



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Notice of Intent for New or Renewal of General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4's)

Part I. Municipal (MS4) Contact Information

1. Name of Municipality: Village of Steger MS4 #: ILR400455
 Population (based on 2010 census): 9,570
2. MS4 Mailing Address: 3320 Lewis Avenue City: Steger, IL Zip: 60475
3. Primary MS4 Contact Person (Authorized Representative for MS4 Permit)
 Name: Dave Toepper Title: Public Infrastructure Director
 Phone: (708) 755-3888 Email Address: dtoepper@villageofsteger.org

General Information

4. Latitude and Longitude at approximate geographical center of MS4 for which you are requesting authorization to discharge:
 Latitude: 41 28 12.11 N Longitude: -87 38 11.15 W
 Degrees Minutes Seconds Degrees Minutes Seconds
5. Community Type: Village Other: _____
6. Name(s) of governmental entity(ies) in which MS4 is located:
- | City/Village | Township | County |
|-------------------|----------------------------|------------|
| Village of Steger | Bloom (Cook), Crete (Will) | Cook, Will |
7. Area of land within your MS4 in square miles: 3.53
8. Percent of MS4 served by combined sewer: 0 Percent of MS4 served by separate sewer: 100

Impaired Waters

The most recent 303(d) list may be found at <https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/303d-list.aspx>. Information regarding TMDLs may be found at <https://www2.illinois.gov/epa/topics/water-quality/watershed-management/tmdls/Pages/default.aspx>.

Name(s) of known receiving waters (in and within 3 miles of MS4 area)	Impairment listed on 303d List or TMDL?
Thorn Creek (HBD-02, HBD-04, HBD-06)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Thorn Creek (HBD-04)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Thorn Creek (HBD-06)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Deer Creek (HBDC)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Deer Creek (HBDC-02)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

9a. If impaired, which potential causes and source?

Causes: See attached 303(d) causes for each waterbody Source: Thorn Creek Stage 3 TMDL Report and 303(d)

9b. Are the receiving waterbodies included in an approved TMDL or alternate water quality management plan? Yes No

If yes, what measures to comply with the TMDL waste load allocation (WLA) are being implemented or are planned?

Note: Although not yet approved, a Stage 3 TMDL Report was drafted for the Thorn Creek Watershed in 2018.

9c. Is the MS4 community included in the chloride variance? Yes No

Program Responsibility

10. Shared Responsibility

Is your MS4 responsible for any permit requirements of another MS4 community? Yes No

Does your MS4 Community rely on another MS4 to satisfy any of the permit requirements? Yes No

11. Co-Permittee

Is your MS4 Community a Co-Permittee with another MS4 Community? Yes No

12. Other contacts responsible for implementation or coordination of Stormwater Management Program

Name: _____ Title: _____

Phone: _____ Email: _____

Area of Responsibility: _____

Part II. Best Management Practices (include shared responsibilities) which have been implemented or are proposed to be implemented in the MS4 area

A. Public Education and Outreach

Approximate date first implemented: 2021 Frequency of each BMP program: Every 5 years

Qualifying Local Programs

A.1 Distributed Paper Material- publish information/newsletters
A.4 Community Event- host a village-wide cleanup day
A.6 Other Public Education- Website informational postings

Measurable Goals (include shared responsibilities)

A.1 Distributed Paper Material

Brief Description of BMP

A.1 Distributed Paper Material- publish information/newsletters

Measurable Goals, including frequencies

Publish information/directions on used oil collection stations, pollution hotlines, etc. and mailed to Village residents annually.

Milestones

Year 1: Newsletter distributed.

Year 2: Newsletter distributed.

Year 3: Newsletter distributed.

Year 4: Newsletter distributed.

Year 5: Newsletter distributed.

Additional Info

BMP Number: _____

A.2 Speaking Engagement

A.3 Public Service Announcement

A.4 Community Event

Brief Description of BMP

A.4 Community Event- host a village-wide cleanup day

Measurable Goals, including frequencies

A Village-wide cleanup day will be held on a yearly basis, potentially in the spring. Residents and volunteers participating in the program will meet up and be given various tasks throughout the Village, including picking up garbage and debris alongside roadways. Host a household hazardous waste drive once a year for residents to encourage proper disposal of household chemicals.

