



The New Adventures of Hartsookville

MS4 Pollution Prevention
FWWA Conference
March 7, 2018

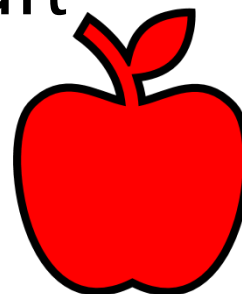


Overall Goal

Prevent storm water pollution through direct control of:

1. Municipal activities
2. Municipally owned land

Considered 'low hanging fruit'



Pollution Prevention Overview

- Planning Elements
- Planning & Ongoing Implementation
- Ongoing Maintenance Efforts





Planning Elements

- Nutrient Management Plans
- Going Green-Environmentally Sensitive Development
- Source Water Protection



Nutrient Management Plans

- Municipal Properties with > 5 acres maintained turf—Talk to Parks Staff
- Nutrient Management Plan
 - Soil Testing
 - Site-specific nutrient application schedule



Going Green

- Applies to Municipal Projects
- Consideration of Environmentally Sensitive Land Development Designs



Green Infrastructure



Low Impact Development

Source Water Protection

- Reduce Municipal Sources of Storm Water Pollution
- Located in Source Water Protection Areas





Planning & Implementation

- Road Salt/Deicing
- Municipal Yard SWPPP
- Educational Element



Winter Road De-icing

- Criteria: Apply no more than needed to maintain public safety
- Annual Reporting:
 - Winter road maintenance contact
 - Type of products used
 - Amount of products used
 - Type of equipment
 - Snow disposal locations
 - Strategies for anti-icing, equipment calibration and salt reduction
- Guidance: WisDOT Highway Maintenance Manual Chapter 35



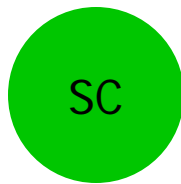
Public Works Yards

- Storm water pollution prevention planning for municipal garages, storage areas and other sources of storm water pollution from municipal facilities.

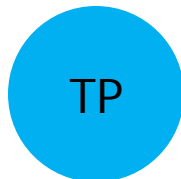


Storm Water Pollution Prevention Plan (SWPPP)

- SWPPP Map
 - Drainage Patterns
 - Sources of storm water pollutants
 - Best Management Practices



