

MIDDLE ST. CROIX WATERSHED MANAGEMENT ORGANIZATION

455 HAYWARD AVENUE, OAKDALE, MINNESOTA 55082
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Regular Meeting of the Middle St. Croix Watershed Management Organization

Remotely held as posted on www.mscwmo.org

Physical location - Washington Conservation District, 455 Hayward Ave N

Thursday, June 11, 2026

6:00PM

1. Call to Order – 6:00PM
 - a. Approval of Agenda
2. Approval of Minutes
 - a. Draft minutes – May 14, 2026 **pg 1-5**
3. Treasurer’s Report
 - a. Report of savings account, assets for June 11, 2026
 - b. Approve payment of bills for June 11, 2026
4. Public Comment (< 5 minute per person)
5. Old Business
6. New Business
 - a. 2027 Draft Budget **pg 6**
 - b. Impervious Surface Analysis **pg. 7-13**
7. Grant and Cost Share Applications
8. Plan Reviews/Submittals
 - a. Plan Review and Submittal Summary **pg 14**
 - i. 218 3rd St – **ACTION pg 15-24**
 - i. Law Enforcement Center – **ACTION pg 25-35**
 - ii. Central Auto Parking Lot – **ACTION pg 36-43**
 - iii. Anthem Strength and Conditioning – **ACTION pg. 44-55**
9. Erosion and Sediment Control Inspection Reports **pg 56-79**
10. Staff Report **pg 80-82**
11. 1W1P Updates – None this month
12. Other
13. Adjourn

Middle St. Croix Watershed Management Organization Member Communities

Afton, Bayport, Baytown, Lakeland, Lakeland Shores, Lake St. Croix Beach, Oak Park Heights, St. Mary’s Point, Stillwater, & West Lakeland

Draft Minutes, Pending Board Approval

Regular Meeting of the Middle St. Croix Watershed Management Organization
Washington Conservation District, 455 Hayward Ave N
Thursday, May 14th, 2026
6:00PM

Present: Brian Zeller, Lakeland Shores; Tom McCarthy, Lake St. Croix Beach; Dave Millard, Lakeland; Ryan Collins, Stillwater; Avis Peters, Baytown; Orin Kipp, Bayport; Rachel Dana, West Lakeland; Carly Johnson, Oak Park Heights; Administrator Matt Oldenburg-Downing; Amanda Herbrand, WCD

Audience: Tom Grahek (remote), "Michael" (remote)

Call to Order

Manager Zeller called the meeting to order at 6:00PM.

Approval of Agenda

Administrator Oldenburg-Downing requested an addition under "New Business" (4b), "EMWREP Contract 2026-2027". Manager McCarthy motioned to approve the agenda with the addition. Manager Collins seconded the motion. The motion carried with all in favor.

Approval of Minutes

Manager Collins motioned to approve the draft April 9th, 2026 board meeting minutes, Manager Kipp seconded the motion. The motion carried on a roll call vote with all in favor.

Treasurer's Report

Manager Johnson presented the treasurer's report. The remaining checking account balance on May 14th was \$75,348.36. First Bank CD's were valued at \$213,549.15. The ending value on the RBC savings account from April was \$102,236.51. Manager Zeller motioned to approve the report of the savings account and assets for May 14th, 2026. Manager McCarthy seconded the motion. The motion carried with all in favor.

Bills to approve this month are two bills to the Washington Conservation District for admin and tech services for \$9,128.50. The total for May bills is \$9,128.50. Manager Zeller motioned to approve payment of bills for May totaling \$9,128.50. Manager Peters seconded the motion. The motion carried with all in favor.

Public Comment

None

Old Business

None

New Business

Bluffland Mailing

Per board request at the April 2026 meeting, staff investigated costs for a mailing to landowners to provide information about shoreland protection. Angie Hong, provided the following:

“Last year in late October, we sent a mailing to 237 bluffland landowners in Bayport, Lakeland, Lakeland Shores, and St. Mary’s Point. It was partly to advertise the Bluffland Workshop we were holding, but also had general info about riverway rules, erosion, and MSCWMO. At Matt’s suggestion, we excluded the LSCB people from the mailing last year because he said most of the riverway land is technically owned by the city. We also left out the West Lakeland people – there are only 13 of them so it wouldn’t take much to add them back in. Staff from Bayport also reviewed and pulled out some of the addresses we originally had in last fall’s mailing because they are in the riverway but not actually shoreline owners. Cost for the mailing was \$355 for printing + \$62 for postage. We used Bayport Printing.”

Manager McCarthy suggested putting something in the newsletter of the communities with bluffline properties. Manager Johnson suggested both something for the community newsletters and also sending the mailing. Managers Zeller and Johnson both mentioned penalties being low. Manager Millard stated work is ongoing for increasing penalties in Lakeland. Manager Millard also mentioned Lakeland is working on adding Scenic Riverway signage to residential roads along the river, the signs have QR codes that direct to Scenic Riverway Rules.

Manager Johnson motioned for MSCWMO staff to send a mailing to bluffline residents highlighting bluffline construction rules. Manager Zeller seconded the motion. The motion carried with all in favor.

EMWREP Contract 2026-2027

Administrator Oldenburg-Downing stated that due to rate changes the previous EMWREP agreement was for one year, this agreement will continue services for two years at the new rate. Manager Zeller motioned to approve the 2026-2027 EMWREP Agreement. Manager Peters seconded the motion. The motion carried with all in favor.

Grant and Cost Share Applications

Ammerman Stewardship Grant Request

Stillwater resident Kristin Ammerman is applying for a 2026 MSCWMO Stewardship to enhance the vegetation along the shoreline of Brick Pond on her property at 1308 Everett St S, Stillwater, MN 55082. Stewardship Grant funds will be used to reimburse for the cost of native plant material and temporary herbivory fencing. The landowner has provided a list of materials to be installed, reviewed and approved by WCD staff. Project estimate is \$350.00, cost share requested is \$350.00.

Manager Zeller motioned to approve encumbrance of \$350.00 cost share for the Ammerman Stewardship Grant project at 1308 Everett St S, Stillwater, MN 55082. Manager Collins seconded the motion. The motion carried with all in favor.

Ballweg Stewardship Grant Request

Lake St. Croix Beach resident Anne Ballweg is applying for a 2026 MSCWMO Stewardship to install a 350 sf raingarden with surrounding native landscaping on her property located at

16620 Upper 12th St S, Lake St Croix Beach, MN 55043. The proposed practice will collect road, roof, and driveway runoff to reduce phosphorus loading by approximately 0.125 lbs and TSS by approximately 22.6 lbs annually. Installation labor will be performed by the landowner with 2026 MSCWMO Stewardship Grant funds used to reimburse for the cost of mulch, soil amendments, and plant material. Project estimate is \$2,020.00 and cost share requested is \$500.00.

Manager Johnson motioned to approve encumbrance of \$500.00 cost share for the Ballweg Stewardship Grant project at 16620 Upper 12th St S, Lake St Croix Beach, MN 55043. Manager Kipp seconded the motion. The motion carried with all in favor.

West Lakeland Town Hall Stewardship Grant Request

West Lakeland Township resident Kelly Stichter is applying for a 2026 MSCWMO Stewardship Grant on behalf of West Lakeland Township to install a native demonstration garden under the West Lakeland Town Hall sign on the corner of 10th St N and Stagecoach Trl N. The proposed project will serve as an opportunity to educate and demonstrate to residents the benefits of planting native species for pollinators and how native plants can beautify residential landscapes. If budget allows, native planting efforts will be extended to include the town hall foundation planting beds. Project estimate is \$1,500.00 and cost share requested is \$500.00.

Manager Johnson motioned to approve encumbrance of \$500.00 cost share for the West Lakeland Town Hall project at 959 Paris Ave Circle N, West Lakeland, MN 55082. Manager McCarthy seconded the motion. The motion carried with all in favor.

Zelenak Stewardship Grant Request

Stillwater resident Van Zelenak is applying for a 2026 MSCWMO Stewardship to enhance the vegetation on a steep wooded slope on the NW corner of his property, located at 112 Harriet St S, Stillwater, MN 55082. While no rill or gully erosion was observed, enhancing the vegetation on the slope to increase ground layer density will help to prevent erosion and improve slope stability. Seed and plant installation will be performed by the landowner with 2026 MSCWMO Stewardship Grant funds used to reimburse for the cost of seed and plant material. Project estimate is \$750.00 and cost share requested is \$500.00.

Manager Collins motioned to approve encumbrance of \$500.00 cost share for the Zelenak Stewardship Grant project at 112 Harriet St S, Stillwater, MN 55082. Manager McCarthy seconded the motion. The motion carried with all in favor.

LSCVFD Water Quality Improvement Grant Request

The Lower St. Croix Valley Fire Department (LSCVFD) is applying for a 2026 MSCWMO Water Quality Improvement Grant to install three biofiltration basins, convert 7,500 square feet of turf, and incorporate native landscaping around the fire department building located at 1560 St. Croix Trl S, Lake St. Croix Beach, MN 55043 . The project is expected to reduce TP loading to Lake St. Croix by approximately 1.04 lbs annually while demonstrating to the public the value of native landscaping for wildlife conservation. The fire department will coordinate with TriCounty Services, city staff, and WCD staff on the installation. Total project estimate is \$16,084.48 and cost share requested is \$2,500.00.

Manager Zeller motioned to approve encumbrance of \$2,500.00 cost share for the LSCVFD Bioretention project at 1560 St. Croix Trail S, Lake St. Croix Beach, MN 55043. Manager Millard seconded the motion. The motion carried with all in favor.

Request for Reimbursement – Stonebridge Elementary School Forest Project

On January 8th, 2026 the MSCWMO board approved cost-share encumbrance of up to \$2,200.00 from the Water Quality Improvement Grant program for the installation of the Stonebridge Elementary School Forest Restoration Project. Teachers, parents and students have installed 26 potted native trees and shrubs, bare-root trees and shrubs donated by the DNR, 53 native perennials, and 16 lbs of native woodland seed within the school forest in spring of 2026. The school forest has also show a positive native plant community response from buckthorn removal over the winter of 2025/26. The Stonebridge Elementary PTA is seeking reimbursement in the amount of \$2,113.15 for payments made to the contractor in November of 2025.

Manager Zeller motioned to approve reimbursement of \$2,113.15 cost share for the installation of the Stonebridge Elementary School Forest restoration project on Parcel #2903020110051. Manager Johnson seconded the motion. The motion carried with all in favor.

Plan Reviews/Submittals

218 3rd St – INFORM

Incomplete submittal items were received on March 18th for the new home construction at 218 3rd St in Stillwater and additional review materials were received on April 23rd including an higher level of engineering review for infiltration in a high vulnerability DWSMA. The project triggers MSCWMO review because of a variance request to impervious surface coverage. MSCWMO staff have requested that applicant revise and resubmit to address the depth of the infiltration facility and maximum drawdown time of 48 hours as well as minor notes and items for the erosion and sediment control plan.

7xx Quixote – ACTION

Incomplete submittal items were received on March 26th for the stair construction at 7XX (between 739 and 745) Quixote Ave N in Lakeland and additional review materials were received on May 5th including plans for riprap placement. The project triggers MSCWMO review because of disturbance within the shoreland and bluffland areas. MSCWMO staff recommends board approval with four conditions:

1. The OHW noted on the plans is corrected and no work will occur below the OHW without prior approval by MNDNR for work in public waters
2. Stabilization timeframes for exposed soil areas are provided on plans
3. ESC inspection notes are provided on plans
4. Local approval is received for vegetative cutting and riprap placement within the flood fringe

Manager Zeller motioned to approve the project with the four conditions. Manager McCarthy seconded the motion. The motion carried with all in favor.

Bayport Safe Routes – ACTION

Draft Minutes, Pending Board Approval

The Middle St. Croix Watershed Management Organization (MSCWMO) received initial submittal materials on April 3rd, 2026 for the Safe Routes to School project on 5th Avenue North within the MSCWMO boundaries and the City of Bayport. The proposed project qualifies for full review under the MSCWMO 2025 Watershed Management Plan (WMP) since it involves earthwork of more than 100 cubic yards. MSCWMO staff recommend approval with three conditions:

1. Contact information of person responsible for erosion and sediment control compliance is provided
2. ESC inspection timeframes and required records are noted
3. Pollution prevention notes are provided

Manager Zeller motioned to approve the project with the three conditions. Manager Johnson seconded the motion. The motion carried with all in favor.

Bonestroo Pool

The project review for the proposed pool project at 175 Lakeland Shores is temporarily suspended until plans addressing restoration of riverway ordinance violations are received.

Central Automotive Parking Lot Addition

Submittal items were received on March 25th for previously suspended Central Automotive parking lot addition at 14819 59th St N in Oak Park Heights. A preliminary review has been completed and staff requested revised materials demonstrating conformance with MIDS flexible treatment options.

Erosion and Sediment Control Inspection Reports

There are six erosion and sediment control reports included in the board packet. Four inspections received an "A" grade, one received a "B" grade, and one received a "C" grade.

Staff Report

Water monitoring and maintenance activities are underway for the season. Other activities such as administration and erosion control were discussed during the meeting.

1W1P Updates

None

Other

Administrator Oldenburg-Downing stated there is a flyer on the table advertising the upcoming Workshop on the Water for board members to look at if they are interested.

Adjourn

Manager Zeller motioned to adjourn the meeting, Manager McCarthy seconded the motion. The motion carried with all in favor. The meeting adjourned at 6:41PM.

MSCWMO 2027 Draft Budget

	2026 MSCWMO Budget	2027 MSCWMO Budget	% CHANGE
ADMINISTRATION			
Administration - General	\$ 34,000.00	\$ 36,000.00	5.88%
Accounting	\$ 1,880.00	\$ 1,980.00	5.32%
Legal Fees - General	\$ 500.00	\$ 500.00	0.00%
Audit	\$ 5,500.00	\$ 500.00	-90.91%
Insurance & Bonds	\$ 2,600.00	\$ 2,600.00	0.00%
Office supplies/equipment/postage	\$ 400.00	\$ 400.00	0.00%
Minutes/Clerical	\$ 1,470.00	\$ 1,600.00	8.84%
Copying/printing/reproduction/minutes	\$ 400.00	\$ 400.00	0.00%
Admin Total	\$ 46,750.00	\$ 43,980.00	-5.93%
PROJECT FUNDS			
Project Contingency	\$ 2,000.00	\$ 2,000.00	0.00%
Engineering - Project	\$ 4,000.00	\$ 4,000.00	0.00%
Development Plan Reviews	\$ 7,000.00	\$ 7,500.00	7.14%
Erosion Monitoring Program	\$ 2,520.00	\$ 2,750.00	9.13%
BMP Cost-Share (general)	\$ 15,000.00	\$ 15,000.00	0.00%
BMP TA & Admin	\$ 34,000.00	\$ 36,040.00	6.00%
Community TA	\$ 3,000.00	\$ 3,000.00	0.00%
Water Resource Educator	\$ 8,000.00	\$ 8,000.00	0.00%
Website	\$ 900.00	\$ 900.00	0.00%
Inspections and Tracking Database	\$ 500.00	\$ 500.00	0.00%
Project Total	\$ 76,920.00	\$ 79,690.00	3.601%
WATER MONITORING			
Water Monitoring	\$ 23,000.00	\$ 23,000.00	0.00%
Water Monitoring Total	\$ 23,000.00	\$ 23,000.00	0.000%
LONG TERM PROJECT SAVINGS			
Water Monitoring - Set aside for equipment replacement & Monitoring Costs	\$ 750.00	\$ 750.00	0.00%
WMP Update	\$ 5,000.00	\$ 5,000.00	0.00%
Savings Total	\$ 5,750.00	\$ 5,750.00	0.00%
MSCWMO Member Contribution Budget	\$ 152,420.00	\$ 152,420.00	0.00%

MEMORANDUM

TO: MSCWMO Board of Managers and Matt Oldenburg-Downing, Administrator

FROM: Aaron DeRusha, Washington Conservation District (WCD)

DATE: 6/4/2026

RE: MSCWMO Impervious Surfaces GIS Layer Development

Background

Recently, a digital impervious surface layer was developed for Brown's Creek Watershed District (BCWD) in response to Watershed and City staff requesting more information on the amount of impervious surfaces in the as-built condition of new developments versus the amount permitted by BCWD. It was noted BCWD requires stormwater management for a certain amount of impervious surface at the time of initial permitting, but local variances and re-development may allow for additional impervious surface that would exceed the capacity of the stormwater management features, possibly creating conditions that may result in localized flooding. This layer was intended to provide information to decision makers when considering variance requests to prevent such occurrences. A presentation on development of this layer was given to WCD and MSCWMO staff, and Administrator Oldenburg-Downing noted developing a similar layer for MSCWMO would be beneficial for informing development plan reviews, especially along the St. Croix River.