Milestones

Year 1: Hold annual Village Cleanup Day and a hazardous waste drive event

Year 2: Hold annual Village Cleanup Day and a hazardous waste drive event

Year 3: Hold annual Village Cleanup Day and a hazardous waste drive event

Year 4: Hold annual Village Cleanup Day and a hazardous waste drive event

Year 5: Hold annual Village Cleanup Day and a hazardous waste drive event

Additional Info

BMP Number: A.6

Notify residents of these events through e-newsletters and postings on the Village's website.

A.5 Classroom Education Material

A.6 Other Public Education

Brief Description of BMP

A.6 Other Public Education- Website informational postings

Measurable Goals, including frequencies

Update website and/or send out e-newsletters on a bi-monthly basis to notify residents of upcoming recycling and special waste disposal events; educational information regarding storm water management, and the annual posting of the Annual Facility Inspection Report.

Milestones

Year 1: Bi-monthly website postings

Year 2: Bi-monthly website postings

Year 3: Bi-monthly website postings

Year 4: Bi-monthly website postings

Year 5: Bi-monthly website postings

Additional Info

BMP Number: _____

B. Public Participation/Involvement

Approximate date first implemented: 2021 Frequency of each BMP program: Annually

Qualifying Local Programs

B.4 Public Hearing- Monthly Village Board Meetings
B.7 Other Public Involvement- Contact Number on Village Website

Measurable Goals (include shared responsibilities)

B.2 Educational Volunteer

B.3 Stakeholder Meeting

B.4 Public Hearing

Brief Description of BMP

Village residents may attend board meetings to provide public comment on the SWMP and the overall MS4 program.

Measurable Goals, including frequencies

Residents may voice their concerns and provide feedback on the current SWMP and overall MS4 program at Village board meetings that are held monthly.

Milestones

Year 1: Village Board Meeting, held monthly

Year 2: Village Board Meeting, held monthly

Year 3: Village Board Meeting, held monthly

Year 4: Village Board Meeting, held monthly

Year 5: Village Board Meeting, held monthly

Additional Info

BMP Number: _____

[Empty text box for additional information]

- B.5 Volunteer Monitoring
- B.6. Program Involvement
- B.7 Other Public Involvement

Brief Description of BMP

B.7 Other Public Involvement- Contact Number on Village Website

Measurable Goals, including frequencies

Provide contact number on Village's website for residents to report stormwater related issues and require the public works department to follow up on all reports in a timely manner. Public works department to maintain a log of all stormwater related complaints and documentation noting when complaints/issues have been resolved and/or closed.

Milestones

Year 1: Respond to stormwater related issues within 3-5 business days of being reported.

Year 2: Respond to stormwater related issues within 3-5 business days of being reported.

Year 3: Respond to stormwater related issues within 3-5 business days of being reported.

Year 4: Respond to stormwater related issues within 3-5 business days of being reported.

Year 5: Respond to stormwater related issues within 3-5 business days of being reported.

Additional Info

BMP Number: A.4

Village-wide cleanup day. Overlap with BMP A.4. See A.4 for additional information.

C. Illicit Discharge Detection and Elimination

Approximate date first implemented: March 2021 Frequency of each BMP program: Annually

Qualifying Local Programs

- C.1 Sewer Map Preparation- Village Storm Sewer Atlas
- C.3 Detection/Elimination Prioritization Plan- Development of Detection/Elimination Program
- C.4 Illicit Discharge Tracing Procedures- Village Ordinance
- C.6 Program Evaluation and Assessment- Hydrologic and hydraulic studies
- C.7 Visual Dry Weather Screening- Storm Sewer/Structure Inspection

Measurable Goals (include shared responsibilities)

- C.1 Sewer Map Preparation

Brief Description of BMP

C.1 Sewer Map Preparation- Village Storm Sewer Atlas

Measurable Goals, including frequencies

The Village keeps and maintains a storm sewer atlas that is used to trace suspicious discharges to their source. The atlas is updated whenever the storm sewer system is modified by a Village project or by private development.

