration):

- 1) Anchorage to resist flotation and lateral movement.
- 2) Installation of watertight doors, bulkheads, and shutters, or similar methods of construction.
- 3) Reinforcement of walls to resist water pressures.
- 4) Use of paints, membranes, or mortars to reduce seepage of water through walls.
- 5) Addition of mass or weight to structures to resist flotation.
- 6) Installation of pumps to lower water levels in structures.
- 7) Construction of water supply and waste treatment systems so as to prevent the entrance of floodwaters.
- 8) Pumping facilities or comparable practices for subsurface drainage systems for buildings to relieve external foundation wall and basement flood pressures.
- 9) Construction to resist rupture or collapse caused by water pressure or floating debris.

- 10) Installation of valves or controls on sanitary and storm drains which will permit the drains to be closed to prevent backup of sewage and storm waters into the buildings or structures. Gravity draining of basements may be eliminated by mechanical devices.
- 11) Location of all electrical equipment, circuits, and installed electrical appliances in a manner which will assure they are not subject to flooding and to provide protection from inundation by the regulatory flood.
- 12) Location of any structural storage facilities for chemicals, explosives, buoyant materials, flammable liquids or other toxic materials which could be hazardous to public health, safety, and welfare in a manner which will assure that the facilities are situated at elevations above the height associated with the regulatory flood protection elevation or are adequately floodproofed to prevent flotation of storage containers, or damage to storage containers which could result in the escape of toxic materials into floodwaters.

Section 3706.540 Floodproofing Activities

- a) Modification, additions, or replacement of existing structures shall be permitted which do not increase the flood damageable floor area (excluding basement floor area) of the existing structure by more than twenty (20) percent. Existing structures, as used in this Part, are structures in existence at the time the State Flood Plain Regulations become effective for the watershed in which the structure is located.
- b) Floodproofing activities are permitted and encouraged, but must comply with local floodproofing ordinances. Existing structures may be protected by levees or floodwalls.

(Source: Amended at 2 Ill. Reg. 47, p. 89, effective November 23, 1978)

SUBPART F: REGULATORY FLOOD PLAIN PROVISIONS

Section 3706.610 Temporary Fills

Temporary fills, such as cofferdams or fills used during construction, are permitted, provided the permittee assumes full liability for flood damages caused by the existence of the temporary fill. The Department may require the posting of a performance bond as a special condition of the permit.

Section 3706.620 Protection and Construction

a) When failure or interruption of service of roadways, bridges, or public utilities would

endanger public health or safety, roadways, bridges, or public utilities shall be protected to the regulatory flood protection elevation. In other instances where only economic losses are threatened, protection shall be provided to the extent practical. For minor or auxiliary roads or utilities, a degree of protection less than the regulatory flood may be justified.

- b) Anyone constructing roadways, bridges and public utilities within the regulatory flood plain shall either:
- 1) Provide waterway openings adequate to pass the regulatory flood with no increase in flood stage, or
 - 2) Provide, through legal means, compensation for possible damage due to backwater effects. Usually, this option would require the following actions:
 - A) Establish backwater effects of preliminary hydraulic design of proposed bridge.
 - B) Estimate present and potential flood damages created by this backwater.
 - C) Successively repeat steps (A) and (B) to identify the optimum hydraulic design.
 - D) If the design of step (C) creates significant backwater, secure adequate land evaluation data and land ownership determinations to identify parcels affected.
 - E) Secure land rights-purchase, flowage easement, quitclaim, negotiated damages, etc. as required to compensate those damaged.
- c) The following provisions shall apply to all applicable construction:
 - 1) Overhead crossings such as transmission lines shall be constructed in a manner which will provide adequate clearance above the regulatory flood protection elevation for navigation purposes.
 - 2) Buried crossings such as pipelines shall be at least 3 feet below the channel bottom.
 - 3) Modification, addition and replacement of existing roadways, bridges, and public utilities shall be permitted providing adequate compensation is made

for the backwater effects of new flow obstructions.

Section 3706.630 Storage of Materials

Materials that are buoyant, flammable, explosive, or could be injurious to human, animal or plant life shall be stored at or above the regulatory flood protection elevation, floodproofed, or protected by structural measures consistent with the standards set forth herein. Storage of materials likely to cause water pollution, in the event of flooding, is prohibited unless adequate safeguards approved by the Illinois Environmental Protection Agency are provided.

Section 3706.640 Emergency Repairs

Emergency repairs and replacements which will not threaten public health or safety may be constructed without a permit. If the construction would normally require a permit, application for such permit must be made as soon as practical. Construction must be removed if it does not conform to State standards.

Section 3706.650 Government Projects

- a) Government projects for flood damage control or other water management purposes authorized by law which do not meet the specific requirements but do not meet the intent of this Part will be permitted provided:
 - 1) The project does not increase flood damage potential.
 - 2) Any increase in flooding above, below, or through the project area is compensated by project design.
 - 3) The plans, specifications and provisions for securing required land rights have been approved by the Department.
 - 4) A sponsoring agency is authorized and has accepted full responsibility for operation, maintenance, and repair of the project.
- b) For purposes of this Part, government projects are those undertaken by units of government which possess condemnation powers and which can reasonably be assumed to have an infinite life.

