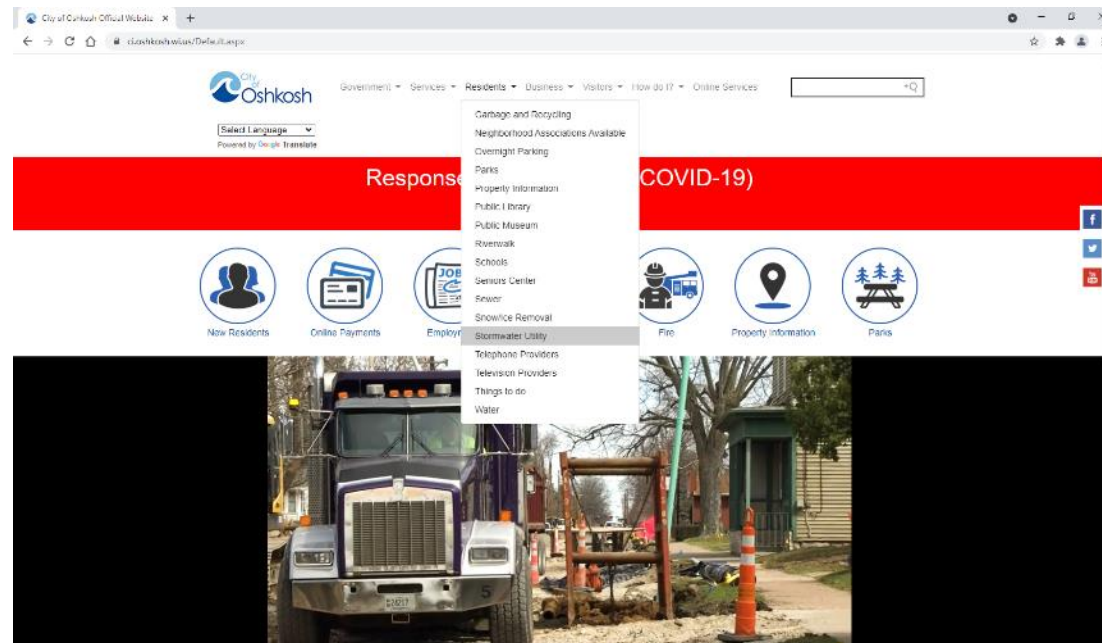


City of Oshkosh Storm Water Management Overview for Storm Water Utility Appeals Board

July 15, 2021

Presentation Outline

1. Municipal Code Chapter 14
 2. MS4 Permit
 3. Flood Control
 4. Operations & Maintenance
- Storm Water Utility Website:
 - <https://www.oshkoshwi.gov/StormWaterUtility/>