Source Controls



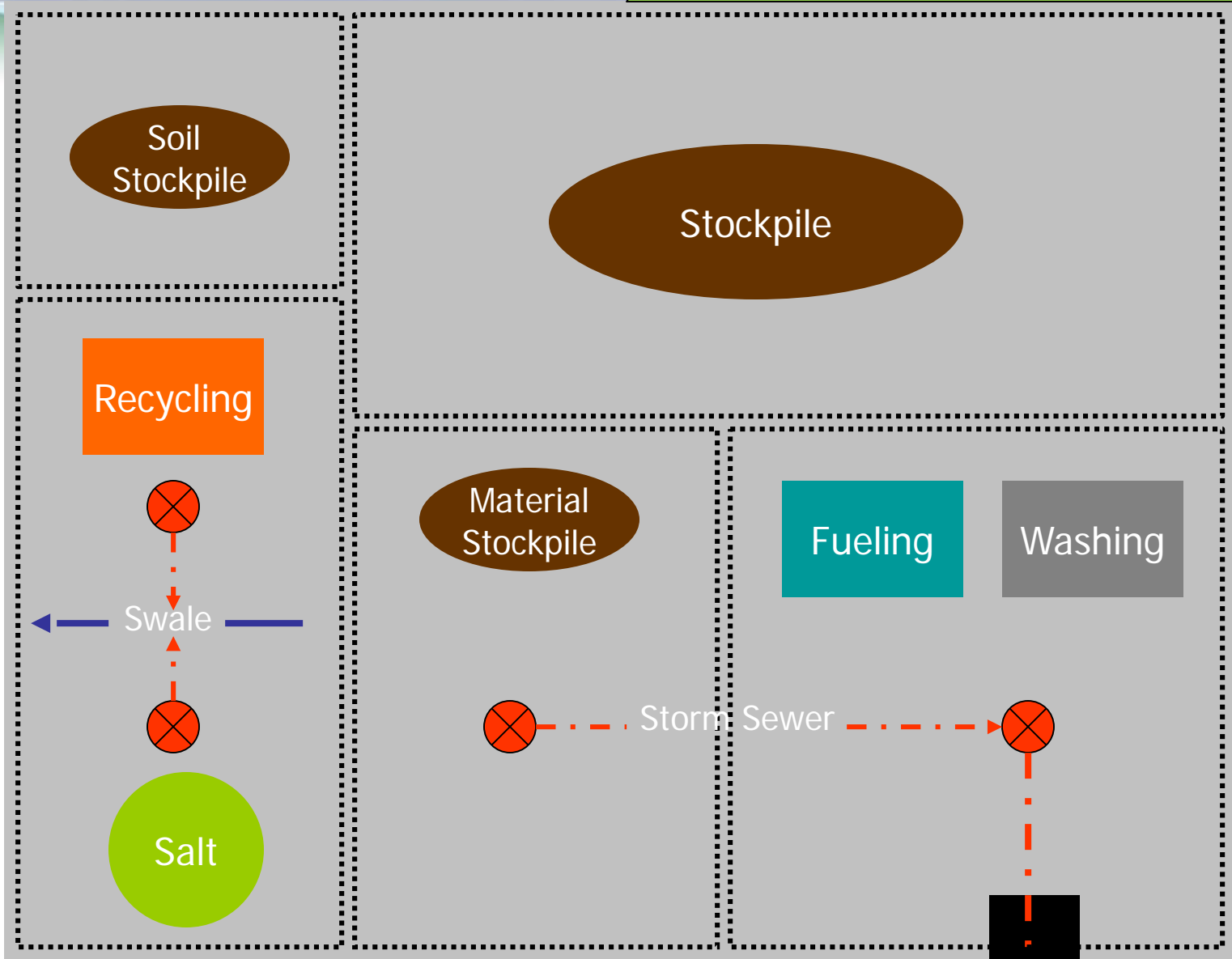
Treatment Practices

The Mayor of Hartsookville



Hartsookville DPW Yard

Wetland



River

Recycling

Soil Stockpile

Stockpile

Material Stockpile

Fueling

Washing

Salt

Swale

Storm Sewer



Small Stockpile (< 1 acre)





Small Stockpile (< 1 acre)



Large Stockpile (> 1 acre)

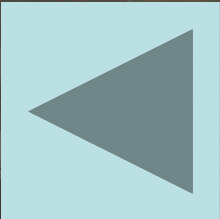




Large Stockpile (> 1 acre)



