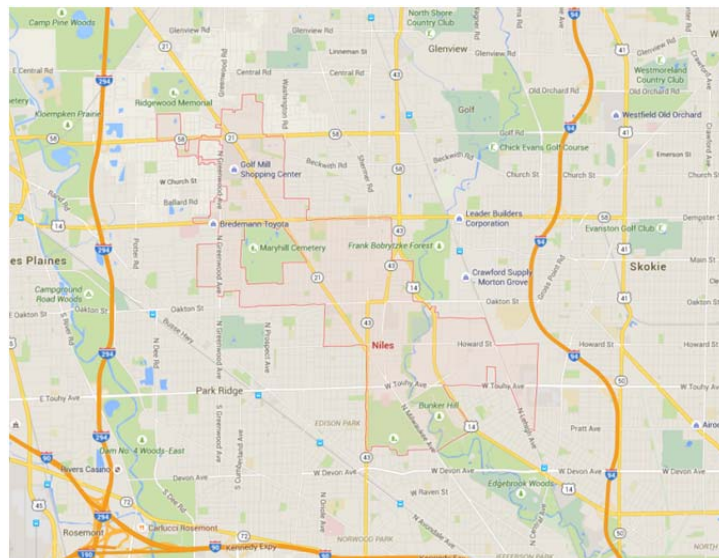


## Village of Niles

# Municipal Separate Storm Sewer System (MS4) Storm Water Management Plan (SWMP)

National Pollutant Discharge Elimination System (NPDES)

NPDES General Permit # ILR400398 for Municipal Storm Water Discharges

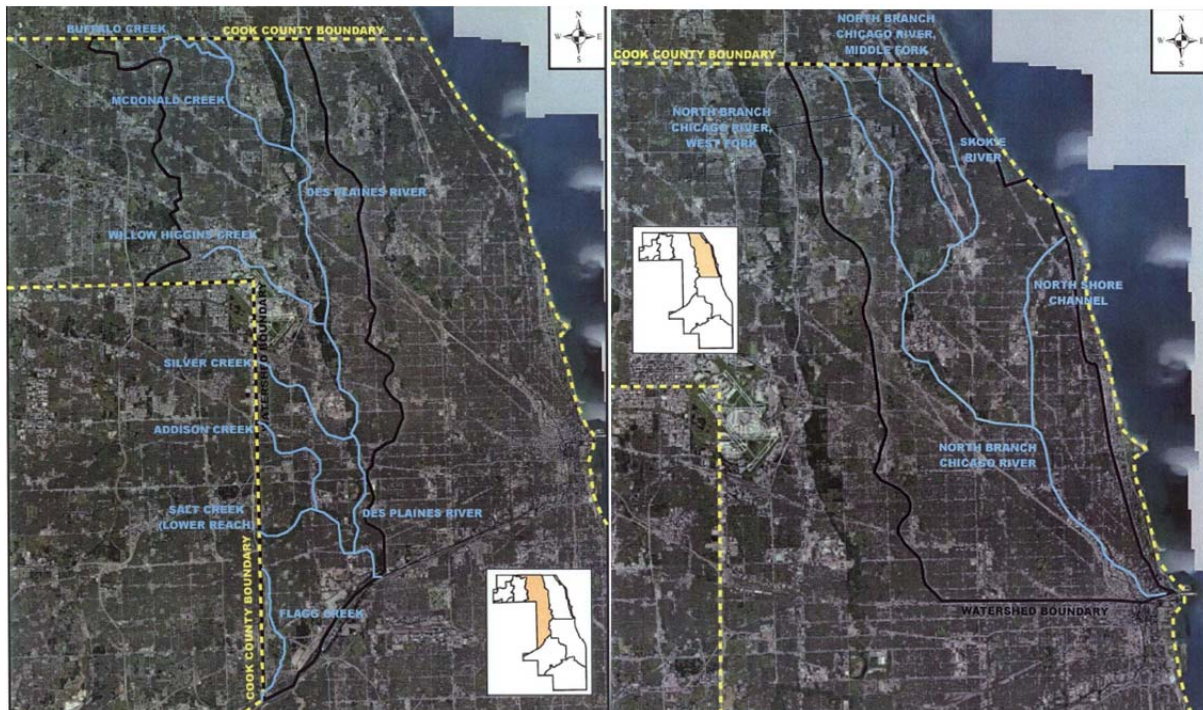


November 2018

The Village of Niles is an established community that is completely developed and encompasses approximately 6.0 square miles. It is located within the North Branch of the Chicago River and Des Plaines River Watersheds and entirely within the service area of the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC).

### Des Plaines Watershed

### North Branch Chicago River Watershed



About 11% of the land in Niles is owned by the Cook County Forest Preserve District or Niles Park District and is set aside for open space and recreation. The population is approximately 29,000 with 11,590 households. Approximately fifty two percent of the community has separated storm sewers. The population served by separate sewers is less than 25,000.

Storm water includes rainfall or melted snow that runs off impervious surfaces, such as rooftops, streets, sidewalks, and parking lots. Impervious, or hard surfaces, prevent the storm water from infiltrating into the ground and percolating down to the ground water table. When stormwater flows across pavement surfaces pollutants are picked up. Common pollutants include vehicle exhaust products, brake and tire dust, oil and grease, sediment, salt, fertilizers and pesticides, pet waste, and litter. Because storm water in separate sewer areas is untreated, these pollutants enter our waterways.

