

CHECKLIST FOR INSPECTION OF BIORETENTION SYSTEM/TREE FILTERS

Location: Daley College Engineering Center, 4101 W 76th St.

Inspector: Chris Bourbois

Date: July 27th 2023

Time: 1 PM

Site Conditions: Sunny, 88°

Days Since Last Rain Event: 1

Inspection Items	Satisfactory (S) or Unsatisfactory (U)	Comments/Corrective Action
1. Initial Inspection After Planting		The plants at this site are stable, although nearly entirely invasives. The one oak on site is also unhealthy and experiencing crown dieback. The density of vegetation has prevented any erosion and there is no evidence of preferential flow.
Plants are stable, roots not exposed	Ⓢ U	
Surface is at design level, no evidence of preferential flow/shoving	Ⓢ U	
Inlet and outlet/bypass are functional	Ⓢ U	
2. Debris Cleanup (1 time/year minimum, Spring/Fall)		There is no visible litter on site or dead leaves/vegetation. However, some of the trees could use pruning (although it is unclear which trees on site were planted and which are volunteers) and the site would definitely benefit from mowing.
Litter, leaves, and dead vegetation removed from the system	Ⓢ U	
Prune/mow vegetation	S Ⓤ	
3. Standing Water (1 time/year and/or after large storms)		No standing or pooled water one day after rain. There is no visible drain or erosion.
No evidence of standing water after 24-48 hours since rainfall	Ⓢ U	
4. Vegetation Condition and Coverage		Vegetation condition is very poor at this site. There is one oak on site that is not doing well. There are a few sedges and native grasses hanging on near the edges, but the site is mostly made up of invasive species. These include phragmites, sweet clover, crown vetch, teasel, reed canary grass, tall goldenrod, non-native thistles, and field weeds like mullein and nightshade. In particular, the crown vetch, teasel, and phragmites are heavy.
Vegetation condition good with good coverage (typically >75%)	S Ⓤ	
5. Other Issues		
Note any additional issues not previously covered	S U	

Final Comments

This site is in very poor shape as far as its species composition goes. Its function seems somewhat intact, as the vegetation density seems to be preventing pooling of water and/or erosion on site. However, given that the function would be just as good with a more robust assemblage of native species, this site must be considered to be in poor shape overall. The small size of the site hopefully provides an easier recovery than would be expected given the extent of the invasives issue. A combination of herbiciding and mowing could return the site to a state where natives can start to be reintroduced. However, the timing of the mowing would need to be well considered. Repeated mowings before species like teasel, crown vetch, or phragmites seed (but just before and during their flowering) could reduce the invasive pressure. This may need to be combined with herbiciding or manual removal of other species that are likely to seed before scheduled mowings. As the invasives are beaten back, plug plantings of grasses and sedges, combined with a simple mix of resilient native prairie seed may begin the recovery process. However, the seed bank is filled with invasive seed at this point, so any recovery will likely need active and significant maintenance for multiple growing seasons before native species begin to dominate the site.