2017 Valley Branch Watershed District Infrastructure and Conveyance Systems Inspections

Prepared for
Valley Branch Watershed District Board of Managers

December 2017
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Certifications

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of Minnesota.

Nathan Campeau
PE #: 44917

December 8, 2017
Date
1.0 Executive Summary

The Valley Branch Watershed District (VBWD) owns, operates, and/or maintains a number of infrastructure and conveyance systems throughout the VBWD, including streams, storm sewer pipes, manholes, catch basins, water level control structures, infiltration basins, bank stabilizations, and dams. Natural and constructed, these systems convey, store, or treat surface water throughout the VBWD.

This report describes 22 VBWD systems (Figure 1-1) inspected by Barr on a regular basis. Observations made by Barr staff during each inspection, including recommendations for maintenance and further inspection are provided. This report also documents maintenance activities performed by VBWD in 2017, including many activities recommended by Barr in the 2016 inspection report. Where maintenance or inspection are recommended in 2018, a cost estimate and priority level (Low, Medium, and High) are provided.

In general, the VBWD systems continue to perform well, with some exceptions as documented in the report. We recommend that the Managers authorize Barr to continue monitoring VBWD systems (natural and constructed) in 2018. Several of the systems can be inspected less than once a year (biennially, triennially, etc.); those systems would not be scheduled for re-inspection until 2019 or beyond. We also recommend that 15 of the 22 systems be inspected by Barr staff in 2018, for a total estimated cost of $40,000.

Barr recommends 20 maintenance activities, classified as Low, Medium, or High priority. While completing all repairs would cost an estimated $602,500, we recommend that VBWD authorize the completion of all High-priority maintenance activities, for a total estimated cost of $180,000.

Barr estimates that the completion of all 2018 inspection and maintenance activities recommended in this report (assuming only High-priority items are addressed) would cost $220,000.
Figure 1-1

INFRASTRUCTURE AND CONVEYANCE SYSTEMS
2017 Infrastructure and Conveyance Systems Inspections Report
Valley Branch Watershed District
2.0 Systems Inspections

This section summarizes Barr’s inspections of Valley Branch Watershed District (VBWD) infrastructure and natural conveyance systems and subsequent maintenance recommendations. VBWD systems are shown on Figure 1-1 and maintenance recommendations are shown on Figure 5-1. Systems discussed in this report are generally organized geographically from northwest to southeast.

2.1 Project 1007

2.1.1 Background

In 1987, the VBWD constructed Project 1007—a large flood control project ($4.25 million). This project provides an outlet for many landlocked and flood-prone lakes in the northwest portion of the watershed, directing water to a Minnesota Department of Transportation (MNDOT) storm sewer along Interstate 94 and, ultimately, to the St. Croix River. The project included construction of new outlets for Long Lake, Lake Olson, Deer Pond, Hedges Pond, Hedges Bog, Lake Jane, Crombie Pond, Beutel Pond, Eagle Point Lake, Lake Elmo, Horseshoe Lake, the West Lakeland Storage Site (North, Middle, and South Ponds), and the MNDOT Rest Area Pond. VBWD has operated Project 1007 since construction. Project 1007 comprises approximately 5 miles of pipe, 60 manholes and water level control structures (including over 40 catch basins/manholes), two dams, and approximately 2 miles of open channels.

VBWD performs periodic maintenance on system components, as needed. This includes annual mowing of the Rest Area Pond and the side slopes of the channels between Horseshoe Lake and Interstate 94 and the West Lakeland Storage Site South Pond.

VBWD replaced the stoplogs in the Eagle Point Lake Dam (Structure 6) in 2017. Additionally, VBWD performed routine maintenance on the entire Project 1007 system. All 2017 maintenance activities are listed in Section 4.0.

2.1.2 Observations

Barr staff inspects Project 1007 open channels, water level control structures, and dams on an annual basis. The remaining manholes and catch basins are inspected every 3 years on a rotating basis, unless maintenance activities require more frequent inspection. On October 4 and 5, 2017, Patrick Brockamp, PE, and Josh Phillips conducted the regular (annual) inspection of Project 1007 components, as well as all 2017 maintenance activities performed by VBWD-hired contractors. On May 25, 2017, Nathan Campeau, PE, inspected the Eagle Point Lake Dam and on October 19, 2017, Nathan Campeau, PE, and representatives from MNDOT inspected the Rest Area Pond Dam (both dams are part of the Project 1007 system). While most open channels, manholes, catch basins, and structures were accessible for inspection, some features were not fully accessible due to high water elevations.

Appendices A and B contain separate inspection reports for Eagle Point Lake Dam and the Rest Area Pond Dam, previously provided to the Managers.

Barr staff noted a number of issues that require maintenance, as noted in Section 2.1.3.
As part of our analyses of the flood levels within the Tri-Lakes and Beutel Pond watersheds, Barr surveyed the top of the stoplog weir in the Lake Olson Outlet (Structure 11) in June 2017. The top of the stoplog weir controls the discharge elevation of Lake Olson and Lake DeMontreville. The VBWD’s permit (Protected Waters Permit 86-6269) with the Minnesota Department of Natural Resources (MNDNR) states that the permanent control elevation of the Lake Olson Outlet shall be 928.5 feet (National Geodetic Vertical Datum of 1929, NGVD29). The record drawings from 1987 indicate that the top of the wooden stoplog weir was constructed at 928.35 feet NGVD29, which equates to 928.48 feet North American Vertical Datum of 1988 (NAVD88 = NGVD29 + 0.13 feet). Barr’s recent survey indicates that the actual elevation at the top of the stoplog weir is 928.68 feet NGVD29 or 928.82 feet NAVD88, which is approximately 0.18 feet (2.16 inches) higher than the MNDNR-permitted elevation or 0.34 feet (4.1 inches) higher than the 1987 record drawings indicate. Our review of the record drawings and recent survey indicate that the difference may be due to swelling of the stoplogs. Because the lake’s outlet is not at the MNDNR-permitted elevation, Barr recommends lowering the stoplog weir to an elevation of 928.5 feet NGVD29 (928.63 NAVDD88).

Lowering the stoplog weir at Structure 11 could be accomplished one of two ways:

1) Replacing the entire stoplog assembly (frame, stoplogs) with an aluminum stoplog system to achieve the desired weir elevation, as was performed in early 2017 on Structure 6

2) Removing the top wooden stoplog and replacing it with a new, shorter wooden stoplog to achieve the desired weir elevation.

Because the existing stoplogs do not appear to be failing and replacing the entire stoplog assembly in this location would likely require excavating into the road (which would likely be more expensive than the $27,500 Structure 6 replacement completed in 2017), we recommend replacing only the top wooden stoplog with a shorter stoplog to achieve the MNDNR-permitted elevation of 928.5 NGVD. We recommend first inquiring whether the city of Lake Elmo would modify the stoplogs. If not, we recommend that the VBWD hire a contractor to perform the work.

2.1.3 Recommendations

All of Project 1007’s components appeared to be performing adequately; however, we suggest that the Managers consider the maintenance items listed below. Relevant photos are provided following the recommendations list.

1. Continue annual mowing of the Rest Area Pond Dam and spillway.
2. Continue annual mowing of the side slopes of the channels between Horseshoe Lake and Interstate 94, including the West Lakeland Storage Site South Pond.
3. Remove accumulated dead trees and debris near the Rest Area Pond Outlet and within the pipe to Structure 2 (Photo 1). The Managers authorized Buelow Excavating Inc. to perform this work in 2016; however, due to high water levels in 2016 and 2017 this work could not be completed. If water levels permit, this work will be performed in 2018.
4. Remove downed trees at Raleigh Creek in Lake Elmo Park Reserve (Photo 2 and Photo 3).
5. Coordinate with The Royal Golf Club for removal of:
   a. Downed trees in the channel downstream of Lake Elmo (Photo 4 and Photo 5).
   b. The abandoned, low-hanging bridge in the channel downstream of Lake Elmo (Photo 6).

6. Inspect the Project 1007 storm sewer via video. This storm sewer has not been inspected since
   construction in 1987; many municipalities conduct video inspections of their infrastructure every
   5 to 10 years.

7. Replace wooden stop logs with aluminum stop logs (Photo 7) at all water level control structures
   (3, 4, 5, 9, 10, 11, and 12).

8. Monitor animal burrows and investigate animal management at the Rest Area Pond Dam; burrows
   are located on the back side of the dam near the transmission tower, below the elevation
   of the emergency spillway.

9. Modify Structure 11 by first re-surveying the elevation of the 6-inch-high top stoplog in the
   structure. Then, lower the discharge elevation by replacing the stoplog with a shorter wooden
   stoplog (about 3.84 inches high) to achieve elevation 928.5 NGVD29, as required in MNDNR
   Protected Waters Permit 86-6269. Once the stoplog elevation has been adjusted, re-survey the
   structure. Ask the city of Lake Elmo to do this work. If the City cannot do the work, hire a
   contractor.

   Barr recommends continuing the annual inspection of Project 1007, including the associated dams.
Photo 1 (November 2015): Barr recommends removing dead trees and debris from the Rest Area Pond Outlet. (No 2017 photo because outlet is under water.)

Photo 2 (October 2017): Barr recommends removing fallen tree from Raleigh Creek in Lake Elmo Park Reserve.
Photo 3 (October 2017): Barr recommends removing fallen tree and debris from Raleigh Creek in Lake Elmo Park Reserve.

Photo 4 (October 2017): Barr recommends coordinating with The Royal Golf Club for removal of fallen trees in the channel downstream of Lake Elmo.
Photo 5 (October 2017): Barr recommends coordinating with The Royal Golf Club for removal of fallen trees in the channel downstream of Lake Elmo.

Photo 6 (October 2016): Barr recommends coordinating with The Royal Golf Club for removal of an abandoned, low-hanging bridge in the channel downstream of Lake Elmo. (The Royal Golf Club did not remove the bridge in 2016, as officials indicated.)
2.2 **Echo Lake Outlet**

2.2.1 **Background**

The Echo Lake Outlet was a cooperative project with the city of Mahtomedi to construct a new, restricted outlet from Echo Lake. The city of Mahtomedi modified the Echo Lake Outlet in 1999 to restrict outflows and protect downstream areas from flooding, as required by the VBWD. In 2002, the City installed a metal fence in front of the outlet to prevent debris from accumulating on the outlet structure.

2.2.2 **Observations**

Patrick Brockamp, PE, and Josh Phillips inspected the Echo Lake Outlet on October 5, 2017, and found the structure in good condition. The inlet was submerged, but did not appear to be obstructed or plugged. Water was flowing through the low-flow orifice in the outlet structure.

2.2.3 **Recommendations**

Barr recommends continuing the annual inspection of this project.
2.3 Weber Pond Outlet

2.3.1 Background

Weber Pond is a 7.5-acre wetland in the City of Mahtomedi that is split in two by an old streetcar embankment. In 2001, VBWD constructed a restricted outlet from the larger upstream portion of Weber Pond to the smaller downstream portion to replace the previous temporary outlet and limit the flood level of Long Lake.

2.3.2 Observations

Patrick Brockamp, PE, and Josh Phillips inspected the Weber Pond Outlet on October 5, 2017, and found the structure in good condition. The water level in the pond was higher than previous years. The inlet grate was submerged, but did not appear to be obstructed or plugged.

2.3.3 Recommendations

Barr recommends continuing the annual inspection of this project.

2.4 Silver Lake Bioretention Basin

2.4.1 Background

The VBWD applied for and received a 2000 MetroEnvironment Partnership Grant to construct the Silver Lake Bioretention Basin. At the time, the stormwater management effectiveness of bioretention basins had not been studied to any great extent. The project was intended to treat previously untreated stormwater runoff prior to discharging to Silver Lake and included designing, constructing, studying, and documenting the effectiveness of bioretention. The VBWD designed the project and the city of North St. Paul did the original construction and planting. After the original construction, the VBWD made enhancements to the basin to improve infiltration. The basin is approximately 0.4 acres and has a tributary area of about 7.4 acres.

