Appendix B
Glossary of Terms

Agricultural areas
Lands intended primarily for crop production, pastures, and other similar uses, including the closely associated facilities of on-farm roads, fences, etc.

Base conditions
The land use and related conditions expected to exist at the beginning of the first year of project operation.

Blocked gravity conditions
Conditions that exist when exterior stages are higher than interior stages, thus preventing flow of interior flood waters through the gravity outlets.

Coincident probability (Frequency)
Probability of flooding to exceed a given elevation based on the joint probability of flooding from each source.

Conditional probability P(a/b)
The probability of flooding from one source given the stage or discharge from another source exceeds a stated level.

Correlated
The degree to which flooding from one source occurs or can be predicted from flooding from another source; a mutual relationship but not necessarily cause and effect.

Culvert
A relatively short length of closed conduit that connects two open channel segments or bodies of water. Culverts are the most common types of gravity outlets for interior areas.

Dependence
The degree to which flooding of an area from one source is physically and meteorologically related to flooding from another source.

Detention storage areas
Any low area, often near the inlets to gravity outlets, pumping stations, or pressure conduits, used to temporarily store interior flood waters in excess of the rate at which these flows can be passed through the line-of-protection.

Discrete events
Flood events in a series that may be considered individually since they are independent of other flood events in the series.

Diversions
Ditches or conduits designed to bypass flood waters around or away from a specific area.

Existing conditions
The present land use and related conditions occurring under existing and authorized improvements, laws, and policies.

Exterior stage
Water surface level on the unprotected (exterior) side of the line-of-protection.

Feasibility investigations
Planning studies performed in response to specific Congressional authorization to determine the feasibility of adopting Federal projects or modifying existing projects. The report is a decision document used to determine the desirability of authorizing a Federal commitment to a project.

Future conditions
The most likely land use and related conditions expected in the future. Conditions other than those deemed the most likely may also be considered future conditions.

Gravity outlet rating table
This table lists the headwater depth required for a range of outlet flow rates and tailwater depths.

Gravity outlets
Culverts, conduits, or other similar conveyance openings through the line-of-protection that permit discharge of interior floodwaters through the line-of-protection by gravity when the exterior stages are lower than interior stages. Gravity outlets are equipped with gates to prevent river flows from entering the protected area during time of high exterior stages.

Headwater
The depth of water at a culvert on the entrance or upstream side, as measured from the upstream invert of the culvert.

Hypothetical frequency storms
Balanced storm distributions with total rainfall amounts consistent with specific exceedance frequencies or recurrence intervals for each time duration.

Independence
Situation in which flooding of an area from one source is unrelated to flooding from another source.

Index location
A point along the main exterior river where recorded or computed stage hydrograph data are available.

Inlet control
A condition where flow capacity of the culvert entrance is less than the flow capacity of the culvert barrel, typically resulting in supercritical flow.

Interception systems
Sewers or ditches provided to connect existing sewers or channels which discharge through the line-of-protection by means of gravity outlets, pumping stations, or pressure conduits.

Interior stage
Water level on the protected side of the line-of-protection.

Interior system
Structural and nonstructural flood loss reduction measures located behind the line-of-protection. These measures may consist of (a) water management measures of gravity outlets, pumping stations, interior detention storage, diversions, pressure conduits, and hillside reservoirs; (2) facility protection measures of flood proofing and structure relocation; and (c) development management measures of floodplain regulations and flood emergency warning-preparedness plans.

Line-of-protection
Location of levee or wall that prevents flood waters from entering an area.

Lower interior subbasin
An interior subbasin that directly contributes to flow behind the line-of-protection, normally considered the floodplain portion of the contributing area.

National economic development (NED) plan
The plan that maximizes net national economic development benefits.

Nonstructural measures
Measures designed to reduce flood losses by implementation of facility flood proofing, raising, or relocation; and development regulations and flood warning-emergency preparedness planning actions.

Outlet control
A condition where culvert capacity is limited by downstream conditions or by the flow capacity of the barrel, typically resulting in subcritical flow.

Overflows
Situation in which the water surface elevation in the interior ponding area rises to a level that causes flows to naturally spill from one interior area into an adjacent interior area.

Pressure conduits
Closed conduits designed to convey interior flows through the line-of-protection under internal pressure. The inlet to a pressure conduit that discharges interior flows by force of gravity must be at a higher elevation than the river stage against which it functions. Some pressure conduits may serve as discharge conduits from pumping stations.

Pump efficiency
The percentage of rated pump capacity actually obtained during pump operations (100 percent at average river stages, less than 100 percent at higher river stages).

Pumping station
Pumps located at or near the line-of-protection to discharge interior flows over or through the levees or flood walls (or through pressure lines) when free outflow through gravity outlets is prevented by exterior stages.

Residual damage
Flood damage remaining after implementation of the flood loss reduction measures.

Seepage
Water that passes through or beneath the line-of-protection when the exterior water surface elevation is higher than the interior water surface elevation.

Standard project storm
Hypothetical storm distribution applicable to basin areas 26 to 2,590 sq km (10 to 1,000 sq miles) located east of 105 deg longitude. Determined according to the criteria discussed in EM 1110-2-1411.

Structural measures
Measures designed to reduce flood losses by construction of levees, gravity outlets, pumping stations, detention storage, reservoirs, and diversions.

Tailwater
The depth of water at a culvert on the downstream side, as measured from the downstream invert of the culvert.

Tieback levee (Flank levee)
Levee that extends from the river, lake, or coast to a bluff line. Part of the line-of-protection.

Total pumping head
This value represents the operating head of a pumping unit at various flow capacities. The total pumping head is the sum of the estimated head loss and the static head.

Transfer relation
Adjustment of the main river stage hydrograph from the index location to a primary or secondary gravity outlet location.

Upper interior subbasin
An interior subbasin, generally a hillside area, producing runoff that is normally routed through a channel segment to the line-of-protection.

Urban areas
Areas presently or expected to be developed for residential, commercial, or industrial purposes within the period considered in project formulation.