A geographic information systems (GIS) based desktop analysis is well suited to inform these questions. Many available land cover layers, such as the National Land Cover Dataset (NLCD) or Minnesota Land Cover Classification System (MLCCS) are too coarse to make determinations of impervious cover at the parcel scale. The University of Minnesota published a 1-meter resolution land cover classification dataset for the Twin Cities Metropolitan Area in 2016 based on 2015 aerial images, but this dataset would be out of date for newer developments, and no other ready-for-use GIS based products for this scale are known to exist. The layer developed for BCWD provides a land cover summary for each property parcel in the watershed, and is hosted on a web-based application for easy viewing and analysis by decision makers. The application can be viewed here: [BCWD Impervious Surface and Land Cover Viewer](#), and the deliverable provided to BCWD can be seen in the attached Exhibit A for reference.

Scope of Service

Applying the principles used to develop the BCWD impervious surface layer, it is possible to develop a new layer of impervious surfaces using recent aerial imagery and remote sensing techniques. False-color infrared images may be used to delineate impervious surfaces by analyzing the reflectivity of pixels in the image in various spectral bands. False-color infrared aerial photography captures images in the visible light spectrum as well as the invisible, near-infrared spectrum, which allows certain land covers, especially impervious surfaces and vegetation, to be easily identified. It is important to use spring leaf-off aerial photos, so impervious surfaces are not obscured by tree canopy. GIS software can be trained to automatically classify image pixels based on their reflectivity and patterns into classes, such as impervious surface, water, deciduous tree canopy, crops, etc.

For this analysis, ESRI ArcGIS Pro with an Image Analyst extension will be used to perform the image classification. A 2025 spring leaf-off false-color infrared image dataset with a resolution of 1-foot was recently made available by the Minnesota Geospatial Information Office, and will be used for this analysis. The ESRI ArcGIS Pro Image Analyst extension includes a classification wizard to assist with the image classification, and multiple iterations of classification will be needed to produce a layer with acceptable accuracy. WCD owns and maintains the appropriate software licenses needed to complete the analysis. A manual comparison between the classified land cover and the aerial image will be performed to ensure accuracy of the final dataset.

The following table summarizes the estimated costs to perform the image classification:

Task	Hours	Cost
Perform image classification and refine dataset	15	\$1,290
Quality-check image classification and produce final impervious surfaces layer, online map, and accuracy metrics	5	\$430
Totals	20	\$1,720

The deliverables for this scope will be a digital raster and/or file geodatabase based GIS layer file of all impervious surfaces within the watershed district with a 1-foot resolution, an accompanying interactive online map for easy viewing of the dataset, and accuracy metrics for the final dataset. Other land cover classes, such as deciduous tree canopy, coniferous tree canopy, crops, bare soil, grasses, shrubs, emergent wetlands, forested wetlands, etc. that show high agreement with actual land cover will also be included in the final dataset.

Requested Board Action

Approve the scope of service as described above for an amount not-to-exceed \$1,720.

EXHIBIT A

MEMORANDUM

TO: BCWD Board of Managers and Karen Kill, District Administrator

FROM: Aaron DeRusha, Washington Conservation District (WCD)

DATE: 5/20/2026

RE: BCWD Impervious Surfaces GIS Layer Development

Background

Staff at the City of Stillwater have noted increased numbers of variance requests for impervious surface coverage on residential lots in recent years. Through conversations with Administrator Kill, the City is interested in knowing how adjusting zoning regulations to provide better consistency with variance requests would affect the amount of impervious surface allowed on a lot by City ordinance and BCWD's permitting process for stormwater treatment. Administrator Kill noted developers receive approval from BCWD to construct a specific amount of impervious surface and are required to provide stormwater treatment for those areas on site, but the amount of treatment required for a development is often less than the maximum amount of impervious surface allowed by City ordinance when considering each individual lot. As lots develop or re-develop after initial permitting and construction, it is possible for the total impervious surface in a development to exceed the permitted capacity of the stormwater treatment practices and potentially have negative impacts on water quality and flooding. In order to answer these questions around development in the City, and all other areas of BCWD, a better understanding of the permitted impervious surfaces versus the as-built impervious surfaces in developments is needed.

A geographic information systems (GIS) based desktop analysis is well suited to inform these questions. Many available land cover layers, such as the National Land Cover Dataset (NLCD) or Minnesota Land Cover Classification System (MLCCS) are too coarse to make determinations of impervious cover on a lot by lot scale. The University of Minnesota published a 1-meter resolution land cover classification dataset for the Twin Cities Metropolitan Area in 2016 based on 2015 aerial images, but this dataset would be out of date for some newer developments, and no other ready-for-use GIS based products for this scale are known to exist.

BCWD amended its service agreement with the WCD to include development of a new digital impervious surface layer using the most recent 2025 spring leaf-off aerial photos with 1-foot resolution, made available by the Minnesota Geospatial Information Office in early 2026. The scope of service included delivering a digital impervious surface layer, other land cover classes such as tree canopy and turf coverage dependent upon accuracy, a web-based application for easy viewing of the data, and an accuracy assessment.

Methods

After examining feasibility of several image classification methods, it was determined a supervised object-based image analysis (OBIA) conducted using ESRI's ArcGIS Pro would be best suited for development of these layers. In simplest terms, this method groups pixels of the image according to their reflectivity, or color, in various spectral bands, and according to their shape, i.e. rectangularity or circularity, into polygons called objects. This process is called segmentation. The user tells the software what land cover type, or class, a sample of these objects belong to, called training samples. The training samples are used to train algorithms that automatically assign the rest of the objects in the image to a class. Specific classes are then merged together into more general classes to obtain a classified image. This classification can then be further refined

with corrections and reclassifications until an adequate end product is achieved, on which an accuracy assessment may be conducted.

For this type of analysis, false-color aerial images are often used because the sensors collecting the images also collect data in near-infrared wavelengths, which we cannot see with our eyes. When viewing these images the near-infrared image band is assigned to the red color, which makes different types of vegetation more visible depending on the vegetation's growth vigor, i.e. the redder the color, the more healthy or active the vegetation is. Other land covers like asphalt or concrete may appear as shades of white, blue, or gray, which also helps algorithms separate pixels into classes. For identifying impervious surfaces it is important to use spring leaf-off aerial photos to minimize the amount of impervious surfaces that would otherwise be obscured by tree canopy.

A general workflow for this analysis is:

1. Obtain false-color leaf-off photos of the study area.
2. Extract spectral bands to display the near-infrared wavelengths.
3. Segment the image into objects.
4. Create land cover classes and collect training samples for each class.
5. Choose and train an image classification algorithm.
6. Classify the image.
7. Merge and reclassify similar classes.
8. Review the classified image and reclassify areas that were misclassified by the algorithm.
9. Generate random points throughout the image and classes.
10. Update the random points with the correct class by reviewing the image, and conduct accuracy assessment.

For this analysis a spring 2025 leaf-off, false-color infrared image with 1-foot resolution was obtained from the Minnesota Geospatial Information Office. An example of the image with true-color and false-color bands displayed can be seen below.



Figure 1. True-color bands displayed on the left side of the image, and false-color bands displayed on the right.

Using ESRI's Image Classification Wizard, the image was then segmented into objects with a Spectral Detail setting of 16 (on a zero to 20 scale) and a Spatial Detail setting of 12 (on a zero to 20 scale). The minimum object size was set to 52 pixels, which equates to roughly 50 square feet.

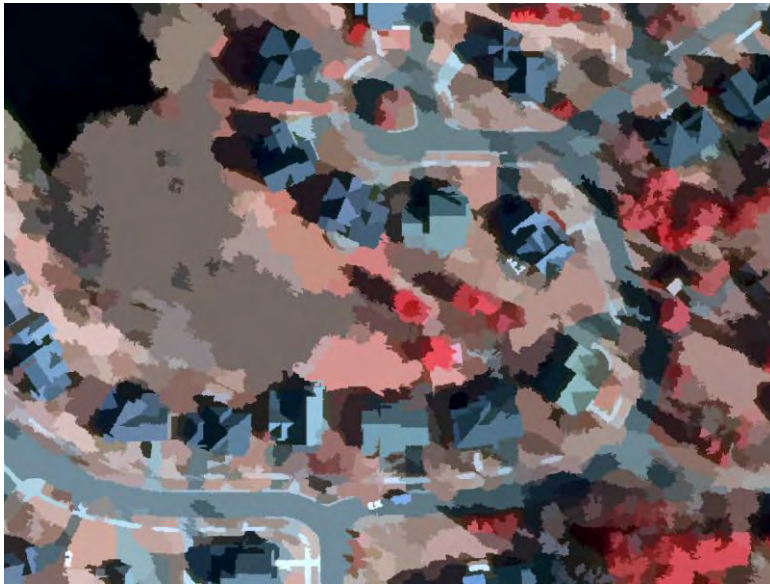


Figure 2. Example of the segmented image at fine scale.

Following segmentation, classes were created and training samples were collected throughout the image. It is important to have highly specific classes at this stage of the analysis to make the algorithm more accurate. Where buildings and trees cast shadows onto other land cover types it is important to create classes for the shadowed areas because they will be darker than their actual land cover class, and may later be misclassified as an impervious surface or water.

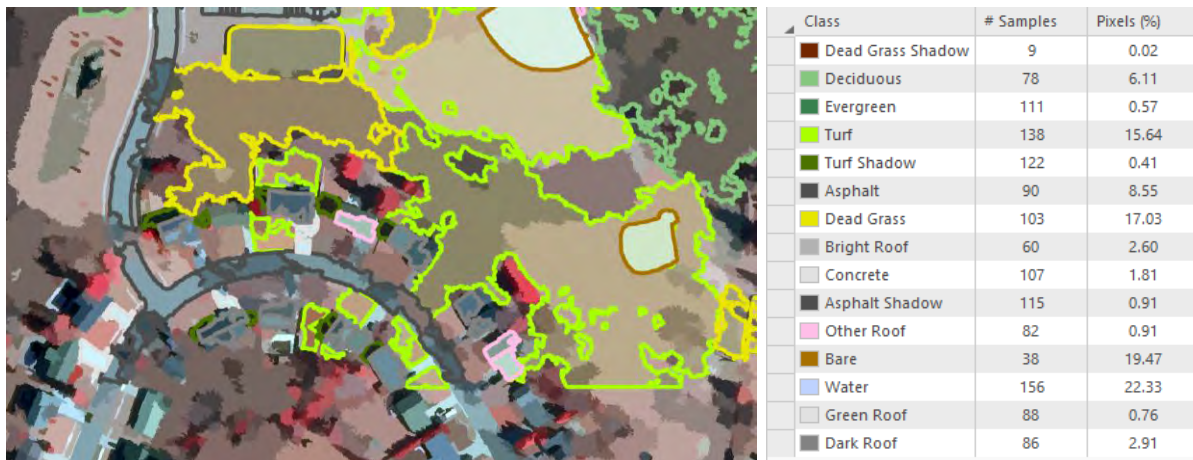


Figure 3. Example of training samples being collected in the image, and initial classes used to train the algorithm.

Once training samples were collected attempts were made to train the Support Vector Machine (SVM) and Random Trees classification algorithms. Due to extremely long processing time for the SVM method, the Random Trees method was used. The model was trained and the classifier was executed. Like classes were then merged, producing the initial classified image below. Note the errors in the image where portions of the streets and rooftops that are partially obscured by tree canopy are misclassified as dead grass or deciduous canopy. There are also portions of roofs and driveways misclassified as water.



Figure 4. Initial classified image.

Portions of the image where errors were present, such as impervious surfaces being classified as water, or roofs being classified as deciduous canopy, were manually reclassified. The specific classes were also combined into seven generalized classes. Finally, in order to ensure the maximum amount of misclassified portions of impervious surfaces were corrected, road centerline and building footprint data layers were used to reclassify these areas. The County developed a building footprint layer derived from LIDAR elevation data in 2024, and a road centerline layer is continuously updated. The building footprints and a 10-foot buffer from the centerline of the roads were used to overwrite these areas of the classified image to increase the accuracy of the impervious surfaces. These areas can be seen in the image below.

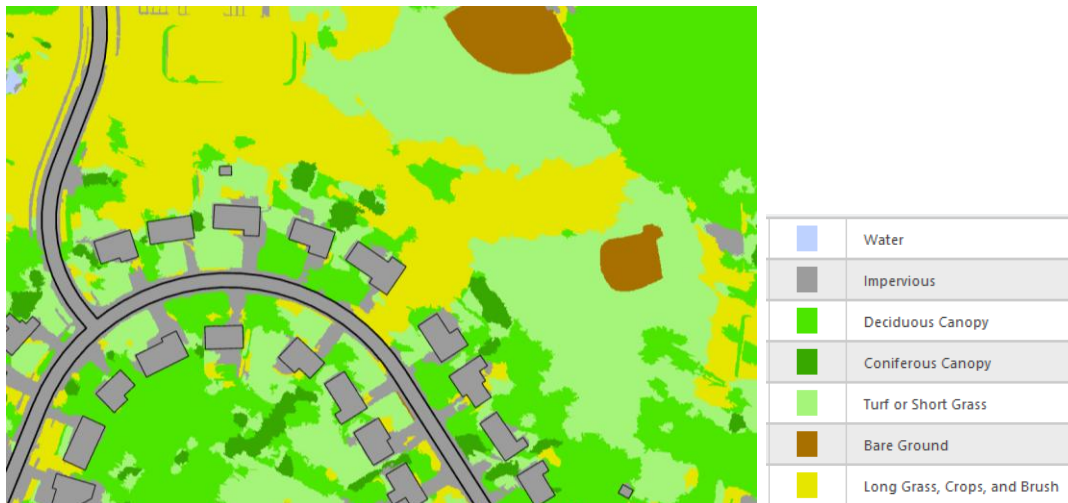


Figure 5. Example of final classified image with building footprint and street buffers overlaid.

In order to provide information on the amount of impervious surface in terms of square footage and percent cover on each parcel, the classified image was summarized using the County's parcel data, and joined back to the parcel data. This allows the end user to view the area and percent cover for each parcel, or summarize the amount of impervious surface for an entire development. Note the methods described in this memo are a simplified workflow, and documentation on specific processes may be provided upon request.