Milestones

- Year 1: The sewer atlas is updated whenever the storm sewer is modified.
- Year 2: The sewer atlas is updated whenever the storm sewer is modified.
- Year 3: The sewer atlas is updated whenever the storm sewer is modified.
- Year 4: The sewer atlas is updated whenever the storm sewer is modified.
- Year 5: The sewer atlas is updated whenever the storm sewer is modified.

Additional Info

BMP Number: _____

- C.2 Regulatory Control Program
- C.3 Detection/Elimination Prioritization Plan

Brief Description of BMP

C.3 Detection/Elimination Prioritization Plan- Development of Detection/Elimination Program

Measurable Goals, including frequencies

The Village is developing a program to detect and eliminate illicit discharges into storm drains and local waterways. Since the program is still being developed, yearly milestones are not available at this time.

Milestones

- Year 1: N/A
- Year 2: N/A
- Year 3: N/A

Year 4: N/A

Year 5: N/A

Additional Info

BMP Number: _____

[Empty text box for additional information]

C.4 Illicit Discharge Tracing Procedures

Brief Description of BMP

C.4 Illicit Discharge Tracing Procedures- Village Ordinance

Measurable Goals, including frequencies

The Village has adopted and enforces an ordinance that provides the regulatory authority to detect, investigate, and eliminate potential illicit discharges. See Section 86-165 of the Village ordinance. The Village will review and maintain annually storm water ordinances to ensure compliance with current policies.

Milestones

Year 1: Annual review or storm water ordinances

Year 2: Annual review or storm water ordinances

Year 3: Annual review or storm water ordinances

Year 4: Annual review or storm water ordinances

Year 5: Annual review or storm water ordinances

Additional Info

BMP Number: _____

[Empty text box for additional information]

C.5 Illicit Source Removal Procedures

C.6 Program Evaluation and Assessment

Brief Description of BMP

C.6 Program Evaluation and Assessment- Hydrologic and hydraulic studies

Measurable Goals, including frequencies

The Village is currently studying storm water control Village-wide. Detailed hydrologic and hydraulic studies have been undertaken to model existing conditions and determine proposed improvements that will improve storm water controls and associated runoff.

Milestones

Year 1: Continue modeling hydrologic and hydraulic studies.

Year 2: Review results of hydrologic and hydraulic studies.

Year 3: Determine proposed improvements.

Year 4:

Year 5:

Additional Info

BMP Number: _____

C.7 Visual Dry Weather Screening

Brief Description of BMP

C.7 Visual Dry Weather Screening- Storm Sewer/Structure Inspection

Measurable Goals, including frequencies

The Village inspects its storm sewers, manholes, catch basins, and inlets during dry weather periods each year. Any evidence of non-storm water discharges is documented and investigated.

Milestones

Year 1:

Year 2:

Year 3:

Year 4:

Year 5:

Additional Info

BMP Number: _____

C.8 Pollutant Field Testing

C.9 Public Notification

C.10 Other Illicit Discharge Controls

D. Construction Site Runoff Control

Approximate date first implemented: March 2021 Frequency of each BMP program: Annually

Qualifying Local Programs

D.1 Regulatory Control Program- Village Ordinance
D.4 Site Plan Review Procedures- Site plan review by Village Staff/Engineering Consultants
D.6 Site Inspection/Enforcement Procedures- Weekly inspection reports by developers and quality assurance inspections by Village or consultant staff.

D.1 Regulatory Control Program

Brief Description of BMP

Village ordinance has been developed to provide the authority to implement MS4 permit

Measurable Goals (include shared responsibilities)

requirements. The Village ordinance procedures require the review of Best Management Practices (BMP) for proposed developments prior to construction.

Measurable Goals, including frequencies

Review and make any necessary changes to the village ordinance on an annual basis to continue to meet MS4 permit requirements.

Milestones

Year 1: Review and update (if necessary) the village ordinance annually.

Year 2: Review and update (if necessary) the village ordinance annually.

Year 3: Review and update (if necessary) the village ordinance annually.

Year 4: Review and update (if necessary) the village ordinance annually.

Year 5: Review and update (if necessary) the village ordinance annually.

