COMPLETE CHECKLIST IN BLUE PEN AND SUBMIT ELECTRONICALLY OR BY MAIL TO THE ADDRESSES BELOW

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Urban Watershed Management Program
ATTN: Stormwater Review
525 Golden Gate Ave, 6th Floor
SAN FRANCISCO, CA 94102
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Annual Self-Certification Checklist

WET POND & CONSTRUCTED WETLAND

(AKA: stormwater pond, retention pond, wet extended detention pond & stormwater wetland, treatment wetland, stormwater marsh)

Inspection Date: _____ **Address:** _____ **Block / Lot #**_____ **Installation Date:** _____

Inspected By: Name: _____ **Phone:** _____ ☐ Property Owner ☐ Site Manager ☐ Contractor ☐ Other: _____

INSTRUCTIONS: All inspections, maintenance tasks and repairs are to be completed prior to the beginning of the rainy season (October 15). Mark all status boxes with an S or U, where S = Satisfactory (no maintenance required), and U = Unsatisfactory (maintenance required). See the Pond & Wetland Inspection instructions included in this packet for detailed descriptions of conditions requiring maintenance and further action.

Item #	Inspection Item Description	Status	Indicate Action Required or Action Planned	Indicate Action Taken (Include Date Completed)
1	Unpleasant odors			
2	High live storage water level (extended drawdown time > 48 hrs.)			
3	Excessive trash / debris accumulation			
4	Visible surface contaminants / pollution			
5	Vandalism / catastrophic damage to components or entire system			
6	Unauthorized modifications			

7	Excessive weed growth			
8	Sediment accumulation at forebay or pond bottom			

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Item #	Inspection Item Description	Status	Indicate Action Required or Action Planned	Indicate Action Taken (Include Date Completed)
9	Impermeable liner visible and/or damaged (if applicable)			
10	Liner attachment damaged or sealant missing (if applicable)			
11	Erosion at inlet, outlet, overflow / emergency spillway, or side slopes			
12	Inlet, outlet, overflow or drawdown structure blockage			
13	Dead, diseased, dying or missing plants			
14	Mulch – large bare spots / eroded mulch areas (if applicable)			
15	Vegetation blocking inlet or flow from forebay, or flow paths through pond			
16	Vegetation blocking Operation & Maintenance of other components			
17	Structural damage (pond / wetland edges, walls, berms or outlet structure)			
18	Rodent damage / burrowing			

19	Mosquitos or mosquito larvae observed*			

*If mosquitos or mosquito larvae are observed, please contact the San Francisco Environmental Health Vector Control Program at (415) 252-3806, or email EnvHealth.DPH@sfdph.org.

By completing and signing the Annual Self Certification (ASC), the Owner/Representative of the property subject to this ASC hereby acknowledges receipt of the ASC and agrees to take any and all necessary steps to comply with the ASC, the San Francisco Stormwater Management Requirements and Design Guidelines, the San Francisco Stormwater Management Ordinance (San Francisco Public Works Code Section 147 et seq.), and all other applicable laws, ordinances, and regulations. Failure to complete and provide a signature by the established deadline will result in the issuance of a non-reporting fee in accordance with the SFPUC Rates Schedule.

Signature: _____ Date: _____

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NOTE: These instructions are intended to be a companion piece to the Annual Self-Certification Checklist. The information contained herein is to be used to help the preparer of the Annual Self-Certification Checklist accurately conduct an inspection and properly complete the form.

Abbreviations: SMR: San Francisco Stormwater Management Regulations and Design Guidelines; SCP: Stormwater Control Plan; SMO: San Francisco Stormwater Management Ordinance; BMP: Best Management Practice (Pond or Wetland); GI: Green Infrastructure