Accuracy Assessment

Assessing the accuracy of classified imagery is an important step to ensure the model represents real world conditions as accurately as possible. Errors will exist in every image classification due to spectral and spatial similarities between land covers, but a high degree of accuracy can be expected. It should be noted the data developed through this process is intended to provide general information on development status at the parcel scale, but real world conditions should be verified through finer review of aerial images or in-field surveys.

In order to assess the accuracy of the classified image 505 randomly stratified points were generated throughout the image. This distributes the amount of random points by class depending on the total area covered by each class. The random points were then manually updated with the actual land cover class and used to compute a confusion matrix and overall accuracy score. In the confusion matrix below, the cells along the green diagonal line represent random points that were accurately classified by the model. Cells off the diagonal represent random points that were misclassified, i.e. the model classified the pixel as impervious, but it was actually water. These provide details on errors of commission (false positives) and errors of omission (false negatives), where classes may include pixels that aren't actually in that class (commission) or classes do not include pixels that should be in that class (omission). The confusion matrix also provides an accuracy score for each class, and a kappa statistic that represents the overall accuracy of the classification. This statistic ranges from zero to one, with one representing perfect accuracy. The most accurate classes are water, impervious surfaces, and coniferous canopy. The least accurate classes are bare ground and deciduous canopy. Bare ground was most commonly misclassified as long grass, crops, and brush, and deciduous canopy errors were most commonly misclassified as turf or short grass, or long grass, crops, and brush. The overall accuracy score of the image is 0.856, which is considered excellent agreement between the model and real world conditions.

Table 1. Confusion matrix for randomly distributed points on the final classified image.

Class	Water	Impervious	Deciduous Canopy	Coniferous Canopy	Turf or Short Grass	Bare Ground	Long Grass, Crops, and Brush	Total	User Accuracy	Kappa
Water	33	1	0	0	0	0	0	34	0.971	0
Impervious	0	42	0	0	0	0	0	42	1.000	0
Deciduous Canopy	0	0	113	2	4	0	9	128	0.883	0
Coniferous Canopy	0	0	0	36	0	0	0	36	1.000	0
Turf or Short Grass	2	1	5	2	47	0	6	63	0.746	0
Bare Ground	0	0	0	0	0	3	2	5	0.600	0
Long Grass, Crops, and Brush	0	2	13	0	3	3	176	197	0.893	0
Total	35	46	131	40	54	6	193	505	0.000	0
Producer Accuracy	0.943	0.913	0.863	0.900	0.870	0.500	0.912	0.000	0.891	0
Kappa	0	0	0	0	0	0	0	0	0	0.856

Deliverables

In order to make use of this classification as convenient as possible a web application was developed using ArcGIS Online Experience Builder to host the data. This application can be used to view the amount of impervious surface on each parcel in the watershed, as well as export selections of parcels to other formats for further analysis. The application can be accessed by clicking the following link or by typing in the URL: [BCWD Impervious Surface and Land Cover Viewer](#) or tinyurl.com/4c9fx8ym. The raw underlying data can also be provided directly in various formats by contacting Aaron DeRusha at aderusha@mnwcd.org.



TO: Matt Oldenburg-Downing, Administrator
FROM: Rebecca Nestingen, PE
DATE: June 4, 2026
RE: **8a) Plan Reviews/Submittals**

The following is a summary of recent activity on projects submittals which qualify for plan review under the MSCWMO 2025 Watershed Management Plan (WMP):

- **Grand Central House (Mehls Residence).** Incomplete submittal items were received on March 18th for the new home construction at 218 3rd St in Stillwater and additional review materials were received on April 23rd including an higher level of engineering review for infiltration in a high vulnerability DWSMA. Revisions to the initial review comments were received on May 11th. The project triggers MSCWMO review because of a variance request to impervious surface coverage. *MSCWMO staff find that the proposed project meets the standards of the MSCWMO and recommends board approval with two conditions.*
- **Central Automotive Parking Lot Addition.** Initial submittal items were received on July 31st, 2025 for the Central Automotive parking lot addition at 14819 59th St N in Oak Park Heights. Revised materials to address initial review comments were received on March 25th, 2026 and May 21st, 2026. The project triggers MSCWMO review because it fully reconstructs more than 6000 square feet of impervious surface. Stormwater management is provided by a proposed wet pond with an iron enhance filter. *MSCWMO staff find that the proposed project meets the standards of the MSCWMO and recommends board approval with three conditions.*
- **Law Enforcement Center.** Initial submittal items were receive on May 13th, 2026 for the proposed site improvements at the Washington County Law Enforcement Center at 15015 62nd St N in Stillwater. Revised materials to address initial review comments were received on June 1st, 2026. The project triggers MSCWMO review because it fully reconstructs more than 6000 square feet of impervious surface. Stormwater management is provided by a proposed infiltration basin. *MSCWMO staff find that the proposed project meets the standards of the MSCWMO and recommends board approval with two conditions.*
- **Anthem Strength & Conditioning.** Initial submittal items were receive on May 26th, 2026 for the proposed Anthem Strength & Conditioning development at 14231 60th S N in Oak Park Heights. The project triggers MSCWMO review because it fully reconstructs more than 6000 square feet of impervious surface. Stormwater management is provided by biofiltration basin which meets MIDS flexible treatment option #2 since infiltration is prohibited in the high vulnerability DWSMA. *MSCWMO staff find that the proposed project meets the standards of the MSCWMO and recommends board approval with six conditions.*



June 3, 2026

Shawn Sanders
City of Stillwater
216 N Fourth Street
Stillwater, MN 55082

Dear Mr. Sanders,

The Middle St. Croix Watershed Management Organization (MSCWMO) received initial submittal materials on March 18th, 2026 for the proposed residential construction at 218 3rd St S within the MSCWMO boundaries and the City of Stillwater. Additional submittal items were requested and received April 23rd, 2026 which included a higher level of engineering review finding infiltration appropriate in the high vulnerability DWSMA. Revision to initial review comments were received on May 11th, 2026. The proposed project qualifies for full review under the MSCWMO 2025 Watershed Management Plan (WMP) since it involves a variance request to the local impervious surface coverage limits. The MSCWMO staff have reviewed the project and find that it meets the standards of the MSCWMO contingent upon the following:

1. Contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control plans shall be provided.
2. Prior to the release of any remaining fee or security, the permit holder shall provide documentation that constructed stormwater facilities perform as designed.

MSCWMO review process information can be downloaded from www.mscwmo.org. Please contact me at 651-796-2227 or moldenburg-downing@mnwcd.org if you have any questions or comments regarding this correspondence.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Oldenburg-Downing".

Matt Oldenburg-Downing | Administrator
Middle St. Croix Watershed Management Organization



MSCWMO Review ID: 26-002

Review Date: 6/3/2026

Project Name: Mehls Residence

Location: 218 3rd St S, Stillwater

Applicant: Jeremy Imhoff

Purpose: new single family home

Recommendation: Proposed project meets the standards of MSCWMO contingent upon the following:

1. Contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control plans shall be provided.
2. Prior to the release of any remaining fee or security, the permit holder shall provide documentation that constructed stormwater facilities perform as designed.

Review Trigger:

- Any project involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land
- Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface.
- Any project within the St. Croix Riverway that adds or reconstruct 500 square feet or more of impervious surface.
- Any project with wetland impacts, grading within public waters, grading within shoreline buffers or within 40-feet of the bluff line.
- Any project requiring a variance from the current local impervious surface coverage limit, shoreline, floodplain, or bluffline setback requirements

Submittal Items:

- A completed project review application form
- The required project review application fee
- Grading Plan/Mapping Exhibits:
 - Property lines and delineation of lands under ownership of the applicant.
 - Summary of all existing and proposed impervious surfaces.
 - Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.

- NA Delineation of existing on-site wetlands, shoreland, bluffline and/or floodplain areas, including any buffers or setbacks with dimensions.
- NA Ordinary High Water (OHW) elevations and datum, as determined by the Minnesota DNR if applicable.
- NA Lowest floor elevation (including basement) of all existing and proposed structures and the regional flood elevation and datum of the 100-year recurrence interval (base flood elevation as determined in a flood insurance study) if applicable.
- Erosion and Sediment Control Plan including the following:
 - Perimeter controls (silt fence, sediment control logs filter berms, or other methods), construction accesses and notation on plans for installation to occur before land disturbing activity begins.
 - Temporary and permanent soil stabilization cover type (erosion control blanket/mulch, seed, sod, or other methods) and notation on plans for required stabilization timeframe.
 - NA Work exclusion areas for shoreland and buffer preservation, bluffline setbacks and stormwater volume control facilities.
 - Scour protection and energy dissipation in areas of concentrated flows.
 - Contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.
 - Identification of all surface waters (lakes, streams, rivers, and wetlands) within one mile that receive drainage from the project site, and methods to protect surface waters.
- Permanent Stormwater Management System including the following:
 - Construction plans for all proposed stormwater management facilities including grading contours, bottom area, top area, outlet elevation and proposed vegetation if applicable.
 - Construction notes for proposed volume control facilities to prevent soil compaction
- NA Location(s) of past, current or future onsite well and septic systems if applicable.
- Locations of existing and proposed downspouts and conveyances routing runoff to proposed stormwater management facilities.

NA Other exhibits required to show conformance with MSCWMO performance standards such as documentation of coverage under the Construction Stormwater General Permit for applicable projects.

Stormwater Rate and Flood Control:

NA Low floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year high water level and the natural overflow of landlocked basins.

NA Low floor elevations of structures built adjacent to designated floodplain areas are a minimum of two feet above the base flood elevation plus any stage increase due to the designation of flood fringe areas or encroachments on the floodplain

Stormwater Volume Control and Treatment:

The required stormwater runoff volume captured and retained on site is equivalent to 1.1 inches of runoff from the new and/or fully reconstructed impervious surfaces, unless the project is linear. [Applicant has completed a higher level of engineering review to allow for infiltration in a high vulnerability DWSMA.](#)

NA As determined and agreed upon by the community and MSCWMO the project site has restrictions where infiltration is not feasible or advised, such as karst topography, very fast or slow infiltration soils, shallow bedrock or groundwater, DWSMA or potential stormwater hotspots.

NA Options considered for volume retention have examined the merits of:

NA Completing a higher level of engineering review for an ERA where the DWSMA is classified as moderate, or outside an ERA where the DWSMA is classified as high or very high

NA Relocating project elements to address varying soil conditions and other constraints across the site to achieve infiltration

NA Utilizing green roofs, rainwater harvesting, and/or stormwater reuse

NA If full volume retention cannot be achieved, FTO #1 is satisfied by achieving volume retention of 0.55 inches of runoff from impervious surfaces and 75% annual total phosphorus removal

NA If FTO#1 cannot be achieved, FTO #2 is satisfied by achieving volume retention to the maximum extent practicable and 60% annual total phosphorus removal

NA If FTO#2 cannot be achieved, FTO #3 is satisfied by through off-site mitigation, credit banking, or cash-in-lieu of treatment

NA Volume retention and pollutant removal credits are calculated in accordance with the Minnesota Stormwater Manual and MIDS calculator. Volume retention

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credits are based on the assumption that an instantaneous volume is captured by the BMP, not the volume infiltrating during the event hydrograph. Ponds, stormwater wetlands and manufactured treatment device removals are based upon the pollutant removal credits in the Minnesota Stormwater Manual.

Stormwater BMP Design:

- NA Surface flows to stormwater management facilities are pre-treated to remove solids and maintain long-term performance of the system. [Not applicable for roof runoff](#)
- Infiltration and filtration facilities drawdown within 48 hours per the following:
 - NA For "off-line" systems, the drawdown time is determined from the maximum water depth below the surface discharge elevation and the infiltration rate.
 - For "in-line" systems, the drawdown time includes the bounce within the system and the drawdown time is determined from the hydrograph time between the peak 100-yr HWL and soil surface/filter-media elevation
- NA Bioretention (biofiltration, bioinfiltration, etc.) facilities above ground with vegetation have a maximum water depth below the surface discharge elevation of 1.5 feet.
- NA Field measured infiltration rates are divided by 2 as a safety factor for design.
- In the absence of field-tested infiltration rates, the following design infiltration rates shall be used:
 - For proposed infiltration facilities with a drainage area less than 2 acres and receiving less the 0.7 acres of impervious surface runoff, the HSG is used to estimate infiltration rates consistent with the recommend rates from the Minnesota Stormwater Manual. [Soil texture assumed to be gravelly sand.](#)
 - NA For proposed infiltration facilities with a drainage area equal to or greater than 2 acres or having 0.7 acres or more of impervious surface runoff, infiltration suitability shall be verified with soil pits or borings per the Unified Soil Classification in accordance with the Minnesota Stormwater Manual.
 - The design infiltration rates for underground infiltration facilities shall not exceed half of the above rates. [Design infiltration rate 0.8 in/hr, gravelly sand rate is 1.63 in/hr per Minnesota Stormwater Manual.](#)
- The following location and minimum setback requirements for proposed infiltration facilities are met:
 - A minimum 3-foot vertical distance between the bottom of an infiltration facility to the seasonally saturated soils or bedrock.

- A minimum of 1,000 feet up gradient or 100 feet down gradient of active karst terrain
- A minimum 100-foot horizontal separation between any infiltration facility and sensitive public water supply well
- A minimum 50-foot horizontal separation between any infiltration facility and all other public water supply well
- A minimum 35-foot horizontal separation between any infiltration facility and septic system.
- Infiltration facilities are not located within bluffline setbacks.

NA To prevent soil compaction of infiltration and filtration facilities, the following construction guidance must be provided in the plans and followed during construction:

NA Proposed facilities shall be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it.

NA Proposed facilities may not be excavated within 2.0 feet of final grade until the contributing drainage area has been constructed and fully stabilized.

NA If facilities are in-place during construction activities, all sediment and runoff must be diverted away from the facility, using practices such as pipe capping or diversions. Robust erosion and sediment controls shall be utilized to protect facilities during construction.

NA Installation of facilities shall occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.

NA Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.

- Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed stormwater facilities perform as designed.

Erosion and Sediment Control:

- Erosion Prevention
 - Stabilize all exposed soil areas (including stockpiles) with temporary erosion control (seed and mulch, blanket, or other methods) within 14 days (or 7 days for St. Croix River or impaired water) if construction activities in the area have temporarily or permanently ceased.

NA During MNDNR “work in water restrictions” periods all exposed soils (including stockpiles) within 200 feet of the water’s edge must be stabilized within 24 hours of temporarily or permanently pausing construction activities

NA Stabilize all exposed soils within the normal wetted perimeter of a temporary or permanent drainage ditch or swale within 200 feet of the point of discharge or property edge within 24 hours of allowing water to flow through the system. Mulch, hydromulch, tackifier, or similar practices may not be used in swales with slopes greater than two percent.

NA Stabilize pipe outlets with energy dissipation within 24 hours of connection to a drainage way or permanent stormwater treatment system.

Location, type and quantity of temporary erosion prevention practices are identified.

Sediment Control

Sediment control practices (silt fence, sediment control logs, filter berms, storm sewer inlet protection, or other methods) will be placed down gradient before land disturbing activities begin.

If sediment controls are overloaded based on frequent failure, additional upgradient, redundant, or more robust controls must be implemented.

NA Flotation silt curtain placed in water shall not be used as a primary sediment control practice except when working below the waterline or at the land-water interface. Sediment controls must otherwise be located on land. If used, flotation silt curtain shall be decontaminated of aquatic invasive species per MNDNR guidelines before transporting from the site.