Section 3706.660 Evaluation of Existing Protection

a) Protection afforded by existing dikes, levees, floodwalls and similar structures will be evaluated during delineation of the regulatory flood plain. If the existing levee

provides protection to the regulatory flood protection elevation, to include adequate freeboard, the boundary of the regulatory plain will be located channelward of the levee. Regulatory flood plains will then be delineated along interior streams, based on their regulatory flood discharge. If the existing levee does not provide protection to the regulatory flood protection elevation, the regulatory flood plain will be delineated as if the levee does not exist.

b) Construction of new levees may be permitted as a government project as provided in Section 3706.650. Protection must be provided equivalent to that provided by filling to the regulatory flood protection elevation.

SUBPART G: ADMINISTRATION

Section 3706.710 Administration and Enforcement

The Office Director, Office of Water Resources, shall administer and enforce this Part. Permits will be executed by the Director of Natural Resources, based on the examination and recommended approval of the Office Director, Office of Water Resources.

Section 3706.720 Application for Permit

- a) The Office of Water Resources form "Application for Permit" shall be used for applying for a permit for construction within a regulatory flood plain.
- b) Where a permit is also required under any Section other than Section 65(f) of "An Act in relation to the regulation of the rivers, lakes and streams of the State of Illinois", approved June 10, 1911, as amended [615 ILCS 5] a single application shall suffice.

Section 3706.730 Application Submittal

- a) Two completed copies of the application for permit and three sets of plans and specifications which provide sufficient information to determine the effect of the construction on the conveyance of flood waters must be submitted.
- b) All required field surveys shall be conducted under the supervision of a Registered Professional Engineer or Registered Land Surveyor, and be so certified.

Section 3706.740 Special Conditions

When necessary to accomplish the purposes of this Part, special conditions may include deed restrictions, performance bonds or sureties, as-built certifications, maintenance guarantees,

floodproofing requirements, fill, dike, or levee requirements, control of the design and location of structures, landscaping, and other specifications related to the accomplishment of the purpose of this Part. When as-built certification is included as a special condition, the required key elevations or critical dimensions will be specifically identified. The provisions of Section 3706.730(b) apply.

Section 3706.750 Coordination with Local Government Requirements

Procedures necessary to coordinate this flood plain regulation with existing permit requirements of applicable counties, cities, and villages will be established prior to implementation. Certification of compliance with local regulations may be required prior to permit issuance.

Section 3706.760 Notice of Application

The Office of Water Resources will provide notice of each application for construction in the regulatory floodway to appropriate regional planning commissions, county and municipal agencies and adjacent landowners, requiring objections to be filed within 21 days. However, the basis for final decision on permit issuance will be the principles stated in Subpart D and F, and compliance with local regulations.

SUBPART H: VIOLATIONS

Section 3706.810 Violations

Construction in violation of the standards established in this Part shall be prosecuted to the full extent of the enforcement powers of the Department of Natural Resources as provided in 615 ILCS 5/25.

SUBPART I: AMENDMENTS

Section 3706.910 Amending or Repealing this Part

The provisions of this Part may be amended or repealed in accordance with the Illinois Administrative Procedures Act [5 ILCS 100].

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

Section 3706.920 Change of Regulatory Profile, Floodway, and Flood Plain

a) The regulatory profile, floodway, and flood plain shall not be changed on the basis

of a proposed flood control structure or channel improvement. The regulatory profile, floodway, or flood plain may be changed after the structure or channel improvement is constructed and operative.

- b) The regulatory profile, floodway, or flood plain shall not be changed unless it has been shown that the original delineation is in error or there are changed conditions which require modification of the original computations. Any person contesting the correctness of the delineation shall be given reasonable opportunity to submit his own technical evidence of error or changed conditions.
- c) If the Department determines that such error or changed conditions exist, and would result in significant changes in the regulatory profile, floodway, or flood plain delineation, the Department will prepare appropriate exhibits indicating the proposed changes, and will make them available for public review. In addition, the Department will issue a public notice describing the proposed modifications and providing appropriate opportunity for public comment.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

SUBPART J: VARIANCES

Section 3706.1010 Variances

Variances from the regulatory flood protection elevation requirements of Sections 3706.520 and 3706.530 will be considered for structures which are insurable under the National Flood Insurance Program. Variances will be considered in accordance with the requirements of Title 24 CFR 1910.6(a). Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or Illinois Historic Sites Survey without regard to the procedures set forth on this Article, if the reconstruction, rehabilitation, or restoration cannot be achieved without such variance.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

Section 3706.1020 Application for Variance

- a) The applicant for a variance shall provide such information as the Department may require to determine whether the following requirements have been met:
 - 1) The applicant must show good cause why the structure should not be required to comply with the regulatory flood protection requirements of Section 3706.520.