Additional Info

BMP Number: _____

[Empty rectangular box for additional information]

- D.2 Erosion and Sediment Control BMPs
- D.3 Other Waste Control Program
- D.4 Site Plan Review Procedures

Brief Description of BMP

D.4 Site Plan Review Procedures- Site plan review by Village Staff/Engineering Consultants

Measurable Goals, including frequencies

Review site plans for proposed developments in the village limits to ensure that Best Management Practices (BMPs) are being shown on the plan. Site reviews are undertaken by village staff and engineering consultants. The NOI is required for projects over 1 acre, which includes the preparation of a Storm Water Pollution Prevention Plan (SWPPP). Site plans will be reviewed by village and/or engineering consultant staff.

Milestones

Year 1: Review site plans for any proposed developments.

Year 2: Review site plans for any proposed developments.

Year 3: Review site plans for any proposed developments.

Year 4: Review site plans for any proposed developments.

Year 5: Review site plans for any proposed developments.

Additional Info

BMP Number: _____

[Empty rectangular box for additional information]

D.5 Public Information Handling Procedures

D.6 Site Inspection/Enforcement Procedures

Brief Description of BMP

D.6 Site Inspection/Enforcement Procedures- Weekly inspection reports by developers and quality assurance inspections by Village or consultant staff.

Measurable Goals, including frequencies

Weekly inspection reports are required from developers of active projects. Periodic and unannounced audit inspections are conducted by Village or consultant staff.

Milestones

Year 1: Conduct audit inspections of projects under construction in the village limits to ensure compliance of the NPDES permit on an annual basis.

Year 2: Conduct audit inspections of projects under construction in the village limits to ensure compliance of the NPDES permit on an annual basis.

Year 3: Conduct audit inspections of projects under construction in the village limits to ensure compliance of the NPDES permit on an annual basis.

Year 4: Conduct audit inspections of projects under construction in the village limits to ensure compliance of the NPDES permit on an annual basis.

Year 5: Conduct audit inspections of projects under construction in the village limits to ensure compliance of the NPDES permit on an annual basis.

Additional Info

BMP Number: _____

D.7 Other Construction Site Runoff Controls

E. Post-Construction Runoff Control

Approximate date first implemented: March 2021 Frequency of each BMP program: Annually

Qualifying Local Programs

E.3 Long Term O & M Procedures- Village storm sewer pipe and structure maintenance
E.4 Pre-Construction Review of BMP Designs- Village and/or consultant review of site plan BMPs
E.5 Site Inspections During Construction- Weekly contractor inspections and village quality assurance inspections
E.6 Post-Construction Inspections-Village and/or consultant inspections

Measurable Goals (include shared responsibilities)

E.1 Community Control Strategy

E.2 Regulatory Control Program

E.3 Long Term O & M Procedures

Brief Description of BMP

E.3 Long Term O & M Procedures- Village storm sewer pipe and structure maintenance

Measurable Goals, including frequencies

Post-construction, the Village continues routine operation and maintenance inspections of storm water systems on an annual basis.

Milestones

- Year 1: The village will inspect storm sewer pipes and structures on an annual basis. Structures and pipes will be cleaned and vacuumed on an as needed basis.
- Year 2: The village will inspect storm sewer pipes and structures on an annual basis. Structures and pipes will be cleaned and vacuumed on an as needed basis.
- Year 3: The village will inspect storm sewer pipes and structures on an annual basis. Structures and pipes will be cleaned and vacuumed on an as needed basis.
- Year 4: The village will inspect storm sewer pipes and structures on an annual basis. Structures and pipes will be cleaned and vacuumed on an as needed basis.
- Year 5: The village will inspect storm sewer pipes and structures on an annual basis. Structures and pipes will be cleaned and vacuumed on an as needed basis.

Additional Info

BMP Number: _____

E.4 Pre-Construction Review of BMP Designs

Brief Description of BMP

E.4 Pre-Construction Review of BMP Designs- Village and/or consultant review of site plan BMPs

Measurable Goals, including frequencies

Village staff and or consultant engineering staff will review site plan BMPs whenever site plans are submitted to the Village for review.