In 2015, the VBWD applied for and obtained a FY2016 State of Minnesota Clean Water Fund (CWF) grant to implement best management practices (BMPs) to reduce phosphorus loading from the watershed tributary to Silver Lake. The CWF grant included improvements to the Silver Lake Bioretention Basin.

In January 2017, the VBWD and the city of North St. Paul signed a Memorandum of Understanding (MOU) regarding roles and responsibilities related to the Silver Lake Bioretention Basin. Among other items, the MOU indicates that the VBWD will annually inspect the site and provide a memorandum to the City with ordinary and necessary maintenance recommendations. The City will then contract with a qualified professional landscape maintenance company, facilitate, and pay for all maintenance at the site beginning the fifth year after construction. The VBWD is responsible for vegetation management until then (2022). The VBWD hired a contractor who made improvements to the basin in November 2017. Additional work will be needed from the contractor in the spring of 2018.
2.4.2 Observations
Greg Williams, PE, of Barr has been observing the construction of the basin.

2.4.3 Recommendations
Barr will continue to monitor the construction project until closeout in the spring of 2018. Following construction, Barr recommends annual inspections beginning in the fall of 2018.

2.5 Long Lake Ravine Stabilization Project

2.5.1 Background
The Long Lake Ravine Stabilization Project was constructed by the VBWD in 2009. The project included channel grading, riprap, and natural vegetation to stabilize the head of a ravine entering Long Lake from the west. A portion of the stream entering the ravine is contained within a culvert and manhole to give neighboring landowners access to their property.

2.5.2 Observations
Barr staff most recently inspected this project in November 2016. The project area was in good condition with well-established vegetation and no signs of erosion. There was water flowing through the project area, and velocities appeared to be low in the re-meandered section of the site. The rock vanes toward the downstream end of the project appeared to be intact and functioning as intended.

2.5.3 Recommendations
Barr recommends continuing the biennial inspection of this project, as scheduled for 2018.

2.6 DeMontreville Ravine Stabilization Project

2.6.1 Background
The DeMontreville Ravine Stabilization Project was constructed by the VBWD in 2009. The ravine runs through the city of Lake Elmo’s DeMontreville Wildlife Park, connecting the ponds downstream of Long Lake with Lake DeMontreville. This VBWD project included installing boulder cross vanes, straight vanes, and natural vegetation to repair and stabilize the stream banks throughout the ravine. To reduce the amount of sediment entering Lake DeMontreville, VBWD also installed a sedimentation basin. In 2015, VBWD’s contractor installed a baffle box and a flat, slotted grate at Catch Basin 47 to reduce plugging caused by leaf and tree debris and promote more efficient flow through the outlet.

2.6.2 Observations
On October 5, 2017, Patrick Brockamp, PE, and Josh Phillips inspected the project. The vegetation along the entire ravine is well-established, including the tree and shrub plantings. The boulder vanes appeared to be in good condition, with only minor debris buildup (removed during the inspection). Barr staff observed accumulated sediment in the DeMontreville Ravine sedimentation basin and in Lake DeMontreville at the outlet from the basin to the lake. The basin is completely full, allowing additional sediment to accumulate in the lake.
The improvements at Catch Basin 47 appear to be functioning well and Barr staff observed no plugging or flow backup; however, vegetation and sedimentation are encroaching on the baffle box. Over time, this may decrease the performance of the baffle box and inlet grate, potentially plugging Catch Basin 47 and creating localized flooding.

### 2.6.3 Recommendations

To restore the lake shoreline and the sediment-removal capacity of the basin, Barr recommends excavating sediment from Lake DeMontreville at the outlet and from the sedimentation basin (Photo 8 and Photo 9). State rules require sediment sampling and permitting before removal; depending on sampling results, landfill disposal may be necessary. Barr also recommends continuing the annual inspection of this project.

**Photo 8 (October 2017):** Barr recommends removing the accumulated sediment in the basin on the downstream end of DeMontreville Ravine.
2.7 Olson Lake Estates Pond Outlet Project

2.7.1 Background

VBWD constructed the Olson Lake Estates Outlet in 1996 to connect the overflow from the Olson Lake Estates Pond (located west of Lake Olson in an Oakdale housing development) to Project 1007. This allows the stormwater runoff from the housing development to bypass Lake Olson and discharge to Project 1007 downstream of Crombie Pond—protecting the water quality of Lake Olson. The project included the construction of 19 manholes. These are inspected every 3 years on a rotating basis, unless maintenance activities necessitate more frequent inspection.

2.7.2 Observations

On October 5, 2017 Patrick Brockamp, PE, and Josh Phillips inspected six manholes and found them all to be in good condition. During this inspection, Barr staff observed both standing and flowing water in the system. Water depths were generally 1–2 inches deep.

In 2017 Washington County reconstructed County State-Aid Highway (CSAH) 13 in the same alignment as much of the Olson Lake Estates Pond Outlet storm sewer. The County modified several VBWD manholes, including adjusting the rim elevations to match the proposed grading for the road project. As required by the VBWD permit, Washington County inspected a portion of the Olson Lake Estates Pond Outlet storm sewer along CSAH 13 by video. Barr reviewed the pre- and post-project video and found the pipe to be in good condition, with no noticeably change in condition after the completion of road construction.
2.7.3 **Recommendations**

Barr recommends that VBWD video inspect the portion of storm sewer not inspected by Washington County. Many municipalities conduct a video inspection of their infrastructure every 5 to 10 years. Barr also recommends continuing the annual inspection of this project.

2.8 **Raleigh Creek Bank Stabilization Project**

2.8.1 **Background**

The VBWD Raleigh Creek Bank Stabilization Project, constructed in 2009, includes two reaches. The first reach is in Oakdale’s Anna’s Grove development, located between the railroad tracks and 31st Street North, primarily on city of Oakdale property. A small section of the creek meanders onto private property, currently owned by Tony Ulrich (7650 31st Street North). The second reach is approximately 350 feet upstream of Tablyn Park in Lake Elmo on private properties currently owned by David Moore, Jr. (8680 Stillwater Boulevard) and Michael Reid (8740 Stillwater Boulevard). Stabilization work included installation of cross vanes for grade control, two new outlets for stormwater ponds, root wads, live stakes, and plantings.

2.8.2 **Observations**

Barr staff most recently inspected this project in June 2016. Most areas remained in stable condition; however, minor erosion was present upstream of a rock vane installed on the Moore property. The channel upstream of the project was incised with some undercut banks.

2.8.3 **Recommendations**

Barr recommends continued biennial monitoring of the minor erosion on the Moore property and the stream upstream of the property to determine if additional action is necessary. The next planned inspection is in 2018.

2.9 **Raleigh Creek**

2.9.1 **Background**

Raleigh Creek is a perennial stream that drains water from portions of Oakdale and Lake Elmo, ultimately discharging to Eagle Point Lake. Both Project 1007 and the Raleigh Creek Bank Stabilization Project (described in Sections 2.1 and 2.8) include the reach of Raleigh Creek downstream of Stillwater Boulevard (CSAH 6).

2.9.2 **Observations**

While Barr staff members have regularly observed several reaches of Raleigh Creek during inspection of other projects, Barr staff most recently performed a comprehensive inspection of the creek (including the areas referenced in Section 2.8) in June 2016.

The erosion control measures for projects referenced in Section 2.8 were in good shape. Some minor erosion was observed on various banks in other areas of the creek, but did not require corrective action.
Barr hired Buelow Excavating Inc. (Buelow) to remove a tree on Raleigh Creek (downstream of the Union Pacific Railroad culvert) that was partially obstructing flow and placed the downed tree on the bank for stabilization (Photo 10 and Photo 11).

2.9.3 Recommendations

Barr recommends completing a triennial inspection of the entire creek, with the next inspection in 2019.

Photo 10 (July 2017): Buelow removed a tree partially obstructing flow from a railroad culvert.
2.10 Farney Creek Stabilization Project

2.10.1 Background

VBWD constructed the Farney Creek Stabilization Project in 2005 on the property currently owned by Aaron and Trista Goldstrohm (8171 21st Street North) within the Torre Pines subdivision of Lake Elmo. In March 2013, VBWD installed riprap to repair bank erosion caused by a July 2011 storm. In May 2013, the contractor returned to make final adjustments and repair minor damage to the lawn and sprinkler caused during riprap installation. In the spring of 2014, the homeowners noted new erosion downstream of the repaired area and adjacent to a private walking bridge.

In 2015, the owners of the home at 8219 21st Street North (Joe and Tammy Dunckel), downstream of the Goldstrohms, also contacted the VBWD Engineer regarding eroding banks on their property. The issue was assessed in 2015.

2.10.2 Observations

Jeff Weiss, PE, conducted a site investigation on November 25, 2017, that included a previously completed stabilization project on the Goldstrohm property and a previously documented erosion area on the Dunckel property. The erosion on the Goldstrohm and Dunckel properties has not become noticeably worse. The cause of the erosion downstream of the area previously repaired on the Goldstrohm property was not apparent. Grasses and flowers previously planted on the bank have continued to colonize the eroded area and should help provide some vegetative reinforcement. At the eroding bank upstream of the walking bridge the grade and shape of the stream bed is directing base flow into the toe of the bank. At the Dunckel property, the channel appears to be slightly incised and a small headcut (erosion of the
channel bottom in a stream or ravine that advances in the upstream direction) was observed near the parcel line between the Goldstrohm and Dunckel properties (Photo 12 and Photo 13).

Aside from the small headcut, systemic problems have not been observed; however, slight enlargement of the channel related to development in the upstream subwatershed may have caused the observed erosion. Though the contributing subwatershed is not densely developed and some runoff is routed through stormwater ponds, development nonetheless fundamentally changes the hydrology of the subwatershed and usually increases the total volume of runoff reaching area water bodies.

### 2.10.3 Recommendations

Barr recommends stabilizing the headcut observed near the property line between the Goldstrohm and Dunckel properties to prevent erosion from migrating upstream. Adjacent eroding streambanks should also be graded and revegetated. We also recommend inspecting the stabilization project in 2018 and the entire creek in 2021.

**Photo 12 (November 2017):** Bank erosion, incised channel, and fallen vegetation on the Dunckel property (8219 21st Street North), a short distance downstream of the headcut (Photo 13). Barr recommends stabilizing the headcut and nearby streambanks.
Photo 13 (November 2017): Eroding banks looking downstream from the Goldstrohm property toward the headcut on Farney Creek. Barr recommends stabilizing this headcut and adjacent banks.

2.11 Goetschel Pond Ravine Stabilization Project

2.11.1 Background

VBWD constructed the Goetschel Pond Ravine Stabilization Project in 2008 in the city of Lake Elmo, with final plantings installed in early 2009. The ravine drains to Goetschel Pond and affects land on property currently owned by:

- Julie and Michael Nelson (4768 Larkspur Lane North).
- Kevin and Maureen Tholen (4854 Linden Trail North).
- Anthony and Sara Yocum (4886 Linden Trail North).
- The Fields of St. Croix Homeowners Association (some parcels).
- The Robert Engstrom Companies (out lots).

Prior to the project, residents reported erosion and accumulation of sediment at the downstream end of the ravine. Stabilization required:

- Importing fill to rebuild the base.
- Installing an armored channel to prevent future erosion of the base.
- Installing vegetated reinforced soil slope (VRSS) to stabilize a steep slope adjacent to a private residence.
• Repairing an upstream detention pond to prevent stormwater seepage near the outlet pipe.

