Minimal Impact Design Standards

Critical Definitions for Performance Standard

**DRAFT – FOR DISCUSSION ONLY**

Background (Large MID’s Group)

Defining development/redevelopment categories for application of performance goals is a specific scope item within the MIDS Work Group Charter. Preliminary definitions for potential key stormwater terms were compiled and presented for discussion to the Work Group in March, 2010. The definitions were refined and re-distributed in May, 2010.

More details can be found within the Work Group’s on-line meeting minutes. Refer to the following Work Group meeting dates for more specific background information:

* February 19, 2010 Minutes (page 4 of the on-line PDF document)
* April 27, 2010 Minutes (page 12 of the on-line PDF document)
* May 21, 2010 Minutes (page 18 of the on-line PDF document)

<http://www.pca.state.mn.us/index.php/view-document.html?gid=13469>

Definitions were discussed again in April, 2011 when the new development performance goal was considered for consensus by the Work Group. At that time, there was uncertainty regarding what “new development” represented. (The previous work on definitions did not encompass that term.) A working definition was proposed for discussion during that meeting. For details, see Work Group WebEx recorded on April 15, 2011; view discussion beginning at runtime 1 hour 54 minutes.

Current Work (Linear and Redevelopment Sub-group)

At nearly every meeting since February 2012, the Linear and Redevelopment subgroup of the MIDS Work Group has discussed the challenge of characterizing key terms with definitions.

* The subgroup reviewed and discussed guidance within CSN Technical Bulletin 5 version 3.0 (Section 1, Defining Redevelopment in the Context of Stormwater)
* The subgroup completed a written survey in April 2012 which included a component for defining the redevelopment and linear category for application of a performance goal.
* Numerous local and national examples of definitions were compiled for development, redevelopment and linear projects.

It is the intent of the subgroup to recommend definitions to the Large Work Group for a consensus determination. At the October 25, 2012 subgroup meeting, subgroup members agreed to focus on the following five terms deemed critical to meet the scope of the Work Group Charter.

Terms for Consideration

1. New development
2. Redevelopment
3. Linear Project
4. Land Disturbance
5. Impervious Surface

This document presents recommended language, alternatives considered, and rationale for assigning definitions to key terms.

**Term: New Development**

**Recommended Language**

Any development that results in the conversion of land that is currently prairie, agriculture, forest, or meadow and has less than 15% impervious surface. Land that was previously developed, but now razed and vacant, will not be considered new development

**Alternative Language Examples Considered**

1. New development means all construction activity that is not defined as redevelopment.   
   *Source: Draft MS4 Phase II Permit*
2. New development means development resulting from the conversion of previously undeveloped land or agricultural land. Development means residential, commercial, industrial or institutional land uses and associated roads.  
   *Source: Wisconsin NR 151 (MIDS 4/15/2011)*

**Rationale for Recommendation**

* The recommended language is original, crafted by Linear and Redevelopment subgroup.
* References the basic land use modeling terms used in the technical analysis by Barr Engineering to set the performance goal for new development.
* Seems consistent with post-construction water quality treatment requirement intent of MN NPDES Construction General Permit (CGP).
* Compliments the draft MS4 Phase II Permit definition “redevelopment” by incorporating a reference to 15% impervious surface.

**Term: Redevelopment**

**Recommended Language**

Any development that is not considered new development.

**Alternative Language Examples Considered**

1. Redevelopment means any **construction activity** where, prior to the start of construction, the area to be disturbed has 15 percent or more of impervious surface(s).   
   *Source: Draft MS4 Phase II Permit*
2. Redevelopment means areas where development is replacing development. Redevelopment is: Any construction, alteration, or improvement that disturbs land where the existing land use is commercial, industrial, institutional, governmental, or multifamily residential. This also includes sites with these prior land uses that have been abandoned or razed.   
   *Source: Wisconsin NR 151 (MIDS 4/15/2011)*
3. Redevelopment is generally defined as the act of improving or renewing or restoring any developed property that results in the land disturbance of one acre or greater, and that has 15 percent or more of that disturbed area covered by an existing impervious surface.  
   *Source: Technical Support Document for Compliance with the Post-Construction* *Stormwater Treatment Performance Standard (MCM 5) DRAFT*
4. Redevelopment will be defined as construction activity that exposes native soils or removes a building/structure in its entirety. Aesthetic projects and maintenance activities are not defined as redevelopment for the purposes of this section.  
   *Source: Woodbury, MN*
5. Redevelopment means the alteration of developed land that disturbs one acre or more, or less than an acre if part of a larger common plan of development, and increases the site or building impervious footprint, or offers a new opportunity for stormwater controls. The term is not intended to include such activities as exterior remodeling, which would not be expected to cause adverse stormwater quality impacts.  
   *Source: Chattanooga, TN*
6. Redevelopment – any proposal to re-subdivide land, or any land-disturbing activity or addition of impervious surface to a developed site.  
   *Source: Rice Creek WD*
7. Redevelopment projects...are land-disturbing activity that results in the creation, addition, or replacement of 5000 square feet or more of impervious surface on an already developed site within the categories listed above. Existing single family non-hillside structures are exempt from the redevelopment requirements.  
   *Source: Los Angeles, CA*
8. Redevelopment. The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and routine replacement of damaged pavement, such as pothole repair.  
   *Source: San Diego, CA*
9. Redevelopment: And development that requires demolition or complete removal of existing structures or impervious surfaces at a site and replacement with new impervious surfaces. Maintenance activities such as top-layer grinding, repaving (where all pavement is not removed), and reroofing are not considered to be redevelopment. Interior remodeling projects and tenant improvements are also not considered to be redevelopment. Utility trenches in streets are not considered to be redevelopment unless more than 50 percent of the street width is removed and repaved.  
   *Source: Portland, OR*