The purpose of this plan is to maintain or improve water quality in the area designated within the MS4 area of the Village of Niles. Storm Water Management is provided as part of the stormwater relief, capital improvement, and sewer and water budget items. This Storm Water Management plan documents Niles' strategy for reducing impacts related to operating our MS4 separate sewer system. Our storm water flows into the North Branch of the Chicago River via forty two outfall locations. Our stormwater flows into the headwaters of the Des Plaines River via one outfall location upstream of Prairie Farmers Creek. The remainder of our separate sewer systems connect into neighboring communities (Park Ridge, Morton Grove, or Des Plaines) or IDOT storm sewers.



The SWMP was developed in compliance with the requirements of the NPDES General Permit # ILR400398. It is designed to ensure public health and safety by reducing discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act. This is achieved through the implementation of the following six minimum control measures and related best management practices for each. (BMPs)

- A. Public Education and Outreach
- B. Public Involvement/ Participation
- C. Illicit Discharge and Detection
- D. Construction Site Runoff Control
- E. Post Construction Runoff Control
- F. Pollution Prevention/Good Housekeeping

## A. Public Education and Outreach

The goal of education and outreach is for members of a community gain a greater understanding of storm water runoff. Stormwater pollution will be mitigated as community members become more aware of the personal responsibilities expected of them and others, including individual actions they can take to protect and improve the quality of area waters.

A variety of stormwater related information is available at <http://www.vniles.com/> The Village of Niles provides a website with many resources for residents, developers and engineers. The website pages and links provide notices of upcoming meetings, ongoing projects download of various documents and links to other NPDES and BMP resources.

- Information and links regarding storm water are provided on our website:  
<http://www.vniles.com/392/Stormwater-Commission>
- Our NPDES compliance documents and information on stormwater pollution reduction techniques can be found here:  
<http://www.vniles.com/176/Stormwater-Runoff-Pollution-Reduction-Te>
- Information on green landscaping and native plantings such as raingardens can be found here:  
<http://www.vniles.com/819/Niles-Community-Rain-Garden>
- Information on potential effects of climate change can be found here:  
<https://www.vniles.com/175/NPDES-MS4-CSO>
- The Village of Niles teamed with neighboring communities to develop stormwater solutions for residents and business owners. This website stems from a larger effort seeking to understand and provide solutions for managing stormwater at a small scale (i.e. individual properties and small groups of properties):  
<http://watersolutionsproject.org/>

Brochures and fact sheets about stormwater pollution and prevention are available at our municipal buildings and supplemented as needed.

The Village of Niles will continue to promote water conservation to the public each year through publication of conservation techniques in the newsletter, message board and web page. The Village enforces water conservation techniques to reduce the use of potable water on residential, commercial and industrial landscaped areas. This program reduces the waste of potable water and promotes the reduction of runoff from landscaped areas to impervious surfaces that can contain greater amounts of

fertilizers and weed killers that can reach the storm water collection system.

## **B. Public Involvement/ Participation**

Our quarterly newsletter “Focus on Niles” incorporates articles to educate residents on topics such as storm water, pollutants, green infrastructure and more. These articles also invite interested parties to participate in things such as green infrastructure, community rain garden volunteering, or attending Stormwater Commission meetings.

The Stormwater Commission is an appointed group created to address the myriad of stormwater issues the Village faces. It will meet annually and on as needed basis at Village Hall. This meeting is open to the public and notification is provided on our website. Public comment on this stormwater management plan take places annually at stormwater commission meetings.

The Village of Niles holds monthly Village Board meetings which are open to the public. Residents can attend these meetings and have the opportunity to address the Village Board on issues relating to storm water management and pollution prevention policies. In addition staff may also answer any questions regarding specific programs or procedures of the Village and provide guidance to the Village Board which makes the final decision on policies and programs administered by the Village. The Village of Niles also takes an active role in issues impacting the local watersheds.

Stakeholder meetings are conducted throughout the county for ongoing planning and project implementation efforts. When stakeholder groups, such as the North Branch of the Chicago River Watershed Council or the Lower Des Plaines River Watershed Council gather, the Village of Niles will participate by being represented at the stakeholder meetings.

The Village of Niles previously developed a brochure outlining what is considered an illicit discharge and identifies practices and procedures residents can use to eliminate these discharges from the Village storm sewer system. As part of this education process residents will be encouraged to report illegal dumping and suspicious discharges.

## **C. Illicit Discharge and Detection**

The Village of Niles is committed to perform activities related to the Illicit Discharge Detection and Elimination (IDDE) minimum control. The majority of these items will be related to IDDE program design. The requirements of an IDDE program include the following: Develop a storm sewer system map that shows the locations of all outfalls and the names and locations of all water of the US that receive discharges from those outfalls. Prohibit non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions. The Village of Niles proposes to inspect industrial and non-retail commercial facilities on an as-needed basis if an illicit discharge is noticed during routine operations or reported to the Village. If a

facility is inspected, one of the items inspected will be to observe chemical storage practices and manufacturing activities to ensure accidental spills are contained, reported as necessary and prevented.

