

Appendix E: Glossary

Best Management Practices (BMPs)

A structural or nonstructural management based practice used singularly or in combination to reduce non-point source inputs to receiving waters in order to achieve water quality protection goals.

BFE - Base Flood Elevation

Built-Up on Area

Built-upon areas shall include that portion of a development project that is covered by impervious or partially impervious cover including buildings, pavement, gravel areas, recreation facilities, etc. Wooden slatted decks and the water area of a swimming pool are considered pervious.

CERCLA

Comprehensive Environmental Response, Compensation, and Liability Act. Federal legislation that addresses hazardous substance releases into the environment and cleanup of inactive hazardous waste disposal sites.

Cluster Subdivision

A subdivision in which lots are grouped or “clustered” on a subdivision site to allow open space use of other parts of the site, as designed and approved in accord with cluster subdivision standards.

Critical Area

The land in a water supply watershed which is adjacent and draining to the water source, where it is most important to filter out potential pollutants.

Dam Types - NC Department of Environment and Natural Resources

- RE – Rolled Earth
- ER – Rockfill
- CNCB – Concrete Buttress
- CNMVCB – Concrete Multiple Arch with Buttresses
- CNPG – Concrete Gravity
- CNPGRE – Concrete Gravity and Rolled Earth
- CNPGVA – Concrete Gravity Arch
- CNVA – Concrete Arch
- MS – Masonry
- MSRE – Masonry and Rolled Earth
- OT – Other
- RECNCB – Rolled Earth and Concrete Buttress
- RECNPNG – Rolled Earth and Concrete Gravity
- REER – Rolled Earth and Rockfill
- REMS – Rolled Earth and Masonry
- STMS – Stone Masonry
- STMSRE – Stone Masonry and Rolled Earth
- TC – Timber Crib

Detention

Surface collection, storage, and distribution of stormwater runoff for the purposes of compensating for increased runoff volume and decreased travel time associated with an increase in impervious surfaces over the contributing catchment, and to allow for the settling-out of pollutants borne by the runoff.

Development

Any land-disturbing activity that changes the amount of impervious surface or partially impervious surface coverage on the land, or that otherwise decreases the infiltration of precipitation into the soil.

Disaster/Emergency

Any hurricane, tornado, storm, flood, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion or other catastrophe in any part of the United States which, in the determination of the President, caused damage of sufficient severity and magnitude to warrant major disaster assistance under P.L. 93-288, above and beyond emergency services by the federal government, to supplement the efforts and available resources of the state, local government and disaster relief organization in alleviating damage, loss, hardship or suffering.

Drainageway

Any stream, watercourse, channel, ditch, or similar physiographic feature draining water from the land.

EMS

Emergency Medical Services - Local medical response teams, usually rescue squads or local ambulance services, which provide medical services during a disaster.

EOC

Emergency Operations Center - A protected site from which government officials and emergency response personnel exercise direction and control in an emergency. The emergency Communications Center (ECC) is normally an essential part of the EOC.

EOP

Emergency Operations Plan - A brief, clear and concise description of action to be taken or instruction to be given to those concerned during a specific emergency. The plan will state the method or scheme for coordinated action based on pre-determined assumptions, objectives and capabilities.

Emergency Planning and Community Right-to-Know Act of 1986 (Title III)

Specifies requirements for organizing the planning process at the state and local levels for specified extremely hazardous substances; minimum plan content; requirements for fixed facility owners and operators to inform officials about extremely hazardous substances present at the facilities; and mechanisms for making information about extremely hazardous substances available to citizens.

Emergency Worker

Workers employed during an emergency to work specifically in disaster roles such as debris removal, engineering services, dike construction, water removal, etc. Also any person engaged in operations required to minimize the effects of a fixed nuclear facility emergency.

EPA - U.S. Environmental Protection Agency

ETJ

Extraterritorial jurisdiction – that area of land outside and beyond the corporate limits of a municipality over which the municipality has planning and zoning jurisdiction.

FEMA

Federal Emergency Management Agency - A federal agency tasked with national disaster and emergency preparedness and response. FEMA also deals in temporary emergency housing, training of state and local emergency response personnel and funding of preparedness projects and functions.

