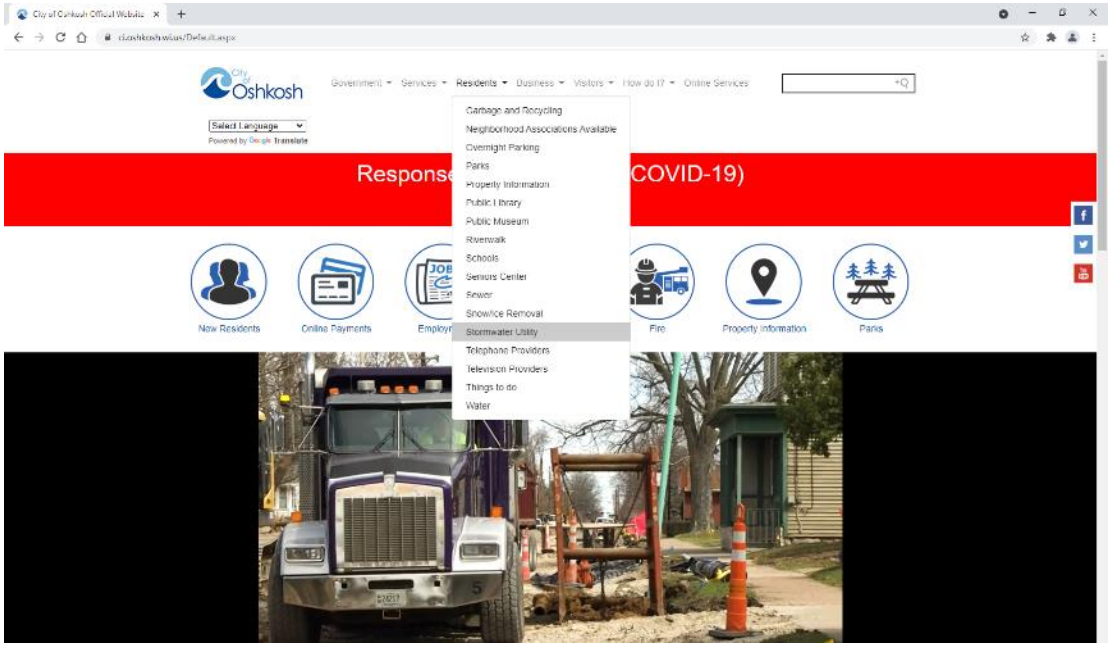
City of Oshkosh Storm Water Management Overview for Storm Water Utility Appeals Board

