

# City of Valley Center

## Stormwater Facility Inspection & Maintenance Guidance

### Stormwater (Wet) Ponds

Regular inspection and maintenance is critical to the effective operation of this stormwater management facility so that it can function as designed. In the City of Valley Center, local regulations require that property owners maintain all stormwater facilities on their properties to ensure they are fully functioning to treat and control stormwater runoff, and to document facility inspections and maintenance activities. This documentation must be kept by the property owner and must be made available to Stormwater Management staff upon their request.

This page provides guidance on inspection and maintenance activities that must be performed for stormwater ponds. Some facilities may have more, or less, frequent maintenance needs, depending upon a variety of factors including the occurrence of large storm events, overly wet or dry (i.e., drought) regional hydrologic conditions, and any changes in the land (e.g., development, landscaping, etc.) that drains to the facility.

Inspection Activities	Suggested Schedule
<ul style="list-style-type: none"> <li>After several storm events or an extreme storm event, inspect for: bank stability; signs of erosion; and damage to, or clogging of, the inlet/outlet structures and pilot channels.</li> </ul>	As needed
<ul style="list-style-type: none"> <li>Inspect for: trash and debris; clogging of the inlet/outlet structures and any pilot channels; excessive erosion; sediment accumulation in the basin, forebay and inlet/outlet structures; tree growth on dam or embankment; the presence of burrowing animals; standing water where there should be none; vigor and density of the grass turf on the basin side slopes and floor; differential settlement; cracking; leakage; and slope stability.</li> </ul>	Semi-annually
<ul style="list-style-type: none"> <li>Inspect that the inlet/outlet structures, pipes, sediment forebays, and upstream, downstream, and pilot channels are free of debris and are operational.</li> <li>Check for signs of unhealthy or overpopulation of plants and/or fish (if utilized).</li> <li>Note signs of algal growth or pollution, such as oil sheens, discolored water, or unpleasant odors.</li> <li>Check sediment marker(s) for sediment accumulation in the facility and forebay.</li> <li>Check for proper operation of control gates, valves or other mechanical devices.</li> <li>Note changes to the wet pond or contributing drainage area as such changes may affect pond performance.</li> </ul>	Annually
Maintenance Activities	Suggested Schedule
<ul style="list-style-type: none"> <li>Clean and remove debris from inlet and outlet structures.</li> <li>Mow side slopes (embankment) and maintenance access. Periodic mowing is only required along maintenance rights-of-way and the embankment. The remaining pond buffer can be managed as a meadow (mowing every other year) or forest.</li> </ul>	Monthly
<ul style="list-style-type: none"> <li>If wetland vegetation is included, remove invasive vegetation.</li> </ul>	Semi-annually
<ul style="list-style-type: none"> <li>Repair damage to pond, outlet structures, embankments, control gates, valves, or other mechanical devices; repair undercut or eroded areas.</li> <li>Remove pollutants or algal overgrowth as appropriate.</li> </ul>	As Needed
<ul style="list-style-type: none"> <li>Perform wetland plant management and harvesting.</li> </ul>	Annually (if needed)
<ul style="list-style-type: none"> <li>Remove sediment from the forebay. Sediments excavated from stormwater ponds that do not receive hotspot runoff are not considered toxic or hazardous material and can be safely disposed of by either land application or landfilling. Sediment testing is required prior to sediment disposal when the pond receives discharge from a hotspot land use.</li> </ul>	5 to 7 years or after 50% of the total forebay capacity has been lost
<ul style="list-style-type: none"> <li>Monitor sediment accumulations and remove sediment when the pond volume has become reduced significantly or the pond is not providing a healthy habitat for vegetation and fish (if used). Discharges of pond water may be considered an illegal discharge by local ordinances. Care should be exercised during pond drawdowns to prevent downstream discharge of sediments, anaerobic water, or high flows with erosive velocities. Consult the local jurisdiction before draining a stormwater pond.</li> </ul>	10 to 20 years or after 25% of the permanent pool volume has been lost

The inspection checklist that is presented on the next page is provided to guide and document inspection and maintenance activities. Please use this checklist or other form(s) of maintenance documentation when and where deemed necessary in order to ensure the long-term proper operation of the stormwater management facility.

For more information on the maintenance of your stormwater facility, please contact:

**City of Valley Center Stormwater Management, 545 W. Clay Valley Center KS. 67147, (316) 755-7320**

# City of Valley Center

## Stormwater (Wet) Ponds Inspection Checklist

Project Name: \_\_\_\_\_ Project #: \_\_\_\_\_

BMP Name/ID (as shown on the O&M Plan): \_\_\_\_\_

Refer to the Operations & Maintenance Plan for this property to get the information requested in this box. The Operations and Maintenance Plan for this property is recorded with the Sedgwick County Register of Deeds.

