

DRAFT

DATE: December 30, 1998  
TO: Urban Nonpoint Source Modelers  
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SUBJECT: Drainage System Connectedness for Urban Areas

When conducting nonpoint source model studies it becomes important to know the connectedness of the drainage system. More specifically this refers to what portion of the drainage system is directly connected, indirectly connected and pervious in a given watershed. The best method for determining this is to conduct a field survey, however this is not always feasible. The next best approach is therefore to use data from other inventoried watersheds with similar land use types and extrapolate results.

The following table of drainage system characteristics was developed from data collected in the cities of Madison and Milwaukee and can be used when site specific data do not exist. The categories listed are general and most applicable to use with the P8 Urban Catchment Model. The user is advised that the industrial land use category exhibited the greatest degree of variability and has the greatest need for site specific verification.

Drainage System Characteristics by Land Use Type

Land Use Type	Percent Area		
	Directly Connected	Indirectly Connected	Pervious
Regional Mall	86	0	14
Hv Industrial	80	2	18
Strip Mall	75	0	25
Lt. Industrial	69	0	31
Institutional	41	0	59
HD Residential	51	0	49
MD Residential	24	13	63
Airport	9	25	66
Park	8	6	86
LD Residential	6	10	84