July 15, 2021

Brown AND Caldwell

Presentation Outline

1. Municipal Code Chapter 14
2. MS4 Permit
3. Flood Control
4. Operations & Maintenance

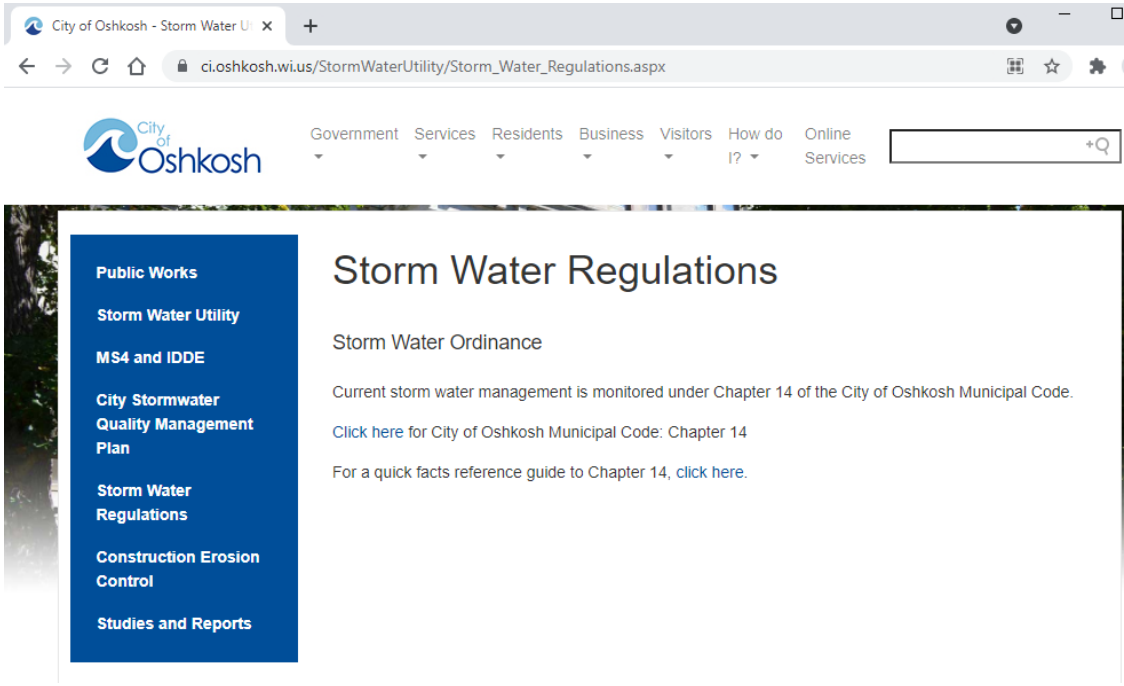


- Storm Water Utility Website:
  - https://www.oshkoshwi.gov/StormWaterUtility/

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

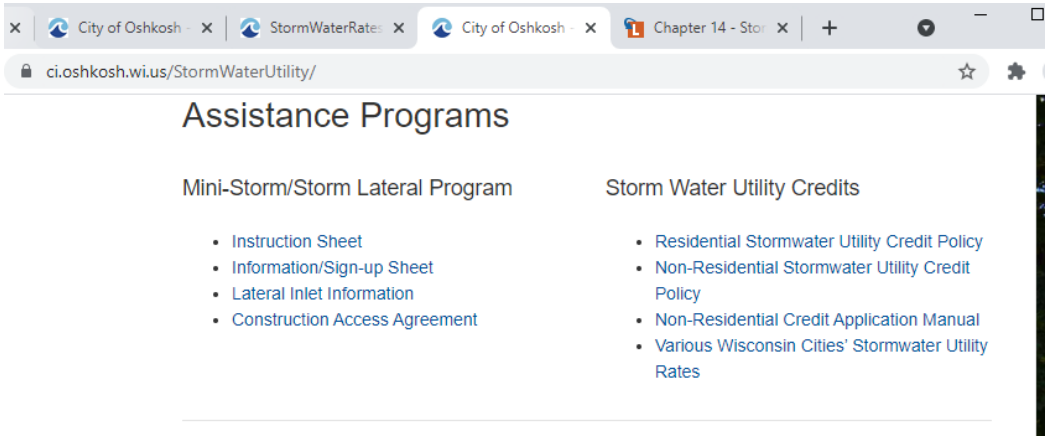
City of Oshkosh Storm Water Rates

Effective for service on and after 4-1-2021

	Monthly Rate through 03/31/2021	**Monthly Rate as of 04/01/2021**
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.



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%

Blue Green Algae – Lake Winnebago (Source: WDNR)