2.11.2 Observations

Barr staff most recently inspected the project in May 2016. Jeff Weiss, PE, of Barr and a representative of the homeowners association observed that sites stabilized during the original project were in good condition. They observed some erosion on the opposite side of the ravine from the stabilization, but there was no evidence that it was caused by surface drainage. The homeowners association representative committed to following up with adjacent homeowners to make sure they were not draining their pool over the side of the ravine and inadvertently causing erosion.

2.11.3 Recommendations

Barr recommends continuing the biennial inspection of this project, with the next inspection in the spring of 2018.

2.12 Goose Lake Ravine Stabilization Project

2.12.1 Background

VBWD constructed the Goose Lake Ravine Stabilization Project in 2008 at 9200 10th Street North (former Zimmerhakl residence) and 9140 10th Street North (Dennis and Karen Geffre residence) to stabilize significant erosion at the head of the ravine. Final plantings were installed early in 2009. Mr. Zimmerhakl had made several attempts to stabilize the channel on his property with mixed results. The initial project included installation of rock vanes, plantings, and an armored channel through the steepest and most actively eroding portion of the channel. High flows in the following years undermined the armoring and caused additional erosion in the armored channel. VBWD installed two large rock vanes in the ravine in December 2012 to act as grade control and stop erosion.

2.12.2 Observations

Jeff Weiss, PE, and Briana Drake visited the project site multiple times in 2017 to complete the design and construction observation for stabilization measures. VBWD hired Wetland Habitat Restorations (WHR), who performed the repairs the week of October 23, 2017. WHR installed two additional vanes to prevent further headcutting, repaired a cross vane with a displaced boulder, and installed armoring in select places to prevent general bank erosion and keep erosion and headcutting from moving around the sides of the vanes (Photo 14).

2.12.3 Recommendations

Barr also recommends continued annual inspection of this project.
2.13 **Downs Lake Flood Duration Reduction Project**

2.13.1 **Background**

VBWD constructed the Downs Lake Flood Duration Reduction Project in 2002 to provide an emergency flood outlet from Downs Lake and a complex of wetland and lowlands adjacent to it. The project created a lower overflow from Downs Lake to Horseshoe Lake, which is part of the Project 1007 system. Efforts included the installation of pipes, a check valve (which acts as a flap gate), and two gates which require manual operation. The operating plan for the gates allows the water level on Downs Lake to be lowered under certain conditions.

2.13.2 **Observations**

Patrick Brockamp, PE, and Josh Phillips inspected the project on October 4, 2017, and found it to be in generally good condition. However, they did discover that the top nut on the east sluice gate in Structure 1 was broken and the gate was inoperable. The west sluice gate in Structure 1 and both gates in Structure 2 were fully exercised during the inspection. In addition, as noted in previous inspections, two bolts in the castings of both Structure 1 and Structure 2 are sheared off.
2.13.3 Recommendations

Barr recommends (1) replacing the top nut of the east sluice gate in Structure 1 and (2) that the VBWD inspect the storm sewer via video. The 15-year-old storm sewer has never been video inspected. Many municipalities conduct a video inspection of their infrastructure every 5 to 10 years. Barr also recommends continued annual inspection of this project.

2.14 Valley Creek

2.14.1 Background

Valley Creek comprises three major reaches: the North Fork, the South Fork, and the Main Stem. The North Fork flows 1.6 miles from Lake Edith to its confluence with the South Fork. Below the confluence of the North and South Forks, the Main Stem of Valley Creek flows 1.8 miles to the mouth of the creek at the St. Croix River. The perennially flowing reaches of Valley Creek make up a trout stream.

The South Fork of Valley Creek has areas of both perennial and intermittent flow. From a point approximately 0.75 miles east of Neal Avenue (CSAH 71) to its junction with the Main Stem (a 2.5-mile stretch) the South Fork flows year round. Upstream of this location, the creek is dry most of the time, flowing only during rain or snowmelt. The most upstream and western end of intermittent flow is about half a mile west of Manning Avenue (Highway 95) and north of Valley Creek Road in Woodbury. A southern leg of the South Fork includes a privately owned dam and splits into three reaches that each extend to near 40th Street South.

The Blasko Dam Removal Project and the Valley Creek Upstream Stabilization Project (described in Section 2.17 and Section 2.18) are on the South Fork of Valley Creek. The Valley Creek Downstream Stabilization Project (described in and Section 2.19) is on the Main Stem of the creek. The Oakgreen Avenue Infiltration Basin (discussed in Section 2.14) and the stabilization projects on the Landucci and Moynagh Ravine (discussed in Section 2.16) are within the watershed of the South Fork of Valley Creek.

2.14.2 Observations

Tom MacDonald, PE, Briana Drake, and David Haar of Barr inspected Valley Creek and its ravines in April and early May 2017. The inspection consisted of walking selected portions of the Main Stem, North Fork, and South Fork of Valley Creek, as well as many of the contributing ravines. Barr staff inspected:

- The Main Stem from its confluence with the St. Croix River to the confluence of the North Fork and South Fork.

- The North Fork from its confluence with the Main Stem to Indian Trail South (Lake Edith) and immediately west of 15th Street Circle South.

- The South Fork from its confluence with the Main Stem to the point at which it becomes intermittent (i.e., not flowing year-round), approximately 0.65 miles east of Neal Avenue South.

Barr investigated a total of approximately 30,000 feet of stream and all of the significant contributing ravines (21,000 feet). Some of these ravines had not been inspected in previous efforts. Barr did not inspect the creek on the Afton Land LP (i.e., Hartwell) property. The landowner is working with an
engineering firm to manage the creek and recently made improvements on this property. Nor did Barr inspect several parcels owned by Belwin on the North Fork that are similarly managed. Additionally, Barr determined that it was not cost-effective to investigate the farthest upstream, non-perennial (i.e., intermittent) stream reaches. Given their small scale, these are not presumed to contribute sediment to the downstream reaches.

Barr staff documented 63 erosion sites categorized as having minor, moderate, or significant erosion. Four sites had significant erosion—one on the creek and three in ravines. There were no sites that had severe erosion.

**2.14.3 Recommendations**

In a memo provided to the Managers and dated July 7, 2017, Barr staff recommended further investigation of the four sites with significant erosion (Photo 15, Photo 16, Photo 17, and Photo 18). The sites noted as having minor or moderate erosion do not require additional action besides monitoring. The erosion at such sites may be due to a temporary disturbance (e.g., a fallen tree) and may self-stabilize. Or, the erosion may be more permanent due to site conditions (e.g., steep topography, lack of ground vegetation), but not, necessarily, growing worse.

For the four sites, Barr recommends a feasibility study including the following:

1. Initiate a site visit and discussion with the landowner(s) to gage willingness to complete a project and, in some cases, incorporate a vegetated buffer
2. If corrective measures are warranted and the landowner(s) are willing to cooperate on a project, collect additional topographic survey data to facilitate design
3. Complete concept-level designs for landowner and Manager review
4. Complete concept-level cost estimates for Manager review
5. Provide recommendation for final design and construction of project(s) in 2019

Barr recommends completing an inspection and erosion inventory of the entire creek and major ravines every 3 years. The next inspection should occur in 2020 and include prioritization of erosion sites.
Photo 15 (April 2017): Significant ravine bank erosion near the south end of Oakgreen Avenue. Barr recommends a feasibility study for this and other Valley Creek erosion sites.

Photo 16 (April 2017): Significant ravine bank erosion near Trading Post Trail and 32nd Street South. Barr recommends a feasibility study for this and other Valley Creek erosion sites.
Photo 17 (May 2017): Significant ravine headcut near 15th Street Circle. Barr recommends a feasibility study for this and other Valley Creek erosion sites.

Photo 18 (May 2017): Significant creek bank erosion on the North Fork of Valley Creek. Barr recommends a feasibility study for this and other Valley Creek erosion sites.
2.15 Oakgreen Avenue Infiltration Basin

2.15.1 Background

VBWD completed the Oakgreen Avenue Infiltration Basin Project in 2008. The project involved the construction of a large infiltration basin at the top of an eroding ravine that feeds runoff directly to Valley Creek. The basin is approximately 0.4 acres and reduces runoff volume and sediment to Valley Creek. VBWD and an Environmental Protection Agency 319 grant paid for the project.

2.15.2 Observations

Matt Metzger, PE, of Barr thoroughly inspected this project in September 2017 and found it in good condition.

2.15.3 Recommendations

Continue monitoring the establishment of saplings at the flared-end sections and remove them if they appear to obstruct flow. Barr recommends continuing the biennial inspection of this project, with the next inspection in 2019.

2.16 Valley Creek Ravine Stabilization Projects—Landucci and Moynagh Ravine

2.16.1 Background

The Valley Creek Ravine Stabilization Projects—Landucci and Moynagh Ravine (also known as the Clean Water Fund Ravine 2 West Project) stabilized approximately 2,100 feet of eroding ravine in the Valley Creek subwatershed of Afton with 29 check dams and a riprapped drop structure. A grant from the Clean Water Fund matched with VBWD dollars paid for construction of the projects. The Landucci Ravine Stabilization Project was completed in December 2015 and the Moynagh Ravine Stabilization Project was completed in October 2016. The Moynagh Ravine property was sold to Jim and Marjorie Wade in 2016.

2.16.2 Observations

Matt Metzger, PE, of Barr inspected the Landucci Ravine Stabilization Project and the Moynagh Ravine Stabilization Project in September 2017 and found them in good condition. Vegetation has been established in areas where sunlight reaches the floor of the ravine. Although shadier areas of the forest floor remain unvegetated, that is not unexpected. Rock vanes appear intact and are not being bypassed or significantly eroded.

2.16.3 Recommendations

Barr recommends annual inspection of these projects to continue monitoring vegetation growth and possible sediment movement in the ravine, with the next inspection in 2018.
2.17 Blasko Dam Removal Project

2.17.1 Background

VBWD completed the Blasko Dam Removal Project in late summer 2010 at the request of landowners Scott and Audrey Blasko (14020 Valley Creek Trail South). VBWD removed the existing dam and replaced it with a series of boulder weirs that maintain upstream water levels, allow upstream fish passage, and prevent channel downcutting at the upstream bridge on Valley Creek Trail. The boulder weirs also result in less upstream pool area; associated reductions in solar input benefit the trout population.

2.17.2 Observations

Tom MacDonald, PE, of Barr inspected the project on April 14, 2017. Scott Blasko was present during the inspection. The project site was in good overall condition, with no observed erosion. There has not been a large flood at this site since construction; these typically occur following rapid snowmelt or large precipitation events when the ground is frozen.

2.17.3 Recommendations

Improvement of the riparian buffer (buckthorn removal and establishment of additional native vegetation) may enhance this site. Barr recommends that the site be re-visited and inspected in 2019 and that the opportunity to improve the riparian buffer be discussed further with the Blaskos.

2.18 Valley Creek Upstream Stabilization Project

2.18.1 Background

The Valley Creek Upstream Stabilization Project addressed bank erosion exacerbated by a severe flood in the spring of 2007. The work was done on properties owned by Jeff and Angela Polacek (14100 Valley Creek Trail South) and Joseph Meissner (14186 Valley Creek Drive South). Work on the Polacek property consisted of stabilizing a short portion of streambank using a root wad, grading, biolog, and revegetation. More extensive remediation was required on the Meissner property, located several hundred feet downstream of the Polaceks. This included repair of two significantly eroded banks using a combination of grading, root wads, boulder vanes, and riprap, as well as replacement of an illegal weir/culvert with a boulder riffle more amenable to fish passage. VBWD also stabilized a nearby culvert inlet to the creek on the downstream end of the Doyle property (14378 Valley Creek Trail) using rock and native vegetation. The work was completed in 2008 and paid for by the VBWD and an Environmental Protection Agency 319 grant. In 2009, VBWD repaired erosion of a contributing ravine where it joins the creek on the Meissner property (caused by early spring snowmelt). These repairs were paid for by VBWD.

