

## BACKGROUND AND DESCRIPTIONS

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This Storm Water Management Plan (SWMP) was developed to enhance the integrity of surface water through management of storm water runoff within the Village of Holland. The SWMP describes the best management practices necessary to comply with the Ohio EPA's Storm Water Phase II Rule and the Lucas County NPDES permit, of which the Village of Holland is a co-permittee.

Under the Storm Water Phase II Rule, the following six control measures must be addressed by enacting local ordinances and activities designed to improve the quality of storm water. Each control measure will be addressed by use of best management practices (BMP's) having measurable goals. Each measurable goal must have a schedule of implementation and responsible department.

The six control measures and their BMP's are described below. More detailed descriptions of the measurable goals of each BMP follow.

### 1. Public Education and Outreach

Inform and educate the public of its role in protecting storm water from non-point pollution.

- a. Lawn and Garden Activities – reducing use of fertilizers, pesticides and other products; use of alternate products.
- b. Water Conservation – divert runoff from roofs and other impervious surfaces into rain gardens or other natural areas.
- c. Household Hazardous Waste- education on available drop off programs and locations
- d. Pet Waste Management – Inform residents on the effect of pet waste on the environment
- e. Business Outreach Education –develop a program to educate local businesses on ways they could improve storm water quality.

### 2. Public Involvement and Participation

Educate and involve the public of its role in protecting storm water from non-point pollution.

- a. Storm Drain Stenciling – paint messages on drain inlets reminding the public not to dump anything other than storm water into a drainage system.
- b. Support Local Watershed Programs – obtain educational materials and program information for distribution to residents/business from Partners for Clean Streams.
- c. Educational School Programs – coordinate with Lucas County Soil & Water Conservation presentations provided by them to Springfield Local School system.
- d. Participation and support of the Storm Water Coalition – the coalition brings many different organizations and municipalities together to address storm water concerns.

3. Illicit Discharge Detection and Elimination

Ordinance 19-2010 enacted to establish legal authority to inspect, monitor, and prohibit illicit discharges.

- a. Spill Response – coordinate training of employees using EPA protocols for spill response.
- b. Illicit Discharge Response Plan – develop plan, coordinate with Lucas County Engineers and Lucas County Health Department procedures for detecting, eliminating illicit discharges
- c. Mapping – coordinate updating of current drainage map with Lucas County to include outfall locations, water bodies affected by the outfalls and provide maps to all spill response staff.
- d. Participate in IDDE training with other jurisdictions through the Toledo Metropolitan Council of Governments.
- e. Educate public on spills, provide reporting information via different media.

4. Construction Site Storm Water Runoff Control

Ordinance 7-2004 adopting soil erosion and sediment controls rules was updated by Ordinance 1-2013. The updated version follows the model ordinance provided in *TMACOG Stormwater Standards Manual*.

- a. Educate the development community on the ordinance update.
- b. Enact a public complaint process utilizing print and internet media.
- c. Devise and implement written procedures for plan review and site inspections.
- d. Promote training for the development community.
- e. Promote training for plan review and inspection personnel.

5. Post Construction Storm Water Management

Post construction controls to ensure the maintenance of erosion and sediment controls installed during development are addressed in the soil erosion and sediment control legislation, Ordinance 1-2013.