Milestones

- Year 1: BMPs will be reviewed for proposed developments whenever site plans are submitted to the village for review.
- Year 2: BMPs will be reviewed for proposed developments whenever site plans are submitted to the village for review.
- Year 3: BMPs will be reviewed for proposed developments whenever site plans are submitted to the village for review.
- Year 4: BMPs will be reviewed for proposed developments whenever site plans are submitted to the village for review.
- Year 5: BMPs will be reviewed for proposed developments whenever site plans are submitted to the village for review.

Additional Info

BMP Number: _____

E.5 Site Inspections During Construction

Brief Description of BMP

E.5 Site Inspections During Construction- Weekly contractor inspections and village quality assurance inspections

Measurable Goals, including frequencies

The Village and consultant staff perform site inspections throughout the entirety of construction activities. Any active construction sites within the village limits will be inspected on at least an annual basis to ensure compliance with the MS4 permit.

Milestones

- Year 1: Perform annual audit inspection of all open construction sites
- Year 2: Perform annual audit inspection of all open construction sites.
- Year 3: Perform annual audit inspection of all open construction sites.
- Year 4: Perform annual audit inspection of all open construction sites
- Year 5: Perform annual audit inspection of all open construction sites

Additional Info

BMP Number: _____

E.6 Post-Construction Inspections

Brief Description of BMP

E.6 Post-Construction Inspections-Village and/or consultant inspections

Measurable Goals, including frequencies

Post-construction, the Village and consultant staff continue inspection of completed construction sites to assure that storm water controls are functioning as intended. A post-construction inspection will be conducted within one year after construction has been completed for a proposed development.

Milestones

- Year 1: Perform post-construction inspection on any projects that have been completed within the last year.
- Year 2: Perform post-construction inspection on any projects that have been completed within the last year.
- Year 3: Perform post-construction inspection on any projects that have been completed within the last year.
- Year 4: Perform post-construction inspection on any projects that have been completed within the last year.
- Year 5: Perform post-construction inspection on any projects that have been completed within the last year.

Additional Info

BMP Number: _____

E.7 Other Post-Construction Runoff Controls

F. Pollution Prevention/Good Housekeeping

Approximate date first implemented: March 2021 Frequency of each BMP program: Annually

Qualifying Local Programs

F.1 Employee Training Program- Municipal operations and safety protocol
F.3 Municipal Operations Storm Water Control- Street sweeping and storm water control facility inspections
F.4 Municipal Operations Waste Disposal- Maintenance records and logs of Village vehicles and equipment
F.6 Other Municipal Operations Controls- Road Salt storage and application

Measurable Goals (include shared responsibilities)

F.1 Employee Training Program

Brief Description of BMP

F.1 Employee Training Program- Municipal operations and safety protocol

Measurable Goals, including frequencies

The Village implements an operation and maintenance program designed to prevent or reduce the discharge of pollutants to the storm sewer system. The Public Works Department conducts regular employee training for municipal operations and safety protocol. Training is provided to educate staff on pollution prevention and reduction of storm water pollution from municipal activities. The training addresses activities such as park and open space maintenance, fleet and building maintenance, operation of storage yards, snow disposal, new construction and land disturbance, and storm system maintenance. The training also addresses the hazard associated with illegal discharges and improper disposal of waste.

Milestones

Year 1: Conduct training programs on a quarterly basis.

Year 2: Conduct training programs on a quarterly basis.

Year 3: Conduct training programs on a quarterly basis.

Year 4: Conduct training programs on a quarterly basis.

Year 5: Conduct training programs on a quarterly basis.

Additional Info

BMP Number: _____

[Empty box for additional information]

F.2 Inspection and Maintenance Program

F.3 Municipal Operations Storm Water Control

Brief Description of BMP

F.3 Municipal Operations Storm Water Control- Street sweeping and storm water control facility inspections

Measurable Goals, including frequencies

The Village performs street sweeping to clean up roadways and keep dirt, debris, and other pollutants from entering the storm sewer system. The Village performs regular inspection and routine maintenance of streets, storm sewer, ditches, creeks, and storm water control facilities.

Milestones

Year 1: Perform annual inspection of storm water facilities. Perform street sweeping of village streets on an as needed basis, but at least once annually.