2.18.2 Observations

Tom MacDonald, PE, Briana Drake, and David Haar of Barr inspected the project in April 2017 and found it in good condition. Minor erosion was evident at the downstream bank on the Meissner property, repaired in 2009, but additional repairs are not recommended.
2.18.3 Recommendations
Barr recommends continuing the biennial inspection of this project, with the next inspection in 2019.

2.19 Valley Creek Downstream Stabilization Project
2.19.1 Background
In 2009, VBWD completed the Valley Creek Downstream Stabilization Project at 15901 Putnam Boulevard South (property formerly owned by Tom Johnson and now owned by Tim and Diane Rivas) and 2398 St. Croix Trail South (property owned by Susan Stanton). The project was paid for by the VBWD and an Environmental Protection Agency 319 grant. The purpose of the project was to stabilize the badly eroded and incised channel reach. To accomplish this, VBWD:

- Installed a series of eight boulder riffles to achieve channel grade control.
- Created floodplain terraces to provide connectivity to the floodplain.
- Restored the riverbanks with native vegetation.

Channel banks susceptible to erosion were stabilized using bioengineering methods (primarily root wads). A native vegetation buffer was also established along the project corridor to provide additional protection and habitat.

The project has largely been successful, and the associated reach of Valley Creek is considered stable; however, at the upstream reach of the project, Tim and Diane Rivas have not maintained the full extent of the native buffer. This has increased the potential for future erosion. In addition, the channel was eroding the east bank at the upstream-most riffle and repair was recommended to prevent further erosion.

Barr recommended repairs consisting of repositioning the boulders on the left side of the riffle (looking downstream) and adding additional boulders to further reinforce the riffle. Barr also recommended repairing the bank immediately downstream of Riffle 8 by installing root wads, provided that Mr. Rivas would agree to stop mowing the overbank adjacent to the erosion area. Mr. Rivas agreed to stop mowing in certain vulnerable areas, but not to maintain the extent of the original buffer. The Managers obtained bids for the work in late June 2016, and they selected Nadeau Companies to perform the work. Construction was completed in fall 2016.

2.19.2 Observations
Tom MacDonald, PE, of Barr inspected the project in April 2017 and found it in good condition with a few areas of minor bank erosion. The repaired riffle and adjacent downstream area were in good condition, but vegetation was still becoming established.

2.19.3 Recommendations
Barr recommends annual inspection of the project until repairs are considered stable.
2.20 30th and Trading Post Ravine Stabilization Project

2.20.1 Background
VBWD stabilized approximately 325 feet of an eroding ravine with a concrete drop structure and 130 feet of 60-inch-diameter pipe. The project site is near the intersection of 30th Street South and Trading Post Trail South in the Valley Creek subwatershed of Afton. Construction of the project was completed in December 2015 and funded by a grant from the Clean Water Fund with matching VBWD dollars.

2.20.2 Observations
Patrick Brockamp, PE, inspected the project on October 24, 2017 and found the site in good condition.

2.20.3 Recommendations
Barr recommends annual inspection of the 30th and Trading Post site, with the next inspection in 2018.

2.21 Kelle’s Creek

2.21.1 Background
Kelle’s Creek, formerly part of the Lower St. Croix Watershed Management Organization (LSCWMO), was added to the VBWD in 2009. Kelle’s Creek has areas of both perennial and intermittent flow. The perennially flowing portion of the creek starts about 0.45 miles northeast of the intersection of Trading Post Trail and Afton Boulevard (CSAH 18) in a steep-walled valley that extends approximately 2.8 miles to the mouth of the St. Croix River. Information from the LSCWMO indicated that there were potential erosion issues in this area. Upstream, the creek is intermittent—dry most of the time but flowing during runoff events. VBWD has funded several projects implemented by the Washington Conservation District (WCD) in the Kelle’s Creek subwatershed to stabilize eroding ravines.

2.21.2 Observations
Jeff Weiss, PE, Josh Phillips, Briana Drake, and Chris Frias, PE, of Barr inspected Kelle’s Creek and its tributary ravines in April and May 2017. The inspection consisted of walking nearly all portions of Kelle’s Creek and the contributing ravines.

Overall, the creek and ravines were in generally stable condition; however, Barr staff documented 91 erosion sites categorized as having minor, moderate, significant, or severe erosion. One ravine site was determined to have severe erosion, six sites have significant erosion (two on the creek and four in ravines), and the rest have moderate or minor erosion. Barr provided a complete summary of the inspection to the Managers in a memorandum dated July 7, 2017.

2.21.3 Recommendations
After completing the inspection, Barr recommended additional investigation of five sites: one site with severe erosion and four with significant erosion (Photo 19, Photo 20, Photo 21, Photo 22, and Photo 23). The sites with minor or moderate erosion and one remaining site with significant erosion do not require additional action besides monitoring. The erosion at these sites may be due to a temporary
disturbance (e.g., a fallen tree) and may self-stabilize. Or, the erosion may be more permanent due to site conditions (e.g., steep topography, lack of ground vegetation), but not, necessarily, growing worse.

For the five sites that justify additional investigation, we recommend a feasibility study including the following:

1. Site visits and discussions with the landowner(s) to gage willingness to complete a project and, in some cases, incorporate a vegetated buffer
2. If corrective measures are warranted and the landowner(s) are willing to cooperate on a project, collect additional topographic survey data to facilitate design
3. Complete concept-level designs for landowner and Manager review
4. Complete concept-level cost estimates for Manager review
5. Provide recommendation for final design and construction of project(s) in 2019

Barr recommends completing an inspection and erosion inventory of the entire creek and major ravines every 3 years. The next inspection should occur in 2020 and include prioritization of erosion sites. Barr also recommends inspecting the intermittent stream/ravine south of Kelle’s Creek in 2018.

Photo 19 (April 2017): Significant ravine headcut near 3750 Paradox End Avenue South. Barr recommends a feasibility study for this and other Kelle’s Creek erosion sites.
Photo 20 (April 2017): Significant ravine headcut near 3750 Paradox End Avenue South and 3990 Paradox End Avenue South. Barr recommends a feasibility study for this and other Kelle’s Creek erosion sites.

Photo 21 (April 2017): Severe ravine scarp near 3750 Paradox End Avenue South. Barr recommends a feasibility study for this and other Kelle’s Creek erosion sites.
Photo 22 (April 2017): Significant creek bank scarp near 3750 Paradox End Avenue South. Barr recommends a feasibility study for this and other Kelle’s Creek erosion sites.

Photo 23 (April 2017): Significant creek bank scarp near 3750 Paradox End Avenue South. Barr recommends a feasibility study for this and other Kelle’s Creek erosion sites.
2.22 Swede Hill Creek Subwatershed

2.22.1 Background

The Swede Hill Creek subwatershed has a drainage area of 836 acres, or approximately 1.3 square miles, and contains several steep-sided ravines and bluffs that drain directly to the St. Croix River. Most of the subwatershed is undeveloped and heavily forested; there are no perennial streams, MNDNR public waters, or other significant waterbodies. The channels in this subwatershed consist of ravines and ephemeral streams that only transport water during and immediately after storm events.

2.22.2 Observations

Briana Drake and Chris Frias, PE, of Barr inspected the Swede Hill Creek subwatershed ravines on May 9, 2017. The inspection consisted of walking select, accessible portions of ravines.

Overall, the ravines were in generally stable condition; however, Barr staff documented 101 sites categorized as having minor, moderate, or significant erosion. Barr did not identify any sites with severe erosion; two sites had significant erosion and the rest had moderate or minor erosion. Barr provided a complete summary of the inspection to the Managers in a memorandum dated July 7, 2017.

2.22.3 Recommendations

There were a number of ravines that Barr was not able to inspect within the allocated budget. We recommend inspecting these remaining ravines in 2018 to identify any additional erosion issues. However, if there are VBWD budget constraints, these inspections could be delayed until 2019.

For the two sites noted as having significant erosion, Barr recommends continued monitoring every 2 years (more frequent than the 5-year inspection program for the Swede Hill Creek subwatershed) to assess how quickly the sites are changing. Aside from monitoring, there is no action required for the sites noted as having minor or moderate erosion. The erosion at such sites may be due to a temporary disturbance (e.g., a fallen tree) and may self-stabilize. Or, it may be more permanent due to site conditions (e.g., steep topography, lack of ground vegetation), but not, necessarily, growing worse.

Barr recommends completing an inspection and erosion inventory of the entire creek and major ravines every 5 years. The next inspection should occur in 2022 and include prioritization of erosion sites.

2.23 Cost-Share Projects with More Than $5,000 in VBWD Contribution

2.23.1 Background

VBWD provides cost-share assistance (administered by the WCD) for projects that improve water quality and natural resources. In 2017, the VBWD asked the WCD to provide inspection reports for projects that received more than $5,000 in VBWD funding. A full list of these projects is shown in Table 2-1. Inspection reports provided by the WCD for projects that received more than $5,000 in VBWD funding are included in Appendix C.
### 2.23.2 Recommendations

Barr recommends that for all projects receiving $5,000 or more of VBWD funding, the District continue to request that the WCD and Ramsey Conservation District (RCD) annually inspect and provide reports on the project for the first 5 years following installation—or direct Barr staff to inspect and report during that period. After 5 years, Barr recommends that VBWD request inspections from WCD, RCD, and/or Barr staff for each project at least triennially.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Grant Year</th>
<th>Grant Type</th>
<th>VBWD Contribution</th>
<th>Inspected in 2017?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Oakdale Nature Preserve</td>
<td>2017</td>
<td>Community</td>
<td>$5,408.50</td>
<td>No</td>
<td>Final walk through performed in July 2017</td>
</tr>
<tr>
<td>Kopotzkie Property</td>
<td>2017</td>
<td>Individual</td>
<td>$5,250.00</td>
<td>No</td>
<td>Project partially complete</td>
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<tr>
<td>White Property</td>
<td>2016</td>
<td>Individual</td>
<td>$6,988.60</td>
<td>No</td>
<td>Project partially complete</td>
</tr>
<tr>
<td>Kramer/Kirkwold Property</td>
<td>2015</td>
<td>Individual</td>
<td>$5,000.00</td>
<td>Yes</td>
<td>No maintenance needed</td>
</tr>
<tr>
<td>Landucci Property</td>
<td>2015</td>
<td>Buckthorn</td>
<td>$10,110.00</td>
<td>No</td>
<td>Project partially complete</td>
</tr>
<tr>
<td>Wiessner/Hill Property</td>
<td>2015</td>
<td>CWF/Match</td>
<td>$22,419.00</td>
<td>Yes</td>
<td>No maintenance needed</td>
</tr>
<tr>
<td>Homestead Development</td>
<td>2015</td>
<td>Community</td>
<td>$13,250.00</td>
<td>Yes</td>
<td>No maintenance needed</td>
</tr>
<tr>
<td>Mutter Property</td>
<td>2015</td>
<td>Individual</td>
<td>$7,900.00</td>
<td>Yes</td>
<td>No maintenance needed</td>
</tr>
<tr>
<td>McComb/Kotz Property</td>
<td>2013</td>
<td>Special Incentive</td>
<td>$10,700.00</td>
<td>Yes</td>
<td>No maintenance needed</td>
</tr>
<tr>
<td>Gurney Property</td>
<td>2012</td>
<td>Individual</td>
<td>$5,550.00</td>
<td>Yes</td>
<td>No maintenance needed</td>
</tr>
<tr>
<td>Lake Elmo Streets</td>
<td>2012</td>
<td>Special Incentive</td>
<td>$27,822.00</td>
<td>Yes</td>
<td>Various sites, some maintenance needed</td>
</tr>
<tr>
<td>DeMontreville Boat Launch</td>
<td>2011</td>
<td>Community</td>
<td>$9,000.00</td>
<td>No</td>
<td>Inspections are only performed for 5 years</td>
</tr>
<tr>
<td>Lake Elmo Roadways</td>
<td>2011</td>
<td>Community</td>
<td>$17,000.00</td>
<td>No</td>
<td>Inspections are only performed for 5 years</td>
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<tr>
<td>Lake Elmo Roadways</td>
<td>2009</td>
<td>Community</td>
<td>$28,750.00</td>
<td>No</td>
<td>Inspections are only performed for 5 years</td>
</tr>
<tr>
<td>Joy Park Shoreline, Maplewood</td>
<td>2009</td>
<td>Community</td>
<td>$18,789.10</td>
<td>No</td>
<td>Inspections are only performed for 5 years</td>
</tr>
<tr>
<td>Century College</td>
<td>2009</td>
<td>Community</td>
<td>$50,000.00</td>
<td>No</td>
<td>Inspections are only performed for 5 years</td>
</tr>
<tr>
<td>Mahtomedi Public Works</td>
<td>2008</td>
<td>Community</td>
<td>$22,500.00</td>
<td>No</td>
<td>Inspections are only performed for 5 years</td>
</tr>
</tbody>
</table>
3.0 Non-System Specific Activities

3.1 Web Mapping
3.1.1 Background
Barr maintains an online map to assist with inspection and maintenance activities and information requests.