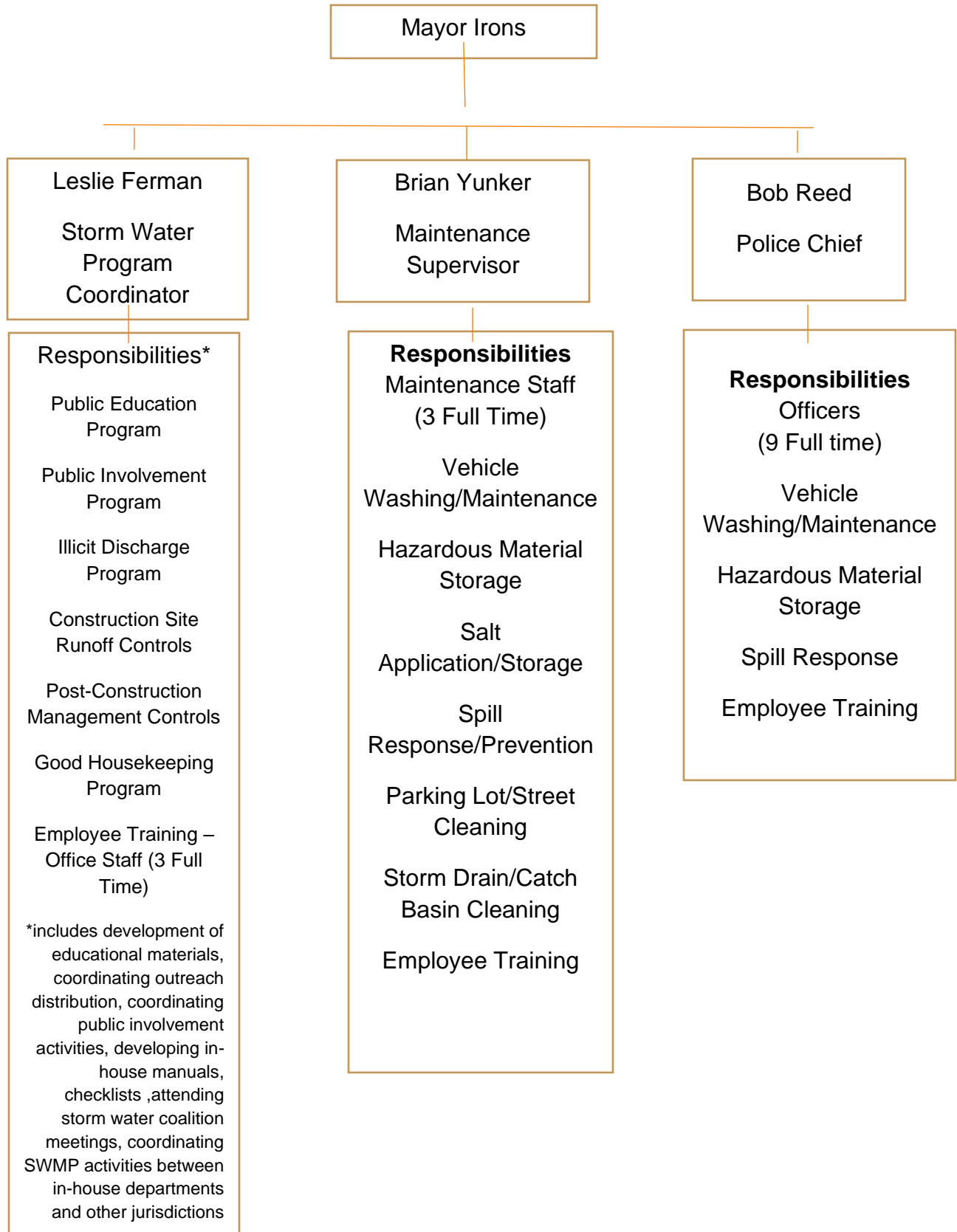
- a. Devise and implement legislation designed to address the impairment of Wolf Creek using the 2009 TMDL as reference for type of contaminants.
- b. Implement training of municipal staff in erosion and sediment control measures.
- c. Create agreement with Lucas County Engineer's Office for assistance in field inspections and review of maintenance plans for installed control measures.

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Municipal operations will be evaluated to assure minimal contamination of storm water discharges:

- a. Vehicle Washing/Maintenance – police vehicles are generally serviced by outside source, street vehicles are serviced in-house; exterior vehicle washing education
- b. Parking lot/Street Cleaning- generally performed by outside source
- c. Storm Drain/Catch Basin Cleaning – perform more frequently
- d. Hazardous Materials Storage – reinforce current procedures and regulations
- e. Spill Response & Prevention – reinforce current procedures and regulations
- f. Road Salt Application & Storage- investigate use of alternate deicers; in-house storage of salt procedures
- g. Employee Training- Educate village employees on best practices relative to storm water quality.

Village of Holland  
Storm water Organizational Chart



## PUBLIC EDUCATION BEST MANAGEMENT PRACTICES

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### 1. Lawn and Garden Activities

Annually      Rain barrel workshop at Strawberry Acres Park based on demand. Distribute information on rain barrels and rain gardens, sign up citizens for make your own rain barrel workshop. Coordinate with Rain Garden Initiative and Lucas County Soil & Water Conservation.

Addresses TMDLs of TSS and Nutrients.

### 2. Fertilizer

2021            Distribute Give Water a Hand materials on fertilizer use to 135 households (25% of total households) in the Village.

Follow up with survey to those same households. Use results of survey to revise materials as needed to ensure information being disseminated is understood.

Addresses TMDL's of TSS and Nutrients

### 3. Household Hazardous Waste

2022            Distribute Give Water a Hand materials on household hazardous waste disposal; locations for disposal to 135 households. Send survey to same households to determine effectiveness of BMP and revise as needed.

Coordinate a drop-off event thru Keep Toledo Lucas County Beautiful and the Lucas County Solid Waste Division shortly after mailing materials.

Addresses TMDLs of TSS and E-Coli.

### 4. Pet Waste Management

Annually      Continue distribution of pet waste bags at Strawberry Acres Park. Document the frequency of replacing 200 bag rolls in the pet waste station.

Addresses TMDL of E-Coli.

### 5. Business Outreach

2023            Distribute Give Water a Hand Materials to automotive businesses within the Village.

Send survey on oil and battery recycling to the 12 auto related businesses in the Village (175 total businesses) and amend BMP as needed.

## PUBLIC PARTICIPATION AND INVOLVEMENT MANAGEMENT PRACTICES

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### 1. Lawn and Garden Activities

Annually      Rain barrel Workshop at Strawberry Acres Park during community event  
Distribute information on rain barrels and rain gardens, sign up citizens for make your own rain barrel workshop based on demand. Coordinate with Rain Garden Initiative, Lucas County Soil & Water.

