

DRAFT Stormwater Problem Ranking Criteria (COST AS A FACTOR METHOD)
Deerfield Regional Storm Water District

RANKING METHODOLOGY

A₁ Benefits to Property Owners / Occupants

- Number of Properties Directly Benefited by Project
 (e.g., controls flooding, erosion, structural deterioration)

Score (A_{1s})

- 10 if more than 100 beneficiaries
- 7 if between 51 and 100 beneficiaries
- 5 if between 11 and 50 beneficiaries
- 3 if between 1 and 10 beneficiaries
- 0 if no direct beneficiaries

Weight (Total = 100%)

Weight (A_{1w}) = 20%

A₂ Number of Properties Using a Benefitting Roadway

Score (A_{2s})

- 10 if more than 1,000 beneficiaries (interstate / limited access highway)
- 7 if between 501 and 1,000 beneficiaries (arterial highway)
- 5 if between 101 and 500 beneficiaries (collector roadway)
- 3 if between 1 and 100 beneficiaries (local roadway)
- 0 if no direct beneficiaries

Weight (A_{2w}) = 10%

B Severity / Frequency of Averted Structural Damage or Loss of Life

Score (B_s)

- 10 Immediate, Direct Threat
Frequent Flooding ≥ 2 ft deep
- 7 Immediate, Indirect Threat
Infrequent Flooding ≥ 2 ft deep
- 3 Potential, Indirect Threat
Infrequent Flooding < 2 ft deep
- 0 No Known Threat
No Structural Flooding

Weight (B_w) = 25%

C Severity / Frequency of Averted Roadway Flooding

Score (C_s)

- 10 Frequent Flooding ≥ 2 ft deep
- 7 Infrequent Flooding ≥ 2 ft deep
- 5 Infrequent Flooding < 2 ft deep
- 3 Infrequent Flooding < 8 inches deep
- 0 No Structure Flooding

Weight (C_w) = 15%

D Water Quality / Habitat Benefits

Score (D_s)

- 10 Significant Reduction in Pollutant Discharges / Habitat Degradation
- 5 Moderate Reduction in Pollutant Discharges / Habitat Degradation
- 0 No Increase in Pollutant Discharges / Habitat Degradation
- 3 Moderate Increase in Pollutant Discharges / Habitat Degradation
- 10 Significant Increase in Pollutant Discharges / Habitat Degradation

Weight (D_w) = 5%

E Estimated Cost to District (not total cost)

Score (E_s)

- 10 Cost to District ≤ \$10,000
- 7 Cost to District > \$10,000 and ≤ \$25,000
- 5 Cost to District > \$25,000 and ≤ \$100,000
- 3 Cost to District > \$100,000 and ≤ \$250,000
- 0 Cost to District > \$250,000

Weight (E_w) = 25%

$$\text{Rank} = (A_{1s} * A_{1w} + A_{2s} * A_{2w} + B_s * B_w + C_s * C_w + D_s * D_w + E_s * E_w)$$

EXAMPLES

Sample	Description	Weight:	20%	10%	25%	15%	5%	COST	25%	Rank (Max=10)
			A ₁	A ₂	B	C	D			
1	Storm Sewer Collapse (cost-share)		5	5	7	5	0	\$ 15,000	7	5.8
2	Storm Sewer Collapse		5	5	7	5	0	\$ 30,000	5	5.3
3	Regional Detention		10	10	0	0	10	\$ 800,000	0	3.5
4	Backyard Puddle or Poor Ditch Drainage		3	0	0	0	(3)	\$ 5,000	10	3.0
5	Failed Headwall		0	3	3	0	0	\$ 20,000	7	2.8
6	Catch Basin/Pipe Cleaning		0	3	0	0	5	\$ 25,000	7	2.3