3.1.2 Recommendations
Barr recommends that the VBWD web map be updated with additional infrastructure and conveyance systems data, as needed. While the web map can be accessed by anybody, the Managers should discuss how public they would like to make the web map (e.g., include on new website).

3.2 Beaver-Removal Cost-Share Program
3.2.1 Background
Over the last 10 years, beaver activity—particularly the construction of dams—has damaged several Valley Creek locations and impacted the conveyance of flows through the Project 1007 system in the West Lakeland Storage Site. In 2017, VBWD hired a contractor to remove a beaver dam at the West Lakeland Storage Site at a cost of $3,100.

To reduce costs related to beaver activity, the Managers established a beaver-removal cost-share program at their November 10, 2016, meeting. Homeowners are required to hire a beaver trapper and can submit their receipts to VBWD for full reimbursement.

3.2.2 Recommendations
Barr recommends that the beaver-removal cost-share program be included in the 2018 VBWD operations and maintenance budget.

3.3 General Maintenance
3.3.1 Background
As outlined in this report, VBWD maintains a number of structures and systems throughout the watershed to protect the District’s water resources and property. Emergency maintenance issues frequently come up during the course of the year and cannot wait for VBWD’s normal annual budgeting process to be addressed. Most of these issues involve removal of trees and debris from streams and channels to protect the stream from erosion and adjacent properties from flooding. In 2017, the Managers acted on $2,900 of unanticipated maintenance expenses. In addition to contractor costs, Barr staff members spend time preparing related memos for the Board packet; this adds to the total cost of these relatively inexpensive maintenance projects. Additionally, waiting 2 to 4 weeks for Manager authorization can sometimes increase the risk of damage to the water resource or property.
3.3.2 Recommendations

Barr suggests that the Managers consider giving Barr authorization to hire contractors for maintenance activities less than $3,000.

3.4 Locating Services

3.4.1 Background

VBWD owns several underground facilities (e.g., storm sewer pipes), including major portions of Project 1007, the Olson Lake Estates Pond Outlet Project, and the Downs Lake Flood Duration Reduction Project. Currently, these underground facilities are not registered in Minnesota’s Gopher State One Call (Gopher State) system. This is the standard method of communicating the location of underground facilities and must be used by anyone planning excavation or soil boring activities. Currently, an entity such as MNDOT, Washington County, or the city of Lake Elmo would not know about the presence of VBWD’s underground facilities through the use of Gopher State. In 2017, two other local watershed organizations who own underground facilities and do not perform locating services had their infrastructure damaged by soil boring and directional drilling equipment, causing thousands of dollars in damage. If VBWD does not locate their infrastructure and a contractor damages it, the District is at risk of having to pay for the repairs to the damaged infrastructure. Most municipalities currently perform locates on their own storm sewer infrastructure.

3.4.2 Recommendations

Barr recommends that the Managers consider authorizing Barr to explore implementing Gopher State locating services in 2018, either by working with municipal staff (Lake Elmo and West Lakeland Township) or by setting up their own locating service. Barr currently performs locating services for the Capitol Region Watershed District and would be able to provide that service to VBWD.

3.5 Major Repair Funding Approaches

3.5.1 Background

Over the past 30 years, VBWD has installed millions of dollars in infrastructure and performs annual inspections and routine maintenance on these systems described in this report. All infrastructure comes to the end of its useful life. For example, concrete structures are typically expected to last between 50 and 100 years. Since much of the Project 1007 system is made of concrete, major portions of that system may need to be replaced in as little as 20 years.

3.5.2 Recommendations

Barr recommends that the Managers consider authorizing Barr to explore approaches to fund future major repairs to their existing infrastructure. Approaches could include bonding for major repairs or setting aside funds each year to establish a major repair fund.
4.0 Maintenance Work Performed in 2017

The Managers took the following actions in 2017:

1. Hired Buelow Excavating Inc. (Buelow) to:
   
   a. Remove several fallen trees from various channels and remove some brush growing near flared-end sections in the West Lakeland Storage Site. The Managers originally approved $2,409 for removals in 2016; however, due to high water levels, a portion of the work was delayed. Buelow completed the remaining tasks in August 2017 for $2,858.

   b. Remove downed trees and logs from DeMontreville Ravine. This work was completed in August 2017 for $500.

   c. Remove a tree on Raleigh Creek downstream of the Union Pacific Railroad culvert that was partially obstructing flow and placed the downed tree on the bank for stabilization. This work was completed in August 2017 for $800.

   d. Mow the Rest Area Pond Dam crest and spillway. This work was completed in September 2017 for $500.

   e. Mow the side slopes of the channels between Horseshoe Lake and Interstate 94, including the West Lakeland South Storage sites. The Managers approved $1,800 for mowing; however, due to high water levels, only a portion of the channels could be mowed. This work was completed in September 2017 for $1,300.

   f. Remove accumulated dead trees and debris near the outlet of the Rest Area Pond. The Managers originally approved $1,411 for removals in 2016; however, due to high water levels in 2016 and 2017, the work could not be completed. Buelow plans to complete the remaining work once the water levels recede.

   g. Remove a beaver dam located at the West Lakeland Storage site in the channel between the south pond and the middle pond. The Managers approved $2,500 for the beaver dam removal. Buelow completed the work in November 2017 for $1,500.

2. Hired Minger Construction Co. Inc. (Minger) to remove and replace wooden stop logs at Structure 6 (Eagle Point Lake Dam) with new aluminum stop logs. The Managers originally approved this work in 2016 for a total of $27,500, but high water levels and the length of time required to manufacture the aluminum stop logs delayed the work. Minger completed the work in January 2017 for $27,500.

3. Hired Wetland Habitat Restorations to perform repairs to the Goose Lake Ravine. This work was completed in October 2017 for $12,790.

4. Hired Tom Christ to trap and remove beavers at the West Lakeland Storage site prior to removal of the beaver dam by Buelow. Tom Christ completed the beaver trapping in November 2017 for $250.
5. Barr completed the following activities in 2017:
   a. Requested that WCD submit annual inspection reports to VBWD on all projects that VBWD supported with contributions of more than $5,000.
   b. Coordinated with The Royal Golf Club to remove debris, downed trees, and old pedestrian bridges in the channel from Lake Elmo through Tartan Park. The Royal Golf Club completed some of this work, although some of the trees and bridges remain.
   c. Prepared and distributed a press release documenting the completion of the Project 1007 inspection and describing the history and benefits of the project. The press release and an article published in the Lillie Suburban Newspaper are included in Appendix D.
   d. Updated the infrastructure and conveyance systems web map.
   e. Administered the work performed by contractors for the VBWD.

The total cost of the completed repairs was $50,048, excluding Barr fees.
5.0 Recommendations

We recommend that the Managers consider the inspection, operation, and maintenance items summarized in Table 5-1 and Table 5-2. If the Managers agree to the recommended actions, we will obtain bids from contractors to perform the work and present those bids to the Managers for consideration. Several recommended projects could be grouped and performed by a single contractor to reduce costs. Maintenance locations are shown on Figure 5-1.

5.1 Inspections

Table 5-1 summarizes the recommended inspection frequency and inspection/reporting cost for each VBWD system described in Section 2.0.

<table>
<thead>
<tr>
<th>System</th>
<th>Inspection Frequency</th>
<th>Last Inspected</th>
<th>Next Recommended Inspection</th>
<th>Estimated 2018 Inspection/Reporting Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1007</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$19,000</td>
</tr>
<tr>
<td>Echo Lake Outlet</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Weber Pond Outlet</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Silver Lake Bioretention Basin</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Long Lake Ravine Stabilization Project</td>
<td>Biennial</td>
<td>2016</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>DeMontreville Ravine Stabilization Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Olson Lake Estates Pond Outlet Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$2,500</td>
</tr>
<tr>
<td>Raleigh Creek Bank Stabilization Project</td>
<td>Biennial</td>
<td>2016</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Raleigh Creek</td>
<td>Triennial</td>
<td>2016</td>
<td>2019</td>
<td>NA</td>
</tr>
<tr>
<td>Farney Creek Stabilization Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Goetschel Pond Ravine Stabilization Project</td>
<td>Biennial</td>
<td>2016</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Goose Lake Ravine Stabilization Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Downs Lake Flood Duration Reduction Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,500</td>
</tr>
<tr>
<td>Valley Creek</td>
<td>Triennial</td>
<td>2017</td>
<td>2020</td>
<td>NA</td>
</tr>
<tr>
<td>Oakgreen Avenue Infiltration Basin</td>
<td>Biennial</td>
<td>2017</td>
<td>2019</td>
<td>NA</td>
</tr>
<tr>
<td>Valley Creek Ravine Stabilization Projects—</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Landucci and Moynagh Ravine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blasko Dam Removal Project</td>
<td>Biennial</td>
<td>2017</td>
<td>2019</td>
<td>NA</td>
</tr>
<tr>
<td>Valley Creek Upstream Stabilization Project</td>
<td>Biennial</td>
<td>2017</td>
<td>2019</td>
<td>NA</td>
</tr>
<tr>
<td>Valley Creek Downstream Stabilization Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>30th and Trading Post Ravine Stabilization Project</td>
<td>Annual</td>
<td>2017</td>
<td>2018</td>
<td>$1,000</td>
</tr>
<tr>
<td>Kelle’s Creek</td>
<td>Part-Annual</td>
<td>2017</td>
<td>2018 2020</td>
<td>$5,000</td>
</tr>
<tr>
<td></td>
<td>Part-Triennial</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### System Inspection Frequency

<table>
<thead>
<tr>
<th>System</th>
<th>Inspection Frequency</th>
<th>Last Inspected</th>
<th>Next Recommended Inspection</th>
<th>Estimated 2018 Inspection/Reporting Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swede Hill Creek subwatershed</td>
<td>Part-Annual, Part-Biennial, Full every 5 years</td>
<td>2017</td>
<td>2019 2022</td>
<td>NA</td>
</tr>
<tr>
<td><strong>TOTAL 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$40,000</strong></td>
</tr>
</tbody>
</table>

---

## 5.2 Operations and Maintenance Items

Table 5-2 summarizes responsible parties, planning-level cost estimates, and estimated priority (*High*, *Medium*, or *Low*) for recommended maintenance activities. Estimates are for total project costs including contractor time, Barr time, and expenses.