**Rationale for Recommendation**

* + Very simple language for very often a complicated circumstance.
  + Removes complications of defining what constitutes “developed” land.
  + Anything with 15% impervious cover or more will be considered redevelopment.

**Term: Linear Project**

**Recommended Language**

Construction or reconstruction of roads, trails, sidewalks, and rail lines that are not part of a common plan of development or sale.

**Alternative Language Examples Considered**

1. Roads, trails, and sidewalks that are not part of a common plan of development or sale.  
   *Source: Capitol Region, Ramsey Washington Metro Watershed Districts*
2. Construction or reconstruction of a public road, sidewalk or trail for vehicle or pedestrian traffic.  
   *Source: Nine Mile Creek WD*
3. Linear Reconstruction Project means rebuilding a road, sidewalk or trail within existing right-of-way, and may include an increase in the area of impervious surface. Rehabilitation, including mill and overlay, or a road, sidewalk or trail within existing right-of-way in a manner that disturbs and/or replaces only the existing pavement and does not involve the addition of impervious surface area or the exposure of underlying soils is not considered a Linear Reconstruction Project.  
     
   Linear Transportation Project means construction of a new road, trail, or sidewalk or reconstruction of an existing road, trail, or sidewalk (see Linear Reconstruction Project).  
   *Source: Minnehaha Creek WD*
4. Projects characterized by linear rights-of-way (ROWs) include underground utilities such as pipelines, fiber-optic lines, water lines, sewage lines, and transmission lines, as well as above ground facilities such as trails/pathways, roads, railroads, and canals.  
   *Source: Arizona State Parks*
5. Activities required for the construction, expansion, modification, or improvement of projects that have multiple crossings of jurisdictional waters (i.e. highways, gas pipelines, fiber optic lines, railways, waste water pipelines, and utility lines). For linear projects, the one acre eligibility threshold will apply to each single and complete project.  
   *Source: US Army Corps – Pennsylvania State Programmatic General Permit*
6. Linear projects are those activities such as railway lines, power transmission lines, pipelines, roads, freeways and canals where project configuration involves a narrow strip of land over a considerable distance.  
   *Source: Goldman, Laurence R. An Applied Anthropological Manual. New York: Berg, 2000.*

**Rationale for Recommendation**

* + Focuses on linear projects that create or otherwise affect impervious surface.
  + Distinguishes stand-alone linear work from that which is incidental to a broader improvement project.

**Term: Land Disturbance**

**Recommended Language**

Any activity that results in a change or alteration in the existing ground cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, stockpiling, excavation and borrow pits.

Routine vegetation management, and mill and overlay/resurfacing activities that do not alter the soil material beneath the pavement base, arenot considered land disturbance. In addition, other maintenance activities such as catch basin and pipe repair/replacement, lighting, and pedestrian ramp improvements shall not be considered land disturbance for the purposes of determining permanent stormwater management requirements

**Alternative Language Examples Considered**

1. No alternatives specifically considered to-date

"Construction Activity" includes construction activity as defined in 40 C.F.R. pt. 122.26(b)(14)(x) and small construction activity as defined in 40 C.F.R. pt. 122.26(b)(15). This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling, and excavating. Construction activity includes the disturbance of less than one acre of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) acre or more.   
*Source: Minnesota NPDES Construction General Permit*

Note: this definition was not presented/discussed during meetings but is included for reference.

**Rationale for Recommendation**

* + Focuses incorporating permanent stormwater management requirements for projects substantively affecting land surface. Therefore, many types of small projects which might be assumed within the scope of a general definition for “redevelopment” (for instance, interior or exterior remodeling of structures) is excluded.

**Term: Impervious Surface**

**Recommended Language**

A surface that impedes the infiltration of rainfall and results in an increased volume of surface runoff

**Alternative Language Examples Considered**

1. A surface that has been compacted or covered with a layer of material, or is likely to become compacted from expected use, so that it is highly resistant to infiltration by water.   
   *Source: Multiple Metro-area Watershed Districts including Brown’s Creek, Carnelian Marine St. Croix, Comfort Lake Forest Lake, Nine Mile Creek.*
2. A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.   
   *Source: Minnesota NPDES Construction General Permit*
3. A surface in the landscape that impedes the infiltration of rainfall and results in an increased volume of surface runoff   
   Source: *Minnesota Stormwater Manual, p.791*

**Rationale for Recommendation**

* + Generally consistent with the Minnesota Stormwater Manual
  + Simple straightforward definition without a long list of examples