

Glossary of Acronyms and Terms

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For an exhaustive list of terms and acronyms related to stormwater management, see the Glossary tab (on the left hand column) in the [2014 Stormwater Management Manual for Western Washington](#).

Acronyms

- **AU** – Assessment Unit
- **GIS** – Geographic Information Systems
- **GSI** – Green Stormwater Infrastructure
- **LID** – Low Impact Development
- **NPDES** – National Pollutant Discharge Elimination System
- **N-SPECT** – Nonpoint-Source Pollution and Erosion Comparison Tool
- **PS** – Puget Sound
- **SSHIA** – Salmon and Steelhead Habitat Inventory and Assessment Program
- **WRIA** – Water Resource Inventory Area: the major watershed areas of Washington State, of which 19 drain into Puget Sound and the Strait of Juan de Fuca

Terms

- **Analysis Area** – The geographic extent of an assessment. It can range in scale depending on the size of a jurisdiction (city vs. county) and the type of landforms being considered (e.g., coastal terrace vs. large river basin). The methods and assessment models of the Characterization are not limited to a single scale but they do require source data that are both suitably detailed and sufficiently comprehensive across the analysis area.³
- **Assessment Models** – Methods that provide a quantitative analysis of abiotic and biotic components outlined in the conceptual model. This includes processes for water flow and water quality (sediment, metals, pathogens, nutrients), and terrestrial, freshwater, and marine/nearshore habitats. The models generate quantitative indices of relative condition for each Assessment Unit relative to all others, but they do not provide the actual rate or quantity of the presence or movement of water, sediment, pathogens or organisms.³
- **Assessment Unit (AU)** – Each analysis area is divided into many smaller “Assessment Units” for comparison of model results. All source data and model results are homogenized within each AU; their size determines the minimum spatial scale over which the Characterization results are meaningful. Using available source data, AU’s are ranked from most important to least important, and most impaired to least impaired, for each process. The size and number of these units depends on the size of the analysis area, the landform types, available source data, and the planning issues a jurisdiction may be addressing.³
- **Assessing Watershed Processes** – The application of abiotic and biotic methods for analyzing watershed processes and environments presented in the conceptual model. In this document, ‘assessment’, ‘watershed assessment’, or ‘assessment of processes’ have the same meaning.³

¹ Building Cities in the Rain

² Stormwater Control Transfer Program

³ Puget Sound Watershed Characterization

- **Beneficial Uses** – Uses of waters of the state which include but are not limited to use for domestic, stock watering, industrial, commercial, agricultural, irrigation, mining, fish and wildlife maintenance and enhancement, recreation, generation of electric power and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state. (excerpted from Western Washington Municipal Stormwater Permit)²
- **Characterization** – The integration of multiple assessments, following an explicit conceptual model, that describes landscape conditions from the basin to sub-basin scale.³
- **Conceptual Model** – A simplified representation of a complex system that emphasizes the interrelationship of the major elements rather than the details of each element. For the Characterization, its conceptual model qualitatively describes the biotic/abiotic elements that are judged to drive and control physical and chemical processes, and the structure and functions of three biological environments (freshwater, terrestrial and marine) across multiple scales. Conceptual models are useful complements to (but not substitutes for) more detailed quantitative models.³
- **Designated Uses** – Uses specified in this chapter for each water body or segment, regardless of whether or not the uses are currently attained. (excerpted from WAC 173-201A-020)²
- **Existing Uses** – Uses actually attained in fresh or marine waters on or after November 28, 1975, whether or not they are designated uses. Introduced species that are not native to Washington, and put-and-take fisheries comprised of nonself-replicating introduced native species, do not need to receive full support as an existing use. (excerpted from WAC 173-201A-020)²
- **Flow Control Standard Range** – The range of pre-developed condition discharge rates from 50% of the 2-year peak flow up to the full 50-year peak flow.²
- **Function** – Role(s) provided by the local structures of the landscape at the site or reach scale, such as wildlife habitat, salmon spawning habitat, flow attenuation, flood storage, groundwater recharge, etc.³
- **High-priority Watershed** – A high priority watershed is a watershed that has been identified for receiving rehabilitation efforts first under a stormwater control transfer program¹
- **Impervious Surfaces** – Constructed surfaces, such as pavement for transportation, buildings, roofs, and sidewalks, that effectively prevent or retard the movement of water vertically through the underlying soil and geologic deposits. The percentage of impervious surfaces in an assessment unit is the largest single determinant of that AU's degree of degradation.³In-Basin Transfer: Construction of, or purchase of capacity credit in, a facility that discharges into the same receiving water as the project site.³
- **Landscape Group** – A group of AU's within the analysis area that each have similar environmental characteristics, such as precipitation, landform, and/or geology. In the current version of the Characterization models, landscape groups are identified strictly on geographical position (coastal, lowland, and mountain, plus a subset of lowland analysis units that drain to one of four large lakes). In the models that assess AU "importance," the assessment units are compared only to others within the same landscape group and not to assessment units in a different landscape group.³
- **Low Impact Development (LID)** - A stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design¹