Item #	Inspection Item Description	Inspection Instructions and Explanation
1	Unpleasant odors	**Area of Concern:** Unpleasant odors can be attributed to stagnant water in wet ponds or constructed wetlands. These installations must be inspected to ensure that water is freely flowing to and through all areas of the installation. The lack of free flowing water leads to stagnation which, in turn, leads to reduced water treatment and pollutant removal, mosquito development, and unsightly conditions. **Maintenance Solution:** For issues that may create a stagnant water situation, see Item #s 2, 3, 7, 8, 12, 15 below.
2	High live storage water level (extended drawdown time > 48 hrs.)	**Area of Concern:** High live storage level and extended drawdown times that are beyond 48 hours in ponds and wetlands can lead to several problems such as stagnant water, reduced water treatment and pollutant removal, and increased risk of berm and spillway overtopping / flooding of adjacent areas. High live storage water level and drawdown failure can be caused by the following: • large amounts of sediment accumulation on the pond bottom • blocked or clogged outflow /overflow structures and/or sand traps Inspecting the outflow / overflow structure or sand trap can be done by removing the lid or grate from the structure and visually inspecting for standing water or excessive debris accumulation. **Maintenance Solution:** Clogged outflow / overflow structures can be cleared by jetting or snaking the underdrain pipe or culvert that connects the structure to the sewer and by removing accumulated debris and sediment from the bottom of the structure.

Item #	Inspection Item Description	Inspection Instructions and Explanation
3	Excessive trash / debris accumulation	**Area of Concern:** Excessive trash or debris accumulation causes problems in ponds and wetlands that extend beyond poor aesthetics. Trash and debris accumulation can inhibit plant growth, clog flow paths or inhibit water movement through the installation and clog outflow structure grates. Clogged flow paths or inhibited water movement could lead to stagnating water. Clogged outflow structure grates can lead to overtopping and flooding. **Maintenance Solution:** All trash and debris should be removed from ponds and wetlands before the start of the rainy season (October 15) or as frequently as site conditions dictate and discarded at an appropriate facility.
4	Visible surface contaminants / pollution	**Area of Concern:** Visible surface contaminants and pollution can range from inert substances that can interrupt treatment and pollutant removal to hazardous substances that impact plant, environmental, or human health. Examples of inert contaminants are masonry, plaster or concrete “washout,” and masonry or roadway saw cutting slurry and residue. Examples of hazardous contaminants are petroleum-based substances, caustic chemicals, pesticides, and herbicides. These pollutants can often be identified by sight or smell. If pollutants are detected, investigations must be conducted to determine the source of the contaminant, mitigate that source, and then take steps to clean up the contamination. **Maintenance Solution:** For inert substances, cleanup can typically be conducted by regular maintenance personnel by draining the pond, scraping off, and discarding the contaminated material at an appropriate facility. Hazardous substance cleanup will require specially trained and licensed contractors and special disposal conforming to local and national laws and regulations.
5	Vandalism / catastrophic damage to components or entire system	**Area of Concern:** Vandalism can range from minor issues like graffiti or tearing out /stealing individual plants to theft of facility components. Catastrophic damage can result from vehicles driving into or through the pond or wetland. Similarly, damage to berms and spillways can be caused by the trampling of large amounts of pedestrians or animals walking around the edges of the installation, or construction or repair of nearby utilities or structures that impact the facility. **Maintenance Solution:** Repair of vandalism or catastrophic damage can range from simply removing graffiti, or planting individual replacement plants, to complete reconstruction of the facility if catastrophic damage occurs.
6	Unauthorized modifications	**Area of Concern:** Unauthorized modifications consist of any changes to a facility that deviates from the approved construction documents. These modifications can take place during construction (i.e., soil or plant substitutions with inferior components) or can happen over time after the facility is constructed (i.e., reducing the footprint of the pond to accommodate an addition to a nearby structure). The SMR Maintenance Agreement Exhibit B recorded on the deed of the property provides the original approved construction documents that can be referred to and used to determine if modifications have been made. **Maintenance Solution:** All unauthorized modifications must be corrected by returning the BMP to its original configuration as described in the approved construction documents contained in the SMR Maintenance Agreement Exhibit B.