- 2) The applicant must demonstrate that exceptional economic hardship will result to the applicant without a variance from the regulatory flood protection elevation requirements of Section 3706.520.
- 3) The applicant must show that, except for increased flood damage potential necessarily arising from a variance, the construction otherwise will conform to the rules of the Department.
- 4) The applicant must show that the variance is the minimum necessary to afford relief.
- The applicant must have obtained approval by the appropriate county or municipality of a variance conforming to 24 CFR 1910.6(a) for the structure, and the county or municipality must be a participant in good standing in the National Flood Insurance Program.
- b) In order to show economic hardship, the applicant must establish that compliance with the regulatory flood protection elevation requirements of Section 3706.520 must result in an actual, identifiable increase in costs which significantly exceeds in equivalent terms an estimated reduction in
 - 1) expected flood losses or
 - 2) actuarial rate flood insurance premiums over the estimated useful life or economic life of the structure.
- c) To assist the applicant in making such comparison, the Department shall, if requested by the applicant, provide a forecast for completion of an authorized flood control project for which the Department would subsequently amend the regulatory flood plain under Section 3706.920.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

Section 3706.1030 Increase Premium Rates

The applicant for a variance must state that he understands that the variance will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and that the structure is subject to increased risks to life and property.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

Section 3706.1040 Permit Content

Every permit issued under the provisions of this Article shall contain a description of the variance, an estimate of the expected flood losses or actuarial rate flood insurance premiums, and a requirement for notice of the estimated flood losses or premiums to any prospective buyer.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

SUBPART K: APPEALS

Section 3706.1110 Appeals

The report of the Department which establishes this flood plain regulation, and, subsequently, the issuance or denial of flood plain construction permits by the Department shall be considered final administrative decisions and are subject to judicial review in accordance with the provisions of the Administrative Review Law [735 ILCS 5]

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)

SUBPART L: DEFINITIONS

Section 3706.1210 Definitions

Unless specifically defined below, words or phrases used in this Part shall be interpreted so as to give them the meaning they have in common usage and to give this Part its most reasonable application.

"Authorized Flood Control Project" -- A project which all authorizations required by law for construction, including any required for expenditure of construction funds, have been secured.

"Channel" -- A natural or artificial watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing water. The top of the banks form dividing lines between the channel and the overbank portion of the flood plain.

"Construction" -- The placement or erection of structures or earthworks; land filling, excavation or other non-agricultural alternation of the ground surface; installation of public utilities; channel modification; storage of materials or any other activity undertaken to modify the existing physical features of a flood plain with respect to the storage and conveyance of flood waters.

"Conveyance" -- Capacity of the valley cross section to discharge flood flows at the regulatory flood stage.

"Encroachment Limit" -- A smoothed line based on hydraulic analysis indicating the maximum channelward encroachment which may be undertaken without significantly increasing flood stage. The encroachment limit forms the common boundary of the flood fringe and regulatory floodway. On small streams and steepwalled valleys, the encroachment limit may coincide with the boundary of the regulatory flood plain.

"Equal Degree of Encroachment" -- A method of determining the location of encroachment limits so that flood plain lands on both sides of a stream are capable of conveying a proportionate share of flood flows. This is determined by considering the effect of encroachment on the hydraulic efficiency of the flood plain along both sides of a stream for a significant reach.

"Flood" -- A temporary rise in stream level that results in inundation of areas not ordinarily covered by water.

"Flood Damage Potential" -- Susceptibility to economic loss caused by flooding, such as inundation and damage to contents, structural damage, loss of occupancy or use, or interruption of normal services. Threats to health and safety such as contamination of public water supplies, danger of drowning or electrocution, interruption of emergency services caused by flooding, failure of on-site waste disposal, and blighting of structures. Nuisances to adjacent lands caused by sediment or erosion, or the flotation of materials which may jam bridges or litter other lands.

"Flood Fringe" -- Those portions of the regulatory flood plain outside the regulatory floodway. Structures and fill placed within the flood fringe will not significantly increase flood stages. The flood fringe could be quite wide on large streams, quite small or nonexistent on small streams.

"Flood Plain" -- That land adjacent to a body of water which has been or may be hereafter covered by flood water including but not limited to the regulatory flood.

"Pollution" -- Pollution shall be as defined in the Environmental Protection Act [415 ILCS 5] or the Rules and Regulations enacted under that Act (35 Ill. Adm. Code).

"Regulatory Flood Plain" -- That land adjacent to a body of water with ground surface elevation at and below the regulatory flood elevation.

"Regulatory Flood Profile" -- A graph showing the relationship of water surface elevation of the regulatory flood to location along the stream.

"Regulatory Flood Protection Elevation" -- An elevation of one foot above the

regulatory flood elevation which provides freeboard protection against ice jams, waves, and debris.

"Regulatory Flood Stage" -- The water surface elevation to be expected during discharge of the regulatory flood.

"Regulatory Floodway" -- That portion of the regulatory flood plain required to store and convey the flood water of the regulatory flood with no significant increase in stage.

"Storage" -- The volume between the regulatory flood stage and the ground surface. The area measured on a valley cross section is a representation of the storage at that section.

(Source: Amended at 3 Ill. Reg. 29, p. 192, effective July 21, 1979)