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- **Method(s)** – The quantitative analysis of an individual watershed process. The methods applied for analyzing each process are presented in the appendices.³
- **Multi-Scale Framework** – An analytical hierarchy of abiotic and biotic assessments, information, and data across multiple scales within a watershed. The framework acts as decision-support tool to help interpret and apply Characterization results to planning and permitting decisions. The Characterization’s “analysis framework” is an example of a multi-scale framework; it is based on a conceptual model that generally describes the freshwater, terrestrial and marine environments in Puget Sound and a set of analysis steps and questions to help integrate watershed information.³
- **Nonpoint-Source Pollution and Erosion Comparison Tool (N-SPECT)** – Tool developed and supported by the National Oceanographic and Atmospheric Administration (NOAA). N-SPECT is GIS-based model that uses pollutant export coefficients to quantify the relationship between land use/land cover and pollutant amounts. It is most useful in planning-level assessments such as the Characterization, providing estimates of the change in pollutant amount in response to a change in land use/land cover (see also <http://www.csc.noaa.gov/digitalcoast/tools/nspect>).³
- **Out-of-Basin Transfer** – Construction of, or purchase of capacity credit in, a facility that discharges into a receiving water other than the receiving water to which the project site will or does discharge.²
- **Pre-developed Condition** – The land cover that likely existed at the project site prior to European settlement of Western Washington. Pre-developed land covers are either forested or prairie. The latter is represented in approved stormwater runoff models as “pasture.”²
- **Pre-project Condition** – The land cover of the project site that is either a) the land cover that exists immediately prior to the proposed project; or 2) the land cover that meets the “existing” land cover as that term is defined by the local code. Some local governments establish a specific date as defining the “existing” land cover condition.²
- **Process** – Physical and chemical fluxes of water, sediment, nutrients, and organic material across large land areas (e.g., watersheds or drift cells) that form and maintain the landscape and the structure and function of their ecosystems over multiple scales. The movement of water, sediment, metals, pathogens, and nutrients constitute the processes addressed in Volume 1 of the Characterization).³
- **Receiving Waterbody or Receiving Waters** – Receiving waterbody or receiving waters means naturally and/or reconstructed naturally occurring surface water bodies, such as creeks, streams, rivers, lakes, wetlands, estuaries, and marine waters, or ground water, to which a MS4 discharges. (See Western Washington Phase I and Phase II Municipal Stormwater Permit Definitions)¹
- **Regional** – An action (here, for stormwater management purposes) that involves more than one discrete property. (2014 Stormwater Manual for Western Washington, Glossary, Appendix I-G, page G-36)¹
- **Regional Detention Facility** – A stormwater quantity control structure designed to correct existing surface water runoff problems of a basin or sub-basin. The area downstream has been previously identified as having existing or predicted significant and regional flooding and/or erosion problems. This term is also used when a detention facility is sited to detain stormwater runoff from a number of new developments or areas within a catchment. (2014 Stormwater Manual for Western Washington, Glossary, Appendix I-G, page G-36)¹
- **Scale** – The typical geographical extent of interest. The range of scales (and the terminology we adopt) in this document includes “basins” (>100 mi²); “sub-basins,” “valley segments,” and “drift

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cells” (commonly, 1 to 100 mi²); “reaches” and “waterbodies” (100 acres to 1 mi²); and individual “stream segments” and “sites” (normally, <100 acres).³

- **Sending Watershed** – A sending watershed is a watershed that has been identified for sending rehabilitation efforts to a receiving watershed¹
- **Stormwater Retrofit** – An improvement in stormwater management that treats stormwater runoff or controls stormwater flow for an existing or redeveloped surface that was not previously receiving that level of runoff treatment or flow control. A “redeveloped surface” means a surface that will require the same or more stormwater runoff treatment or flow control to meet the NPDES Minimum Requirements. This improvement in stormwater management can sometimes be transferred through an Ecology approved plan. Some retrofits are installed as part of the structural stormwater controls obligations under the Phase 1 NPDES Municipal Permit¹
- **Structure** – Features of the landscape at the site scale created and maintained by the controlling processes, for example stream channel shape, floodplain, slope wetlands, estuaries, etc.³
- **Watershed** – An area of land from which all of the water that is on or under it drains to the same place¹
- **Watershed Management Matrix** – A matrix that combines the categorical results of the models for importance and degradation for any single process in a particular AU to identify the most suitable management strategy (described by the terms protection, restoration, conservation, or development) for that process within that area.³
- **Water Resource Inventory Area (WRIA)** – Administrative watershed boundaries designated by the State of Washington’s natural resource agencies.³

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