Vehicle Tracking



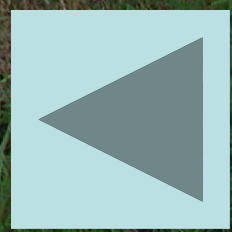


Outside Washing



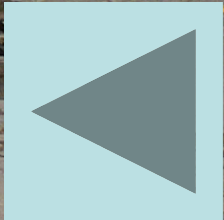


Outside Washing





Fueling Island



Material Storage



COLD MIX

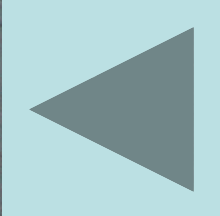
SWEeper DUMP

WOOD CHIPS





Salt Storage



Recycling Storage



Recycling Storage



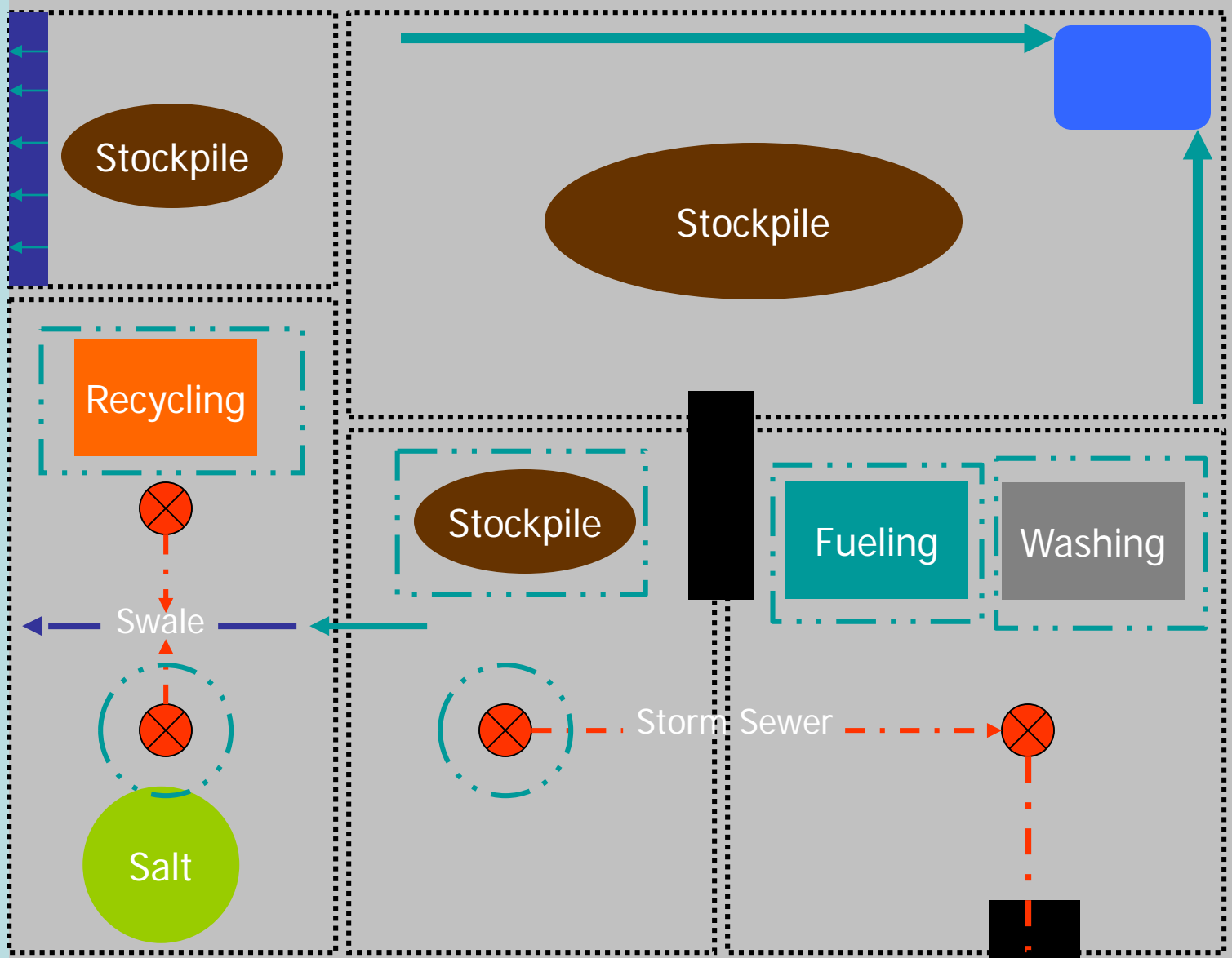




Recycling Storage

New Hartsookville DPW Yard

Wetland



River

Stockpile

Stockpile

Recycling

Stockpile

Fueling

Washing

Swale

Salt

Storm Sewer



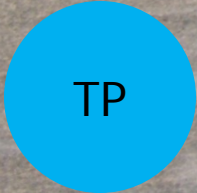
TP

Vegetative Buffer (1054)



TP

Vegetative Buffer

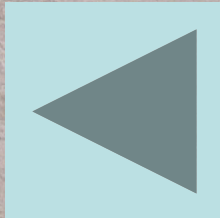


TP

Ditch Check (1062)



Manufactured Perimeter Control (1071)





TP

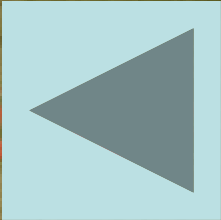
Diversion Berm (1066)



TP

Sediment Trap (1063)

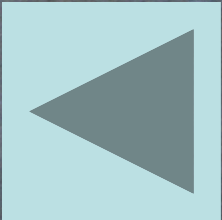
AUG





SC

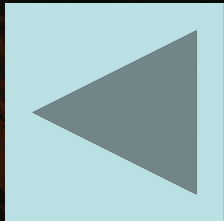
Tracking Pad (1057)