Year 2: Perform annual inspection of storm water facilities. Perform street sweeping of village streets on an as needed basis, but at least once annually.

Year 3: Perform annual inspection of storm water facilities. Perform street sweeping of village streets on an as needed basis, but at least once annually.

Year 4: Perform annual inspection of storm water facilities. Perform street sweeping of village streets on an as needed basis, but at least once annually.

Year 5: Perform annual inspection of storm water facilities. Perform street sweeping of village streets on an as needed basis, but at least once annually.

Additional Info

BMP Number: _____

F.4 Municipal Operations Waste Disposal

Brief Description of BMP

F.4 Municipal Operations Waste Disposal- Maintenance records and logs of Village vehicles and equipment

Measurable Goals, including frequencies

The Village keeps maintenance records and logs for maintenance of Village vehicles and equipment, including disposal of associated hazardous materials.

Milestones

Year 1: Update vehicle maintenance logs whenever vehicle maintenance is performed throughout the year.

Year 2: Update vehicle maintenance logs whenever vehicle maintenance is performed throughout the year.

Year 3: Update vehicle maintenance logs whenever vehicle maintenance is performed throughout the year.

Year 4: Update vehicle maintenance logs whenever vehicle maintenance is performed throughout the year.

Year 5: Update vehicle maintenance logs whenever vehicle maintenance is performed throughout the year.

Additional Info

BMP Number: _____

F.5 Flood Management/Assess Guidelines

F.6 Other Municipal Operations Controls

Brief Description of BMP

F.6 Other Municipal Operations Controls- Road Salt storage and application

Measurable Goals, including frequencies

Road salt is stored in a covered permanent structure to protect it from precipitation. The Village roadway de-icing operators receive specific training on best management practices for snow and ice removal, and use only the amount of deicing chemical needed for each weather event.

Milestones

Year 1: Ensure that all new roadway de-icing operators receive required training on BMPs for snow and ice removal.

Year 2: Ensure that all new roadway de-icing operators receive required training on BMPs for snow and ice removal.

Year 3: Ensure that all new roadway de-icing operators receive required training on BMPs for snow and ice removal.

Year 4: Ensure that all new roadway de-icing operators receive required training on BMPs for snow and ice removal.

Year 5:

Additional Info

BMP Number: _____

BMPs Currently Implemented and Proposed

BMP Number	Location

Approximate Pollutant Reduction Resulting from each BMP

BMP Number	Pollutant	Reduction

Instream Monitoring Program

Is there an instream monitoring program currently in place? Yes No

Is an instream monitoring program currently being proposed? Yes No

Sediment Monitoring

Is sediment monitoring currently taking place? Yes No

Sample Monitoring of Outfalls

Is sample monitoring of outfalls currently taking place? Yes No

Other Monitoring

Describe other types of monitoring implemented or proposed to evaluate the BMP effectiveness or water quality impact of stormwater.

Part III. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fines and imprisonment.

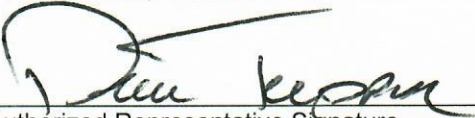
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony (415 ILCS 5/44 (h)).

Dave Toepper

Public Infrastructure Director

Authorized Representative Name

Title



3/16/21

Authorized Representative Signature

Date

You may complete this form online and save a copy locally before printing and signing the form. It should then be sent to:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Attn: Permit Section
P.O. Box 19276
1021 North Grand Avenue East
Springfield, IL 62794-9276

Information required by this form must be provided to comply with 415 ILCS 5/39 (2000). Failure to do so may prevent this form from being processed and could result in your application being denied.

the LC, the WLA was set equal to the LC at that flow level and the resulting nonpoint source (LA) allowable loads are zero.

MS4 Discharges

MS4s represent runoff from municipal areas with separate stormwater sewer systems. MS4s are regulated discharges and therefore, are allocated through WLAs, rather than LAs. WLAs for MS4s are calculated by first determining the total area within a municipality’s boundaries that lies within the target watershed using GIS analyses and geographic data for municipal boundaries from the U.S. Census Department (2000).

