Targeting Storm Water Retrofits
to Improve Urban Streams
April 27, 2010

Storm Water Retrofit Ranking

The purpose of the storm water retrofit evaluation and ranking to be conducted by Cuyahoga SWCD will be to identify high priority *locations* where storm water retrofits may be pursued. This is different than prioritizing actual *retrofit projects*, and this difference is due to the decision to focus desktop analyses and field investigations on identifying locations that may be suitable for storm water retrofits, as opposed to developing storm water retrofit field concepts.

Storm water ranking factors fall under three categories:

- Potential for Treatment
- Potential for Greater Ecological and Community Benefits
- Site Constraints

The proposed ranking system is displayed below.

Category	Ranking Factor	Potential Score	
Potential for Treatment			**40**
	Total drainage area treated	15	
	Impervious area treated	15	
	Land use treated	10	
Potential for Greater Ecological and Community Benefits			**25**
	Potential education / demonstration project AND/OR public accessibility	15	
	Treatment of area(s) of concern	5	
	Potential to support other planned or on-going watershed restoration projects and activities	5	
Site Constraints			**35**
	Access for construction and maintenance	15	
	Potential for conflict with existing utilities	5	
	Potential ecological conflicts	10	
	Project for further consideration (yes/maybe)	5	
Total Potential Score			**100**

Method for Assigning points:
Total drainage area treated and impervious area treated: The area of each site was divided by the area for the largest site, and the result was multiplied by the 15 available points. In each watershed there is at least one site whose area is significantly large enough (multiple standard deviations above the average) to skew this ranking, so these sites were assigned the full 15 points, but not used as the “large site” against which the other sites are compared.

Land use treated: Based on the event mean concentration for a pollutant of concern for the land use(s) in each site's drainage area. The pollutant of concern used in each subwatershed is phosphorus, except that nitrogen was used in Baldwin Creek.

Potential as a demonstration/education site: Based on the field form response. 15 points for "Yes," 7.5 points for "Maybe" and 0 points for "No."

Treatment of Areas of Concern: Based on the field form response. 5 points for "Yes," 2.5 points for "Maybe" and 0 points for "No."

Potential to support other planned or on-going watershed restoration projects and activities: Points assigned based on priority areas as identified by the rocky River and Euclid Creek Watershed Coordinators. In Abram Creek, sites in the immediate vicinity of Lake Abram received 5 pints, all others received 0 points. In Baldwin Creek, all sites upstream of W. 130th St. received 5 points, all others received 0 points. And in Euclid Creek, 5 points were assigned to sites near potential headwater restoration sites.

Access for construction and Maintenance: Based on the field form response. 15 points for "Yes," 7.5 points for "Unsure" and 0 points for "No."

Potential for Conflict with existing Utilities: Based on the field form response. 5 points for "Yes," 2.5 points for "Unsure" and 0 points for "No."

Potential Ecological Conflicts: Based on the field form response. 10 points for "Yes," 5 points for "Unsure" and 0 points for "No."

Project for Future Consideration: Based on the field form response. 5 points for "Yes" and 0 points for "No."

Once storm water retrofit locations are ranked they will be grouped into three to five categories in terms of priority (e.g., High Priority, Medium Priority, and Low Priority). A secondary screening process will then be used to select projects for implementation. Factors that may be considered at this stage include the following:

- Property ownership and landowner cooperation
- Support of an interested community partner
- Potential cost of design and construction
- Opportunity to support protection of a rare, threatened or endangered species
- Potential to obtain an easement for the location
- Potential to serve as a demonstration project related to the NEORSD storm water fee
- Community cooperation
- Specific, local priorities for stormwater management (e.g., runoff reduction to reduce CSOs)