Property Owner Name: \_\_\_\_\_

Property Address: \_\_\_\_\_

Owner Phone #: \_\_\_\_\_ Owner Email Address: \_\_\_\_\_

Owner Change since last inspection? Y N

Inspection Date/Time: \_\_\_\_\_

Weather and Site Conditions (last rainfall date, dry/wet soil, etc.): \_\_\_\_\_

Inspection Items	Condition*	Comments/Corrective Action
<p>*Note - Condition should be marked as Satisfactory (S) or Unsatisfactory (U). An explanation of corrective actions must be provided for all items marked as Unsatisfactory. The completion date of any corrective actions taken must also be documented.</p> <p><b>Inspect the embankment (the dam/berm that holds water in the pond) and the emergency spillway (the location where water exits the facility in the event that the embankment is overtopped).</b></p>		
1. Does the vegetation appear to be healthy and adequately covering the embankment to prevent erosion? <b>Yes = Satisfactory</b>		
2. Are there signs that soil is eroding (washing away) on/from the embankment? <b>Yes = Unsatisfactory</b>		
3. Are there signs of animal burrows in embankment? <b>Yes = Unsatisfactory</b>		
4. Are there signs of cracking, sliding and/or bulging of the berm/dam? <b>Yes = Unsatisfactory</b>		
5. Are the drains (if any) blocked or malfunctioning? <b>Yes = Unsatisfactory</b>		
6. Are there signs of leaks or seeps on the embankment? <b>Yes = Unsatisfactory</b>		
7. Are there any obstructions of the emergency spillway(s)? <b>Yes = Unsatisfactory</b>		

# City of Valley Center

## Stormwater (Wet) Ponds Inspection Checklist

Inspection Items	Condition*	Comments/Corrective Action
8. Are there signs of erosion (washing away of soil) in or around the emergency spillway? <b>Yes = Unsatisfactory</b>		
9. Other (describe)?		
<b>Inspect the inlet and outlet structures and channels – these are the locations/structures where water enters and exits the pond.</b>		
10. Are the inlets and outlets and channels clear of debris and functional? <b>Yes = Satisfactory</b>		
11. Are trash racks clear of debris and functional? <b>Yes = Satisfactory</b>		
12. Has sediment accumulated at any of the inlet and outlet structures? <b>Yes = Unsatisfactory</b>		
13. Does the concrete/masonry appear to be in good condition? <b>Yes = Satisfactory</b>		
14. Do the pipes appear to be in good condition? <b>Yes = Satisfactory</b>		
15. Is the slide gate (if any) operating properly? <b>Yes = Satisfactory</b>		
16. Is the pond drain valve operating properly? <b>Yes = Satisfactory</b>		
17. Are there signs of erosion (washing away of soil) in the outlet channels? <b>Yes = Unsatisfactory</b>		
18. Other (describe)?		
<b>Inspect the permanent pool – this is the area that stays permanently (or nearly permanently) filled with water.</b>		
19. Is there growth of undesirable vegetation or overgrowth of vegetation? <b>Yes = Unsatisfactory</b>		
20. Is the pool visibly polluted (trash, oily sheen, foul or chemical odor, discoloration, foaming, etc.)? <b>Yes = Unsatisfactory</b>		

# City of Valley Center

## Stormwater (Wet) Ponds Inspection Checklist

Inspection Items	Condition*	Comments/Corrective Action
21. Are there areas of erosion (soil washing away) on the shoreline? <b>Yes = Unsatisfactory</b>		
22. Are there signs of erosion (soil washing away) at the location where water enters the pool? <b>Yes = Unsatisfactory</b>		
23. Are the headwalls and endwalls in good condition? <b>Yes = Satisfactory</b>		
24. Are other activities (e.g., grading, recreational, etc.) encroaching on the pool area? <b>Yes = Unsatisfactory</b>		
25. Is there evidence of sediment accumulation? <b>Yes = Unsatisfactory</b>		
<b>Inspect the sediment pre-treatment area (usually a forebay) – the location and type of the pre-treatment area should be indicated on the O&amp;M Plan.</b>		
26. Has sediment accumulated in the pre-treatment area? Note – sediment accumulation would indicate that the pre-treatment area is not working as intended and must be cleaned. <b>Yes = Unsatisfactory</b>		
<b>Inspect the dry areas.</b>		
27. Is the vegetation healthy and adequately covering the dry areas to prevent soil erosion? <b>Yes = Satisfactory</b>		
28. Is there growth of undesirable vegetation or overgrowth of vegetation? <b>Yes = Unsatisfactory</b>		
29. Is there excessive sediment accumulation? <b>Yes = Unsatisfactory</b>		
<b>Identify any potential hazards to humans or the environment.</b>		
30. Have there been complaints from residents? <b>Yes = Unsatisfactory</b>		
31. Are there any other public hazards that should be noted? <b>Yes = Unsatisfactory</b>		

## City of Valley Center Stormwater (Wet) Ponds Inspection Checklist

By signing my name below, I certify that the information submitted in this document (and all attachments) is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information, including the possibility of regulatory violations and associated fines.

Inspected by (Name): \_\_\_\_\_

Inspected by (Signature): \_\_\_\_\_