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7	Excessive weed growth	**Area of Concern:** Noxious and invasive weeds must be removed when they cover more than 25% of the facility surface. Noxious and invasive weeds are highly damaging to landscapes and the natural and built environment. These weeds interfere with the beneficial use of the land, degrade biodiversity, and reduce the effectiveness of the facility. Weed growth can also block the intended flow path through the pond or wetland. **Maintenance Solution:** Best practices call for weed removal on a monthly basis, regardless of cover percentage. Weed removal must include the entire root structure and the weeds must be disposed of at an appropriate facility to prevent spreading of invasive species. California's Pest Prevention System (PPS) and the California Food and Agricultural Code (FAC) Appendix D set regulations and laws pertaining to weed removal and disposal.
8	Sediment accumulation at forebay or pond bottom	**Area of Concern:** Sediment accumulation in ponds or wetlands is normal and expected. However, steps must be taken to remove sediment accumulation on an annual basis (or more often, depending on site conditions) to keep the facility functioning properly. Sediment and debris can collect in the forebay (or rock cobble energy dissipater), or at the low point of pond or wetland. This sediment buildup must be removed to keep water flowing freely through the facility as well as to maintain treatment and pollutant removal capacity. **Maintenance Solution:** Typical removal methods consist of drawing down the pond level and scraping up sediment. Use shovels for small quantities of sediment or extended reach construction and dredging equipment for large quantities of sediment. Properly dispose of the sediment and dredged material at an approved facility.
9	Impermeable liner visible and/or damaged (if applicable)	**Area of Concern:** Impermeable liners are intended to remain buried, with soil and mulch protecting the liner from impact damage and photo degradation. If the liner becomes exposed through the settlement of soil or by erosion at the sides of the planter, then soil and/or mulch should be added to keep the liner covered. **Maintenance Solution:** If the liner has been damaged and has holes, cracks, splits, or open seams, then the damage must be repaired with a patch to ensure that the liner remains watertight.
10	Liner attachment damaged or sealant missing (if applicable)	**Area of Concern:** Impermeable liner attachment points must remain fastened and sealed to adjacent concrete structures (if applicable) to prevent ponded water from leaking between the liner attachment point and the adjacent concrete structure. If the liner attachment hardware has become loose, detached from the surrounding concrete structure, or has become damaged, then steps must be taken to mechanically re-attach the hardware to the concrete and reseal the joint with the appropriate caulk or mastic sealant. **Maintenance Solution:** If the liner sealant at the joint between the attachment hardware and the concrete structure is cracked, damaged, or missing, then the joint between the hardware and the surrounding concrete structure must be resealed with the appropriate caulk or mastic sealant.

Item #	Inspection Item Description	Inspection Instructions and Explanation
11	Erosion at inlet, outlet, overflow / emergency spillway, or side slopes	**Area of Concern:** Inflow, outflow, and water movement through a pond or wetland may cause erosion and scouring of the planter surface over time or immediately after construction during the plant grow-in period. Erosion and the sediment created by erosion can block flow paths through the pond or wetland, cause damage to plants, and create clogging in drains and outflow structures. **Maintenance Solution:** Repair measures must include identifying and correcting the cause of the erosion, repairing the erosion damage, and removing any sediment created by the erosion process.
12	Inlet, outlet, overflow, or drawdown structure blockage	**Area of Concern:** Trash, debris, and poorly sited or overgrown plant material can create blockages at the inlet and outlet points, at the overflow structure, or in the flow paths of ponds and wetlands, inhibiting the flow of water into, through, or out of the facility. Inlet blockages can cause stormwater flows to bypass the facility or only allow partial flows into the pond or wetland, creating a situation where the facility is non-functioning or underperforming. Inlet and outlet structure blockages can create excessive ponding within and around the facility, potentially leading to hazardous conditions and property damage. **Maintenance Solution:** Blockages must be cleared before the start of the rainy season (October 15) and/or before each forecast storm if site conditions require or as frequently as site conditions dictate. Trash and debris must be removed by hand or with hand tools and disposed of at an appropriate facility. Poorly-sited or overgrown plant material can be transplanted to another location within the facility or discarded as compost. Overflow structure grates, sumps, and traps must be cleared of debris by hand, hand tools, or vactor truck.
13	Dead, diseased, dying, or missing plants	**Area of Concern:** Plants play an important role in the function of a pond or wetland. In addition to evapotranspiration, plant roots help aerate the soil and minimize soil compaction, replenish organic materials in the soil, and provide a habitat for beneficial bacteria that aids in the biological breakdown and mitigation of pollutants deposited by stormwater into the facility. For a pond or wetland to function properly, it needs consistent and healthy plant cover. Bare spots created by missing plants give invasive weeds an opportunity to grow. This invasive weed growth will crowd out the beneficial plant species over time, reducing the effectiveness of the facility. **Maintenance Solution:** Dead, diseased, dying, or missing plants must be replaced. If a large amount of plants have died off, consult with a horticultural expert on the cause of the die-off, and remedy the cause before replanting.
14	Mulch – large bare spots / eroded mulch areas (if applicable)	**Area of Concern:** Rock and organic mulch helps to minimize weed growth, prevent erosion and scour of the soil surface, and helps prevent the soil surface from losing moisture and crusting during dry periods. **Maintenance Solution:** Any bare spots on the planter surface where the soil is visible must be re-covered with mulch. The added mulch must meet the specs of the material thickness and type used during construction. If the facility was installed with organic mulch, do not substitute bark, “gorilla hair,” or recycled kiln dried lumber type mulches as replacement materials because these types of mulches are floatable materials that can cause other maintenance problems. If the facility was installed with rock mulch, select a replacement product of similar size or larger to resist washing out. Do not substitute rock mulch materials with high fines content or recycled materials.