Regular storm water runoff contributes pollutants to waterways, even more significant amounts of pollution result from illicit and /or inappropriate discharges and connections, direct or indirect. Illicit discharges are prohibited by ordinance and the Village of Niles will require corrective measured related to all non-storm water discharges to the system. Please refer to Niles Municipal Code Chapter 102.

- **Sec. 102-29. - Use of the public sewers.**

(a)

*Sanitary sewers.* No person shall discharge or cause to be discharged any unpolluted waters such as stormwater, groundwater, roof runoff, subsurface drainage, or cooling water to any sanitary sewer.

(b)

*Storm sewers.* Stormwater and all other unpolluted water shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the approving authority and other regulatory agencies. Unpolluted industrial cooling water or process water may be discharged, on approval of the approving authority and other regulatory agencies, to a storm sewer, combined sewer, or natural outlet.

(c)

*Prohibitions and limitations.* Except as provided in this section, no person shall discharge or cause to be discharged any of the following described waters or wastes into any public sewer:

(1)

Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid, or gas.

(2)

Any waters or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes, that could injure or interfere with any waste treatment or sludge disposal process, constitute a hazard to humans or animals, or create a public nuisance in the receiving waters of the wastewater treatment facility.

(3)

Any waters or wastes having a pH lower than 5.5, or in excess of 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the wastewater treatment facilities.

(4)

Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in public sewers or other interference with the proper operation of the wastewater treatment facilities, such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails, and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.

(5)

The following described substances, materials, waters or wastes shall be limited in discharges to sanitary sewer systems to concentrations or quantities which will not harm either the sanitary sewers, wastewater treatment process, or equipment; will not have an adverse effect on the receiving stream; or will not otherwise endanger lives, limbs, public property, or constitute a nuisance. The approving authority may set limitations more stringent than those established in this subsection if such more stringent limitations are necessary to meet the objectives of this subsection. The approving authority will give consideration to the quantity of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sanitary sewers, the wastewater treatment facility, and other pertinent factors. Wastes or wastewaters discharged to the sanitary sewers which shall not exceed the following limitations:

a.



Wastewater having a temperature higher than 150 degrees Fahrenheit (65 degrees Celsius).

b.

Wastewater containing more than 25 Niles/l of petroleum oil, nonbiodegradable cutting oils, or products of mineral oil origin.

c.

Wastewater from industrial plants containing floatable oils, fat, or grease.

d.

Any unground garbage. Garbage grinders may be connected to sanitary sewers from homes, hotels, institutions, restaurants, hospitals, catering establishments, or similar places where garbage originates from the preparation of food in kitchens for the purposes of consumption on the premises or when served by caterers.

e.

Any waters or wastes containing iron, copper, zinc, and other toxic and nonconventional pollutants to such degree that the concentration exceeds levels specified by federal, state, and local authorities.

f.

Any waters or wastes containing phenols or other taste or odor-producing substances exceeding limits which may be established by the approving authority or limits established by any federal or state statute, rule, or regulation.

g.

Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the approving authority in compliance with applicable state or federal regulations.

h.

Any waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment processes employed, or are amenable to treatment only to such degree that the wastewater treatment facility effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

i.

Any water or wastes which, by interaction with other water or wastes in the sanitary sewer system, release obnoxious gases, form suspended solids which interfere with the collection system, or create a condition deleterious to structures and treatment processes.

j.

Materials which exert or cause:

1.

Unusual BOD, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the wastewater treatment facility.

2.

Unusual volume of flow or concentration of wastes constituting slugs.

3.

Unusual concentrations of inert suspended solids, such as, but not limited to, fuller's earth, lime slurries, and lime residues or of dissolved solids, such as, but not limited to, sodium sulfate.

4.

Excessive discoloration, such as, but not limited to, dye wastes and vegetable tanning solutions.

k.

Incompatible pollutants in excess of the allowed limits as determined by local, state, and federal laws and regulations in reference to pretreatment standards developed by the Environmental Protection Agency, 40 CFR 403, as amended from time to time. Any waters or wastes discharged to the sewer containing over one-tenth Niles/l hexavalent chromium per 24-hour composite.

(d)

*NPDES permit.* No person shall cause or permit a discharge into the sanitary sewers that would cause a violation of the municipality's NPDES permit and any modifications thereof.

(e)

*Special arrangements.* No statement contained in this article shall be construed as prohibiting any special agreement between the approving authority and any person whereby a waste of unusual strength or character may be admitted to the wastewater treatment facilities, either before or after pretreatment, provided that there is no impairment of the functioning of the wastewater treatment facilities by reason of the admission of such wastes, and no extra costs are incurred by the municipality without recompense by the person; and further provided that all rates and provisions set forth in this article are recognized and adhered to.

(f)

*New connections.* New connections to the municipality's sanitary sewer system will be allowed only if there is available capacity.