The proportion of total MS4 area to total watershed area was then calculated for each sub-watershed. This proportion was then used to migrate loads from previously calculated LAs for overland runoff to WLAs for MS4 areas in each flow category. This process effectively transfers MS4 load allocations for overland runoff from non-regulated sources described as LAs to the WLA for regulated sources of contaminants. As MS4 allocations are tied to overland runoff in urban areas, they are therefore related to higher flow conditions in the stream. As a result, the WLAs for MS4s are only applied to the upper 50% of flow categories (mid-range to high flows) for each segment. The total MS4 load allocations for fecal coliform that are applied to the proportion of each municipality within each impaired reach’s subbasin are shown for each applicable flow category in Tables 2-5 through 2-12.

Table 2-5: WLA (mil col/Day) for MS4 Areas in Thorn Creek Segment HBD-02

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Chicago Heights	ILR400174	6,100	178,008	72,848	47,627	34,116	26,977	-	-	-	-	-
Country Club Hills	ILR400177	173	5,066	2,073	1,355	971	768	-	-	-	-	-
Crete	ILR400321	3,920	114,391	46,813	30,606	21,924	17,336	-	-	-	-	-
Flossmoor	ILR400337	1,697	49,522	20,266	13,250	9,491	7,505	-	-	-	-	-
Ford Heights	ILR400191	1,110	32,400	13,259	8,669	6,210	4,910	-	-	-	-	-
Frankfort	ILR400194	70	2,050	839	548	393	311	-	-	-	-	-
Glenwood	ILR400344	1,746	50,951	20,851	13,632	9,765	7,722	-	-	-	-	-
Homewood	ILR400357	1,059	30,925	12,656	8,274	5,927	4,687	-	-	-	-	-
Lansing	ILR400373	1,835	53,575	21,925	14,334	10,268	8,119	-	-	-	-	-
Lynwood	ILR400380	2,990	87,277	35,717	23,352	16,727	13,227	-	-	-	-	-
Matteson	ILR400383	4,458	130,095	53,240	34,808	24,934	19,716	-	-	-	-	-
Monee	ILG870335	497	14,522	5,943	3,885	2,783	2,201	-	-	-	-	-
Olympia Fields	ILR400413	1,841	53,733	21,989	14,377	10,298	8,143	-	-	-	-	-
Park Forest	ILR400421	3,141	91,670	37,515	24,527	17,569	13,893	-	-	-	-	-
Sauk Village	ILR400441	2,445	71,368	29,206	19,095	13,678	10,816	-	-	-	-	-
South Chicago Heights	ILR400449	1,009	29,466	12,059	7,884	5,647	4,466	-	-	-	-	-
Steger	ILR400455	2,238	65,312	26,728	17,475	12,517	9,898	-	-	-	-	-
Thornton	ILR400459	949	27,699	11,336	7,411	5,309	4,198	-	-	-	-	-
University Park	ILR400250	4,622	134,886	55,200	36,090	25,852	20,442	-	-	-	-	-

Table 2-6: WLA (mil col/Day) for MS4 Areas in Thorn Creek Segment HBD-03

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist				Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%	
Monee	ILG870335	407	18,996	7,087	4,062	2,550	1,793	-	-	-	-	-	
Park Forest	ILR400421	1,054	49,214	18,360	10,523	6,605	4,646	-	-	-	-	-	
University Park	ILR400250	2,471	115,319	43,020	24,658	15,477	10,887	-	-	-	-	-	