### Table 5-2 Recommended Operations and Maintenance Activities Based on 2017 Inspections

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Responsible Party</th>
<th>Planning-Level Cost Estimate¹</th>
<th>Estimated Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Annually mow the Rest Area Pond Dam and spillway</td>
<td>VBWD</td>
<td>$500</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Annually mow channel side slopes between Horseshoe Lake and Interstate 94, including the West Lakeland Storage Site South Pond</td>
<td>VBWD</td>
<td>$2,000</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Remove accumulated dead trees and debris near the Rest Area Pond Outlet and within the pipe to Structure 2 (<em>Photo 1</em>)</td>
<td>VBWD</td>
<td>$1,500 (Authorized)</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Remove two downed trees at Raleigh Creek (<em>Photo 2 and Photo 3</em>)</td>
<td>VBWD</td>
<td>$2,000</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Coordinate with The Royal Golf Club to remove downed trees and an old pedestrian bridge in the channel downstream of Lake Elmo (<em>Photo 4, Photo 5</em>, and <em>Photo 6</em>)</td>
<td>VBWD / The Royal Golf Club</td>
<td>$0</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Inspect the Project 1007 storm sewer via video</td>
<td>VBWD</td>
<td>$85,000</td>
<td>Low</td>
</tr>
<tr>
<td>7</td>
<td>Replace wooden stop logs with aluminum stop logs at all structures (3, 4, 5, 9, 10, 11, 12) (<em>Photo 7</em>)</td>
<td>VBWD</td>
<td>$210,000</td>
<td>Low</td>
</tr>
<tr>
<td>8</td>
<td>Lower the stoplog weir in Structure 11 to 928.5 feet (NGVD29)</td>
<td>VBWD</td>
<td>$8,000</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td><strong>DeMontreville Ravine Stabilization Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Remove accumulated sediment from the sedimentation basin at the downstream end of the ravine and the outlet into Lake DeMontreville (<em>Photo 8</em> and <em>Photo 9</em>)</td>
<td>VBWD</td>
<td>$95,000</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td><strong>Olson Lake Estates Pond Outlet Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Inspect the Olson Lake Estates Pond Outlet Project storm sewer via video</td>
<td>VBWD</td>
<td>$20,000</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td><strong>Farney Creek Stabilization Project</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Complete stabilization of headcut and eroding banks at the Goldstrohm and Dunckel properties (<em>Photo 12 and Photo 13</em>)</td>
<td>VBWD</td>
<td>$65,000²</td>
<td>High</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Responsible Party</td>
<td>Planning-Level Cost Estimate</td>
<td>Estimated Priority</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>12</td>
<td>Replace top nut for east sluice gate in Structure 1</td>
<td>VBWD</td>
<td>$500</td>
<td>High</td>
</tr>
<tr>
<td>13</td>
<td>Inspect the Downs Lake Flood Duration Reduction Project storm sewer via video</td>
<td>VBWD</td>
<td>$7,500</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td><strong>Valley Creek</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Conduct feasibility study to further evaluate significant erosion sites along Valley Creek and tributary ravines. ([Photo 15, Photo 16, Photo 17, and Photo 18])</td>
<td>VBWD</td>
<td>$60,000</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td><strong>Kelle’s Creek</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Conduct feasibility study to further evaluate significant and severe erosion sites along Kelle’s Creek and tributary ravines. ([Photo 19, Photo 20, Photo 21, Photo 22, and Photo 23])</td>
<td>VBWD</td>
<td>$25,000</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td><strong>General</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Update web mapping as needed</td>
<td>VBWD</td>
<td>$500</td>
<td>High</td>
</tr>
<tr>
<td>17</td>
<td>Continue beaver-removal cost-share program</td>
<td>VBWD</td>
<td>$3,000</td>
<td>High</td>
</tr>
<tr>
<td>18</td>
<td>Perform general maintenance</td>
<td>VBWD</td>
<td>$10,000</td>
<td>High</td>
</tr>
<tr>
<td>19</td>
<td>Explore locating services</td>
<td>VBWD</td>
<td>$2,000</td>
<td>High</td>
</tr>
<tr>
<td>20</td>
<td>Investigate major repair funding approaches</td>
<td>VBWD</td>
<td>$5,000</td>
<td>Medium</td>
</tr>
</tbody>
</table>

1 Costs do not include any snowpack monitoring or any work (Barr or contractor) associated with a potential drawdown of lakes in the spring to mitigate flooding.
2 Does not include costs associated with acquiring easements; no easements are assumed to be needed.

### 5.3 Maintenance Costs

Table 5-3 summarizes the estimated project costs by priority.

<table>
<thead>
<tr>
<th>Priority Rank</th>
<th>Planning-Level Cost Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Priority</td>
<td>$180,000</td>
</tr>
<tr>
<td>Medium Priority</td>
<td>$100,000</td>
</tr>
<tr>
<td>Low Priority</td>
<td>$322,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$602,500</td>
</tr>
</tbody>
</table>
### MAINTENANCE RECOMMENDATIONS

**2017 Infrastructure and Conveyance Systems Inspections Report**

**Valley Branch Watershed District**

---

<table>
<thead>
<tr>
<th>Project 1007</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anually mow the Rest Area Pond Dam and spillway.</td>
</tr>
<tr>
<td>2</td>
<td>Anually mow the channel side slopes between Horsehoe Lake and Interstate 94, including the West Island Slough and the South Pond.</td>
</tr>
<tr>
<td>3</td>
<td>Remove accumulated dead trees and debris near the Rest Area Pond Outlet and within the pipe to Structure 2.</td>
</tr>
<tr>
<td>4</td>
<td>Remove two downed trees at Raleigh Creek.</td>
</tr>
<tr>
<td>5</td>
<td>Coordinate with The Royal Golf Club to remove downed trees and an old pedestrian bridge in the channel downstream of Lake Elmo.</td>
</tr>
<tr>
<td>6</td>
<td>Complete the Project 1007 storm sewer via video.</td>
</tr>
<tr>
<td>7</td>
<td>Replace wooden stop logs with aluminum stop logs at all structures (1, 4, 5, 9, 10, 11, 12).</td>
</tr>
<tr>
<td>8</td>
<td>Lower the stoplog weir in Structure 11 to 92.5 feet (NVD192).</td>
</tr>
</tbody>
</table>

**DeMontreville Ravine Stabilization Project**

| 9 | Remove accumulated sediment from the sedimentation basin at the downstream end of the route and the outlet into Lake DeMontreville. |

**Olson Lake Estates Pond Outlet Project**

| 10 | Inspect the Olson Lake Estates Pond Outlet Project storm sewer via video. |

**Valley Creek Stabilization Project**

| 11 | Complete stabilization of headwall and widening at the Goldstrom and Dunich properties. |
| 12 | Inspect the Downs Lake Flood Duration Reduction Project storm sewer via video. |

**Valley Creek**

| 13 | Conduct feasibility study to further evaluate significant and severe erosion sites along Valley Creek and tributary rivers. |

**Kelle’s Creek**

| 14 | Conduct feasibility study to further evaluate significant erosion sites along Kelle’s Creek and tributary streams. |

**General**

| 15 | Update 3D modeling as needed. |
| 16 | Continue beaver-removal cost-share program. |
| 17 | Perform general maintenance. |
| 18 | Explore locating services. |
| 19 | Explore major repair-funding approaches. |

---

**Figure 5-1**

![Map of Valley Branch Watershed District with marked projects and maintenance recommendations](image-url)
Appendix A

2017 Eagle Point Lake Dam Inspection Report
June 2, 2017

Mr. Jason Boyle  
Dam Safety Unit  
Division of Waters  
Minnesota Department of Natural Resources  
500 Lafayette Road  
St. Paul, MN 55155

Re: 2017 Annual Inspection of Eagle Point Lake Dam  
Valley Branch Watershed District

Dear Mr. Boyle:

On May 25, 2017, I performed an inspection of the Eagle Point Lake Dam and its control structures. This was done in accordance with Special Provision 8 of the Minnesota Department of Natural Resources permit for the dam, issued to the Valley Branch Watershed District (VBWD). The inspection report form and photographs of the dam and control structures are enclosed. The results of the inspection are summarized below.

- The inspections revealed the dam to be in generally good condition.

- In 2016, we requested that Washington County Parks either burn or mow the prairie grasses on the dam faces to better facilitate inspections of the earthen dam. Washington County Parks burned the dam faces prior to our 2017 inspection.

- The water level of Eagle Point Lake was elevated due to the large amount of precipitation this season, resulting in discharge from upstream lakes. The water levels we recorded on May 25, 2017, were at elevation 896.3 feet, approximately 2.3 feet above the top of the primary outlet stop log weir in Structure 6 and level with the weir into the secondary outlet structure (Structure 7).

- In 2015, we observed damage to the wooden stop log weir in Structure 6. In January 2017 we replaced the wooden stop logs with aluminum stop logs. The stop log weir was submerged on May 25, 2017, and could not be inspected; however, we inspected the stop logs on January 23, 2017, and found them to be in good condition.

- No debris was observed in the secondary outlet structure on May 25, 2017. While the primary outlet structure could not be fully inspected on May 25 due to high water, an inspection on January 23, 2017, found the structure clear of debris.
• In 2016, we observed trees outside of the dam footprint, limiting access to the outfall emergency pipe, and requested that Washington County Parks remove the trees. This was done before the 2017 inspection.

• We observed several sumac bushes on the upstream face of the dam. We will request that Washington County Parks remove the trees and treat the stumps.

If you have any questions or need additional information, please contact me at 952-832-2854 or ncampeau@barr.com.

Sincerely,

Nathan Campeau, PE

Enclosures

c: VBWD Managers
## Inspection Report

**Eagle Point Lake Dam**  
Valley Branch Watershed District  
Inspected by Nathan Campeau, PE, and Patrick Brockamp, EIT  
October 17 and 25, 2016

<table>
<thead>
<tr>
<th>Feature</th>
<th>Deficiency Observed</th>
<th>Remarks</th>
<th>Photo #</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Outlet Structures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Accumulation of debris</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Cracking or spalling of concrete</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Deterioration of concrete</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Abnormal leakage</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Unusual or inadequate operational behavior</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>II. Upstream Embankment Slope</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Wave erosion</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Cracks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Slides or sloughs</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Subsidence</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Damage to slope protection</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Other erosion</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Vegetation failure</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Tree growth</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Animal burrows</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>III. Downstream Embankment Slope</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Wave erosion</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Cracks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Slides or sloughs</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Subsidence</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Other erosion</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Excessive seepage or boils</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Vegetation failure</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Tree growth</td>
<td>X</td>
<td>Sumac trees observed on upstream face of dam</td>
<td>10</td>
</tr>
<tr>
<td>I. Animal burrows</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INSPECTION REPORT (continued)
EAGLE POINT LAKE DAM
Valley Branch Watershed District

PHOTOGRAPHS (taken May 25, 2017, unless otherwise noted)

Photo 1: Upstream face, looking toward left abutment (north)
Photo 2: Downstream face, looking toward left abutment (north)

Photo 3: Upstream face, looking toward right abutment (south)
Photo 4: Downstream face, looking toward right abutment (south)

Photo 5: Downstream side of new aluminum stoplog weir in primary outlet (January 23, 2017)
Photo 6: Inlet to secondary structure
Photo 7: Inside of secondary structure

Photo 8: Outfall pipe from secondary structure

Photo 9: Washington County Parks removed trees that were limiting access to outfall pipe from secondary structure

Photo 10: Sumac trees on upstream face of dam should be removed
Appendix B

2017 Rest Area Pond Dam Inspection Report
October 23, 2017

Mr. Bryce Fossand, P.E.
MNDOT Water Resources Engineering
1500 West County Road B2
Roseville, MN 55113

Re: 2017 Annual Inspection of Interstate 94 Rest Area Pond Dam

Dear Mr. Fossand:

On October 19, 2017, you and Christina Caouette of MNDOT and I of Barr, representing the Valley Branch Watershed District, inspected the Interstate 94 Rest Area Pond Dam (Permit 86-6270). Barr staff (Pat Brockamp and Josh Phillips) also performed an inspection of the dam on October 4, 2017. Two copies of related documents are enclosed:

- Chart of historic water levels
- Completed Rest Area Pond Dam inspection form
- Comment sheet
- Photographs from the inspection

We found the dam and outlet structure to be in good condition. On October 4, 2017, Barr staff estimated the water level of the pond at Elevation 834.7 feet, approximately 0.7 feet above the low-flow outlet elevation and 7.8 feet below the secondary outlet weir.