(Code 1965, § 26-47)

- **Sec. 102-30. - Control of industrial wastes directed to public sewers.**

(a)

*Submission of basic data.* The approving authority may require each person who discharges or seeks to discharge industrial wastes to a public sewer to prepare and file with the approving authority, at such times as it determines, a report that shall include pertinent data relating to the quantity and characteristics of the wastes discharged to the wastewater treatment facilities. In the case of a new connection, the approving authority may require that this report be prepared prior to making the connection to the public sewers.

(b)

*Industrial discharges.* If any waters or wastes are discharged or are proposed to be discharged to the public sewers, which waters or wastes contain substances or possess the characteristics enumerated in [section 102-29](#), and which in the judgment of the approving authority have a deleterious effect upon the wastewater treatment facilities, processes, equipment, or receiving waters, or which otherwise create a hazard to life, health, or constitute a public nuisance, the approving authority may:

(1)

Reject the wastes;

(2)

Require pretreatment to an acceptable condition for discharge to the public sewers;

(3)

Require control over the quantities and rates of discharge; and/or

(4)

Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provisions of this article.

(c)

*Control manholes.* Each person discharging industrial wastes into a public sewer shall, at the discretion of the approving authority, construct and maintain one or more control manholes or access points to facilitate observation, measurement, and sampling of wastes, including sanitary sewage. Control manholes or access facilities shall be located and built in a manner acceptable to the approving authority. If measuring and/or sampling devices are to be permanently installed, they shall be of a type acceptable to the approving authority. Control manholes, access facilities, and related equipment shall be installed by the person discharging the wastes, at his expense, and shall be maintained by him so as to be in safe condition, accessible, and in proper operating condition at all times. Plans for installation of the control manholes or access facilities and related equipment shall be approved by the approving authority prior to the beginning of construction.

(d)

*Measurement of flow.* The volume of flow used for computing sewer service charges shall be the metered water consumption of the person as shown in the records of water readings maintained by the water department or utility except as noted in subsection (e) of this section.

(e)

*Metering of waste.* Devices for measuring the volume of waste discharged may be required by the approving authority if this volume cannot otherwise be determined from the metered water consumption records. Metering devices for determining the volume of waste shall be installed, owned, and maintained by the person discharging the wastewater. Following approval and installation, such meters may not be removed without the consent of the approving authority.

(f)

*Waste sampling.* Industrial wastes discharged into the public sewers shall be subject to periodic inspection and a determination of character and concentration of the wastes. The determination shall be made by the industry as often as may be deemed necessary by the approving authority. Samples shall be collected in such a manner as to be representative of the composition of the wastes. The sampling may be accomplished either manually or by the use of mechanical equipment acceptable to the approving authority. Installation, operation, and maintenance of the sampling facilities shall be the responsibility of the person discharging the wastes and shall be subject to the approval of the approving authority. Access to sampling locations shall be granted to the approving authority or its duly authorized representatives at all times. Every care shall be exercised in the collection of samples to ensure their preservation in a state comparable to that at the time the sample was taken.

(g)

*Pretreatment.* Persons discharging industrial wastes into any public sewer may be required to pretreat such wastes, if the approving authority determines pretreatment is necessary to protect the wastewater treatment facilities or prevent the discharge of incompatible pollutants. In that event, such person shall provide at his expense such pretreatment or processing facilities as may be determined necessary to render wastes acceptable for admission into the sanitary sewers.

(h)

*Grease, oil, and sand interceptors.* Grease, oil, and sand interceptors shall be provided when, in the opinion of the approving authority, they are necessary for the proper handling of liquid wastes containing floatable grease in amounts in excess of those specified in this article, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the approving authority and shall be located so as to be readily and easily accessible for cleaning and inspection. In maintaining these interceptors, the owners shall be responsible for the proper removal and disposal by appropriate means of the captured material and shall maintain records of the dates and means of disposal which are subject to review by the approving authority. Disposal of the collected materials performed by owners' personnel or currently licensed waste disposal firms must be in accordance with currently acceptable state environmental protection agency (IEPA) rules and regulations.

(i)

*Analyses.* All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this article shall be determined in accordance with the latest edition of the publication "Standard Method" and with the federal regulation of 40 CFR 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants," as amended from time to time. Sampling methods, location, time, durations, and frequencies are to be determined on an individual basis subject to approval by the approving authority. Determination of the character and concentration of the industrial wastes shall be made by the person discharging them, or the person's agent, as designated and required by the approving authority. The approving authority may also make its own analyses on the wastes, and these determinations shall be binding as a basis for sewer service charges.

(j)

*Submission of information.* Plans, specifications, and any other pertinent information relating to proposed flow equalization, pretreatment, or grease and/or sand interceptor facilities shall be submitted for review and approval of the approving authority prior to the start of their construction, if the effluent from such facilities is to be discharged into the public sewers. No construction of such facilities shall commence until the approval has been granted.

(Code 1965, § 26-48)

- **Sec. 102-65. - Same—Connection of footing drains; discharge.**

(a)

Footing drains shall be connected to sump pumps and splashed out to rear yard for further discharge into storm sewer or drainage ditches wherever possible. No footing drain or drainage tile shall be connected to the sanitary or combined sewer system.

(b)

No concentrated discharge from footing drains shall be made which adversely impacts any adjacent property.

