

CHECKLIST FOR INSPECTION OF BIORETENTION SYSTEM/TREE FILTERS

Location: Cermak Rd between Ashland and Halsted, Blue Island Ave between Ashland and Western

Inspector: Chris Bourbois

Dates: September 7th and 12th 2023

Time: 1 PM both days

Site Conditions: Cloudy, roughly 69° both days

Days Since Last Rain Event: 1 in both cases

Inspection Items	Satisfactory (S) or Unsatisfactory (U)	Comments/Corrective Action
1. Initial Inspection After Planting		The installed plants here still appear stable and healthy for the most part, although the size and age of these installations can make determining which individuals and species were originally planted difficult. In areas still populated by grasses, there is no evidence of preferential flow. In areas that are now mostly bare ground, there is clear evidence of preferential flow and rutting. Some inlets and outlets remain functional and are protected by vegetation and rock structures. Some others have no protection remaining and are dealing with erosion and influxes of litter/vegetative debris at their inlets.
Plants are stable, roots not exposed	Ⓢ U	
Surface is at design level, no evidence of preferential flow/shoving	S Ⓤ	
Inlet and outlet/bypass are functional	S Ⓤ	
2. Debris Cleanup (1 time/year minimum, Spring/Fall)		There is little to no standing dead vegetation that needs removal from the system. However, there is a lot of litter across the system, as well as some vegetative debris. Much of this appears to be being carried into some GSI structures by stormwater, often accumulating near inlets. Pruning and mowing could both be beneficial in certain areas, as some areas are very overgrown, while others have reed canary grass populations that could begin to be controlled by repeated mowings.
Litter, leaves, and dead vegetation removed from the system	S Ⓤ	
Prune/mow vegetation	S Ⓤ	
3. Standing Water (1 time/year and/or after large storms)		No standing or pooled water one day after rain. However, some areas are clearly experiencing erosional issues and rutting, either because they have lost their vegetation or because they have an inlet that is not protected by vegetation or rock barriers.
No evidence of standing water after 24-48 hours since rainfall	Ⓢ U	

4. Vegetation Condition and Coverage		Vegetation conditions are very mixed here. This is a very large site that has extremely variable conditions throughout its multi-mile stretch. Given the size of the site and the age of these installations, there is a pleasantly surprising lack of serious invasive species concerns. Some areas have some reed canary grass, but these areas also have native grasses (prairie cordgrass and big bluestem) and are not monocultures. Reed canary grass was also the only serious invasive species observed, although there are plenty of field weeds like mugwort, curled dock, yellow toadflax, barnyardgrass, foxtail, yarrow, and smartweed.
Vegetation condition good with good coverage (typically >75%)	S ①	
Final Comments		
<p>This site is challenging to assess as a whole because of its size and the variability of its installations. Some areas are not vegetated at all and are therefore experiencing erosional issues, preferential flow, and rutting. Other unvegetated areas are well mulched and are not experiencing the same problems, while also theoretically being well positioned to get native plants established. Some of the non-vegetated installations are xeriscaped effectively, with large rocks surrounding a single, healthy tree. The areas that are obviously receiving maintenance (like outside Juarez academy or outside some of the residential areas) are generally in decent shape. The areas outside Juarez are filled with sunflowers, boneset, switchgrass, milkweed and goldenrod, while the residential areas are filled with cultivated roses, amaranth, and hydrangeas. Some areas that don't appear to be receiving much maintenance, like on the southern side of Blue Island, are severely overgrown with field weeds like mugwort, barnyardgrass, and curled dock and are being brushed in by tree of heaven and other adventive woody species. Others still retain some native quality, like some of the bioswales along the southern side of Cermak. These bioswales unfortunately have a significant amount of reed canary grass, but many of them also had populations of sedges, switchgrass, milkweed, big bluestem, and prairie cordgrass, of which the latter two were not often seen at sites in this inventory. Given the wide range of conditions here, it may be best to take action based on management capabilities. The first priorities for improvement are likely the rutted, non-vegetated areas along Cermak and the overgrown areas along Blue Island. The rutted areas are not currently functional and would likely need plug plantings of wetland plants (perhaps of some sedges and of the prairie cordgrass doing well elsewhere), along with maintenance to ensure their establishment. The overgrown Blue Island installations are beginning to encroach onto sidewalk space and should be pruned/mowed to a manageable state again, before adding native plants again. However, if difficulty maintaining these native communities remains, it may be better to simply use rock formations, or use ornamental plants that have also been doing well in the area. With such a large number of installations, maintaining native wet prairie and wetland communities throughout the entire project area is obviously difficult, time consuming, and expensive. As we often do in restoration, it may be best to dedicate maintenance time to the highest quality areas, while looking for easier to manage solutions in the areas that are not responding well (like the aforementioned xeriscaping and use of mulch + ornamentals).</p>		