

PART IV
APPENDICES

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ALL AREAS OF RESPONSIBILITY

PART IV

APPENDIX 1 - GLOSSARY

1. Action - any highway construction, reconstruction, rehabilitation, repair, or improvement undertaken with Federal or Federal-aid highway funds or FHWA approval or taken with State, State and local funds - all subject to S.H.A. approval.
2. Alteration and repair - for dams, modifications which may affect the safety of the dam; all other works, modifications which may affect the hydraulic performance. Alteration and repair may not apply to ordinary maintenance in all cases.
3. Anadromous fish spawning areas - that portion of the waters of the State identified by the Maryland Fisheries Administration as spawning and nursery areas for anadromous fish species.
4. Base Flood - the flood or tide having a 1-percent chance of occurrence in any given year.
5. Base Flood Plain - the area subject to flooding by base flood.
6. Base Flood Plain - Existing - the area subject to flooding by the base flood using discharges from the watershed as presently developed.
7. Base Flood Plain - Ultimate - the area subject to flooding by the base flood using discharges from watershed ultimately developed based on present day zoning.
8. Bridge - a bridge is a man-made structure where the invert of the watercourse for the stream waters is not a part of the structural integrity of the structure.
9. Conduit Spillway - any pipe, orifice, or other device designed to conduct water without a free water surface.
10. Culvert - a culvert is a man-made structure in which the structural integrity is dependent on that portion of the structure which also serves as the of the watercourse for the stream waters.
11. Dam - any obstruction, wall, or embankment, together with its abutments and appurtenant works, if any, in, along, or across any steam, heretofore or hereafter constructed for the purpose of storing or diverting water or for creating a pool upstream of the dam, as determined by the W.R.A.
12. Danger reach - that area downstream of a dam within which sudden release of waters resulting from failure of the dam during a major storm would cause an artificial flood exceeding the flood that might be expected from the same storm is the dam had not existed.

13. Design Flood - the peak discharge, volume if appropriate, stage or wave crest elevation of the flood associated with the probability of exceedance selected for the design of a highway encroachment. By definition, the highway will not be inundated from the stage of the design flood.
14. Dominant discharge - the flow rate capacity, in cubic feet per second, of the stream channel considering steady, uniform flow.
15. Encroachment - an action within the limits of the base flood plain.
16. Emergency conditions - those circumstances which the S.H.A. determines constitute a present or imminent danger to the public health or safety or to the environment.
17. Flood plain - that area contiguous to the watercourse or body of water which is used to convey and/or store flood waters which have escaped from the watercourse and/or body of water.
18. Floodproof - to design and construct individual buildings, facilities, and their sites to protect against structural failure, to keep water out or to reduce the effects of water entry.
19. Flood waters - water which has escaped from the natural watercourse in great volume and flows over and/or is stored on adjoining lands in no regular channel. The fact that such errant waters make for themselves a temporary channel or follow some natural channel, gully or depression, does not affect their character as "flood waters" or give to the course which they follow the character of a natural "watercourse".
20. Freeboard - the vertical clearance of the lowest structural member of the bridge superstructure above the water surface elevation of the flood waters in question. Also the vertical distance from a defined water surface to a designated point.
21. Ground water - Subsurface water occupying the saturated zone, from which wells and springs are fed, and water in underground formations of impervious material, either free or confined. The water table is the upper surface of the ground water body and of the saturated zone.
22. Height - the maximum vertical distance from the original stream bed to the normal water surface.
23. Inflow design flood - the size of flood coming into the reservoir that is used as a basis for designing various parts of the dam.
24. Maximum probable flood - the most severe flood considered possible in a specific region. This may be the maximum probable flood as determined by a source acceptable to the Water Resources Administration or may be calculated using a rational consideration of the chances of simultaneous occurrence of the maximum of the several elements or conditions which contribute to the flood.
25. Minimize - to reduce to the smallest practicable amount or degree.