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15	Vegetation blocking inlet or flow from forebay or flow paths through pond	**Area of Concern:** Poorly-sited, spreading, or overgrown plant material can create blockages at the inlet point of a pond or wetland, creating a situation where stormwater ponds at or bypasses the inlet. If stormwater cannot enter the facility or less than the designed volume of stormwater is able to enter, the function of the facility will be significantly diminished. **Maintenance Solution:** Any plant material that blocks the inlet of a facility must be pruned, thinned, transplanted elsewhere in the planter, or removed and discarded. Pruning, thinning, and transplanting should only be done by trained landscape professionals in accordance with established horticultural practices and standards.
16	Vegetation blocking Operation & Maintenance of other components	**Area of Concern:** Poorly-sited, spreading, or overgrown plant material can interfere with or block the Operation & Maintenance (O&M) of other key components of a facility. Some of the pond and wetland components that may be interfered with are: outlet structures, drawdown structures, and valves. **Maintenance Solution:** Any plant material that blocks the O&M of key components of a facility must be pruned, thinned, transplanted elsewhere in the planter, or removed and discarded. Pruning should only be done by trained landscape professionals in accordance with established horticultural practices and standards.
17	Structural damage (pond / wetland edges, walls, berms or outlet structure)	**Area of Concern:** Minor damage to structural components such as curbs, walls, trench drains, and outlet structures should be repaired on a yearly basis. These minor repairs can consist of, but are not limited to, patching chips and cracks to concrete structures and resetting outlet structure frames and grates. More significant structural damage, such as damage caused by auto accidents, nearby construction work, or natural disasters must be repaired as soon as possible. **Maintenance Solution:** Major repairs can consist of removal and replacement of damaged curbs, walls, outflow structures, or structural bracing and supplemental reinforcement of failing structural components.
18	Rodent damage / burrowing	**Area of Concern:** Rodent damage and animal burrows in ponds or wetlands can cause structural, landscape and stormwater flow-based issues. Burrows can undermine structural components, leading to unwanted settlement and create preferential flow paths through a pond or wetland that differ significantly from the designed flow path. Burrows can also cause piping and erosion problems in berms or other earthen structures. Rodents can also damage plants and plant root systems and destabilize berms or dikes. **Maintenance Solution:** If rodent / animal damage is observed, consult with a licensed professional pest control service for eradication, or trapping and relocation, as appropriate.

Item #	Inspection Item Description	Inspection Instructions and Explanation
19	Mosquitos or mosquito larvae observed	**Area of Concern:** Ponded water resulting from extended drawdown time beyond 48 hours may lead to the development of a mosquito habitat. **Maintenance Solution:** See Item #2 above for remedies to extended drawdown times. For more information on mosquito control visit http://www.sfdph.org/dph/eh/WestNile/default.asp or http://www.sfmosquito.org/. If mosquitos or mosquito larvae are observed, please contact the San Francisco Environmental Health Vector Control Program at (415) 252-3806, or email EnvHealth.DPH@sfdph.org. Also, consult with a licensed professional pest control service for eradication, as appropriate.