NA Preserve a 50-foot buffer of natural vegetation (100 feet along the St. Croix River or impaired waters) around all surface waters, blufflines, and existing permanent stormwater treatment facilities. If infeasible and disturbance must occur within the buffer, redundant perimeter controls must be used.

Stabilized construction accesses (rock pads, rumble strips, access mats) must be utilized to minimize tracking out of sediment from the construction site. Paved surfaces must be cleaned daily if tracking practices are not adequate to prevent sediment from being tracked onto the paved surfaces.

Location, type and quantity of sediment control practices are identified.

NA Dewatering

NA Dewatering turbid or sediment-laden water to surface waters, stormwater conveyances, and existing permanent stormwater treatment facilities is prohibited.

NA Dewatering discharges shall be directed to temporary sediment basins, filter bags, well-vegetated areas within the site, treatment dumpsters, weeper systems, or other methods. Water leaving the site shall not be turbid, and dewatering discharge points shall be protected from scour and erosion.

NA Dewatering discharges must be regularly checked for visual clarity at least once every four hours, and records must be kept with the erosion control plan. Unattended dewatering activities are prohibited. If turbid water is discharged, dewatering activities shall cease immediately and additional filtration methods implemented.

Inspections and Maintenance

Applicant must inspect all erosion prevention and sediment control practices and adjacent surface waters, stormwater conveyances, and paved surfaces weekly and within 24 hours of a half-inch or more rain event to ensure integrity and effectiveness.

Records of inspections must include the date, time, name of inspector, rainfall amount, findings of the inspection, photographs collected of damaged practices or sediment discharges, and corrective actions taken as a result of the inspection.

Damaged, non-functional, or missing erosion and sediment control practices shall be replaced by the end of the next business day. Sediment control devices must be maintained when sediment reaches half the height or half the volume of the device by the end of the next business day.

If a sediment or discharge of material other than clean stormwater is found, the applicant must immediately notify the permit authority, and report the discharge to the state duty officer with a description of the type and amount of material discharged, and affected resources

Plans shall include contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.

Pollution Prevention

Solid waste, including materials from spill clean ups, must be stored, collected and disposed of in accordance with state law.

Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds) such that wastes do not come in contact with soil or stormwater.

Hazardous materials that have potential to leach pollutants such as oil, fuels, hydraulic fluid, paints, solvents, curing compounds, or other materials must be

stored in sealed containers and under cover to minimize contact with stormwater.

- Immediately contain and prevent further discharge of spilled materials using spill containment kits. Document and report spills as required by state law.
- Final Stabilization
 - Projects are considered stabilized when all construction activity is complete and all soils disturbed as a result of the project are covered with perennial vegetation of at least 70 percent of the final expected growth. When sod is used, a project is considered stabilized after sod has been laid and maintained alive for at least 30 days.
 - Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.
- NA Construction is prohibited on steep Slopes within the St. Croix. Steep slopes are defined as lands having average slopes 12% or greater over horizontal distances of fifty feet (50) or more.
- NA Land disturbing activities are prohibited within 40 feet of the top of blufflines. Blufflines are defined as a line along the top of a slope connecting points at which the slope, proceeding away from the waterbody or adjoining watershed channel, becomes less than twelve percent (12%).

Wetland Protection:

- NA Direct discharge of stormwater to wetlands and all other water bodies without water quality treatment is prohibited. Exemptions for bridges/culverts on linear projects and disconnected impervious with adequate vegetated buffers may be considered.
- NA Permits shall be obtained from appropriate regulatory authorities before beginning any work that impacts a wetland or its required buffer.
- NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.
- NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 of the WMP for the individual wetland susceptibility class.

Buffer Protection:

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NA Buffers of unmowed natural vegetation shall be maintained or created upslope of wetlands, lakes and streams.

NA Buffer widths conform to provisions in Table 7.1 of the WMP.

NA All buildings (principle and accessory) must be set back at least 20 feet from the upslope edge of the buffer.



June 3, 2026

Shawn Sanders
City of Stillwater
216 N Fourth Street
Stillwater, MN 55082

Dear Mr. Sanders,

The Middle St. Croix Watershed Management Organization (MSCWMO) received initial submittal materials on May 13th, 2026 for the Law Enforcement Center site improvements project at 15015 62nd St N within the MSCWMO boundaries and the City of Stillwater. Revised materials to address initial review comments were received on June 1st, 2026. The proposed project qualifies for full review under the MSCWMO 2025 Watershed Management Plan (WMP) since it involves more than 6,000 square feet of new/reconstructed impervious. Stormwater management is provided by a proposed infiltration basin and expanded depression. The MSCWMO staff have reviewed the project and find the plans as submitted are meeting MSCWMO standards contingent upon the following two (2) items:

1. A proposed maintenance agreement and drainage easements covering stormwater facilities shall be provided.
2. A plan for post-construction chloride management shall be provided.

Please contact me at 651-796-2227 or moldenburg-downing@mnwcd.org if you have any questions or comments regarding this correspondence.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Oldenburg-Downing".

Matt Oldenburg-Downing | Administrator
Middle St. Croix Watershed Management Organization



PROJECT REVIEW CHECKLIST

MSCWMO Review ID: 26-010

Review Date: 6/3/2026

Project Name: Law Enforcement
Center

Location: 15015 62nd St N

Applicant: Max Seitz

Purpose: Road and pavement
improvements

Recommendation: Proposed project meets the standards of MSCWMO contingent upon the following:

1. A proposed maintenance agreement and drainage easements covering stormwater facilities shall be provided.
2. A plan for post-construction chloride management shall be provided.

Review Trigger:

- Any project involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land
- Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface.
- Any project within the St. Croix Riverway that adds or reconstruct 500 square feet or more of impervious surface.
- Any project with wetland impacts, grading within public waters, grading within shoreline buffers or within 40-feet of the bluff line.
- All major subdivisions or minor subdivisions that are part of a common plan of development
- Development projects that impact 2 or more of the member communities
- Any project requiring a variance from the current local impervious surface coverage limit, shoreline, floodplain, or bluffline setback requirements

Submittal Items:

- A completed project review application form
- NA The required project review application fee
- Grading Plan/Mapping Exhibits:
 - Property lines and delineation of lands under ownership of the applicant.
 - Summary of all existing and proposed impervious surfaces.

MSCWMO Member Communities

Afton • Bayport • Baytown • Lakeland • Lakeland Shores • Lake St. Croix Beach • Oak Park Heights
St. Mary's Point • Stillwater • West Lakeland

- Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.
- NA Delineation of existing on-site wetlands, shoreland, bluffline and/or floodplain areas, including any buffers or setbacks with dimensions.
- NA Ordinary High Water (OHW) elevations and datum, as determined by the Minnesota DNR if applicable.
- NA Lowest floor elevation (including basement) of all existing and proposed structures and the regional flood elevation and datum of the 100-year recurrence interval (base flood elevation as determined in a flood insurance study) if applicable.
- Drainage easements covering land adjacent to ponding areas, stormwater facilities and wetlands up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to stormwater management facilities shall also be shown.
- Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.
- Location and detailed cross sections with elevations of proposed and existing stormwater facilities including outlet control structures and emergency overflows.
- Existing and proposed normal water elevations and the high water level produced from the 100-year 24-hour storms of all stormwater facilities.
- Erosion and Sediment Control Plan including the following:
 - Perimeter controls (silt fence, sediment control logs filter berms, or other methods), construction accesses and notation on plans for installation to occur before land disturbing activity begins.
 - Temporary and permanent soil stabilization cover type (erosion control blanket/mulch, seed, sod, or other methods) and notation on plans for required stabilization timeframe.
- NA Work exclusion areas for shoreland and buffer preservation, bluffline setbacks and stormwater volume control facilities.
- Scour protection and energy dissipation in areas of concentrated flows.
- Contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.
- Identification of all surface waters (lakes, streams, rivers, and wetlands) within one mile that receive drainage from the project site, and methods to protect surface waters.

- For projects disturbing more than one acre, or major or minor subdivisions that are part of a common plan of development, a copy of the Stormwater Pollution Prevention Plan (SWPPP), prepared by a qualified individual, which conforms to the MPCA Construction Stormwater General Permit requirements. The SWPPP must conform to the special requirements for “Special Waters” (St. Croix River) and impaired waters, when applicable.
- Permanent Stormwater Management System including the following:
 - Construction plans for all proposed stormwater management facilities including grading contours, bottom area, top area, outlet elevation and proposed vegetation if applicable.
 - Construction notes for proposed volume control facilities to prevent soil compaction
- NA Location(s) of past, current or future onsite well and septic systems if applicable.
- Locations of existing and proposed downspouts and conveyances routing runoff to proposed stormwater management facilities.
- A completed stormwater volume control checklist.
- Narrative addressing incorporation of stormwater BMPs, including individual BMP storage volumes and pretreatment method(s) used.
- All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities. The summaries shall include a map that corresponds to the subwatershed areas in the model.
- A table (or tables) must be submitted showing the following:
 - A listing of all points where runoff leaves the site and the existing and proposed peak runoff rates for the 2-, 10-, and 100-year 24-hour storms.
 - A listing of the existing and proposed subwatershed hydrologic parameters including the impervious and pervious areas, runoff curve number of pervious areas, and time of concentration.
- For proposed infiltration facilities with drainage areas of more than 2 acres or 0.7 acres or more of impervious surfaces, a soil boring report for onsite soil borings within the footprint of the proposed stormwater BMPs done in accordance with the Minnesota Stormwater Manual
- A proposed maintenance agreement, which may be in the format of Appendix Q, or other form approved by the MSCWMO.
- A plan for post-construction management of chloride use on the site.

- Other exhibits required to show conformance with MSCWMO performance standards such as documentation of coverage under the Construction Stormwater General Permit for applicable projects.

Stormwater Rate and Flood Control:

- The peak rate of stormwater runoff from the 2-, 10-, and 100-year 24-hour storms from newly developed or redeveloped sites does not exceed the existing runoff rates for all points where stormwater discharges leave the site
 - Existing conditions assume good hydrologic conditions. When existing land cover is cropland, a CN of 56, 70, 79, and 83 is used for HSG A, B, C, and D, respectively.
 - Runoff for impervious and pervious portions of each subwatershed are calculated separately
 - Time of concentration is computed using TR-55 methodology
 - Modeling analyses include secondary overflows to route flows for events exceeding the storm sewer systems level-of-service and computational routing methods are "tailwater-aware" (e.g. dynamic-storage-indication or simultaneous pond routing)
- NA In sub-areas of a landlocked watershed, development shall not increase the existing volume or rate of discharge from the sub-area for the 10-year return period event
- NA Low floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year high water level and the natural overflow of landlocked basins.
- NA Low floor elevations of structures built adjacent to designated floodplain areas are a minimum of two feet above the base flood elevation plus any stage increase due to the designation of flood fringe areas or encroachments on the floodplain

Stormwater Volume Control and Treatment:

- The required stormwater runoff volume captured and retained on site is equivalent to 1.1 inches of runoff from the new and/or fully reconstructed impervious surfaces, unless the project is linear.
- For linear projects, required stormwater runoff volume captured and retained on site is equivalent to the larger of:
 - 1.1 inches of runoff from the net increase in impervious, or
 - 0.55 inches or runoff from new and/or fully reconstructed impervious

NA As determined and agreed upon by the community and MSCWMO the project site has restrictions where infiltration is not feasible or advised, such as karst topography, very fast or slow infiltration soils, shallow bedrock or groundwater, DWSMA or potential stormwater hotspots.

NA Options considered for volume retention have examined the merits of:

NA Completing a higher level of engineering review for an ERA where the DWSMA is classified as moderate, or outside an ERA where the DWSMA is classified as high or very high

NA Relocating project elements to address varying soil conditions and other constraints across the site to achieve infiltration

NA Utilizing green roofs, rainwater harvesting, and/or stormwater reuse

NA If full volume retention cannot be achieved, FTO #1 is satisfied by achieving volume retention of 0.55 inches of runoff from impervious surfaces and 75% annual total phosphorus removal

NA If FTO#1 cannot be achieved, FTO #2 is satisfied by achieving volume retention to the maximum extent practicable and 60% annual total phosphorus removal

NA If FTO#2 cannot be achieved, FTO #3 is satisfied by through off-site mitigation, credit banking, or cash-in-lieu of treatment

NA Volume retention and pollutant removal credits are calculated in accordance with the Minnesota Stormwater Manual and MIDS calculator. Volume retention credits are based on the assumption that an instantaneous volume is captured by the BMP, not the volume infiltrating during the event hydrograph. Ponds, stormwater wetlands and manufactured treatment device removals are based upon the pollutant removal credits in the Minnesota Stormwater Manual.

Stormwater BMP Design:

- Surface flows to stormwater management facilities are pre-treated to remove solids and maintain long-term performance of the system.
- Infiltration and filtration facilities drawdown within 48 hours per the following:
 - For "off-line" systems, the drawdown time is determined from the maximum water depth below the surface discharge elevation and the infiltration rate.
 - For "in-line" systems, the drawdown time includes the bounce within the system and the drawdown time is determined from the hydrograph time between the peak 100-yr HWL and soil surface/filter-media elevation
- Bioretention (biofiltration, bioinfiltration, etc.) facilities above ground with vegetation have a maximum water depth below the surface discharge elevation of 1.5 feet.

NA Field measured infiltration rates are divided by 2 as a safety factor for design.

In the absence of field-tested infiltration rates, the following design infiltration rates shall be used:

NA For proposed infiltration facilities with a drainage area less than 2 acres and receiving less the 0.7 acres of impervious surface runoff, the HSG is used to estimate infiltration rates consistent with the recommend rates from the Minnesota Stormwater Manual.

For proposed infiltration facilities with a drainage area equal to or greater than 2 acres or having 0.7 acres or more of impervious surface runoff, infiltration suitability shall be verified with soil pits or borings per the Unified Soil Classification in accordance with the Minnesota Stormwater Manual.

NA The design infiltration rates for underground infiltration facilities shall not exceed half of the above rates

The following location and minimum setback requirements for proposed infiltration facilities are met:

A minimum 3-foot vertical distance between the bottom of an infiltration facility to the seasonally saturated soils or bedrock.

A minimum of 1,000 feet up gradient or 100 feet down gradient of active karst terrain

A minimum 100-foot horizontal separation between any infiltration facility and sensitive public water supply well

A minimum 50-foot horizontal separation between any infiltration facility and all other public water supply well

A minimum 35-foot horizontal separation between any infiltration facility and septic system.

Infiltration facilities are not located within bluffline setbacks.

To prevent soil compaction of infiltration and filtration facilities, the following construction guidance must be provided in the plans and followed during construction:

Proposed facilities shall be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it.

Proposed facilities may not be excavated within 2.0 feet of final grade until the contributing drainage area has been constructed and fully stabilized.

If facilities are in-place during construction activities, all sediment and runoff must be diverted away from the facility, using practices such as pipe capping

or diversions. Robust erosion and sediment controls shall be utilized to protect facilities during construction.

- Installation of facilities shall occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
- Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
- Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed stormwater facilities perform as designed. All projects shall provide as-builts of permanent stormwater facilities and infiltration tests demonstrating an acceptable infiltration rate or maximum 48-hour drawdown of the full volume if applicable.