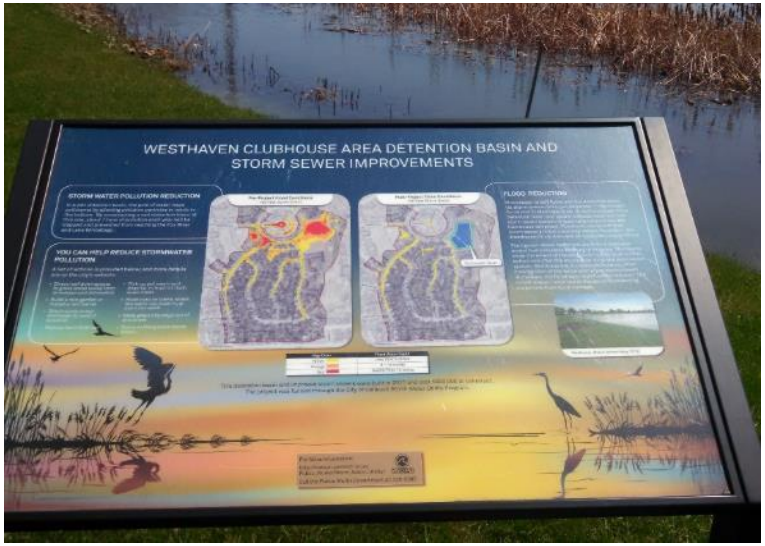
MS4 Permit

- 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

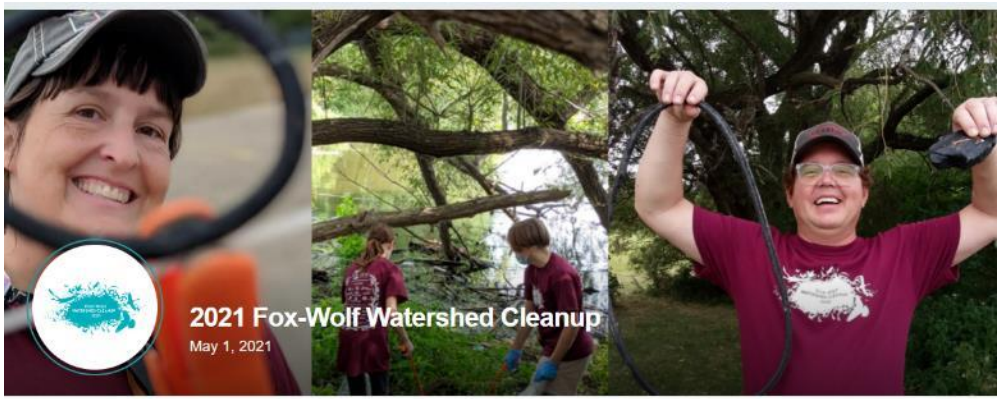
MS4 Permit

- Public education & outreach
- Public participation/ involvement

- City conducts various activities
- Partnership with FWWA / NEWSC



Educational sign at Westhaven Clubhouse Area Detention Basin



REGISTRATION IS OPEN!

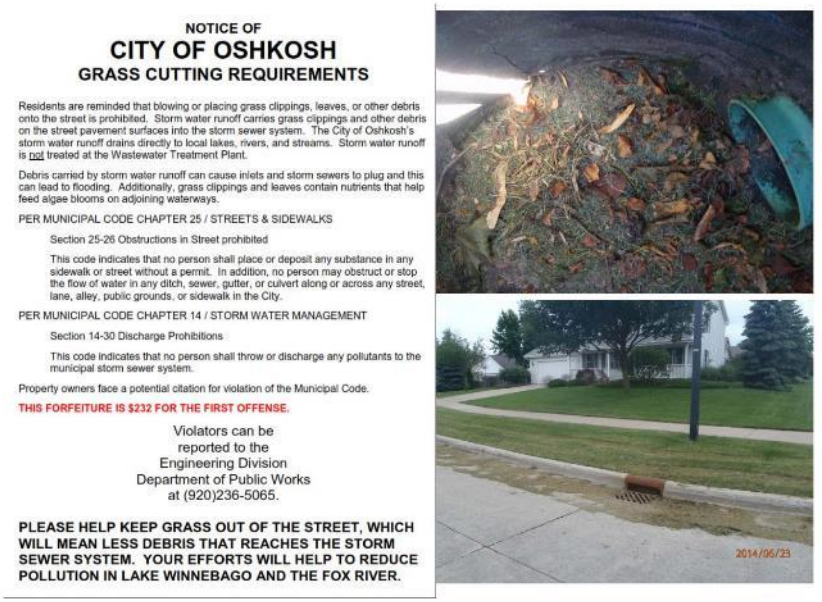
When registering, you can register yourself along with your family members.