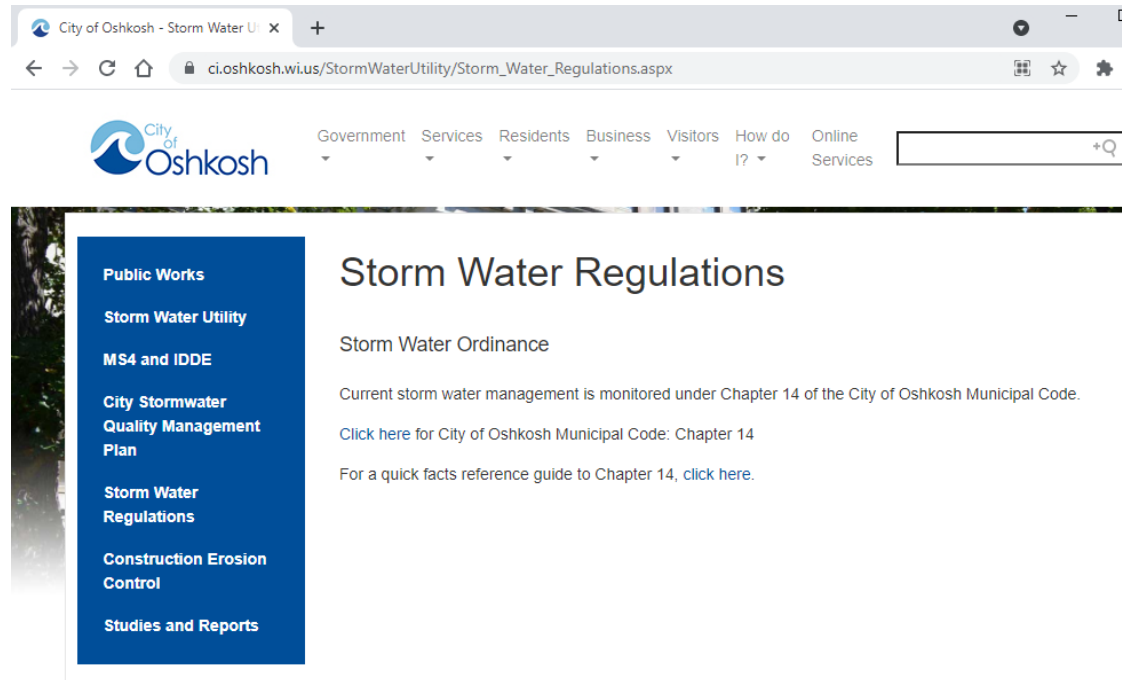


Municipal Code Chapter 14

- Link to Chapter 14
- https://www.oshkoshwi.gov/StormWaterUtility/Storm_Water_Regulations.aspx

- Resources:

- Definitions (Section 14-1)
- Storm Water Utility Appeals Board information (Section 14-37)
- Quick reference guide



Municipal Code Chapter 14

- Components
 - Storm water utility
 - Construction site erosion control
 - Post-construction storm water management
 - Illicit discharge

Municipal Code Chapter 14

- Storm Water Utility
 - Funding mechanism for storm water management
 - Based on impervious area of parcel

- Credits available based on private improvements

City of Oshkosh Storm Water Rates

Effective for service on and after 4-1-2021

	Monthly Rate through <u>03/31/2021</u>	Monthly Rate as of <u>04/01/2021</u>
Rate per Equivalent Run Off Unit (ERU):	\$16.41	\$17.55

Residential:

Small Residential (Impervious area < 1,750 sq. ft.) = .67 ERU

Average Residential (Impervious area > 1,750 and < 3,750 sq. ft.) = 1.0 ERU

Large Residential (Impervious area > 3,750 sq. ft.) = 1.33 ERU's

Non-Residential:

The number of ERU's is determined by dividing the impervious area of the parcel by 2,817 sq. ft.

The screenshot shows a web browser window with the URL ci.oshkosh.wi.us/StormWaterUtility/. The page title is "Assistance Programs". It is divided into two columns: "Mini-Storm/Storm Lateral Program" and "Storm Water Utility Credits".

Mini-Storm/Storm Lateral Program	Storm Water Utility Credits
<ul style="list-style-type: none">• Instruction Sheet• Information/Sign-up Sheet• Lateral Inlet Information• Construction Access Agreement	<ul style="list-style-type: none">• Residential Stormwater Utility Credit Policy• Non-Residential Stormwater Utility Credit Policy• Non-Residential Credit Application Manual• Various Wisconsin Cities' Stormwater Utility Rates

Municipal Code Chapter 14

- Construction site erosion control
- Post-construction storm water management
 - Peak flow control
 - Storm water pollution
 - New development & re-development
- City reviews developments for compliance



Oshkosh Corporation Headquarters Construction Entrance



Menominee Nation Arena Porous Pavement

MS4 Permit

- MS4: Municipal Separate Storm Sewer System
- Permit stems from Clean Water Act
- Six minimum measures
- TMDL compliance
- Compliance activities summarized in annual report
 - <https://www.oshkoshwi.gov/StormWaterUtility/MS4Permit.aspx>