Since the 2016 inspection, VBWD performed minor maintenance on the Rest Area Pond Dam, mowing the entire dam and spillway in September 2017 prior to the recent inspections.

While no immediate repairs or maintenance appear to be needed, VBWD plans the following maintenance activities before the next inspection in fall 2018:

- Mowing the entire dam and spillway
- Continued monitoring of animal burrows and investigation of animal management; burrows are located on the back-side of the dam near the transmission tower, below the elevation of the emergency spillway
- Removing tree debris near the pond outlet; this work was authorized in 2016, but has not been performed due to high water

Please contact me with any corrections to the inspection form. If we do not hear from you, we will assume that you have forwarded this information to Jason Boyle at the Department of Natural Resources Dam
Safety Unit, 500 Lafayette Road, St. Paul, MN, 55155. If you have any questions or need additional information, please contact me at (952) 832-2854.

Sincerely,

Nathan Campeau, P.E.

Enclosures

c: VBWD Managers
District Maintenance Engineer
DNR Dam Safety Unit
State Foundations Engineer
District Hydraulics Engineer

## Dam No. T.H. No. Mile Post Location Maintenance Area
I-94 Rest Area Pond 94 S.P. 8282-37 Metro-Oakdale

<table>
<thead>
<tr>
<th>Type</th>
<th>Location</th>
<th>West Lakeland Township</th>
<th>Washington County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pond</td>
<td>1.0 Mile East of Rest Area</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vegetation Cover</td>
<td>Good</td>
<td>See note</td>
</tr>
<tr>
<td>2. Rip Rap</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>3. Spillway</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>4. Seepage Rate</td>
<td>None Observed</td>
<td>None Observed</td>
</tr>
<tr>
<td>5. Pond Elevation</td>
<td>Approx. 833.3</td>
<td>Approx. 832.4</td>
</tr>
<tr>
<td>6. Changes in Stream Area</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>7. Photographs</td>
<td>Taken 10-27-14</td>
<td>Taken 11-06-15</td>
</tr>
<tr>
<td>8. Structure #2</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>9. 60&quot; RCP</td>
<td>Good</td>
<td>See Remark 2</td>
</tr>
<tr>
<td>10. RCP</td>
<td>Good</td>
<td>Good</td>
</tr>
</tbody>
</table>

### Year 2017 Remarks
1. Dam and spillway were mowed September 28, 2017, including the dam crest and embankments before inspections were performed.
2. Water level was too high to inspect the flared-end section inlet and RCP pipe.
3. Animal burrows observed in one location on the back-side of the embankment, near the transmission tower.

### Year 2016 Remarks
1. Dam and spillway were mowed October 14, 2016, including the dam crest and embankments before inspections were performed.
2. Water level was too high to inspect the flared-end section inlet and RCP pipe.
3. Animal burrows observed in two locations on the crest of the embankment.

---

Inspected By: Date: Oct. 27, 2014
Jennifer Koehler and
Amy Anderson

Inspected By: Date: Nov. 6, 2015
Nathan Campeau and
Patrick Brockamp

Inspected By: Date: Oct. 17 & 25, 2016
Nathan Campeau and
Patrick Brockamp

Inspected By: Date: Oct. 4, 2017
Patrick Brockamp and
Josh Phillips

Bridge Inspections Engineer

- See Other Side
1 - Condition of vegetation cover (brush and trees cleared)
2 - Condition of Rip Rap
3 - Condition of Spillway
4 - Check drainage pipe on downstream side
5 - Top pond water elevation
6 - Look for changes of downstream area (new building, excavation, etc.)
7 - Take representative photos

Rating
G - Good – No repairs needed
F - Fair – Minor repairs
P - Poor – Repairs needed
U - Unsatisfactory – Repairs needed immediately
Other Comments and Observations

- Valley Branch Watershed District (VBWD) and Minnesota Department of Transportation staff inspected the dam on October 4 and 19, 2017.

- In general, dam and appurtenant structures are in good condition.

- The water level of the pond is above the low-flow control elevation and water is discharging from the pond.

- VBWD’s contractor mowed the dam and spillway in September 2017, before the inspections.

- Inspectors observed woody debris at the pond outlet (flared end inlet to Structure 2) during the 2015 inspections, and VBWD has hired a contractor to remove the debris. High water levels in 2016 and 2017 prevented removal of the woody debris prior to the 2017 inspections. The pond outlet was submerged and could not be inspected. Inspectors observed water discharging from the outlet structure.

- Inspectors observed animal burrows at one locations on the back side of the dam near the powerline tower. Inspectors will monitor this location and investigate animal management.
2017 I-94 Rest Area Pond Dam Inspection Photographs (October 4, 2017)

Photo 1: Upstream face, looking toward right abutment (south)

Photo 2: Spillway, looking east-northeast

Photo 3: Crest, looking toward right abutment (south)

Photo 4: Downstream face, looking toward right abutment (south)
2017 I-94 Rest Area Pond Dam Inspection Photographs (continued)

Photo 5: Animal burrows, back-side near tower

Photo 6: 60-inch-diameter reinforced-concrete pipe outlet (submerged)

Photo 7: Outlet structure, upstream side of weir

Photo 8: Outlet structure, downstream side of weir
Appendix C

2017 Washington Conservation District Inspection Reports of VBWD Cost-Share Projects
Robert Pike And Judith Gibson
10684 10th Street Ct N
Lake Elmo Mn  55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Robert Pike And Judith Gibson,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 10684 10th Street Ct N, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Tom And Sarah Hietpas,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 3704 Kindred Ct, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Lawrence Ptasienski And Carol Mager,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5715 Highlands Trl N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded Aesthetics

Inlet maintenance: Weed/replace and lower sod
Garden: Weeding, might benefit from replanting.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Kevin And Joann Campbell,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/6/2017, we conducted an inspection of the Urban BMPs project located at 5730 Hytrail Ave N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status**: Partially Functioning

Lower Sod
Alice Johnson  
5750 Highlands Ct  
Lake Elmo Mn 55042  

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Alice Johnson,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5750 Highlands Ct, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:
Inlet maintenance is needed: replace sod

**Practice Status:** Nonfunctional

Inlet: Replace Sod  
Hydraulic function degraded: Standing water  
Garden: Replanting
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear John And Suzanne Haugen,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/6/2017, we conducted an inspection of the Urban BMPs project located at 5770 Hytrail Ave N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Thomas And Abigail Dodds,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5855 Highlands Trl N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded Aesthetics

Lower Sod
Replanting, might benefit from weeding.
Steven And Delores Hedrick  
5870 Highlands Trl  
Lake Elmo Mn  55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Steven And Delores Hedrick,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5870 Highlands Trl, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Nonfunctioning

Inlet: Replace Sod, remove sandbag.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Joseph Baierl And Denise Duchateau,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5875 Highland Trl, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Lew And Diane Schuweiler,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5890 Highland Trl, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Terrence And Susan Lizakowski,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 7760 53rd St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded aesthetics

Replace Sod

Garden might benefit from replanting.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear John And Becky Fremont,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 7761 53rd St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Patrick And Lynette Kirkwold  
8010 Demontreville Trl Cir  
Lake Elmo Mn  55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Patrick And Lynette Kirkwold,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 8010 Demontreville Trl Cir, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Sanjuanita Rodriguez
8065 59th St N
Lake Elmo Mn 55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Sanjuanita Rodriguez,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/6/2017, we conducted an inspection of the Urban BMPs project located at 8065 59th St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Partially Functioning

Lower Sod
Carl And Amanda Mahmood  
8215 59th St N  
Lake Elmo Mn 55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Carl And Amanda Mahmood,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/6/2017, we conducted an inspection of the Urban BMPs project located at 8215 59th St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Robert And Virginia Pleban  
8245 59th St N  
Lake Elmo Mn  55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Robert And Virginia Pleban,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/6/2017, we conducted an inspection of the Urban BMPs project located at 8245 59th St N, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Randall And Klarice Bachman  
2760 Nybeck Ave S  
Afton Mn  55001  

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Randall And Klarice Bachman,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 2760 Nybeck Ave S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck  
President  
Valley Branch Watershed District Board of Managers  

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Belwin,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 1553 Stagecoach Trl S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Belwin
1553 Stagecoach Trl S
Afton Mn  55001

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Belwin,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 1553 Stagecoach Trl S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

*David J. Bucheck*

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Michael And Trudy Berggren,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/18/2017, we conducted an inspection of the Urban BMPs project located at 13645 Valley Creek Trl S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Paula Hall,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 4824 Grenwich Way N, Oakdale Mn 55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status**: Buckthorn present
Paula Hall
4824 Grenwich Way N
Oakdale Mn  55128

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Paula Hall,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 4824 Grenwich Way N, Oakdale Mn  55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project (Native Landscaping) does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Audrey And Scott Blasko,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at Po Box 88, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Landowner,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/14/2017, we conducted an inspection of the Urban BMPs project located at 2887 Lake Blvd, North Saint Paul. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear David And Jacqueline Boorman,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 16542 Swede Hill Dr S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Mark And Barbara Borgwardt,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at Po Box 223, Afton Mn 55001-0223. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Bonnie Butenhoff  
Po Box 95  
Lake Elmo Mn 55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Bonnie Butenhoff,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at Po Box 95, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

*David J. Bueck*

President  
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear City Of Oakdale,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 1584 Hadley Ave N, Oakdale Mn 55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear City Of Lake Elmo,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/1/2017, we conducted an inspection of the Urban BMPs project located at 3800 Laverne Ave N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Partially Functioning

Inlet: Lower Sod  
Hydraulic function degraded: Cattails present  
Weeding
Dear Blake Devcich And Mollie Drabik,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 1727 Newberry Ave N, Stillwater Mn 55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Debra And David Downing,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 5135 Lake Elmo Ave N, Lake Elmo Mn  55042-9562. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear City Of Lake Elmo,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 9440 53rd St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Dennis And Sandra Grabowski,

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 9652 55th St N, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Steve Gurney And Barbara Saniti  
8281 26th St N  
Lake Elmo Mn  55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Steve Gurney And Barbara Saniti,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 8281 26th St N, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Aimmie And Justin Hauer  
5787 Highland Ct N  
Lake Elmo Mn 55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Aimmie And Justin Hauer,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5787 Highland Ct N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President  
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Forty Acres Real Estate Llc  
1205 Nathan Ln  
Plymouth Mn 55441

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Forty Acres Real Estate Llc,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 1205 Nathan Ln, Plymouth Mn 55441. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Catherine Helms,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/18/2017, we conducted an inspection of the Urban BMPs project located at 3287 Lake Elmo Ave N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Cherie And Peter Hill,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/6/2017, we conducted an inspection of the AG BMPs project located at 13212 Mcginty Rd, Minnetonka Mn 55305. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Homestead Homeowners Association,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 11075 14th St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Homestead Homeowners Association,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 11075 14th St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Randall And Luann Hunt  
4330 Neal Ave N  
Stillwater Mn  55082

**Thank you for helping protect and restore natural resources in Valley Branch Watershed District!**

Dear Randall And Luann Hunt,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 4330 Neal Ave N, Stillwater Mn  55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

*David J. Bucheck*

President  
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Danette Jahnke And Richard Leonard,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 8242 Hidden Bay Trl, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded Aesthetics