FEMA Flood Zones

Zone A - Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study (FIS) by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs (base flood elevations) or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

Zone AE and A1-A30 - Zones AE and A1-A30 are the flood insurance rate zones that correspond to the 100-year floodplains that are determined in the FIS by detailed methods. In most instances, BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

Zone AH - Zone AH is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding with a constant water-surface elevation (usually areas of ponding) where average depths are between 1 and 3 feet. The BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

Zone AO - Zone AO is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. The depth should be averaged along the cross section and then along the direction of flow to determine the extent of the zone. Average flood depths derived from the detailed hydraulic analyses are shown within this zone. In addition, alluvial fan flood hazards are shown as Zone AO on the FIRM. Mandatory flood insurance purchase requirements apply.

Zone AR - Zone AR is the flood insurance rate zone used to depict areas protected from flood hazards by flood control structures, such as a levee, that are being restored. FEMA will consider using the Zone AR designation for a community if the flood protection system has been deemed restorable by a Federal agency in consultation with a local project sponsor; a minimum level of flood protection is still provided to the community by the system; and restoration of the flood protection system is scheduled to begin within a designated time period and in accordance with a progress plan negotiated between the community and FEMA. Mandatory purchase requirements for flood insurance will apply in Zone AR, but the rate will not exceed the rate for unnumbered A zones if the structure is built in compliance with Zone AR floodplain management regulations.

For floodplain management in Zone AR areas, elevation is not required for improvements to existing structures. However, for new construction, the structure must be elevated (or floodproofed for non-residential structures) such that the lowest floor, including basement, is a maximum of 3 feet above the highest adjacent existing grade if the depth of the base flood elevation (BFE) does not exceed 5 feet at the proposed development site. For infill sites, rehabilitation of existing structures, or redevelopment of previously developed areas, there is a 3 foot elevation requirement regardless of the depth of the BFE at the project site.

The Zone AR designation will be removed and the restored flood control system shown as providing protection from the 1% annual chance flood on the NFIP map upon completion of the restoration project and submittal of all the necessary data to FEMA.

Zone A99 - Zone A99 is the flood insurance rate zone that corresponds to areas of the 100-year floodplains that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No BFEs or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

Zone D - The Zone D designation on NFIP maps is used for areas where there are possible but undetermined flood hazards. In areas designated as Zone D, no analysis of flood hazards has been conducted. Mandatory flood insurance purchase requirements do not apply, but coverage is available. The flood insurance rates for properties in Zone D are commensurate with the uncertainty of the flood risk.

Zone V – Zone V is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no BFEs are shown within this zone. Mandatory flood insurance purchase requirements apply.

Zone VE - Zone VE is the flood insurance rate zone that corresponds to the 100-year coastal floodplains that have additional hazards associated with storm waves. BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

Zones B, C, and X - Zones B, C, and X are the flood insurance rate zones that correspond to areas outside the 100-year floodplains, areas of 100-year sheet flow flooding where average depths are less than 1 foot, areas of 100-year stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 100-year flood by levees. No BFEs or depths are shown within this zone.

Flood or Flooding

A general and temporary condition of partial or complete inundation of normally dry land areas from: 1) the overflow of inland or tidal waters; and 2) the unusual and rapid accumulation of runoff of surface waters from any source.

Flood Hazard Boundary Map (FHBM)

An official map of a community, issued by the Federal Emergency Management Agency (FEMA), where the boundaries of the areas of special flood hazard have been defined as Zone A.

Flood Insurance Rate Map (FIRM)

An official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Floodway

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Hazardous Material (HAZMAT)

Any element, compound, mixture, solution or substance which, when spilled or released into the environment, may present a substantial threat or danger to human life or health and/or the environment.

Hazardous Waste Storage

Containment of hazardous waste, for a period of ninety (90) days or more, in such manner as not to constitute disposal.

ICS

Incident Command System - The combination of facilities, equipment, personnel, procedures and communications operating within an established command structure (e.g., on-scene command post).

Mitigation

Any activity that actually eliminates or reduces the probability of a disaster occurrence, or reduces the effects of a disaster. Mitigation includes such actions as zoning and land use management, safety and building codes, flood proofing of buildings and public education.

National Warning System (NAWAS)

The federal warning system used to disseminate warnings of imminent natural disaster or enemy attack into a regional warning system which passes it to the state warning points for action.

National Weather Service (NWS)

A federal agency tasked with forecasting weather and providing appropriate warning of imminent natural disaster such as hurricane, tornados, tropical storms, etc.