(c)

Discharge shall occur within six to ten feet of the building to allow the ground water to be absorbed into the majority of the front or rear yard prior to being collected into a catch basin.  
(Code 1965, § 26-28; Ord. No. 2009-46, § 1, 9-23-09; Ord. No. 2011-17, § 1, 3-22-11)

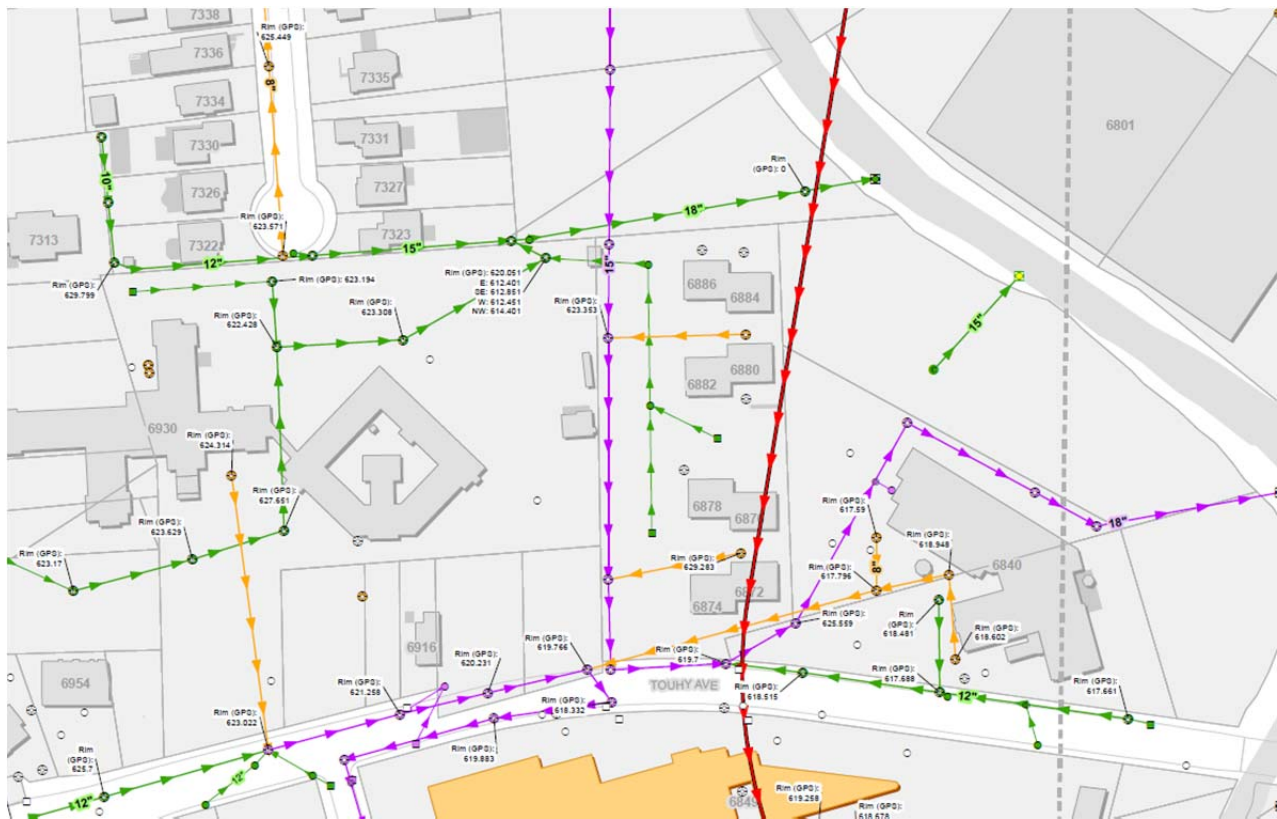
## GIS DATA

Niles has a dedicated GIS specialist who continually updates and revises the GIS Sewer Mapping System. Each outfall and respective service areas are mapped and available for public view at Public Services.

GIS maps are available for public viewing at the Niles Public Services Building. GIS data or hardcopies can be requested through the GIS department. Data request forms can be found here:

<http://www.vniles.com/224/Geographic-Information-Systems-GIS>

A sample of the atlas map data available from our GIS department is below:



The Village will conduct periodic inspections of the storm sewer outfalls in dry weather conditions for detection of non-storm water discharges and illegal dumping. A prioritization plan will be established to determine major/high priority outfalls. Major/high priority outfalls will be inspected annually. Approximately, 20% of the low priority outfalls will be inspected annually. The Water and Sewer Department has a log

on file of these repairs and clean-out efforts and is also available for review at the Public Services building.

In case of an illicit discharge detected via outfall monitoring or submission of a discharge concern, Public Services will utilize their expertise and Atlas maps to trace any illicit discharge. From point of observation, staff will track upstream and downstream, identifying all contributory areas to determine point of discharge and where it could travel within the storm sewer system. Should the discharge travel into the river, Niles would implement immediate procedures to contain the discharge and notify MWRDGC. Manhole observation is the first step taken to help identify the location of the source. Notes are taken regarding nearby buildings, yards, etc.

When necessary, dye testing, smoke testing and video inspection can be used until the source has been identified. Niles will document information obtained through the various tracing options outlined above. This will include information such as date of inspection, type of discharge, location, source, follow-up actions taken, jurisdiction and maintenance responsibilities, type of mitigation used and comments on site. In addition, if available, costs of action taken will be included in the information collected.

