

BMP SUITABILITY MATRIX

Effectiveness level *** H Very Effective M Moderately Effective L Supports Function Not Applicable Suitability level**** 3 Well Suited to Condition 2 Moderately Suited to Condition 1 Less Suited to Condition Not Applicable	Cost		Water Quality		Water Quantity		Site Conditions					Drainage Area				Land Use					
	Implementation	Maintenance	On-site	Downstream	Flood Control	Evaporation	Aquifer Recharge	Steep Slopes	High Groundwater Tables	Shallow Bedrock	Slow Draining Soils	Expansive Clay Soils	Contaminated Soils	Rooftops	Roadways	Sidewalks	Landscapes	Single-family Residential Lot	Subdivisions & Campuses of any land use	Commercial	Institutional
Prevent Runoff: Minimize Impervious Area BMPs																					
Share Parking Spaces BMP	\$	\$	M	H	L	M	L	3	3	3	3	3	3		3				2	3	2
Minimize Pavement Widths BMP -	\$\$	\$	M	H	L	M	L	3	3	3	3	3	3		3	3		3	3	2	3
Minimize Front Setbacks BMP -	\$	\$	M	H	L	M	L	3	3	3	3	3	3		3	3		3	2		2
Share a Driveway BMP	\$	\$	M	H	L	M	L	3	3	3	3	3	3		3	3		3	3	2	3
Minimize Building Footprint(s) BMP -	\$\$	\$	M	H	L	M	L	3	3	3	3	3	3	3				2	3	3	3
Minimize New Pavement BMP	\$	\$	M	H	L	M	L	3	3	3	3	3	3		3	3		3	3	3	3
Prevent Runoff: Limit Disturbance BMPs																					
Construction Sequencing BMP -	\$		H	H	L	L	L	3	3	3	3	3	3					3	3	3	3
Conserve Fast(er) Draining Soils	\$	\$	M	H	L	M	L	3	3	3	3	3	3			3		3	3	3	3
Cluster Development BMP -	\$\$\$	\$	H	H	L	H	L	3	3	3	3	3	3	3	3	3	3		3	2	2
Tree Protection BMP	\$	\$	H	H	L	M	L	3	3	3	3	3	3	2	3	3	3		3	2	2
Minimal Foundation BMP -	\$\$\$	\$	L	M	H		L	3	3	3	3	3	3	3				3	2	3	3
Prevent Runoff from Landscape and Hardscape Areas																					
Restored Soils BMP	\$\$	\$	H	H	L	M	M	3	3	3	3	3				3	3	3	3	3	
Tree Planting BMP	\$	\$\$	M	H	M	M	M	3	3	3	3	3	3	1	2	2	3	2	3	1	2
De-pave Existing Pavement BMP	\$	\$	M	H	M	M	M	3	3	3	3	3	3		2	2		2	3	2	3
Contained Planter(s) BMP	\$	\$	M	M	L	H		3	3	3	3	3	3	2	3	3		3	3	3	3
Vegetated Roofs (Green Roofs) BMP -	\$\$\$	\$\$\$	M	M	M	H		3	3	3	3	3	3	3				2	2	3	2
Porous Pavement (Rainfall) BMP -	\$\$	\$	H	H	H		H		1	1	3				3	3		2	2	3	3
Reduce Runoff from Landscape and Hardscape Areas																					
Porous Pavement (Runoff) BMP -	\$\$\$	\$	H	H	H		H		1	1	3			3	2	2		2	3	3	3
Infiltration Rain Garden, LID Swale, or Stormwater Planter BMP -	\$\$-\$	\$	H	H	H	M	H				2	3		3	3	3	3	3	3	3	3
Soakage Trench BMP* -	\$\$	\$\$	H	H	H		H		1	1	2			3	3	3	3	3	3	3	3
Drywell BMP** -	\$\$\$	\$\$	H	H	H		H		1	3		2		3	2	2	1	3	3	3	3
WQ Conveyance Swale BMP -			M	L	L	L	L	3	3	3	3	3		3	3	3	3	1	3	3	3
Dispersion: Vegetated Filter Strips BMP -	\$\$	\$	M	L	L	L	L		1	1	3	3		1	3	3	3	3	3	2	3
Dispersion: Downspout Disconnection BMP	\$	\$	M	L	L	L	L		1	1	3	3		3				3	3	2	3
Provide Minimal Water Quality Treatment of Runoff from Landscape & Hardscape Areas: (Equipped to deal with source contaminants)																					
Lined Rain Garden, LID Swale, or Stormwater Planter BMP -	\$\$-\$	\$	H	L	L	M		3	3	3	3	3	3	3	3	3	3	3	3	3	3

Roads and Public Right-of-Way	Land Ownership			Development Type		
	Industrial	Private	Public	Retrofit	Redevelopment	New Development
	1	2	2	2	2	3
3	1	3	3	2	2	3
		3	2		1	3
	1	3	2	1	2	2
	2	3	2		1	2
2	3	3	3		3	3
3	3	3	3	3	3	3
1	3	3	3	3	3	3
	2	3	3		1	2
3	2	3	3	3	2	2
	3	3	3		1	3
3	2	3	3	3	3	3
2	2	3	3	3	3	3
2	2	3	3	3	3	2
2	2	3	3	3	3	2
	3	2	3	1	2	3
2	2	2	3	1	1	3
3	3	2	3	1	1	3
2	3	3	3	3	3	3
3	3	3	3	3	3	3
3	3	3	3	3	3	3
3	3	3	3	3	3	3
3	2	3	3	3	3	3
	2	3	3	3	3	3
2	3	3	3	3	3	3

Use the LID Implementation Form to apply BMPs in the preferred order (i.e. stormwater hierarchy). Brief descriptions of column headings are as follows (see Chapter 3 for additional information):

Water Quality. Indicates which BMPs address water quality on-site and which substantially reduce runoff volume to protect against erosion and subsequent re-pollution of downstream waterways.

Drainage Area. Indicates which BMPs can be applied to which surfaces.

Challenging Sites. Indicates which BMPs are feasible at sites where infiltration of runoff is not recommended.

Local Flooding Control. Indicates which BMPs serve as a substitute for a detention basin (i.e. are effective for flood control).

Land Use. Indicates the land uses/zoning classifications where LID can and has been implemented in Oregon.

Ownership. Indicates which BMPs may be used in private development or public development.

Development Type. Indicates which BMPs may be used in a retrofit, redevelopment or new development.

*Soakage trenches under pavement are not suitable for expansive soils, but are well suited under landscape areas with expansive soils.

** With adaptations, drywells may sometimes be used below contaminated soils. See Chapter 3 "Drywells BMP".

*** Effectiveness level assumes the BMP is acting as a stand alone BMP under average conditions. When BMPs are used in a conjunction with others (e.g. any "Minimize Impervious Area BMPs" are combined with "Restored Soils BMP") their effectiveness tends to increase.

****Suitability level accounts for general difficulty in implementing or use by stakeholders under average conditions.

+ Cost varies per square foot of property. Ranking therefore is determined based on a 1,660 square foot house (the average house size in Oregon)

Maintenance is determined based on annual cost

- Indicates the need for a hired professional to complete the BMP

This table is an excerpt from the LID guidance template "LID for Health" to be released in early 2016. For more info (upcoming template, etc.), please contact Maria Cahill (greengirl@greenoregon.gov)