Examples of MS4 components

MS4 Permit

- TMDL Compliance
 - Citywide Storm Water Management Plan (SWMP)
 - 2008, 2014, On-Going
- City needs to remove TSS and TP from within City
 - TSS: 20% to 58%
 - TP: 86%

Total Maximum Daily Loads for Total Phosphorus and Total Suspended Solids Upper Fox and Wolf Basins

Final U.S. EPA approved Report



02/27/2020

Including Forest, Langlade, Menominee, Shawano, Outagamie, Waupaca, Winnebago, Waushara, Calumet, Fond Du Lac, Green Lake, Marquette, Columbia, Adams, Dodge, and Portage Counties, Wisconsin

Prepared For:
U.S. Environmental
Protection Agency
Region 5
77W Jackson Blvd.
Chicago, IL 60604



WI Department of
Natural Resources
101 S. Webster St
PO Box 7921
Madison, WI 53707-7921



Prepared By: The Cadmus Group LLC
Finalized by the WI Department of Natural Resources



Blue Green Algae – Lake Winnebago
(Source: WDNR)

MS4 Permit

- Six minimum measures
 1. Public education & outreach
 2. Public participation/ involvement
 3. Illicit discharge detection & elimination
 4. Construction site runoff control
 5. Post-construction runoff control
 6. Pollution prevention/ good housekeeping

MS4 Permit

- Public education & outreach
- Public participation/ involvement
- City conducts various activities
- Partnership with FWWA / NEWSA



Educational sign at Westhaven Clubhouse Area Detention Basin



REGISTRATION IS OPEN!

When registering, you can register yourself along with your family members.

Saturday, May 1, 2021

MS4 Permit

- Illicit discharge detection & elimination
 - MS4 is meant for storm water runoff only
 - Limited exceptions: residential car washing, foundation drains, lawn watering, etc
- https://www.oshkoshwi.gov/StormWaterUtility/IDDE_program.aspx

NOTICE OF CITY OF OSHKOSH GRASS CUTTING REQUIREMENTS

Residents are reminded that blowing or placing grass clippings, leaves, or other debris onto the street is prohibited. Storm water runoff carries grass clippings and other debris on the street pavement surfaces into the storm sewer system. The City of Oshkosh's storm water runoff drains directly to local lakes, rivers, and streams. Storm water runoff is not treated at the Wastewater Treatment Plant.

Debris carried by storm water runoff can cause inlets and storm sewers to plug and this can lead to flooding. Additionally, grass clippings and leaves contain nutrients that help feed algae blooms on adjoining waterways.

PER MUNICIPAL CODE CHAPTER 25 / STREETS & SIDEWALKS

Section 25-26 Obstructions in Street prohibited

This code indicates that no person shall place or deposit any substance in any sidewalk or street without a permit. In addition, no person may obstruct or stop the flow of water in any ditch, sewer, gutter, or culvert along or across any street, lane, alley, public grounds, or sidewalk in the City.

PER MUNICIPAL CODE CHAPTER 14 / STORM WATER MANAGEMENT

Section 14-30 Discharge Prohibitions

This code indicates that no person shall throw or discharge any pollutants to the municipal storm sewer system.

Property owners face a potential citation for violation of the Municipal Code.

THIS FORFEITURE IS \$232 FOR THE FIRST OFFENSE.

Violators can be reported to the Engineering Division
Department of Public Works
at (920)236-5065.

PLEASE HELP KEEP GRASS OUT OF THE STREET, WHICH WILL MEAN LESS DEBRIS THAT REACHES THE STORM SEWER SYSTEM. YOUR EFFORTS WILL HELP TO REDUCE POLLUTION IN LAKE WINNEBAGO AND THE FOX RIVER.



