

Exhibit 1. **Debris Collection Alternatives for the City of Miami Beach Stormwater System**

| Alternative | Location | Pros | Cons | Costs |
|--|--|---|--|-----------------------|
| Bar Racks  | Consolidated , Upstream of Stormwater Outfall Discharge | <ul style="list-style-type: none"> ✓ Is already in use throughout the City: CMB Pump Station Locations – installation and maintenance procedures are known ✓ Low visual impact ✓ Minimum impact to stormwater flow ✓ Works in free-draining and submerged environments | <ul style="list-style-type: none"> ☒ Requires the construction of an additional stormwater structure ☒ Community and traffic impacts during construction and maintenance | Capital \$\$\$ |
| | | | | Maintenance \$ |
| | | | | Overall \$\$ |
| Stormwater Inlet Grates  | Multiple Installations, at Every Stormwater Inlet | <ul style="list-style-type: none"> ✓ Easy to install ✓ Different configurations available | <ul style="list-style-type: none"> ☒ Disrupts flow when blocked with debris, causing flooding ☒ Will require each stormwater inlet to be cleaned and maintained frequently ☒ Community and traffic impacts during construction and maintenance | Capital \$\$ |
| | | | | Maintenance \$\$\$ |
| | | | | Overall \$\$\$ |
| Outfall Filtration Net  | Consolidated , At Outfall Discharge | <ul style="list-style-type: none"> ✓ Works in free-draining and submerged environments ✓ Relatively easy installation process ✓ Minimum impact on flow ✓ Minimum impacts to the community and traffic during construction and maintenance operations | <ul style="list-style-type: none"> ☒ May be unsightly ☒ May impact boat traffic ☒ May be difficult to access ☒ Nets may become damaged at high flow velocities ☒ When net becomes full, it disengages from the main unit, and though there is a safety system, it no longer catches debris ☒ Requires a crane and boat for cleaning the net | Capital \$ |
| | | | | Maintenance \$\$ |
| | | | | Overall \$\$ |