26. Natural and Beneficial Flood Plain Values - include but are not limited to fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality maintenance, and groundwater recharge.
27. Natural trout waters - waters having the potential to support or are capable of supporting natural trout populations, including propagation, and their associated food organisms.
28. Overflow spillway - any operating, emergency, or other spillway which discharges with a free water surface over or around the dam as opposed to an orifice, gate, or conduit which discharges through or beneath the dam or nearby ground.
29. Overtopping Flood - the flood described by the probability of exceedance and water surface elevation at which flow occurs over the highway, over the watershed divide, or through structures provided for emergency relief.
30. Phase II - Location Studies
31. Phase III - Design Studies
32. Phase IV - Design
33. Practicable - capable of being done within reasonable natural, social, or economic constraints.
34. Preserve - to avoid modification to the functions of the natural flood plain environment or to maintain it as closely as practicable in the natural state.
35. Recreational trout waters - cold or warm waters having the potential to hold or support or are capable of holding or supporting adult trout for put-and-take fishing, usually seasonal.
36. Regulatory Floodway - the flood plain area that is reserved in an open manner by Federal, State or local requirements, i.e., unconfined or unobstructed either horizontally or vertically, to provide for the discharge of base flood so that the cumulative increase in water surface elevation is no more than a designated amount (not to exceed 1 foot as established by the Federal Emergency Management Agency (FEMA) for administering the National Flood Insurance Program).
37. Restore - to reestablish a setting or environment in which the functions of the natural and beneficial flood plain values adversely impacted by the highway agency action can again operate.
38. Rigid bottomed culvert - is a man-made structure where the structural integrity of the structure included that portion of the structure which serves also as the invert of the watercourse for stream waters.
39. Rigid bottomed stream bed - a man-made or naturally existing stream channel the bottom of which is not subject to erosion.

40. Risk - the consequences associated with the probability of flood attributable to an encroachment. It shall include the potential for property loss and hazard to life during the service life of the highway.
41. Risk analysis - an economic comparison of design alternatives using expected total costs (construction costs plus risk costs) to determine the alternative with the least total expected cost to the public. It shall include probable flood-related costs during the service life of the facility for highway operation, maintenance, and repair, for highway-aggravated flood damage to other property, and for additional or interrupted highway travel.
42. Significant Encroachment - a highway encroachment and any direct support of likely base flood plain development that would involve one or more of the following construction or flood-related impacts.
 - a. a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route,
 - b. a significant risk, or
 - c. a significant adverse impact on natural and beneficial flood plain values.
43. Significant flooding - flooding which involves one or more of the following construction or flood-related impacts:
 - a. a significant potential for interruption or termination of facility functions such as highways needs for emergency vehicles or providing a community's only evacuation route, power failures, etc.
 - b. a significant risk, or
 - c. a significant adverse impact on natural and beneficial flood plain values.
 - d. flooding which denies the owner reasonable use of his land or property.
44. Storm water management:
 - a. for quantitative control, a system of vegetative and structural measures which control the increased volume and rate of surface runoff caused by man-made changes to the land and have the effect of maintaining the existing patterns of flood magnitude and frequency; and
 - b. For qualitative control, a system of vegetative, structural, and other measures which control or treat pollutants carried by surface runoff.
45. Storm water facilities - structures such as pipes, pipe archs, box culverts, bridges, etc. which provides means for storage and/or transportation of storm water.

46. Stream waters - waters that were formerly surface and/or ground waters which have entered and now flow or are confined within a well-defined natural watercourse, together with other waters reaching the watercourse by direct precipitation or rising from springs in the bed or banks of the watercourse. They continue as stream waters as long as they remain in the watercourse.
47. Support Base Flood Plain Development - to encourage, allow serve, or otherwise facilitate additional base flood plain development. Direct support results from an encroachment, while indirect support results from an action out of the base flood plain.
48. Surface waters - waters derived from rain, snow, or springs that diffuse themselves over the surface of the ground without collecting into a definite body or channel. Flood waters may be considered surface water if they become separated from the main current or leave it permanently and spread out over the surface of lower ground.
49. Watercourse - a channel in which a flow of water occurs, either continuously or intermittently with some degree of regularity. Such flow, beyond tidal waters, is in a definite direction. Watercourses may be either natural or artificial, and the former may occur either on the surface or underground.