Grass clipping info:

<https://www.ci.oshkosh.wi.us/StormWaterUtility/assets/pdf/GrassClipping.pdf>

2021 Ongoing Screening Program Review

Illicit Discharge Detection and Elimination (IDDE)

City of Oshkosh Storm Water Utility Committee

April 15, 2021

Westwood

MS4 Permit

- Pollution prevention/ good housekeeping
 - Inventory of municipal storm water BMPs
 - SWPPPs for municipal facilities
 - Documentation of programs (street sweeping, catch basin cleaning, deicer application, fertilizer application)
 - Internal training



400 North Main Street Parking Lot Biofilter



Salt shed at Field Operations Facility

Flood Control

- Level of Service Goals
- Watershed Studies
- Implementation
 - Flood relief projects
 - Street reconstruction projects



Highway 41 flooding during June 12, 2008 storm event



Fair Acres Detention Basin during June 12, 2008 storm event

Flood Control

- Level of Service Goals
 - 10-year design storm
 - Eliminate street surcharging of the storm sewer system onto the street
 - 25-year design storm
 - Maintain drivability of streets (center of street “dry”)
 - 100-year design storm
 - Contain runoff within the street right-of-way

Flood Control

- Watershed Studies
 - Feasibility Studies
 - Road CIP Infrastructure Modeling

- https://www.oshkoshwi.gov/StormWaterUtility/Studies_and_Reports.aspx
- https://www.oshkoshwi.gov/StormWaterUtility/assets/pdf/Storm_Water_Utility_Progress_Maps/Flood_Studies.pdf



Flood Control

- Implementation
 - Flood relief projects
 - Street reconstruction projects
- Storm water utility brochure:
 - https://www.oshkoshwi.gov/StormWaterUtility/assets/pdf/Stormwater_Utility_Brochure.pdf
- Storm water utility progress maps
 - https://www.oshkoshwi.gov/StormWaterUtility/Storm_Water_Utility_Progress_Maps.aspx



Fernau Watershed - North Main Street Wet Detention Basin




Box culvert installed as part of street reconstruction project

Flood Control

- Flood relief projects – interactive map
 - <https://oshkosh.maps.arcgis.com/apps/MapTour/index.html?appid=8d8cec94c79749c9994885e608804e8d>

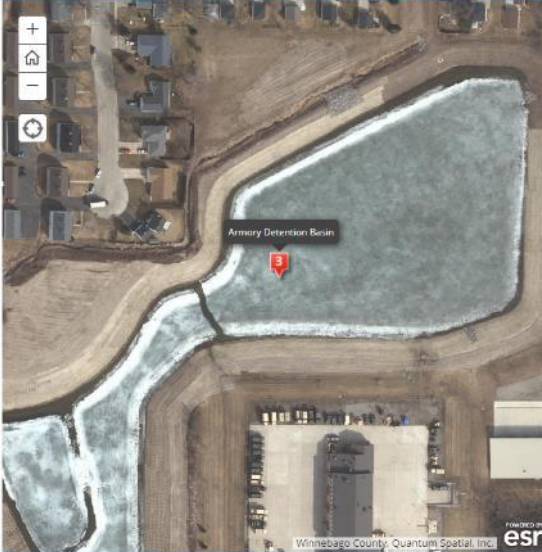
City of Oshkosh Storm Water Projects Storm Water Utility [↗](#)

The purpose of this application is to illustrate the projects undertaken by the City of Oshkosh to mitigate the effect of runoff from rain or snow melt and to reduce the impact of flooding events.



Armory Detention Basin











This wet detention basin was constructed in 2014 in the Campbell Creek watershed on a portion of the Wisconsin Army National Guard property purchased by the City. Total project cost came in nearly \$1 million below budget at \$2.9 million. \$1.8 million of which was covered by a Hazard Mitigation Grant through FEMA. Armory Detention Basin, in conjunction with the Tipler Detention Basin, has reduced the depth of flooding downstream in surrounding areas by as much as 6 feet, and removes approximately 48 tons of sediment annually to improve water quality.



Winnebago County Quantum Spatial, Inc. **esri**

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Operations & Maintenance

- Street Cleaning
- Leaf Collection
- Major Infrastructure
- Sewer Televising
- Storm Response

- MS4 Map
 - https://www.oshkoshwi.gov/StormWaterUtility/MS4Permit/MS4_Map_2020.pdf