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

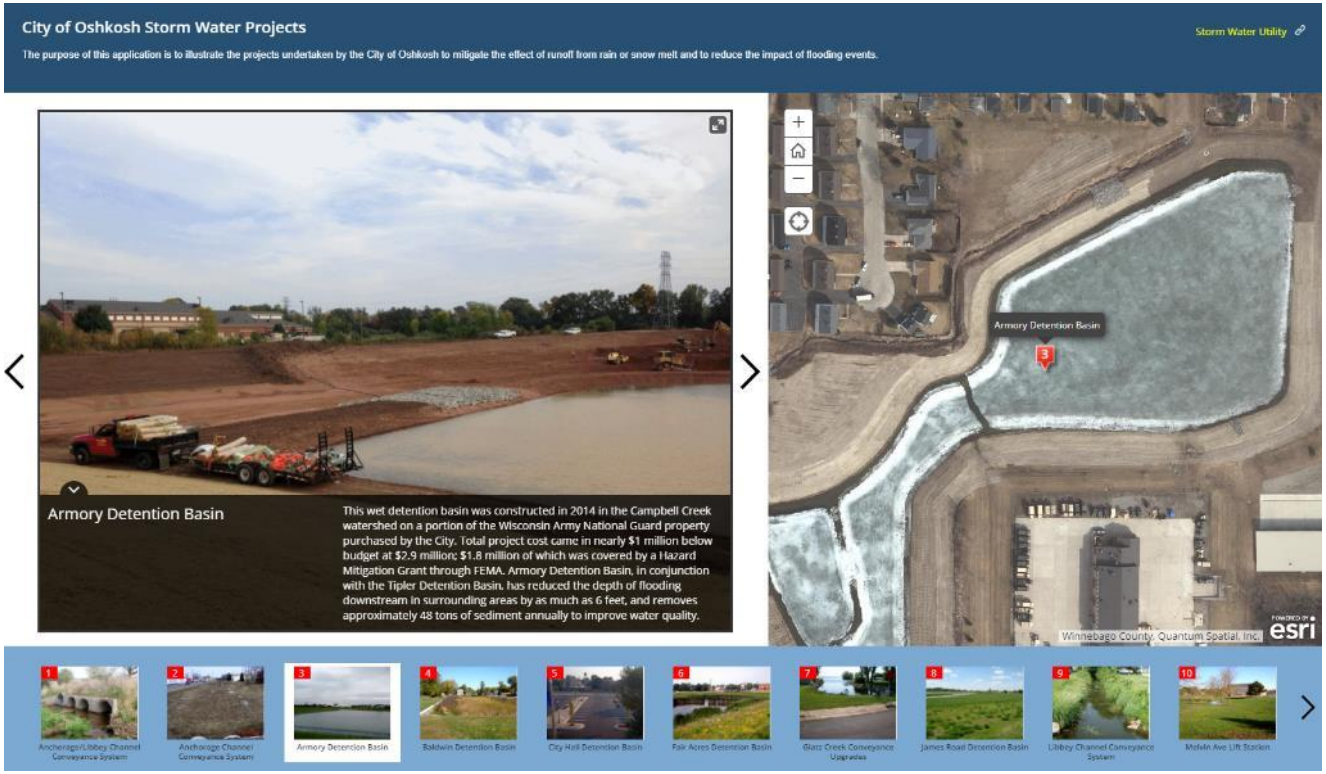
- Implementation
  - Flood relief projects
  - Street reconstruction projects
  - Storm water utility brochure:
    - https://www.oshksohwi.gov/StormWaterUtility/assets/pdf/Stormwater_Utility_Brochure.pdf
  - Storm water utility progress maps
    - https://www.oshkoshwi.gov/StormWaterUtility/Storm_Water_Utility_Progress_Maps.aspx

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



Operations & Maintenance

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

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