SC

Indoor Washing





SC

Fuel Island Canopy



Fuel Island Spill Kit





SC

No Exposure

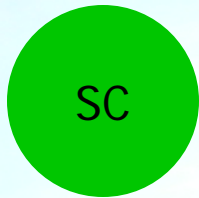


SC

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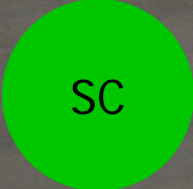


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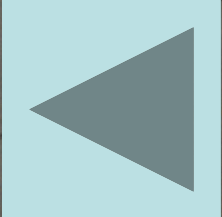
No Exposure





SC

No Exposure





TP

Inlet Protection (1060)

TP

Proprietary Settling Device (1006)





TP

Grass Swale



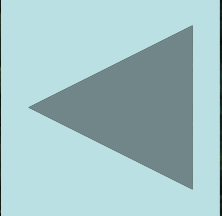
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Grass Swale



TP

Grass Swale





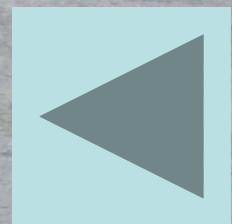
SC

No Exposure





Spill
Containment



**WASTE
OIL DEPOSIT
STATION**

WASTE OIL ONLY

**NO GASOLINE
NO ANTI-FREEZE
NO PAINT or THINNERS**

REPORT ANY PROBLEMS TO THE STREET DEPARTMENT OFFICE

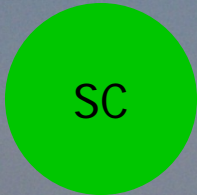
Used Oil Only - No Fuel - Please Keep Drop Pan Clean
USED OIL ONLY

Property
City of
Kaukauna

**NO OIL
IN DRAIN**

**NO OIL
IN POT
A JTE**





Holding Tank





SC

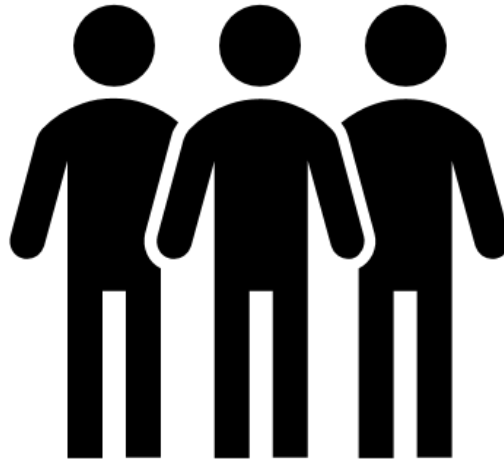
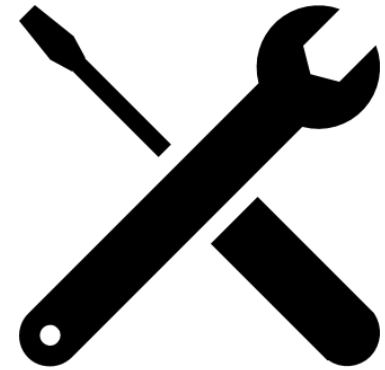
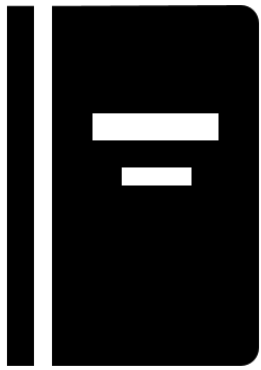
Holding Area



Recommendations

- Identify source control and treatment practices on SWPPP Map
- No Exposure, No Exposure, No Exposure!
- Utilize existing DNR technical standards for erosion & sediment control and storm water management

Educational Element





Ongoing Maintenance

- MS4 Owned BMPs
- Street and Catchbasin Cleaning
- Yard Waste Management

Municipal BMP Maintenance

- Inventory-Know what you have
 - Practices used in pollutant load analysis
- Inspect-Know the condition
 - DNR tech standards
 - Record keeping
- Maintain-Plan and execute maintenance
 - NR 528





Street and CB Cleaning

- Are you doing what your plan says?
 - Equipment type
 - Frequency
- Do you have records of it?
- Is disposal appropriate?



Yard Waste Management

- Do you have a program?
 - Onsite management
 - Compost site
 - Collection
 - Restrictions on Storage Location
- What is your program?
- Does your TMDL plan make any assumptions?

Questions?