NCDC - National Climatic Data Center Storm Events Database

<http://www4.ncdc.noaa.gov/cgi-win/wwwcgi.dll?wwEvent~Storms>

The Storm Events Database is updated on a monthly basis and is usually 90-120 days behind the current month. All of the data is received from the National Weather Service and is made available as soon as possible. The National Climatic Data Center Storm Events Database contains data from the following sources:

- 1) All Weather Events from 1993 - 1995, as entered into Storm Data (except 6/93 - 7/93, which is missing; no latitude/longitude).
- 2) All Weather Events from 1996 - current, as entered into Storm Data (including latitude/longitude).
- 3) Additional data from the Storm Prediction Center including tornadoes (1950-1992); thunderstorm winds (1955-1992); and hail 1955-1992

NCDEM (or NCEM)

North Carolina Division of Emergency Management - The North Carolina state agency tasked with protecting the general public from the effects of natural or man-made disasters.

NCDENR – North Carolina Department of Environment and Natural Resources**Nonpoint Source Pollution**

Pollution that enters waters from dispersed sources (such as surface runoff) rather than from a point source (i.e., pipe).

Recovery

Activities which involve assistance to enhance the return of the community to normal or near-normal conditions. Short-term recovery returns vital life-support systems to minimum operating standards. Long-term recovery may continue for a number of years after a disaster and seeks to return life to normal or improved levels. Recovery activities include temporary housing, loans or grants, disaster unemployment insurance, reconstruction and counseling programs.

RCRA

Resource Conservation and Recovery Act – Federal legislation that established a framework for the proper management and disposal of all wastes. RCRA directed EPA to identify hazardous wastes, both generically and by listing specific wastes and industrial process waste management practices and to track the movement of wastes with a manifest system. Owners and operators of treatment, storage, and disposal facilities also must comply with standards, which are generally implemented through permits issued by EPA or authorized states.

Response

Activities that occur immediately before, during, and directly after an emergency or disaster. Activities involve lifesaving actions such as, the activation of warning systems, manning the EOCs, implementation of shelter or evacuation plans and search and rescue.

Retention

Surface collection, storage, and reduction of stormwater runoff for the purpose of providing infiltration of the runoff into the soil.

Runoff

That portion of rainfall or other precipitation that is not absorbed by the soil, but rather flows across the ground surface and drains to a water body.

SHELDUS – Spatial Hazard Events and Losses Database for the United States

http://go2.cla.sc.edu/hazard/db_registration

SHELDUS is a geo-referenced data set providing county-level data on natural hazard events and losses from 1960 to 2000. Hazard types covered in the data base include avalanches, coastal hazards, drought, earthquakes, flooding, fog, hail, heat, hurricane/tropical storms, landslides, lightning, severe storms/thunderstorms, tornadoes, tsunamis/seiches, volcanoes, wildfires, wind hazards, and winter weather. According to the SHELDUS website, this is the most comprehensive database of natural hazard events and losses available.

SHELDUS culls data from repositories such as the National Climatic Data Center Storm Data and the Council of National Seismic Systems. Variables include county name, state, Federal Information Processing Standard (FIPS) code, date, event type, property losses (in unadjusted dollars), crop losses (in unadjusted dollars), injuries, and deaths.

Only those events that generated more than \$50,000 in losses are included in the database. For events that covered multiple counties, the dollar losses, deaths, and injuries were equally divided among the counties. Where dollar loss estimates were provided in a range (e.g., \$50,000 to \$100,000), the lowest value in the range of the category was used. This results in the most conservative estimate of losses during the time period.

Superfund

The trust fund established under CERCLA to provide money during a cleanup. Superfund Amendments and Reauthorization Act of 1986 (SARA) - Title III of SARA includes detailed provisions for community planning.

USGS - United States Geological Survey.

Vulnerability

The susceptibility to life, property, and the environment to damage if a hazard manifests its potential.

Watershed

The land area that drains runoff to a surface water body or watercourse. Also called a drainage basin, a watershed includes hills, lowlands, and the body of water into which the runoff drains.

Watershed Buffer

An undisturbed area of natural vegetation adjacent to a drainageway, watercourse, or water impoundment within a watershed through which stormwater runoff is intended to flow in a diffuse manner so that it does not become channelized and infiltration of runoff and filtering of pollutants can take place.