Within the current permit period, warning signs/symbols will be installed at each of our outfalls. These signs will be double sided and include symbols which are universal.

**Sample:**

**CAUTION STORMWATER  
OUTFALL  
# 140  
NORTH BRANCH OF THE  
CHICAGO RIVER WATERSHED**



**IF YOU HAVE ANY CONCERNS PLEASE  
CONTACT NILES PUBLIC SERVICES AT 847-  
588-7900**

Our Niles Administrative Assistant to the Public Works Director is a member of the North Branch of the Chicago River Watershed executive board. Niles has consolidated resources with MWRDGC, for example, through an agreement on the monitoring of our combined sewer overflows. Niles continues to visually monitor these, however, MWRDGC monitors via telemetry. Reports are submitted to IEPA by MWRD on behalf of Niles on a quarterly basis. Information, such as time and duration of each CSO

event, are kept on file at Public Services and can also be found on both NILES and MWRD websites.

<http://www.mwrd.org/irj/portal/anonymous/overview>

Local businesses are encouraged to participate in the Village Green Business program to support and promote environmentally sensitive practices. The Village of Niles has established itself as a committed partner to improving the environment and encouraging sustainable practices. The Village recognizes the importance of government, residents and businesses working together to reach ambitious goals of environmental sustainability. The Green Business Award program promotes environmentally-friendly business practices in Niles.

This program is designed to encourage businesses in Niles to adopt environmentally sustainable practices, such as waste reduction, conservation of water and energy efficiency.

More information is available here:

<http://www.vniles.com/740/Green-Business-Award>

#### **D. Construction Site Runoff Control**

Any development that triggers the MWRD Watershed Management Ordinance (WMO) shall require erosion and sediment control measures. The requirements of the WMO minimize construction related erosion and sediment laden runoff from polluting our waterways. The IEPA also requires NOI permits and erosion and sediment control practices on construction sites over 1 acre in separate sewer areas.

The MWRD WMO works together with the General Permit for Storm Water Discharges from Construction Activities. Please refer to article four of the WMO for regulations related to erosion and sediment control:

### ***ARTICLE 4. REQUIREMENTS FOR EROSION AND SEDIMENT CONTROL***

#### ***§ 400. Erosion and Sediment Control General Requirements***

1. *Any development requiring a Watershed Management Permit as specified in §201 shall comply with the requirements of Article 4. All co-permittees shall submit the documents specified in §302 of this Ordinance to demonstrate compliance and must develop an erosion and sediment control plan.*
2. *All developments that are subject to National Pollutant Discharge Elimination System (NPDES) Permit ILR-10 shall meet the submittal and approval requirements of ILR-10.*

3. *All developments shall incorporate erosion and sediment control practices into the initial site plan. Primary emphasis should be placed on erosion control practices as they are preventative source controls, while sediment control practices are secondary measures designed to contain eroded soil after it is in transport.*
4. *For all developments that discharge directly to Jurisdictional Waters of the U.S., the hydraulic and hydrologic design of the erosion and sediment control plan shall be designed for a storm event equal to or greater than a 25-year, 24-hour storm event.*
5. *Design criteria and specifications for erosion and sediment control practices shall be taken from the Illinois Urban Manual, as amended.*
6. *Where criteria and specifications are not provided in the Illinois Urban Manual, the design criteria and specifications shall be taken from the TGM.*
7. *Other erosion and sediment control practices that are equally effective as those in the Illinois Urban Manual may be used if either the District or an authorized municipality provides prior written approval.*
8. *Erosion and sediment control practices shall be functional before disturbances are made to the site.*

#### **§ 401. Temporary Erosion Control Requirements**

1. *Existing vegetation shall be preserved where practicable to minimize the area of soil disturbance.*
2. *Selection of appropriate erosion control practices shall consider:*
  - A. *Seasonal, topographic, and maintenance limitations;*
  - B. *The susceptibility of soils to erosion; and*
  - C. *Proximity to flood protection areas.*
9. *Temporary erosion control practices are stabilization measures that include, but are not limited to, protection of existing vegetation or establishment of new vegetation, such as seeding and sod stabilization, mulches and soil binders, geotextiles, erosion control blankets, plastic covers and mats, wind and dust control measures, stormwater conveyance channels, and velocity dissipation measures.*
10. *Areas where the existing ground cover does not consist of appropriate stabilizing vegetation in the portions of the site not under current development shall incorporate appropriate erosion control practices.*
11. *Erosion control practices shall be maintained on a year-round basis during construction and any periods of construction shutdown until permanent stabilization is achieved.*