Weeding
Mulching: 1 Inch Thick
Patrick And Lynette Kirkwold
8010 Demontreville Trail Circle Ct
Lake Elmo Mn 55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Patrick And Lynette Kirkwold,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 8010 Demontreville Trail Circle Ct, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Donald And Mary Lacho,

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 13676 Valley Crk Trl S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Lorna Rodriquez,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 6586 48th Street Pl N, Oakdale Mn  55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded Aesthetics

Weeding-Garlic mustard present at time of inspection. Removal of garlic mustard recommended.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Henry And Virginia Lepinski,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 2778 Hilo Ave N, Oakdale Mn  55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Nonfunctional

Hydraulic function degraded-takes approximately a week for water to drain after heavy rain

Replanting
Nathan And Jennifer Stoltenow
3857 Ironwood Trl
Lake Elmo Mn 55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Nathan And Jennifer Stoltenow,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 3857 Ironwood Trl, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Woodbury Lutheran Church
7380 Afton Rd
Woodbury Mn  55125

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Woodbury Lutheran Church,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 7380 Afton Rd, Woodbury Mn  55125. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Anne E Mccomb,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 2813 Division St N, North St Paul Mn 55109-1676. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Gregory Ales And Colleen Mcguire,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 6161 Inwood Ct N, Stillwater Mn  55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Randall Herold And Lisa Mekka,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 7175 44th St N, Oakdale Mn 55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Jean Melin,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5295 Neal Ave N, Stillwater Mn 55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek

President
Valley Branch Watershed District Board of Managers

Inspection Summary

Neither of your projects require any maintenance, thank you for sustaining your practices. We greatly appreciate your help.
Dear Jean Melin,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 5295 Neal Ave N, Stillwater Mn 55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Memorial Church Afton,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 15730 Afton Blvd S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project requires maintenance, please follow the notes below:

Practice Status: Degraded Aesthetics

Mulching: 1 Inch Thick
Marines Mutter  
1815 Stagecoach Trl S  
Afton Mn 55001  

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Marines Mutter,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 1815 Stagecoach Trl S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

*David J. Bucheck*

President  
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Wesley And Janet Noyes,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/15/2015, we conducted an inspection of the Urban BMPs project located at 1720 Oakgreen Ave N, Stillwater Mn 55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Alicia Paulsen,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 506 109th Ln Nw, Minneapolis Mn 55448-4372. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Ernest Reeh And Mary Bunczak,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted inspections of the Urban BMPs projects located at 12635 53rd Street Ct N, Stillwater Mn 55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

Inspection Summary

Neither of your projects require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Ernest Reeh And Mary Bunczak,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 12635 53rd Street Ct N, Stillwater Mn 55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear David And Susan Roloff,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the AG BMPs project located at 13211 48th St N, Stillwater Mn  55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchech
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Patrick And Mary Rugloski  
14775 Valley Creek Trl  
Afton Mn 55001

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Patrick And Mary Rugloski,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 14775 Valley Creek Trl, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Steven And Margaret Sagstetter,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 1625 Hydram Ave N, Oakdale Mn 55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

*David J. Bucheck*

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Jay And Sheila Schlechte,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 2697 Greystone Ave N, Oakdale Mn 55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchecck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Allen Schneider,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 7112 Upper 39th St, Oakdale Mn  55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Philp And Norma Sidler,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 4580 Birch Bark Trl N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded Aesthetics

Vegetation: Weeding
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Paul Sinclair And Anita Martin,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 15349 11th St S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thomas Skalbeck  
8879 Jane Rd N  
Lake Elmo Mn  55042

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Thomas Skalbeck,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 8879 Jane Rd N, Lake Elmo Mn  55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project requires maintenance, please follow the notes below:

**Practice Status:** Degraded Aesthetics

Vegetation: Weeding
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Gary And Donna Sparks,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 2287 Helmo Ct N, Oakdale Mn 55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear John And Nicole Sullivan,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 12855 5th St N, Lake Elmo Mn 55042. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Kathleen Thomas,

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/13/2017, we conducted an inspection of the Urban BMPs project located at 13736 Valley Creek Trl, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Jack Vang,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/6/2017, we conducted an inspection of the AG BMPs project located at 12788 50th St S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Traditional Ventures Llc,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/6/2017, we conducted an inspection of the AG BMPs project located at 1987 Manning Ave S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

*David J. Bucheck*

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Brian And Kira Warden,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/20/2017, we conducted inspections of the Urban BMPs projects located at 14270 42nd St S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Neither of your projects require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Brian And Kira Warden  
14270 42nd St S  
Afton Mn 55001

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Brian And Kira Warden,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/20/2017, we conducted an inspection of the AG BMPs project located at 14270 42nd St S, Afton Mn 55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck
President
Valley Branch Watershed District Board of Managers

Inspection Summary

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Grant And Carol Wiessner,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/6/2017, we conducted an inspection of the AG BMPs project located at 3750 Paradox End Ave S, Afton Mn  55001. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Greg And Angela Wentz
9653 68th Ct N
Stillwater Mn  55082

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Greg And Angela Wentz,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/12/2017, we conducted an inspection of the Urban BMPs project located at 9653 68th Ct N, Stillwater Mn  55082. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Bucheck

President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Paradox Farm LLC
250 S Hamline
St Paul Mn  55105

Thank you for helping protect and restore natural resources in Valley Branch Watershed District!

Dear Paradox Farm LLC,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 7/6/2017, we conducted an inspection of the AG BMPs project located at 250 S Hamline, St Paul Mn 55105. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
Dear Dean And Bonnie Wilson,

This letter is a follow-up from our regular annual inspections of projects installed throughout the watershed. Funding for your project was provided by Valley Branch Watershed District while the Washington Conservation District supplied technical assistance. Our review will help you make sure your project looks good and functions properly long-term.

On 6/14/2017, we conducted an inspection of the Urban BMPs project located at 7890 44th St N, Oakdale Mn  55128. Our inspection process looks at several factors critical to the functionality of your project and determines if maintenance is needed to ensure the overall success of the project. A summary of our inspection findings is below. If maintenance is needed for your project, please make the improvements as suggested below or, if you need clarification, contact Tara Kline (651-330-8220 x28) or Bryan Pynn (651-330-8220 x36) at the Washington Conservation District.

Regards,

David J. Buchek
President
Valley Branch Watershed District Board of Managers

**Inspection Summary**

Your project does not require any maintenance, thank you for sustaining your practice. We greatly appreciate your help.
FOR IMMEDIATE RELEASE
October 13, 2017
Lake Elmo, Minnesota

Project 1007 celebrates 30th birthday
Inspection shows flood-reduction project continues to protect area homes

Project 1007, a large flood-control project constructed by the Valley Branch Watershed District, turned 30 this year—and continued its unblemished record of controlling Washington County flood waters. Since completion in 1987, no homes protected by the $4.25 million project have flooded.

The Valley Branch Watershed District manages lakes and streams within an area comprising 70 square miles of Washington County and one square mile of Ramsey County. The intricate Project 1007 system includes 5 miles of pipe, 60 manholes, two dams, and two miles of open channels. Starting at Long Lake, it links the major lakes in the northwest and central portions of the District (Lake DeMontreville, Lake Olson, Lake Jane, Eagle Point Lake, Lake Elmo, and Horseshoe Lake) to a large storm sewer pipe along Interstate 94 that discharges to the St. Croix River. In addition to minimizing water level fluctuations, the system improves water quality by reducing erosion related to flooding. It also includes large infiltration areas to recharge groundwater.

The importance of infrastructure like Project 1007 is underscored by predictions of rainfall events of increased frequency, severity, and duration. To ensure that homes continue to be protected from flooding, maintaining the system is a priority for the District. Each fall, the District’s engineers conduct an inspection of the system’s open channels, water-level-control structures, and dams, performing routine maintenance as necessary. In some years, the required maintenance is as straightforward as clearing downed trees from open channels. Occasionally, more intensive structural repairs are necessary, such as repairing holes in manholes or replacing old wooden structures that hold back water from the District’s lakes. This year, the District’s engineers found the system to be in generally good working order, recommending routine maintenance including removal of a beaver dam and downed trees.

About the Valley Branch Watershed District: Residents petitioned the State to form the Valley Branch Watershed District in 1968 to address area flooding problems. Since its inception, the District’s role has expanded to address all facets of water resource management. The entity is governed by a Board of five managers who meet two times each month. Municipalities included within the District include the cities of Afton, Grant, Lake Elmo, Lake St. Croix Beach, Mahtomedi, Oak Park Heights, Oakdale, Pine Springs, St. Mary’s Point, Maplewood, North St. Paul, White Bear Lake, Woodbury, and the townships of Baytown and West Lakeland.

Attachment: Map of the Project 1007 system and photos from 2017 inspection

Media contact: Dave Bucheck, President, Valley Branch Watershed District, 651-770-1730, dbucheck@yahoo.com
Project 1007 was constructed to relieve flooding in the VBWD. These homes were flooded in the mid-1980s, before the project was completed.

- 5 miles of pipe
- 60 manholes
- 2 dams
- 2 miles of open channels
During their Project 1007 inspection, Valley Branch Watershed engineers discovered a beaver dam at the West Lakeland Storage Site and removed a portion of the dam to allow more conveyance through the channel. The entire dam will likely be removed by a contractor as part of future maintenance activities.

Valley Branch Watershed District engineers observed downed trees in Raleigh Creek during their inspection of the Project 1007 system. The engineers removed individual branches to allow better conveyance; downed trees will be removed by a contractor as part of future maintenance activities.
Project 1007 celebrates 30th birthday

Submitted by admin on Tue, 10/24/2017 - 9:57am

By: Angie Hong (byangie-hong)

Angie Hong - Washington Conservation District

Project 1007, a large flood-control project constructed by the Valley Branch Watershed District, turned 30 this year—and continued its unblemished record of controlling Washington County flood waters. Since completion in 1987, no homes protected by the $4.25 million project have flooded.

The Valley Branch Watershed District manages lakes and streams within an area comprising 70 square miles of Washington County and one square mile of...
Ramsey County. The intricate Project 1007 system includes five miles of pipe, 60 manholes, two dams, and two miles of open channels. Starting at Long Lake, it links the major lakes in the northwest and central portions of the district (Lake DeMontreville, Lake Olson, Lake Joes, Eagle Point Lake, Lake Elmo, and Horseshoe Lake) to a large storm sewer pipe along Interstate 94 that discharges to the St. Croix River. In addition to minimizing water level fluctuations, the system improves water quality by reducing erosion related to flooding. It also includes large infiltration areas to recharge groundwater.

The importance of infrastructure like Project 1007 is underscored by predictions of rainfall events of increased frequency, severity, and duration. To ensure that homes continue to be protected from flooding, maintaining the system is a priority for the district. Each fall, the district's engineers conduct an inspection of the system's open channels, water-level-control structures, and dams, performing routine maintenance as necessary. In some years, the required maintenance is as straightforward as clearing downed trees from open channels. Occasionally, more intensive structural repairs are necessary, such as repairing holes in manholes or replacing old wooden structures that hold back water from the district's lakes. This year, the district's engineers found the system to be in generally good working order, recommending routine maintenance including removal of a beaver dam and downed trees.

Residents petitioned the state to form the Valley Branch Watershed District in 1968 to address area flooding problems. Since its inception, the district's role has expanded to address all facets of water resource management. The entity is governed by a board of five managers who meet two times each month. Municipalities included within the district include Afton, Grant, Lake Elmo, Lake St. Croix Beach, Mahtomedi, Oak Park Heights, Oakdale, Pine Springs, St. Mary's Point, Maplewood, North St. Paul, White Bear Lake, Woodbury, and the townships of Baytown and West Lakeland.

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