#1 – Maintenance Checklist for Detention Ponds:

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
General	Trash and Debris	Any trash and debris which exceed five cubic feet per 1,000 square feet. If less than threshold, all trash and debris will be removed as part of next scheduled maintenance.	Trash and debris cleared from site.
General	Poisonous Vegetation and Noxious Weeds	Any poisonous or nuisance vegetation which may constitute a hazard to maintenance personnel or the public. Any evidence of noxious weeds as defined in the Pierce County Noxious Weeds List. (Apply requirements of adopted integrated pest management policies for the use of herbicides.)	No danger of poisonous vegetation where maintenance personnel or the public might normally be. Noxious and nuisance vegetation removed according to applicable regulations. *(Coordinate with Tacoma-Pierce County Health Department.) Complete eradication of noxious weeds may not be possible. Compliance with state or local eradication policies required.*
General	Contaminants and Pollution	Any evidence of contaminants such as oil, gasoline, concrete slurries, or paint.	No contaminants or pollutants present. *(Coordinate source control, removal, and/or cleanup with Gig Harbor Public Works Department 253-851-6170 and/or Dept. of Ecology Spill Response 800-424-8802.)*
General	Rodent Holes	If the facility is constructed with a dam or berm, look for rodent holes or any evidence of water piping through the dam or berm.	Rodents removed and dam or berm repaired. *(Coordinate with Tacoma-Pierce County Health Department; coordinate with Ecology Dam Safety Office if pond exceeds 10 acre-feet.)*
General	Beaver Dams	Beaver dam results in an adverse change in the functioning of the facility.	Facility is returned to design function. (*Contact WDFW Region 6 to identify the appropriate Nuisance Wildlife Control Operator.)*
General	Insects	When insects such as wasps and hornets interfere with maintenance activities.	Insects destroyed or removed from site. *Apply insecticides in compliance with adopted integrated pest management policies.*
General	Tree Growth and Dense Vegetation	Tree growth and dense vegetation impedes inspection, maintenance access or interferes with maintenance activity (i.e., slope mowing, silt removal, vactoring, or equipment movements).	Trees and vegetation do not hinder inspection or maintenance activities.
General	Hazard Trees	If dead, diseased, or dying trees are identified (Use a certified Arborist to determine health of tree or removal requirements).	Hazard trees removed.
General	Performance	Check crest gauge against design expectations (see Maintenance and Source Control Manual).	Reading recorded. City notified if not meeting design performance.
Crest Gauge	Crest Gauge Missing/ Broken	Crest gauge is not functioning properly, has been vandalized, or is missing.	Repair/replace.

#1 – Maintenance Checklist for Detention Ponds:

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Side Slopes of Pond	Erosion	Erosion damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion.	Slopes stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction.
Side Slopes of Pond	Erosion	Any erosion observed on a compacted berm embankment.	Slopes stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction. *If erosion is occurring on compacted berms, a professional engineer should be consulted to resolve source of erosion.*
Storage Area	Sediment	Accumulated sediment that exceeds 10 percent of the designed pond depth unless otherwise specified or affects facility inlets or outlets.	Sediment cleaned out to designed pond shape and depth; pond reseeded if necessary to control erosion. *(If sediment contamination is a potential problem, sediment should be tested regularly to determine leaching potential prior to disposal.)*
Storage Area	Liner (If Applicable)	Liner is visible and has more than three one-fourth inch holes in it.	Liner repaired or replaced. Liner is fully covered.
Pond Berms (Dikes)	Settlements	Any part of berm which has settled 4 inches lower than the design elevation.	Dike is built back to the design elevation. *If settlement is significant, a professional engineer should be consulted to determine the cause of the settlement.*
Pond Berms Over 4 ft in height (Dikes)	Tree Growth	Tree growth on berms over 4 feet in height may lead to piping through the berm which could lead to failure of the berm.	Trees on berms removed. *If root system is small (base less than 4 inches) the root system may be left in place. Otherwise the roots should be removed and the berm restored. A professional engineer should be consulted for proper berm/spillway restoration.*
Pond Berms (Dikes)	Piping	Discernable water flow through pond berm. Ongoing erosion with potential for erosion to continue.	Piping eliminated. Erosion potential eliminated. *Recommend a geotechnical engineer be called in to inspect and evaluate condition and recommend repair of condition.*
Emergency Overflow/ Spillway	Tree Growth	Tree growth on emergency spillways creates blockage problems and may cause failure of the berm due to uncontrolled overtopping.	Trees on emergency spillway removed. *If root system is small (base less than 4 inches) the root system may be left in place. Otherwise the roots should be removed and the berm restored. A professional engineer should be consulted for proper berm/spillway restoration.*

#1 – Maintenance Checklist for Detention Ponds:

Drainage System Feature	Defect or Problem	Condition When Maintenance Is Needed	Results Expected When Maintenance Is Performed
Emergency Overflow/ Spillway	Rock Missing	Only one layer of rock exists above native soil in area five square feet or larger, or any exposure of native soil at the top of outflow path of spillway.	Rocks and pad depth restored to design standards. (Riprap on inside slopes need not be replaced.)
Emergency Overflow/ Spillway	Erosion	Erosion damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion. Any erosion observed on a compacted berm embankment.	Slopes stabilized using appropriate erosion control measure(s); e.g., rock reinforcement, planting of grass, compaction. *If erosion is occurring on compacted berms a professional engineer should be consulted to resolve source of erosion.*

If you are unsure whether a problem exists, contact a professional engineer.