12. *For projects involving phased construction, the portions of the site where construction activities have temporarily or permanently ceased must have stabilization practices completed within seven days, except:*
  - *Where precluded by snow cover, erosion control practices shall be completed as soon as practicable; or*
  - *Where construction activity resumes on that portion of the site within fourteen (14) days from when activities ceased.*
13. *If a soil stockpile is to remain dormant or undisturbed:*
  - *For time periods between thirty (30) days and twelve (12) months, temporary stabilization shall be completed within seven days of the formation of the stockpile; or*
  - *For time periods of more than twelve (12) months, permanent stabilization of the stockpile shall be completed within seven days of the formation of the stockpile.*
14. *Any trenches, holes, or other excavations required for utility installation shall be protected at the end of each workday.*
15. *Development sites shall incorporate appropriate erosion control practices that reduce the potential for wind erosion.*
16. *Velocity dissipation measures shall be placed at discharge locations and along the length of any outfall channel, as necessary, to provide a non-erosive velocity flow so that the natural, physical, and biological characteristics and functions of the channel are maintained and protected.*
17. *Erosion control practices shall be functional before disturbances are made to the site.*
18. *Earthen embankment side slopes shall not exceed 3:1 (horizontal to vertical) and shall be stabilized with an erosion control blanket.*

## **§ 402. Temporary Sediment Control Requirements**

3. *Selection of appropriate sediment control practices shall consider:*
  - A. *Seasonal, topographic, and maintenance limitations;*
  - B. *Amount of tributary drainage area; and*
  - C. *Proximity to flood protection areas.*
4. *Sediment control practices include, but are not limited to, silt fences, fiber rolls and berms, storm drain inlet controls such as barriers and inserts, entrance and exit controls, sediment traps, basins, and check dams. Straw bales shall not be used as sediment control practices.*



5. *Perimeter sediment control practices shall be installed and functioning prior to soil disturbance.*
6. *Sediment control practices shall be maintained on a year-round basis during construction and any periods of construction shutdown until permanent stabilization is achieved.*
7. *Sediment control practices shall intercept all runoff from disturbed areas before runoff leaves the site under the following conditions:*
  - A. *Disturbed areas draining less than one acre shall be protected by silt fence or equivalent; or*
  - B. *Disturbed areas draining more than one acre shall be protected by a silt fence and a sediment basin or equivalent, which shall be:*
    - *Sized to intercept the 2-year, 24-hour runoff volume from the tributary drainage area; and*
    - *Located at the lowest point of the disturbance.*

*All storm drain inlets draining disturbed areas shall be protected with an appropriate sediment control practice.*

8. *A stabilized construction entrance/exit shall be provided to prevent soil from being tracked or deposited onto public or private roadways. Any soil reaching a public or private roadway shall be removed immediately and transported to a controlled sediment disposal area.*
9. *If a soil stockpile is created on the site, perimeter sediment controls shall be placed around the stockpile immediately.*
10. *Construction dewatering operations shall be designed and operated so that water discharged from a site will meet State of Illinois water quality standards, as set forth in Title 35, Subtitle C, Chapter I, Part 302, Subpart B, of the Illinois Administrative Code.*

### **§ 403. Construction Site Management Requirements**

1. *All waste generated as a result of site development including, but not limited to, any building waste, concrete truck washout, chemicals, litter, sanitary waste, or any other waste shall be properly disposed of and shall be prevented from being transported offsite by either wind or water.*
2. *Flood protection areas shall be protected with a minimum of a double-row silt fence or equivalent measure.*
3. *Soil stockpiles or other construction materials shall not be located within flood protection areas or their buffers.*
4. *Temporary stream crossings used during construction shall be designed to convey a 2-year, 24-hour flood event without overtopping unless either the District or an authorized municipality approves a more frequent design event. In addition, the following conditions shall be met:*

- A. *Temporary stream crossings shall not reduce the carrying capacity of the channel;*
- B. *The entire crossing shall be designed to withstand hydrodynamic, hydrostatic, and erosive forces up to the base flood event without washing out;*
- C. *Upon completion of construction, the temporary stream crossings shall be entirely removed and the stream bed and banks restored to a stable non-erosive condition that incorporates native vegetation where appropriate; and Erosion and sediment control practices shall be implemented and maintained during installation, maintenance, and removal of temporary stream crossings.*

#### **§ 404. Permanent Erosion Control Requirements**

1. *Permanent erosion control practices shall be initiated within seven days following the completion of soil disturbing activities.*
2. *All temporary erosion and sediment control practices shall be maintained until permanent stabilization practices are achieved by at least one of the following:*
  - *The establishment of a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent on all unpaved areas and areas not covered by permanent structures; and*
  - *Installation of riprap, gabions, or other non-vegetative practices.*
3. *All temporary erosion and sediment control practices shall be removed within thirty (30) days after permanent stabilization is achieved in accordance with §404.2 of this Ordinance.*

Niles reviews Stormwater Pollution Prevention Plans (SWPPP) as part of a standard plan review. Current sites requiring a SWPPP will have a signed certification on site, as well as a copy of their permit available and their inspection reports. This information is also filed at Niles Public Services.

Developments requesting approval and a permit from the Village will provide plans to our Engineering & Community Development Department for review. Comments and recommendations are returned to developers. The plans are developed in this manner until Niles is satisfied the SWPPP goals will be met. Once Niles is satisfied with the plan content, if appropriate, we will then forward the plans to MWRD for their approval. Once the MWRD issues a permit, Niles Engineering gives final approval to the plans and a permit is then issued from the Village.

Niles Community Development Department, Engineering Department, and the MWRD work together to make certain all requirements of development plans are in compliance. The Community Development Department is almost exclusively concerned with improvements on private property. Engineering reviews grading drainage and anything related to public utilities and transportation.