Erosion and Sediment Control:

- Erosion Prevention
 - Stabilize all exposed soil areas (including stockpiles) with temporary erosion control (seed and mulch, blanket, or other methods) within 14 days (or 7 days for St. Croix River or impaired water) if construction activities in the area have temporarily or permanently ceased.
 - NA During MNDNR “work in water restrictions” periods all exposed soils (including stockpiles) within 200 feet of the water’s edge must be stabilized within 24 hours of temporarily or permanently pausing construction activities
 - NA Stabilize all exposed soils within the normal wetted perimeter of a temporary or permanent drainage ditch or swale within 200 feet of the point of discharge or property edge within 24 hours of allowing water to flow through the system. Mulch, hydromulch, tackifier, or similar practices may not be used in swales with slopes greater than two percent.
 - Stabilize pipe outlets with energy dissipation within 24 hours of connection to a drainage way or permanent stormwater treatment system.
 - Location, type and quantity of temporary erosion prevention practices are identified.
- Sediment Control
 - Sediment control practices (silt fence, sediment control logs, filter berms, storm sewer inlet protection, or other methods) will be placed down gradient before land disturbing activities begin.
 - If sediment controls are overloaded based on frequent failure, additional upgradient, redundant, or more robust controls must be implemented.

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- NA Flotation silt curtain placed in water shall not be used as a primary sediment control practice except when working below the waterline or at the land-water interface. Sediment controls must otherwise be located on land. If used, flotation silt curtain shall be decontaminated of aquatic invasive species per MNDNR guidelines before transporting from the site.
- NA Preserve a 50-foot buffer of natural vegetation (100 feet along the St. Croix River or impaired waters) around all surface waters, blufflines, and existing permanent stormwater treatment facilities. If infeasible and disturbance must occur within the buffer, redundant perimeter controls must be used.
- Stabilized construction accesses (rock pads, rumble strips, access mats) must be utilized to minimize tracking out of sediment from the construction site. Paved surfaces must be cleaned daily if tracking practices are not adequate to prevent sediment from being tracked onto the paved surfaces.
 - Location, type and quantity of sediment control practices are identified.
- Dewatering
- Dewatering turbid or sediment-laden water to surface waters, stormwater conveyances, and existing permanent stormwater treatment facilities is prohibited.
 - Dewatering discharges shall be directed to temporary sediment basins, filter bags, well-vegetated areas within the site, treatment dumpsters, weeper systems, or other methods. Water leaving the site shall not be turbid, and dewatering discharge points shall be protected from scour and erosion.
 - Dewatering discharges must be regularly checked for visual clarity at least once every four hours, and records must be kept with the erosion control plan. Unattended dewatering activities are prohibited. If turbid water is discharged, dewatering activities shall cease immediately and additional filtration methods implemented.
- Inspections and Maintenance
- Applicant must inspect all erosion prevention and sediment control practices and adjacent surface waters, stormwater conveyances, and paved surfaces weekly and within 24 hours of a half-inch or more rain event to ensure integrity and effectiveness.
 - Records of inspections must include the date, time, name of inspector, rainfall amount, findings of the inspection, photographs collected of damaged practices or sediment discharges, and corrective actions taken as a result of the inspection.
 - Damaged, non-functional, or missing erosion and sediment control practices shall be replaced by the end of the next business day. Sediment control

devices must be maintained when sediment reaches half the height or half the volume of the device by the end of the next business day.

- If a sediment or discharge of material other than clean stormwater is found, the applicant must immediately notify the permit authority, and report the discharge to the state duty officer with a description of the type and amount of material discharged, and affected resources.
- Plans shall include contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.
- Pollution Prevention
 - Solid waste, including materials from spill clean ups, must be stored, collected and disposed of in accordance with state law.
 - Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds) such that wastes do not come in contact with soil or stormwater.
 - Hazardous materials that have potential to leach pollutants such as oil, fuels, hydraulic fluid, paints, solvents, curing compounds, or other materials must be stored in sealed containers and under cover to minimize contact with stormwater.
 - Immediately contain and prevent further discharge of spilled materials using spill containment kits. Document and report spills as required by state law.
- Final Stabilization
 - For residential subdivisions only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and down gradient sediment control has been completed.
 - Projects are considered stabilized when all construction activity is complete and all soils disturbed as a result of the project are covered with perennial vegetation of at least 70 percent of the final expected growth. When sod is used, a project is considered stabilized after sod has been laid and maintained alive for at least 30 days.
 - Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.
- NA Construction is prohibited on steep Slopes within the St. Croix. Steep slopes are defined as lands having average slopes 12% or greater over horizontal distances of fifty feet (50) or more.

NA Land disturbing activities are prohibited within 40 feet of the top of blufflines. Blufflines are defined as a line along the top of a slope connecting points at which the slope, proceeding away from the waterbody or adjoining watershed channel, becomes less than twelve percent (12%).

Wetland Protection:

NA Direct discharge of stormwater to wetlands and all other water bodies without water quality treatment is prohibited. Exemptions for bridges/culverts on linear projects and disconnected impervious with adequate vegetated buffers may be considered.

NA Permits shall be obtained from appropriate regulatory authorities before beginning any work that impacts a wetland or its required buffer.

NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.

NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 of the WMP for the individual wetland susceptibility class.

Buffer Protection:

NA Buffers of unmowed natural vegetation shall be maintained or created upslope of wetlands, lakes and streams.

NA Buffer widths conform to provisions in Table 7.1 of the WMP.

NA All buildings (principle and accessory) must be set back at least 20 feet from the upslope edge of the buffer.

Chloride Management:

A post-construction chloride management plan for chloride use on the site designates an individual authorized to implement the chloride-use plan and a MPCA smart salting-certified applicator engaged in the implementation of the chloride-use plan for the site. **A chloride management plan shall be provided.**



June 4, 2026

Jacob Rife
City of Oak Park Heights
14168 Oak Park Blvd. N
Oak Park Heights, MN 55082

Dear Mr. Rife,

The Middle St. Croix Watershed Management Organization (MSCWMO) received initial submittal materials on July 31st, 2025 for the Central Automotive parking lot expansion project at 14819 59th St N within the MSCWMO boundaries and the City of Oak Park Heights. Revised materials to address initial review comments were received on March 25th, 2026 and May 21st, 2026. The proposed project qualifies for full review under the MSCWMO 2025 Watershed Management Plan (WMP) since it involves more than 6,000 square feet of new/reconstructed impervious. Stormwater management is provided by a proposed wet pond with an iron enhanced filter. The MSCWMO staff have reviewed the project and find the plans as submitted are meeting MSCWMO standards contingent upon the following three (3) items:

1. A proposed maintenance agreement and flowage easements up to the 100-yr flood level of the stormwater management facilities shall be provided and recorded.
2. Contact and training information for the person responsible for implementation of the erosion and sediment control plan shall be provided.
3. Erosion and sediment control inspection frequency, inspection records, maintenance requirements, and amendment procedure shall be provided.

Please contact me at 651-796-2227 or moldenburg-downing@mnwcd.org if you have any questions or comments regarding this correspondence.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Oldenburg-Downing".

Matt Oldenburg-Downing | Administrator
Middle St. Croix Watershed Management Organization



MSCWMO Review ID: 25-021

Review Date: 6/4/2026

Project Name: Central Automotive Parking Lot Addition

Location: 14819 59th St N, Oak Park Heights

Applicant: David Triemert

Purpose: Parking Lot Addition

Recommendation: Proposed project meets the standards of MSCWMO contingent upon the following:

1. A proposed maintenance agreement and flowage easements up to the 100-yr flood level of the stormwater management facilities shall be provided and recorded.
2. Contact and training information for the person responsible for implementation of the erosion and sediment control plan shall be provided.
3. Erosion sediment control inspection frequency, inspection records, maintenance requirements, and amendment procedure shall be provided.

Applicability:

- Any project undertaking grading, filling, or other land alteration activities which involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land.
- Any project that creates or fully reconstruct 6,000 square feet or more of impervious surface.
- All major subdivisions or minor subdivisions that are part of a common plan of development. Major subdivisions are defined as subdivisions with 4 or more lots.
- Any project with wetland impacts, grading within public waters, grading within buffers or within 40-feet of the bluff line.
- Development projects that impact 2 or more of the member communities.
- New or redevelopment projects within the St. Croix Riverway that require a building permit that add 500 square feet of additional impervious surface.
- Any project requiring a variance from the current local impervious surface zoning requirements for the property.
- Any land development activity, regardless of size, that the City determines is likely to cause an adverse impact to an environmentally sensitive area or other property, or may violate any other erosion and sediment control standard set by the member community.

Submittal Items:

- A completed and signed project review application form and review fee.
- Grading Plan/Mapping Exhibits:
 - Property lines and delineation of lands under ownership of the applicant.
- NA Delineation of existing on-site wetlands, shoreland and/or floodplain areas (including any buffers).

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NA Ordinary High Water (OHW) elevations and datum, as determined by the MDNR (if applicable).

- Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.
- Drainage easements covering land adjacent to ponding areas, wetlands, and waterways up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to other stormwater management facilities shall also be shown. (Not required for sites within public right-of-way)

NA Minimum building elevation for each lot.

- Identification of downstream water body.
- Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.
- Location, alignment, and elevation of proposed and existing stormwater facilities.
- Existing and proposed normal water elevations and the critical (the highest) water level produced from the 100-year 24-hour storms.
- Location of the 100-year flood elevation, natural overflow elevation, and lowest floor elevations.
- A Stormwater Pollution Prevention Plan in compliance with the requirements of the NPDES SDS Construction Stormwater Permit.
- Permanent Stormwater Management System in compliance with the requirements of the NPDES SDS Construction Stormwater Permit and MSCWMO Performance Standards.
 - Impervious areas (Pre- and Post-Construction).
 - Construction plans and specifications for all proposed stormwater management facilities.

NA Location(s) of past, current or future onsite well and septic systems (if applicable).

- Other exhibits required to show conformance to these Performance Standards.
 - Hydrologic/Hydraulic Design Exhibits:
 - All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities shall be submitted. Model summaries must be submitted. The summaries shall include a map that corresponds to the drainage areas in the model and all other information used to develop the model.
 - A table (or tables) must be submitted showing the following:
 - A listing of all points where runoff leaves the site and the existing and proposed stormwater runoff rates and volumes.
- NA A listing of the normal water levels under existing and proposed conditions and the water levels produced from the storm and runoff events listed above for all on-site wetlands, ponds, depressions, lakes, streams, and creeks.

- A proposed maintenance agreement, which may be in the format of Appendix I, or other form approved by the city.

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- This site drains to, and is within one mile of special or impaired water and complies NPDES CSW additional requirements.

STORMWATER MANAGEMENT PERFORMANCE STANDARDS

- Water quality treatment is provided prior to direct discharge of stormwater to wetlands and all other water bodies.

Rate and Flood Control Standards

- The peak rate of stormwater runoff from a newly developed or redeveloped site shall not exceed the 2-, 10-, and 100-year 24-hour storms with respective 2.8, 4.2, and 7.3-inch rainfall depths with MSCWMO approved time distribution based on Atlas 14 for existing and proposed conditions. The runoff curve number for existing agriculture areas shall be less than or equal to the developed condition curve number. The newly developed or redeveloped peak rate shall not exceed the existing peak rate of runoff for all critical duration events, up to and including the 100-year return frequency storm event for all points where discharges leave a site during all phases of development.
- Predevelopment conditions assume “good hydrologic conditions” for appropriate land covers as identified in TR-55 or an equivalent methodology. Runoff curve numbers have been increased where predevelopment land cover is cropland:

Hydrologic Soil Group A	Runoff Curve Number 56
Hydrologic Soil Group B	Runoff Curve Number 70
Hydrologic Soil Group C	Runoff Curve Number 79
Hydrologic Soil Group D	Runoff Curve Number 83

- Computer modeling analyses includes secondary overflows for events exceeding the storm sewer systems level-of-service up through the critical 100-year event.

NA In sub-areas of a landlocked watershed, the proposed project does not increase the predevelopment volume or rate of discharge from the sub-area for the 10-year return period event.

- Flowage easements up to the 100-yr flood level have been secured for stormwater management facilities (such as ditches and storm sewers).
- Lowest floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year flood elevation and a minimum of two feet above the natural overflow of landlocked basins.

Volume Control Standards

- Calculations/computer model results indicate stormwater volume is controlled for new development and redevelopment requirements per the MSCWMO Design Standards.

Volume Retention Required (cu. ft.)	Volume Retention Provided (cu. ft.)
$35,500\text{ sq. ft.} \times \frac{1.1\text{ in}}{12\text{ in/ft}} = 3,255\text{ cu. ft.}$	BMP Volume BMP #1 6,551 cu. ft.
Total Required Volume Retention = 3,254 cu. ft.	Total Provided Volume Retention = 6,551 cu. ft.

Flexible Treatment Options (when applicable)

- NA Applicant demonstrated qualifying restrictions as defined in Section 7.2.2 (4) of the 2015 MSCWMO Watershed Management Plan that prohibits the infiltration of the entire required volume.
- NA FTO #1: MIDS calculator submission removes 75% of the annual total phosphorous.
- NA FTO #2: MIDS calculator submission removes 60% of the annual total phosphorous.
- NA FTO #3: Offsite mitigation equivalent to the volume reduction standard is provided.

Infiltration/Filtration Design Standards

- Proposed stormwater management features meet or exceed NPDES General Construction Permit requirements are designed in conformance with the most recent edition of the State of Minnesota Stormwater Manual.
- None of the following conditions exists that prohibit infiltration of stormwater on the site
 - a. Areas where vehicle fueling and maintenance occur.
 - b. Areas where contaminants in soil or groundwater will be mobilized by infiltrating stormwater.
 - c. Areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless amended to slow the infiltration rate below 8.3 inches per hour.
 - d. Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.
 - e. Areas of Hydrologic Soil Group D (clay) soils
 - f. Areas within DSWMAs and ERAs unless infiltration is deemed appropriate based on Minnesota Stormwater Manual Guidance
 - g. Areas within 1,000 feet up gradient, or 100 feet down gradient of active karst features unless allowed by a local unit of government with a current MS4 permit.
 - h. Areas that receive runoff from industrial facilities not authorized to infiltration stormwater under the NPDES stormwater permit for industrial activities.

- Minimum setbacks from the Minnesota Department of Health for infiltration practices are met

Setback	Minimum Distance (ft.)
Property line	10
Building foundation*	10
Private well	35
Public water supply well	50
Septic system tank/leach field	35

*Minimum with slopes directed away from the building

- Pretreatment devices(s) remove at least 50% of sediment loads. If downstream from a potential hot spot, a skimmer is in place to facilitate cleanup.
- Water quality volume will be discharged through infiltration or filtration media in 48 hours or less.
- NA For bioretention (biofiltration and bioinfiltration) volume control management facilities above ground with vegetation the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.
- NA For infiltration basin volume control management facilities the period of inundation shall be calculated using the maximum water depth below the surface discharge elevation and the soil infiltration rate.

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NA Appropriate soil borings have been conducted that meet the minimum standards.

- a. A minimum of one boring was conducted at the location of the infiltration facility for facilities up to 1,000 ft²; between 1,000 and 5,000 ft², two borings; between 5,000 and 10,000 ft², three borings; and greater than 10,000 ft², 4 borings plus an additional boring for every 2,500 ft² beyond 12,500 ft².
- b. Soil borings extend a minimum of five feet below the bottom of the infiltration practice. If fractured bedrock is suspected, the soil boring goes to a depth of at least ten feet below the proposed bottom of the volume control facility.
- c. A minimum of three feet of separation to the seasonal water table and/or bedrock.
- d. Identify unified soil classification.

NA The least permeable soils horizon identified in the soil boring dictated the infiltration rate.