Addresses TMDLs of TSS and Nutrients.

### 2. Storm Drain Stenciling

Annually      Working with Partners for Clean Streams host an annual storm drain stenciling event for volunteer groups. Record the location and number of drains stenciled each year. Goal is to stencil 25-50 basins each year.

Addresses TMDLs of TSS, Nutrients and E-Coli.

### 3. Storm Water Coalition

Annually      Continue participation with the TMACOG Storm Water Coalition

### 4. Educational School Programs

Annually      Working with Lucas County Soil and Water, promote and provide educational programs to the Springfield Local School system. Document number of programs held and number of attendees.

Addresses TMDLs of TSS and E-Coli.

## ILLCIT DISCHARGE BEST MANAGEMENT PRACTICES

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1. Mapping  
Annually      Continue working with Lucas County to update GIS maps showing locations of outfalls.
  
2. Inspections  
Bi-Annually      Village maintenance staff to inspect 15 outfalls.  
Inspect existing taps into storm sewers during road construction projects.  
Coordinate with Lucas County Health as needed.  
  
Document number outfalls inspected; disconnections.  
  
Addresses TMDLs of TSS and E-Coli.
  
3. IDDE Training  
Annually      Maintenance trained on detecting illicit discharges and reporting such.  
  
Coordinate IDDE training with TMACOG.  
  
Document number of employees trained.  
  
Addresses TMDLs of TSS and E-Coli.
  
4. Spill Response Education  
Annually      Publish hotline information for residents thru various media.  
  
Document number and type of media distributed.  
  
Goal is to reach 25% of households/businesses with hotline information.  
  
Addresses TMDLs of TSS and E-Coli.
  
5. Spill Response Protocols  
Annually      Review procedures with staff; document number staff trained.  
  
Coordinate procedures with police, fire, EPA and other agencies.

## CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

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### 1. Developer Training

Annually      Coordinate with Stormwater Coalition to advertise the availability of Developer training opportunities.

Addresses TMDL of TSS.

### 2. Public Complaint Process

Annually      Provide the public with a means to address concerns over activity at a Construction site that may affect stormwater.

Document number of complaints and actions taken in response.

### 3. SW3P Review & Inspections

Annually      Continue contract for outside review of submitted SW3P and inspections Of runoff control measures on construction sites.

Document number of plans submitted, reviewed.

Document number of and inspection results. Obtain from outside Contractor.

Addresses TMDL of TSS.

### 4. Contractor Training

Annually      Obtain documentation that outside contractors are adhering to the Training requirements of the NPDES.



## POST CONSTRUCTION BEST MANAGEMENT PRACTICES

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1. Storm Sewer Replacement/Rehabilitation

Annual                      Future road construction projects should continue to replace or  
Line existing storm sewers to bring current sewer system up to date.

Document linear feet of storm sewer replaced &/or lined annually.

2. Erosion/Sediment Control Measure Training

Annual                      Incorporate training of in-house staff on the correct construction for  
commonly seen erosion control measures used on construction sites;  
include information on reporting any deficiencies noted.

Addresses TMDL of TSS.

3. Post Construction Inspections

As needed                      Coordinate inspection of post construction BMPs with Lucas County  
Engineer's Office using the requirements of the site maintenance plans for  
post construction controls

4. Evaluate Existing Post Construction Control Measures

As needed                      Review inspection logs, enforcement actions taken, and TMDL for Wolf  
Creek pollutants updates, update existing legislation as needed to address  
deficiencies in the inspection/enforcement procedures and to account for  
changes to the type of Wolf Creek contaminants.

Addresses TMDLs of TSS and E-Coli.

## POLLUTION PREVENTION BEST MANAGEMENT PRACTICES

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1. Street Sweeping  
Annually Contract with Perfect Sweep or other contractor to sweep curbed streets At least quarterly. Document number of times swept and obtain from Vendor the amount of debris collected and where disposed.
  
2. Vehicle Maintenance  
Annually Police vehicle service logs indicating service by qualified outside vendor. Police vehicle washing performed at local car washes. Maintenance vehicle service logs indicating service by outside and In-house staff. In-house work documented to show quantity of oil, Brake fluid and other possible pollutants and their method of disposal.
  
3. Storm Drain Cleaning  
Annually Inspect 25% of catch basins each year. Document amount of debris Cleaned from each basin and its method of disposal. Document improvements to storm sewer system during road projects.
  
4. Road Salt  
Annually Ensure that salt storage is contained within the building and on An impervious surface. Inspect salt trucks to ensure correctly gauged distribution mechanisms To reduce the amount of salt spread. Where possible, use environment friendly methods of de-icing such as On walking path, building entrances. Document amount of salt distributed with each winter event.
  
5. Staff Training  
Annually In-house staff training in hazardous materials storage, spill response, Exterior vehicle washing and overall pollution prevention methods. Use TMACOG's *"Pollution Prevention and Good Housekeeping Practices for Municipal Operations"* as reference for the training program. Document Training for each employee.