The Village performs quality assurance inspection to ensure ILR10 on-site inspections occur and are documented to confirm compliance. Should a sediment and erosion control problem exist that a development refuses to correct, a 'Stop Work Order' would be presented by our Inspector.

Implementing strategies as Planning Procedures can be identified in the Development Plan Review Process described above. Whether required locally, state- wide or federally, regulatory mechanisms are in place to control construction runoff. The regulations will ensure long term operation and maintenance of controls. The Village supports developments which implement BMP site planning techniques.

As the primary stormwater management agency for the greater Chicago area, the Metropolitan Water Reclamation District of Greater Chicago adopted a Watershed Management Ordinance that establishes the minimum storm water management requirements for development in the service area. The watershed management ordinance, which will be enforced by the MWRD and/or local agencies in the service area, establishes standards for regulatory control program. The enforcement of the WMO implements BMPs under BMP numbers D.1, D.2, D.3, D.4 and D.6.

#### **E. Post Construction Runoff Control**

The Post Construction Control measure is closely tied to the measure above;

The Village of Niles will continue to provide a storm water runoff trash management program that includes a regular inspection of storm water detention/retention facilities, box culverts and bridges to identify and/or remove debris that can lead to storm sewer blockages as well as aesthetic nuisances.

The watershed management ordinance, which will be enforced by the MWRD and/or local agencies in the service area, establishes standards for regulatory control program. The enforcement of the WMO implements BMPs under BMP numbers D.1, D.2, D.3, D.4 and D.6.

The Village of Niles consideration of post construction BMP's also includes a lead by example approach. The Village has installed the Village Rain garden on a high traffic corridor (Touhy Avenue). Information on the rain garden is posted on the Village webpage, and volunteer days are routinely held to get citizens involved. The Village has also installed to Neva bio-swale to reduce pollutants from snow stockpiles. The Oak Park bio-swale was constructed in 2017.

The Village of Niles has adopted the MWRD WMO including the post construction volume control BMP's contained there-in. The Village supports developments which implement BMP site planning techniques.

## **F. Pollution Prevention/Good Housekeeping**

The Village of Niles provides street cleaning services throughout the year, weather permitting. While two street sweepers complete the primary tasks of the department, additional equipment is used to help clean various locations inaccessible to the street sweepers, such as roadway islands. We will continue to clean streets on a routine basis, decreasing the amount of pollutants and debris entering the storm sewer system.

The Village of Niles owns, operates and maintains two street sweepers for the purpose of sweeping litter and other debris from streets and curbs throughout the year, weather permitting. The street sweeping program continues into the fall.

During the Village's leaf collection season, which runs from October thru November, property owners collect their leaves where Village crews use pickup trucks equipped with leaf pushing brooms to push leaves into piles. Then loaded by end loaders into trucks, leaves are transported to the Public Services yard and reloaded into packers which transport leaves to a transfer station facility for disposal.

Niles Public Services provides training as part of an operation and maintenance program designed to prevent and reduce the discharge of pollutants from operations and properties, to the maximum extent practicable. Employee training is provided by video presentation and department specific handouts. The Village of Niles will provide employees with a reference manual which outlines practices and procedures employees should undertake during the workday to prevent the release of pollutants to the Village's storm sewer system. The Village will also conduct or participate in an annual pollution prevention seminar for employees of the Public Services Department to provide them with formal instruction on the proper handling and disposal of wastes to prevent them from entering the storm sewer system.

The Public Services facility utilizes a rain gage which is automatically monitored following rainfall events. This is installed for accurate rainfall data which will be used in conjunction with the USGS Stream gage located on the North Branch of the Chicago River.

Throughout the monitoring and cleanup of our properties, areas of interest, and the MS4s, small stream maintenance is performed as well. When there is debris identified in our waterways that our staff is unable to rectify, such as blockages or downed trees, the MWRD is contacted.

A Vactor truck/machine is used to clean catch basins and other drainage structures throughout the spring, summer and fall seasons. Cleaning catch basins is performed for the entire village on a five year cycle. The Public Works sewer section is responsible for the maintenance of sewer lines in the village. Crews are equipped with the latest technology available for sewer maintenance, such as sewer televising equipment which easily locates problem areas. Crews are able to make repairs with pinpoint accuracy in order to avoid unnecessary complications.

## **G. Monitoring, Recordkeeping and Reporting**

A monitoring and assessment program will be implemented. Niles' population is approximately 29,000 and approximately fifty-two percent (52%) of the community has separated storm sewers. Since the population served by the separate storm sewers is less than 25,000, Niles will conduct visual observation of the storm water discharge and document color, odor, clarity, solids, foam and other obvious indicators of storm water pollution.

Niles will develop an inventory of all BMPs and document in GIS. BMPs will be assessed for effectiveness based on published research for the removal of pollutants of concern.

With the assistance of the IEPA, The Village of Niles will work to see that this current Storm Water Management Plan is up-to-date on any changes to the MS4 program requirements.

Storm Water Management Plan is available for review at

Niles Public Services

6849 Touhy, Niles, IL \* 847-588-7900 \*