- Additional flows are bypassed and are routed through stabilized discharge points.
- Filtration basin demonstrates a basin draw down between 24 hours and 48 hours.
- Filtration system Iron Enhanced Sand Filter is sized to bind soluble phosphorous removal for 30 year functional life of the system using the published value of 17lbs.phosphorous removal per 20 yards of 5% by weight iron filings to 95% sand.
- Identify as build survey and method to demonstrate infiltration or filtration basin is functioning.
- Construction plans provide adequate construction guidance to prevent clogging or compaction and demonstrate performance.
 - a. Excavation within 2.0 feet of final grade for infiltration/filtration systems is prohibited until contributing drainage areas are constructed and fully stabilized.
 - b. Rigorous sediment and erosion controls planned to divert runoff away from the system.
 - c. Installation of volume control facilities must occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
 - d. Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
 - e. Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed volume control facilities perform as designed.
- There is a way to visually verify the system is operating as designed.
- A minimum 8.0' maintenance access is provided to all stormwater facilities.

EROSION AND SEDIMENT CONTROL PERFORMANCE STANDARDS

- A Stormwater Pollution Prevention Plan (SWPPP) that meets the National Pollutant Discharge Elimination System (NPDES) requirements.

Narrative

- Identify the person knowledgeable and experienced who will oversee the implementation of the SWPPP; the installation, inspection, and maintenance of the BMPs.
 - a. Identifies the person who will oversee the BMP inspection and maintenance.
 - b. Identify the training requirements are satisfied.
 - c. Inspections performed once every 7 days.

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- d. Inspections performed within 24 hours of a rain event greater than 0.5 in/24 hours.
- e. Inspection and Maintenance records include:
 - i. Date and time of inspection.
 - ii. Name of person(s) conducting inspections.
 - iii. Finding of inspections, including the specific location where corrective actions are needed.
 - iv. Corrective actions taken (including dates, times, and party completing maintenance activities).
 - v. Date and amount of rainfall events greater than 0.5 in/24 hours.
 - vi. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, or by a weather station that is within one mile or by a weather reporting system.
 - vii. Requirements to observe, describe, and photograph any discharge that may be occurring during the inspection.
 - viii. All discovered nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs within 24 hours after discovery, or as soon as field conditions allow.
- Describes procedures to amend the SWPPP and establish additional temporary ESC BMPs as necessary for site conditions.

- Describes the installation timing for all Erosion Sediment Control (ESC) Best Management Practices (BMPs).
- Describes final stabilization methods for all exposed areas.
- Methods used to minimize soil compaction and preserve topsoil must be described.

NA Describes dewatering technique to prevent nuisance conditions, erosion, or inundation of wetlands.

NA Identifies any specific chemicals and the chemical treatment systems that may be used for enhancing the sedimentation process on the site, and how compliance will be achieved with the permit requirements.

- Describes the following pollution prevention management measures:
 - a. Storage, handling, and disposal of construction products, materials, and wastes.
 - b. Fueling and maintenance of equipment or vehicles; spill prevention and response.
 - c. Vehicle and equipment washing.
 - d. No engine degreasing allowed on site.
 - e. Containment of Concrete and other washout waste.
 - f. Portable toilets are positioned so that they are secure.

Plan Sheets

NA Temporary Sediment Basins required (10 acres draining to common location or 5 acres App. A) and design meets the following criteria:

- a. Adequately sized – 2-year, 24-hour storm, minimum 1,800 feet/acre; or no calculative minimum 3,600ft³/acre.
- b. Designed to prevent short circuiting.
- c. Outlets designed to remove floating debris.
- d. Outlets designed to allow complete drawdown.
- e. Outlets designed to withdraw water from the surface
- f. Outlets have energy dissipation.
- g. Have a stabilized emergency spillway.
- h. Situated outside of surface waters and any natural buffers.

- Locations and types of all temporary and permanent Erosion Control BMPs.
 - a. Exposed soils have erosion protection/cover initiated immediately and finished within 7 days. Wetted perimeters of ditches stabilized within 200 feet of surface water within 24 hours.
 - b. Pipe outlets have energy dissipation within 24 hours of connecting.
- Locations and types of all temporary and permanent Sediment Control BMPs.
 - a. Sediment control practices established on down gradient perimeters and upgradient of any buffer zones.
 - b. All inlets are protected.
 - c. Stockpiles have sediment control and placed in areas away from surface waters or natural buffers.
 - d. Construction site entrances minimize street tracking
 - e. Plans minimize soil compaction and, unless infeasible to preserve topsoil.
 - f. Fifty foot natural buffers preserved or (if not feasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water.
- Tabulated quantities of all erosion prevention and sediment control BMPs.
- Stormwater flow directions and surface water divides for all pre- and post-construction drainage areas.
- Locations of areas not to be disturbed (buffer zones).
- NA Location of areas where construction will be phased to minimize duration of exposed soil areas.
- NA Blufflines are protected from construction activities in urban (40 foot buffer) areas and rural areas (100-foot buffer).

WETLAND PERFORMANCE STANDARDS

- NA Direct discharge of stormwater to wetlands and all other water bodies without water quality treatment is prohibited.
- NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.
- NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 for the individual wetland susceptibility class.

LAKE, STREAM AND WETLAND BUFFER PERFORMANCE STANDARDS

- NA A buffer zone of unmowed natural vegetation is maintained or created upslope of all water bodies (wetlands, streams, lakes).
- NA A 50 foot natural buffer or (if a buffer is infeasible) provide redundant sediment controls when a surface water is located within 50 feet of the project's earth disturbances and stormwater flows to the surface water.
- NA If adjacent to a Special or Impaired Water an undisturbed buffer zone of not less than 100 linear feet from the special water is maintained both during construction and as a permanent feature post construction.



June 4, 2026

Jacob Rife
City of Oak Park Heights
14168 Oak Park Blvd. N
Oak Park Heights, MN 55082

Dear Mr. Rife,

The Middle St. Croix Watershed Management Organization (MSCWMO) received initial submittal materials on May 26th, 2026 for the Anthem Strength & Conditioning project at 14231 60th S N within the MSCWMO boundaries and the City of Oak Park Heights. The proposed project qualifies for full review under the MSCWMO 2025 Watershed Management Plan (WMP) since it involves more than 6,000 square feet of new/reconstructed impervious. The site is located in a high vulnerability DWSMA and meet stormwater management standards through flexible treatment option #2 by providing 60% annual total phosphorus removal with a biofiltration basin. The MSCWMO staff have reviewed the project and find the plans as submitted are meeting MSCWMO standards contingent upon the following six (6) items:

1. The require project review application fee shall be paid.
2. Drainage easements up to the 100-year flood levels for stormwater management facilities and a maintenance agreement shall be recorded.
3. A chloride management plan shall be provided.
4. Documentation of stormwater facilities performing as designed shall be provided prior to the release of any surety.
5. Contact information for the individual responsible for erosion and sediment control shall be provided.
6. Grading notes shall be revised from a minimum of 6" of topsoil in green spaces to a minimum of 8".

Please contact me at 651-796-2227 or moldenburg-downing@mnwcd.org if you have any questions or comments regarding this correspondence.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Oldenburg-Downing'.

Matt Oldenburg-Downing | Administrator
Middle St. Croix Watershed Management Organization



PROJECT REVIEW CHECKLIST

MSCWMO Review ID: 26-011

Review Date: 6/4/2026

Project Name: Anthem Strength & Conditioning

Location: 14231 60th St N

Applicant: Hedley Wuertz

Purpose: New development – proposed gym facility

Recommendation: Proposed project meets the standards of MSCWMO contingent upon the following:

1. The require project review application fee shall be paid.
2. Drainage easements up to the 100-year flood levels for stormwater management facilities and a maintenance agreement shall be recorded.
3. A chloride management plan shall be provided.
4. Documentation of stormwater facilities performing as designed shall be provided prior to the release of any surety.
5. Contact information for the individual responsible for erosion and sediment control shall be provided.
6. Grading notes shall be revised from a minimum of 6" of topsoil in green spaces to a minimum of 8".

Review Trigger:

- Any project involve movement of 100 cubic yards of earth or removal of vegetation on greater than 10,000 square feet of land
- Any project that creates or fully reconstructs 6,000 square feet or more of impervious surface.
- Any project within the St. Croix Riverway that adds or reconstruct 500 square feet or more of impervious surface.
- Any project with wetland impacts, grading within public waters, grading within shoreline buffers or within 40-feet of the bluff line.
- All major subdivisions or minor subdivisions that are part of a common plan of development
- Development projects that impact 2 or more of the member communities
- Any project requiring a variance from the current local impervious surface coverage limit, shoreline, floodplain, or bluffline setback requirements

Submittal Items:

- A completed project review application form

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- The required project review application fee
- Grading Plan/Mapping Exhibits:
 - Property lines and delineation of lands under ownership of the applicant.
 - Summary of all existing and proposed impervious surfaces.
 - Existing and proposed site contour elevations related to NAVD 1988 datum (preferred) or NGVD, 1929. Datum must be noted on exhibits.
 - Delineation of existing on-site wetlands, shoreland, bluffline and/or floodplain areas, including any buffers or setbacks with dimensions.
- NA Ordinary High Water (OHW) elevations and datum, as determined by the Minnesota DNR if applicable.
- NA Lowest floor elevation (including basement) of all existing and proposed structures and the regional flood elevation and datum of the 100-year recurrence interval (base flood elevation as determined in a flood insurance study) if applicable.
- Drainage easements covering land adjacent to ponding areas, stormwater facilities and wetlands up to their 100-year flood levels and covering all ditches and storm sewers. Access easements to these drainage easements and to stormwater management facilities shall also be shown.
- Delineation of the subwatersheds contributing runoff from off-site, proposed and existing on-site subwatersheds, and flow directions/patterns.
- Location and detailed cross sections with elevations of proposed and existing stormwater facilities including outlet control structures and emergency overflows.
- Existing and proposed normal water elevations and the high water level produced from the 100-year 24-hour storms of all stormwater facilities.
- Erosion and Sediment Control Plan including the following:
 - Perimeter controls (silt fence, sediment control logs filter berms, or other methods), construction accesses and notation on plans for installation to occur before land disturbing activity begins.
 - Temporary and permanent soil stabilization cover type (erosion control blanket/mulch, seed, sod, or other methods) and notation on plans for required stabilization timeframe.
 - Work exclusion areas for shoreland and buffer preservation, bluffline setbacks and stormwater volume control facilities.
 - Scour protection and energy dissipation in areas of concentrated flows.

- Contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.
- Identification of all surface waters (lakes, streams, rivers, and wetlands) within one mile that receive drainage from the project site, and methods to protect surface waters.
- For projects disturbing more than one acre, or major or minor subdivisions that are part of a common plan of development, a copy of the Stormwater Pollution Prevention Plan (SWPPP), prepared by a qualified individual, which conforms to the MPCA Construction Stormwater General Permit requirements. The SWPPP must conform to the special requirements for “Special Waters” (St. Croix River) and impaired waters, when applicable.
- Permanent Stormwater Management System including the following:
 - Construction plans for all proposed stormwater management facilities including grading contours, bottom area, top area, outlet elevation and proposed vegetation if applicable.
 - Construction notes for proposed volume control facilities to prevent soil compaction
- NA Location(s) of past, current or future onsite well and septic systems if applicable.
- NA Locations of existing and proposed downspouts and conveyances routing runoff to proposed stormwater management facilities.
- A completed stormwater volume control checklist.
- Narrative addressing incorporation of stormwater BMPs, including individual BMP storage volumes and pretreatment method(s) used.
- All hydrologic and hydraulic computations completed to design the proposed stormwater management facilities. The summaries shall include a map that corresponds to the subwatershed areas in the model.
- A table (or tables) must be submitted showing the following:
 - A listing of all points where runoff leaves the site and the existing and proposed peak runoff rates for the 2-, 10-, and 100-year 24-hour storms.
 - A listing of the existing and proposed subwatershed hydrologic parameters including the impervious and pervious areas, runoff curve number of pervious areas, and time of concentration.
- NA For proposed infiltration facilities with drainage areas of more than 2 acres or 0.7 acres or more of impervious surfaces, a soil boring report for onsite soil

borings within the footprint of the proposed stormwater BMPs done in accordance with the Minnesota Stormwater Manual

- A proposed maintenance agreement, which may be in the format of Appendix Q, or other form approved by the MSCWMO.
- A plan for post-construction management of chloride use on the site.
- Other exhibits required to show conformance with MSCWMO performance standards such as documentation of coverage under the Construction Stormwater General Permit for applicable projects.

Stormwater Rate and Flood Control:

- The peak rate of stormwater runoff from the 2-, 10-, and 100-year 24-hour storms from newly developed or redeveloped sites does not exceed the existing runoff rates for all points where stormwater discharges leave the site
 - Existing conditions assume good hydrologic conditions. When existing land cover is cropland, a CN of 56, 70, 79, and 83 is used for HSG A, B, C, and D, respectively.
 - Runoff for impervious and pervious portions of each subwatershed are calculated separately
 - Time of concentration is computed using TR-55 methodology
 - Modeling analyses include secondary overflows to route flows for events exceeding the storm sewer systems level-of-service and computational routing methods are "tailwater-aware" (e.g. dynamic-storage-indication or simultaneous pond routing)
- NA In sub-areas of a landlocked watershed, development shall not increase the existing volume or rate of discharge from the sub-area for the 10-year return period event
 - Low floor elevations of structures built adjacent to stormwater management features and other water bodies are a minimum of two feet above the 100-year high water level and the natural overflow of landlocked basins.
- NA Low floor elevations of structures built adjacent to designated floodplain areas are a minimum of two feet above the base flood elevation plus any stage increase due to the designation of flood fringe areas or encroachments on the floodplain

Stormwater Volume Control and Treatment:

- NA The required stormwater runoff volume captured and retained on site is equivalent to 1.1 inches of runoff from the new and/or fully reconstructed impervious surfaces, unless the project is linear.

NA For linear projects, required stormwater runoff volume captured and retained on site is equivalent to the larger of:

NA 1.1 inches of runoff from the net increase in impervious, or

NA 0.55 inches or runoff from new and/or fully reconstructed impervious

As determined and agreed upon by the community and MSCWMO the project site has restrictions where infiltration is not feasible or advised, such as karst topography, very fast or slow infiltration soils, shallow bedrock or groundwater, DWSMA or potential stormwater hotspots.

Options considered for volume retention have examined the merits of:

NA Completing a higher level of engineering review for an ERA where the DWSMA is classified as moderate, or outside an ERA where the DWSMA is classified as high or very high

NA Relocating project elements to address varying soil conditions and other constraints across the site to achieve infiltration

NA Utilizing green roofs, rainwater harvesting, and/or stormwater reuse

NA If full volume retention cannot be achieved, FTO #1 is satisfied by achieving volume retention of 0.55 inches of runoff from impervious surfaces and 75% annual total phosphorus removal

If FTO#1 cannot be achieved, FTO #2 is satisfied by achieving volume retention to the maximum extent practicable and 60% annual total phosphorus removal

NA If FTO#2 cannot be achieved, FTO #3 is satisfied by through off-site mitigation, credit banking, or cash-in-lieu of treatment

Volume retention and pollutant removal credits are calculated in accordance with the Minnesota Stormwater Manual and MIDS calculator. Volume retention credits are based on the assumption that an instantaneous volume is captured by the BMP, not the volume infiltrating during the event hydrograph. Ponds, stormwater wetlands and manufactured treatment device removals are based upon the pollutant removal credits in the Minnesota Stormwater Manual.

Stormwater BMP Design:

Surface flows to stormwater management facilities are pre-treated to remove solids and maintain long-term performance of the system

Infiltration and filtration facilities drawdown within 48 hours per the following:

NA For "off-line" systems, the drawdown time is determined from the maximum water depth below the surface discharge elevation and the infiltration rate.

- For "in-line" systems, the drawdown time includes the bounce within the system and the drawdown time is determined from the hydrograph time between the peak 100-yr HWL and soil surface/filter-media elevation
- Bioretention (biofiltration, bioinfiltration, etc.) facilities above ground with vegetation have a maximum water depth below the surface discharge elevation of 1.5 feet.
- NA Field measured infiltration rates are divided by 2 as a safety factor for design.
- NA In the absence of field-tested infiltration rates, the following design infiltration rates shall be used:
 - NA For proposed infiltration facilities with a drainage area less than 2 acres and receiving less the 0.7 acres of impervious surface runoff, the HSG is used to estimate infiltration rates consistent with the recommend rates from the Minnesota Stormwater Manual.
 - NA For proposed infiltration facilities with a drainage area equal to or greater than 2 acres or having 0.7 acres or more of impervious surface runoff, infiltration suitability shall be verified with soil pits or borings per the Unified Soil Classification in accordance with the Minnesota Stormwater Manual.
 - NA The design infiltration rates for underground infiltration facilities shall not exceed half of the above rates
- NA The following location and minimum setback requirements for proposed infiltration facilities are met:
 - NA A minimum 3-foot vertical distance between the bottom of an infiltration facility to the seasonally saturated soils or bedrock.
 - NA A minimum of 1,000 feet up gradient or 100 feet down gradient of active karst terrain
 - NA A minimum 100-foot horizontal separation between any infiltration facility and sensitive public water supply well
 - NA A minimum 50-foot horizontal separation between any infiltration facility and all other public water supply well
 - NA A minimum 35-foot horizontal separation between any infiltration facility and septic system.
 - NA Infiltration facilities are not located within bluffline setbacks.
- To prevent soil compaction of infiltration and filtration facilities, the following construction guidance must be provided in the plans and followed during construction:

- Proposed facilities shall be staked off and marked during construction to prevent heavy equipment and traffic from traveling over it.
- Proposed facilities may not be excavated within 2.0 feet of final grade until the contributing drainage area has been constructed and fully stabilized.
- NA If facilities are in-place during construction activities, all sediment and runoff must be diverted away from the facility, using practices such as pipe capping or diversions. Robust erosion and sediment controls shall be utilized to protect facilities during construction.
- Installation of facilities shall occur in dry soil conditions. Excavation, soil placement and rapid stabilization of perimeter slopes must be accomplished prior to the next precipitation event.
- NA Excavation shall be performed by an excavator with a toothed bucket. Use excavator bucket to place materials. Construction equipment shall not be allowed into the basin.
- Prior to the release of any remaining fee or security, the permit holder must provide documentation that constructed stormwater facilities perform as designed. All projects shall provide as-builts of permanent stormwater facilities and infiltration tests demonstrating an acceptable infiltration rate or maximum 48-hour drawdown of the full volume if applicable.

Erosion and Sediment Control:

- Erosion Prevention
 - Stabilize all exposed soil areas (including stockpiles) with temporary erosion control (seed and mulch, blanket, or other methods) within 14 days (or 7 days for St. Croix River or impaired water) if construction activities in the area have temporarily or permanently ceased.
 - NA During MNDNR “work in water restrictions” periods all exposed soils (including stockpiles) within 200 feet of the water’s edge must be stabilized within 24 hours of temporarily or permanently pausing construction activities
 - Stabilize all exposed soils within the normal wetted perimeter of a temporary or permanent drainage ditch or swale within 200 feet of the point of discharge or property edge within 24 hours of allowing water to flow through the system. Mulch, hydromulch, tackifier, or similar practices may not be used in swales with slopes greater than two percent.
 - Stabilize pipe outlets with energy dissipation within 24 hours of connection to a drainage way or permanent stormwater treatment system.
 - Location, type and quantity of temporary erosion prevention practices are identified.

Sediment Control

Sediment control practices (silt fence, sediment control logs, filter berms, storm sewer inlet protection, or other methods) will be placed down gradient before land disturbing activities begin.

If sediment controls are overloaded based on frequent failure, additional upgradient, redundant, or more robust controls must be implemented.

NA Flotation silt curtain placed in water shall not be used as a primary sediment control practice except when working below the waterline or at the land-water interface. Sediment controls must otherwise be located on land. If used, flotation silt curtain shall be decontaminated of aquatic invasive species per MNDNR guidelines before transporting from the site.

NA Preserve a 50-foot buffer of natural vegetation (100 feet along the St. Croix River or impaired waters) around all surface waters, blufflines, and existing permanent stormwater treatment facilities. If infeasible and disturbance must occur within the buffer, redundant perimeter controls must be used.

Stabilized construction accesses (rock pads, rumble strips, access mats) must be utilized to minimize tracking out of sediment from the construction site. Paved surfaces must be cleaned daily if tracking practices are not adequate to prevent sediment from being tracked onto the paved surfaces.

Location, type and quantity of sediment control practices are identified.

NA Dewatering

NA Dewatering turbid or sediment-laden water to surface waters, stormwater conveyances, and existing permanent stormwater treatment facilities is prohibited.

NA Dewatering discharges shall be directed to temporary sediment basins, filter bags, well-vegetated areas within the site, treatment dumpsters, weeper systems, or other methods. Water leaving the site shall not be turbid, and dewatering discharge points shall be protected from scour and erosion.

NA Dewatering discharges must be regularly checked for visual clarity at least once every four hours, and records must be kept with the erosion control plan. Unattended dewatering activities are prohibited. If turbid water is discharged, dewatering activities shall cease immediately and additional filtration methods implemented.

 Inspections and Maintenance

Applicant must inspect all erosion prevention and sediment control practices and adjacent surface waters, stormwater conveyances, and paved surfaces

weekly and within 24 hours of a half-inch or more rain event to ensure integrity and effectiveness.

- Records of inspections must include the date, time, name of inspector, rainfall amount, findings of the inspection, photographs collected of damaged practices or sediment discharges, and corrective actions taken as a result of the inspection.
- Damaged, non-functional, or missing erosion and sediment control practices shall be replaced by the end of the next business day. Sediment control devices must be maintained when sediment reaches half the height or half the volume of the device by the end of the next business day.
- If a sediment or discharge of material other than clean stormwater is found, the applicant must immediately notify the permit authority, and report the discharge to the state duty officer with a description of the type and amount of material discharged, and affected resources.
- Plans shall include contact information including email and a phone number of the person responsible for inspection and compliance with erosion and sediment control.
- Pollution Prevention
 - Solid waste, including materials from spill clean ups, must be stored, collected and disposed of in accordance with state law.
 - Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds) such that wastes do not come in contact with soil or stormwater.
 - Hazardous materials that have potential to leach pollutants such as oil, fuels, hydraulic fluid, paints, solvents, curing compounds, or other materials must be stored in sealed containers and under cover to minimize contact with stormwater.
 - Immediately contain and prevent further discharge of spilled materials using spill containment kits. Document and report spills as required by state law.
- Final Stabilization
 - NA For residential subdivisions only, individual lots are considered final stabilized if the structures are finished and temporary erosion protection and down gradient sediment control has been completed.
 - Projects are considered stabilized when all construction activity is complete and all soils disturbed as a result of the project are covered with perennial vegetation of at least 70 percent of the final expected growth. When sod is

used, a project is considered stabilized after sod has been laid and maintained alive for at least 30 days.

- Grading and landscape plans shall include soil tillage and soil bed preparation methods that are employed prior to landscape installation to a minimum depth of 8" and incorporate amendments to meet Minnesota State Stormwater Manual predevelopment soil type bulk densities.

NA Construction is prohibited on steep Slopes within the St. Croix. Steep slopes are defined as lands having average slopes 12% or greater over horizontal distances of fifty feet (50) or more.

NA Land disturbing activities are prohibited within 40 feet of the top of blufflines. Blufflines are defined as a line along the top of a slope connecting points at which the slope, proceeding away from the waterbody or adjoining watershed channel, becomes less than twelve percent (12%).

Wetland Protection:

NA Direct discharge of stormwater to wetlands and all other water bodies without water quality treatment is prohibited. Exemptions for bridges/culverts on linear projects and disconnected impervious with adequate vegetated buffers may be considered.

NA Permits shall be obtained from appropriate regulatory authorities before beginning any work that impacts a wetland or its required buffer.

NA Any potential changes to the hydrology of the wetland (i.e. changes to the outlet elevation or contributing drainage area) must be reviewed to evaluate the impact of both the existing and proposed wetland conditions and approved by the MSCWMO.

NA Land-altering activities shall not increase the bounce in water level or duration of inundation from a 2.0-inch 24-hour storm for any downstream wetland beyond the limit specified in Table 7.2 of the WMP for the individual wetland susceptibility class.

Buffer Protection:

NA Buffers of unmowed natural vegetation shall be maintained or created upslope of wetlands, lakes and streams.

NA Buffer widths conform to provisions in Table 7.1 of the WMP.

NA All buildings (principle and accessory) must be set back at least 20 feet from the upslope edge of the buffer.

Chloride Management:

- A post-construction chloride management plan for chloride use on the site designates an individual authorized to implement the chloride-use plan and a MPCA smart salting-certified applicator engaged in the implementation of the chloride-use plan for the site.



Compliance Summary & Corrective Action Notice

Inspector Name: Aaron DeRusha Inspection Date: 06/02/2026

Project Name: Marzolf and Bausch Retaining Wall Project Address: 16855 21st St S

Site is within one mile of and discharges to an impaired or special water?

Yes No

Inspection Type: Pre-construction Routine Rainfall Post-construction

Overall Site Grade:

<input checked="" type="checkbox"/> A	The site is in full compliance . All practices are in place and the site is well maintained.
<input type="checkbox"/> B	The site is in compliance , but normal maintenance activities are required.
<input type="checkbox"/> C	The site is not in compliance . Maintenance or supplemental practices are required.
<input type="checkbox"/> D	The site is not in compliance . Erosion and sediment control practices are in poor condition and controllable water resources or off-site impacts are likely.
<input type="checkbox"/> F	The site is in severe non-compliance . Controllable water quality or off-site impacts have occurred. Enforcement proceedings will be initiated unless immediate corrective actions are taken.

Erosion Controls, aka soil covers, protect soils from moving during rain events, while **Sediment Controls**, aka perimeter controls, are the last line of defense to contain moving soils. Soil cover is often more effective than perimeter control in preventing sediment discharges, and proper use reduces maintenance needs for perimeter controls.

Guidance for best practices: [Small Site Erosion Control](#), [Erosion Prevention and Stabilization](#), and [Sediment and Perimeter Controls](#) or contact WMO staff.

Corrective Action(s) Required:

General Comments or Potential Areas of Future Concern:

No erosion control concerns. Prairie dropseed plantings to be installed on wall terraces. Boulder wall install matches plan set. Discussed stairway modifications- City Engineer recommended following up with legal before proceeding with any plans.

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Were any discharges observed during this inspection? No Yes

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

	Compliant	Non-compliant	Under Review	Not Inspected
Erosion Prevention Requirements:				
Soils are stabilized where no construction activity has occurred for 14 days (including stockpiles)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbance of steep slopes has been minimized or stabilization practices designed for steep slopes are used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ditches/swales are stabilized 200' back from point of discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pipe outlets have energy dissipation (within 24 hours of connection)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction phasing in accordance with the approved plan is being followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas not to be disturbed are marked off (flags, signs, ect.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sediment Control Requirements:				
Perimeter sediment controls are installed properly on all down gradient perimeters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate BMPs are installed protecting inlets, catch basins, and culvert inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Erodible stockpiles have perimeter control in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary sediment basin is built as shown on approved construction plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil compaction is minimized where applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Maintenance and Inspection Requirements:				
Previously stabilized areas are maintaining ground cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perimeter controls are maintained and functioning properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inlet protection devices are maintained and adequately protecting inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary sediment basins are being maintained and properly functioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle tracking BMPs are in place at site exits and are maintained/functioning properly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tracked sediment is being removed within 24 hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters, ditches, conveyances, and discharge points have been inspected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Requirements:				

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Pollution prevention management measures for solid waste, hazardous materials, concrete and truck washing are in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If dewatering is occurring, BMPs are being used to ensure clean water is leaving the site and discharge is not causing erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If being utilized, infiltration/filtration systems are marked and protected from compaction and sediment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If required buffers are preserved around all streams, rivers, lakes, and wetlands during construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If required, buffer monumentation has been installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Images of non-compliant items, concerns, or general conditions:





Compliance Summary & Corrective Action Notice

Inspector Name: Aaron DeRusha Inspection Date: 06/02/2026

Project Name: Bill Marzolf and Maureen Bausch New Home Project Project Address: 16855 21st St S

Site is within one mile of and discharges to an impaired or special water?

Yes No

Inspection Type: Pre-construction Routine Rainfall Post-construction

Overall Site Grade:

<input checked="" type="checkbox"/> A	The site is in full compliance . All practices are in place and the site is well maintained.
<input type="checkbox"/> B	The site is in compliance , but normal maintenance activities are required.
<input type="checkbox"/> C	The site is not in compliance . Maintenance or supplemental practices are required.
<input type="checkbox"/> D	The site is not in compliance . Erosion and sediment control practices are in poor condition and controllable water resources or off-site impacts are likely.
<input type="checkbox"/> F	The site is in severe non-compliance . Controllable water quality or off-site impacts have occurred. Enforcement proceedings will be initiated unless immediate corrective actions are taken.

Erosion Controls, aka soil covers, protect soils from moving during rain events, while **Sediment Controls**, aka perimeter controls, are the last line of defense to contain moving soils. Soil cover is often more effective than perimeter control in preventing sediment discharges, and proper use reduces maintenance needs for perimeter controls.

Guidance for best practices: [Small Site Erosion Control](#), [Erosion Prevention and Stabilization](#), and [Sediment and Perimeter Controls](#) or contact WMO staff.

Corrective Action(s) Required:

General Comments or Potential Areas of Future Concern:

No erosion control concerns, rain gardens not yet started. Met with contractor, landscaper, owner, City Engineer, and City Mayor on site to discuss placement of boulders and vegetation plantings on the north slope of the City's property. No concerns from WMO as long as the final construction is not a retaining wall that

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

increases impervious surface, impedes plowing, or removes existing trees and shrubs on the northeast corner of the slope closest to the river. Discussed native and cultivar plantings. Discussed maintenance and inspection agreement needed for rain gardens- refer to MSCWMO website.

Were any discharges observed during this inspection? No Yes

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

	Compliant	Non-compliant	Under Review	Not Inspected
Erosion Prevention Requirements:				
Soils are stabilized where no construction activity has occurred for 14 days (including stockpiles)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbance of steep slopes has been minimized or stabilization practices designed for steep slopes are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ditches/swales are stabilized 200' back from point of discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pipe outlets have energy dissipation (within 24 hours of connection)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction phasing in accordance with the approved plan is being followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas not to be disturbed are marked off (flags, signs, ect.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sediment Control Requirements:				
Perimeter sediment controls are installed properly on all down gradient perimeters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate BMPs are installed protecting inlets, catch basins, and culvert inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Erodible stockpiles have perimeter control in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary sediment basin is built as shown on approved construction plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil compaction is minimized where applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Maintenance and Inspection Requirements:				
Previously stabilized areas are maintaining ground cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perimeter controls are maintained and functioning properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inlet protection devices are maintained and adequately protecting inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary sediment basins are being maintained and properly functioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle tracking BMPs are in place at site exits and are maintained/functioning properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracked sediment is being removed within 24 hours	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters, ditches, conveyances, and discharge points have been inspected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Requirements:				

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Pollution prevention management measures for solid waste, hazardous materials, concrete and truck washing are in place	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If dewatering is occurring, BMPs are being used to ensure clean water is leaving the site and discharge is not causing erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If being utilized, infiltration/filtration systems are marked and protected from compaction and sediment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If required buffers are preserved around all streams, rivers, lakes, and wetlands during construction	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If required, buffer monumentation has been installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Images of non-compliant items, concerns, or general conditions:





Compliance Summary & Corrective Action Notice

Inspector Name: Aaron DeRusha Inspection Date: 06/03/2026

Project Name: Cheep Storage Lakeland Expansion(CSLXP) Project Address: 228 Saint Croix Trl N

Site is within one mile of and discharges to an impaired or special water?

Yes No

Inspection Type: Pre-construction Routine Rainfall Post-construction

Overall Site Grade:

<input type="checkbox"/> A	The site is in full compliance . All practices are in place and the site is well maintained.
<input checked="" type="checkbox"/> B	The site is in compliance , but normal maintenance activities are required.
<input type="checkbox"/> C	The site is not in compliance . Maintenance or supplemental practices are required.
<input type="checkbox"/> D	The site is not in compliance . Erosion and sediment control practices are in poor condition and controllable water resources or off-site impacts are likely.
<input type="checkbox"/> F	The site is in severe non-compliance . Controllable water quality or off-site impacts have occurred. Enforcement proceedings will be initiated unless immediate corrective actions are taken.

Erosion Controls, aka soil covers, protect soils from moving during rain events, while **Sediment Controls**, aka perimeter controls, are the last line of defense to contain moving soils. Soil cover is often more effective than perimeter control in preventing sediment discharges, and proper use reduces maintenance needs for perimeter controls.

Guidance for best practices: [Small Site Erosion Control](#), [Erosion Prevention and Stabilization](#), and [Sediment and Perimeter Controls](#) or contact WMO staff.

Corrective Action(s) Required:

1. **Within 24 hours** install additional protection around infiltration, filtration, rain gardens, or other stormwater management systems that must be rigorously protected from compaction and sediment.

General Comments or Potential Areas of Future Concern:

Met with Dion on site. Stormwater basin has been constructed to final grade and all sediment laden stormwater

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

must be kept out of the basin until contributing areas are fully stabilized. Asked for photos showing perimeter controls have been installed to protect the infiltration area.

Were any discharges observed during this inspection? No Yes

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

	Compliant	Non-compliant	Under Review	Not Inspected
Erosion Prevention Requirements:				
Soils are stabilized where no construction activity has occurred for 14 days (including stockpiles)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Disturbance of steep slopes has been minimized or stabilization practices designed for steep slopes are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ditches/swales are stabilized 200' back from point of discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pipe outlets have energy dissipation (within 24 hours of connection)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction phasing in accordance with the approved plan is being followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas not to be disturbed are marked off (flags, signs, ect.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sediment Control Requirements:				
Perimeter sediment controls are installed properly on all down gradient perimeters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate BMPs are installed protecting inlets, catch basins, and culvert inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Erodible stockpiles have perimeter control in place	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary sediment basin is built as shown on approved construction plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil compaction is minimized where applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Maintenance and Inspection Requirements:				
Previously stabilized areas are maintaining ground cover	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perimeter controls are maintained and functioning properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inlet protection devices are maintained and adequately protecting inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temporary sediment basins are being maintained and properly functioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle tracking BMPs are in place at site exits and are maintained/functioning properly	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tracked sediment is being removed within 24 hours	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters, ditches, conveyances, and discharge points have been inspected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Requirements:				

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Pollution prevention management measures for solid waste, hazardous materials, concrete and truck washing are in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If dewatering is occurring, BMPs are being used to ensure clean water is leaving the site and discharge is not causing erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If being utilized, infiltration/filtration systems are marked and protected from compaction and sediment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If required buffers are preserved around all streams, rivers, lakes, and wetlands during construction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If required, buffer monumentation has been installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Images of non-compliant items, concerns, or general conditions:

Erosion & Sediment Control Compliance Summary & Corrective Action Notice



Access clear



Basins and swales hydroseeded.



Stockpiles covered or actively worked.



South swale stabilized with checks. Earthen dam keeping runoff out of west basin.

Erosion & Sediment Control Compliance Summary & Corrective Action Notice





Compliance Summary & Corrective Action Notice

Inspector Name: Aaron DeRusha Inspection Date: 06/03/2026

Project Name: Schultz Project Address: 15110-15172 15th St N

Site is within one mile of and discharges to an impaired or special water?

Yes No

Inspection Type: Pre-construction Routine Rainfall Post-construction

Overall Site Grade:

<input type="checkbox"/> A	The site is in full compliance . All practices are in place and the site is well maintained.
<input type="checkbox"/> B	The site is in compliance , but normal maintenance activities are required.
<input checked="" type="checkbox"/> C	The site is not in compliance . Maintenance or supplemental practices are required.
<input type="checkbox"/> D	The site is not in compliance . Erosion and sediment control practices are in poor condition and controllable water resources or off-site impacts are likely.
<input type="checkbox"/> F	The site is in severe non-compliance . Controllable water quality or off-site impacts have occurred. Enforcement proceedings will be initiated unless immediate corrective actions are taken.

Erosion Controls, aka soil covers, protect soils from moving during rain events, while **Sediment Controls**, aka perimeter controls, are the last line of defense to contain moving soils. Soil cover is often more effective than perimeter control in preventing sediment discharges, and proper use reduces maintenance needs for perimeter controls.

Guidance for best practices: [Small Site Erosion Control](#), [Erosion Prevention and Stabilization](#), and [Sediment and Perimeter Controls](#) or contact WMO staff.

Corrective Action(s) Required:

1. Apply temporary soil cover such as temporary seed with annual oats or ryegrass, straw mulch, hydromulch, or other methods to idle exposed soils on west and south sides of build. Cleared area NW of house should also be better stabilized.
2. **Immediately** establish and maintain a properly contained washout facility or cease washout activities. Concrete, stucco, grout, paint, or other washout wastes may not touch soil or stormwater.

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

General Comments or Potential Areas of Future Concern:

Exposed soils on west and south sides of the house require temporary stabilization. Rills are beginning to form and roof runoff could overwhelm perimeter controls and create conditions for a sediment discharge to the wetland. Cleared area NW of the house appears seeded with turf grass but is not germinating well. Recommend overseeding with annual oats or ryegrass, or installing straw mulch to provide soil cover. Previously noted perimeter control issues addressed.

Were any discharges observed during this inspection? No Yes

Erosion & Sediment Control Compliance Summary & Corrective Action Notice

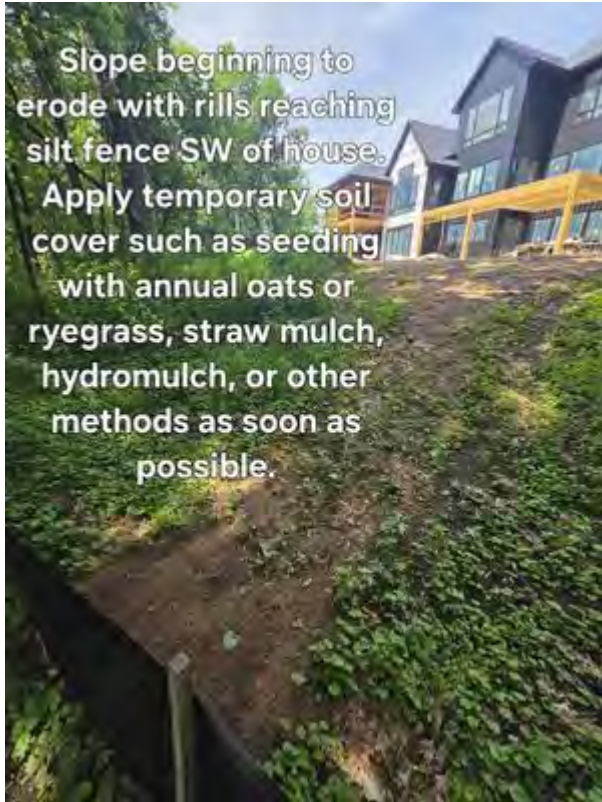
	Compliant	Non-compliant	Under Review	Not Inspected
Erosion Prevention Requirements:				
Soils are stabilized where no construction activity has occurred for 14 days (including stockpiles)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disturbance of steep slopes has been minimized or stabilization practices designed for steep slopes are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ditches/swales are stabilized 200' back from point of discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pipe outlets have energy dissipation (within 24 hours of connection)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction phasing in accordance with the approved plan is being followed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Areas not to be disturbed are marked off (flags, signs, ect.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sediment Control Requirements:				
Perimeter sediment controls are installed properly on all down gradient perimeters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate BMPs are installed protecting inlets, catch basins, and culvert inlets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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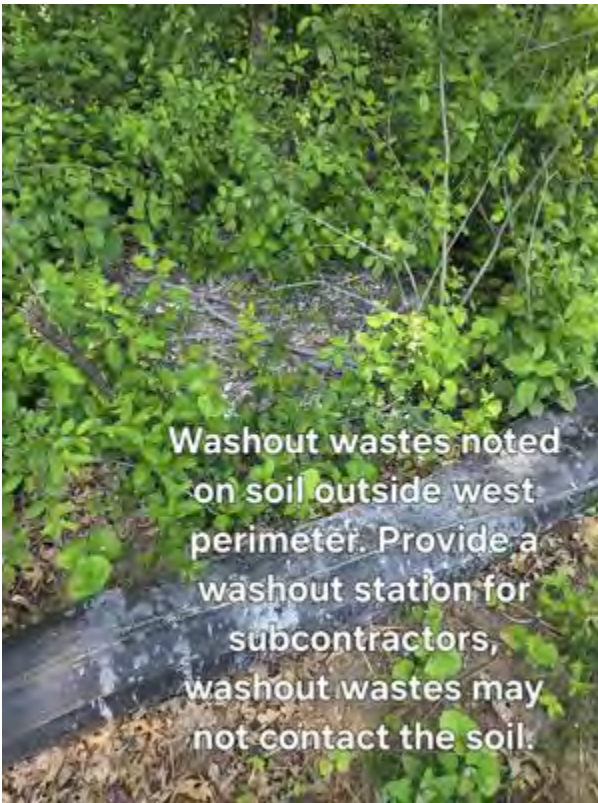
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Erosion & Sediment Control Compliance Summary & Corrective Action Notice

Images of non-compliant items, concerns, or general conditions:



Erosion & Sediment Control Compliance Summary & Corrective Action Notice



Erosion & Sediment Control Compliance Summary & Corrective Action Notice





Staff Report- MAY 2026

Administration

- Prepared meeting materials
- Participated in Lower St. Croix Partnership meetings
- Permit review coordination with communities
- Coordination with partners
- Planning for LSCWP grant request

Water Monitoring Program

Description: The MSCWMO water monitoring program includes the monitoring of flow at two sites. These sites have equipment that serves to collect data on the total volume of water flowing through Perro Creek at the Diversion Structure, as well as the Perro Creek Diversion Structure Overflow. Water quality samples are collected at the Perro Creek Diversion Structure on a monthly basis and during storm events.

Additionally, the MSCWMO monitors two lakes, Lily and McKusick for several parameters from April-October. Data is collected on both lakes on a biweekly basis and includes: water level, clarity, pH, temperature and dissolved oxygen profiles, an aesthetics and user profile, and field conditions. Additionally, water quality samples are collected from the surface of the lakes and analyzed for total phosphorus, total Kjeldahl nitrogen, and chlorophyll.

Activities This Month: Monitoring equipment has been fully installed at Perro Creek Diversion and Perro Creek Diversion Overflow monitoring sites, and one base flow grab sample and one storm composite sample have been collected. Four lake samples have been collected on both Lily and McKusick Lakes, including a seasonal chloride sample. Lake elevation gages have been installed and surveyed on Lily Lake, McKusick Lake, and Brick Pond. A citizen volunteer continues to collect elevations at Brick Pond.

Staff: Aaron DeRusha, WCD

Erosion and Sediment Control Inspections

Description: The MSCWMO has contracted with the WCD to conduct erosion and sediment control inspections for construction projects that have been reviewed and recommended for permit approval by partner communities. The WCD also maintains an ArcGIS Online based database for project plan review tracking, erosion control inspection, and BMP implementation and maintenance activities.

Activities This Month: Inspections were conducted at the 15130 15th St N West Lakeland Township- Schultz, Lakeland- Cheep Storage Expansion, and Lake St. Croix Beach- Marzolf New Home Build and Retaining Wall projects. A site meeting was conducted with the MSCWMO Administrator, City Engineer, site owner, site contractor, and site landscaper at the Marzolf Home Build and Retaining Wall site to discuss modifications to the City property adjacent to the

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St. Mary's Point • Stillwater • West Lakeland

site involving placement of boulders and plantings. No concerns from the WMO or City were noted, as long as existing vegetation is not modified, and the boulders do not constitute a wall or impede plowing operations. The retaining wall installation is complete except for final vegetation plantings, and the home build is nearing completion. A site meeting was conducted at the Cheep Storage Expansion project with the contractor, and additional perimeter controls were needed to keep sediment laden water out of the infiltration basin. The Schultz project in West Lakeland Township was found to need additional temporary soil stabilization measures, such as temporary seeding, straw mulch, or hydromulch to prevent erosion.

Staff: Aaron DeRusha, WCD

St. Croix Riverway Violations

Description: The MSCWMO staff have been involved in providing technical support to communities for local St. Croix Riverway Ordinance violations.

Activities This Month: MSCWMO staff, along with the City Engineer and DNR Area Hydrologist met with the owner at 175 Lakeland Shores on April 22nd to discuss potential restorations for actions in violation of the local riverway ordinance. The proposed pool project review for the property is temporarily suspended until a revised plan that addresses the restoration is provided. MSCWMO staff also provided recommendations for restoration orders at 569 Quixote which was discussed at a violation hearing at the Lakeland City council meeting on May 19th. Awaiting response from the property owner.

Staff: Matt Oldenburg-Downing, MSCWMO

BMP Cost-Share Program

Description: The MSCWMO has contracted with the WCD to provide technical services to residents and communities for implementation of stormwater best management practices. The WCD also assists with administration of the WMO's cost-share programs as a means to support and incentivize BMP implementation.

Activities This Month: WCD staff have conducted a total of 12 site visits this year, with five occurring in month of May. Eight cost-share applications have been received in 2026 with one project closeout in May (Stonebridge Elementary School Forest). A total of \$7,463.15 has been encumbered with \$7,536.85 remaining under the WMO's annual cost-share program budget.

Staff: Brett Stolpestad, WCD

BMP Maintenance

Description: The MSCWMO has a maintenance obligation for its Capital Improvement Projects and projects funded by Clean Water Fund grants. The MSCWMO partners with the Washington Conservation District to fulfill this maintenance requirement.

Activities this month: Inlet cleanout at Oak Park Heights Area D, Lily Lake Basin, and Stillwater Country Club. Vegetation management at Lily Basin.

Staff: Brett Stolpestad, Cameron Blake, WCD

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Meetings:

- LSC Steering Team – May 13th
- Quixote Ave Utilities Pre-App – May 14th
- Quixote Ave Utilities Pre-App – May 19th
- 1866 Quartz Violation – June 2nd
- LSCB ROW – June 2nd
- 1st Choice Grant App – June 4th

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