Table 2-7: WLA (mil col/Day) for MS4 Areas in Thorn Creek Segment HBD-04

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist				Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%	
Chicago Heights	ILR400174	6,100	183,818	83,043	52,070	36,808	28,280	-	-	-	-	-	
Country Club Hills	ILR400177	173	5,231	2,363	1,482	1,047	805	-	-	-	-	-	
Crete	ILR400321	3,920	118,125	53,365	33,461	23,654	18,173	-	-	-	-	-	
Flossmoor	ILR400337	1,697	51,139	23,103	14,486	10,240	7,867	-	-	-	-	-	
Ford Heights	ILR400191	1,110	33,458	15,115	9,478	6,700	5,147	-	-	-	-	-	
Frankfort	ILR400194	70	2,117	956	600	424	326	-	-	-	-	-	
Glenwood	ILR400344	1,746	52,615	23,770	14,904	10,536	8,095	-	-	-	-	-	
Homewood	ILR400357	1,059	31,934	14,427	9,046	6,395	4,913	-	-	-	-	-	
Lansing	ILR400373	2,060	62,090	28,050	17,588	12,433	9,552	-	-	-	-	-	
Lynwood	ILR400380	2,990	90,126	40,716	25,530	18,047	13,866	-	-	-	-	-	
Matteson	ILR400383	4,458	134,342	60,692	38,055	26,901	20,668	-	-	-	-	-	
Monee	ILG870335	497	14,996	6,775	4,248	3,003	2,307	-	-	-	-	-	
Olympia Fields	ILR400413	1,841	55,487	25,067	15,718	11,111	8,536	-	-	-	-	-	
Park Forest	ILR400421	3,141	94,663	42,766	26,815	18,956	14,563	-	-	-	-	-	
Sauk Village	ILR400441	2,445	73,697	33,294	20,876	14,757	11,338	-	-	-	-	-	
South Chicago Heights	ILR400449	1,009	30,428	13,746	8,619	6,093	4,681	-	-	-	-	-	
South Holland	ILR400451	908	27,389	12,374	7,759	5,485	4,214	-	-	-	-	-	
Steger	ILR400455	2,238	67,443	30,469	19,105	13,505	10,376	-	-	-	-	-	
Thornton	ILR400459	1,154	34,791	15,718	9,855	6,967	5,353	-	-	-	-	-	
University Park	ILR400250	4,622	139,288	62,926	39,457	27,892	21,429	-	-	-	-	-	

Table 2-8: WLA (mil col/Day) for MS4 Areas in Thorn Creek Segment HBD-05

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Chicago Heights	ILR400174	2,472	110,200	41,359	23,369	14,949	11,121	-	-	-	-	-
Matteson	ILR400383	52	2,318	870	492	314	234	-	-	-	-	-
Monee	ILG870335	407	18,144	6,809	3,848	2,461	1,831	-	-	-	-	-
Olympia Fields	ILR400413	75	3,330	1,250	706	452	336	-	-	-	-	-
Park Forest	ILR400421	2,817	125,564	47,125	26,627	17,033	12,672	-	-	-	-	-
South Chicago Heights	ILR400449	349	15,576	5,846	3,303	2,113	1,572	-	-	-	-	-
University Park	ILR400250	2,559	114,041	42,800	24,184	15,470	11,509	-	-	-	-	-

Table 2-9: WLA (mil col/Day) for MS4 Areas in Thorn Creek Segment HBD-06

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20% ¹	20 - 30% ¹	30 - 40% ¹	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Chicago Heights	ILR400174	4,925	92,496	0	0	0	6,270	-	-	-	-	-
Flossmoor	ILR400337	55	1,040	0	0	0	71	-	-	-	-	-
Glenwood	ILR400344	30	555	0	0	0	38	-	-	-	-	-
Matteson	ILR400383	52	977	0	0	0	66	-	-	-	-	-
Monee	ILG870335	407	7,645	0	0	0	518	-	-	-	-	-
Olympia Fields	ILR400413	75	1,408	0	0	0	95	-	-	-	-	-
Park Forest	ILR400421	2,817	52,911	0	0	0	3,587	-	-	-	-	-
South Chicago Heights	ILR400449	847	15,906	0	0	0	1,078	-	-	-	-	-
Steger	ILR400455	801	15,037	0	0	0	1,019	-	-	-	-	-
University Park	ILR400250	2,559	48,055	0	0	0	3,257	-	-	-	-	-

¹All available WLA at these flow levels previously allocated to a point source discharge (Thorn Creek Basin Sanitary District STP).

Table 2-10: WLA (mil col/Day) for MS4 Areas in Butterfield Creek Segment HBDB-03

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Chicago Heights	ILR400174	399	6,622	3,516	1,828	1,192	830	-	-	-	-	-
Country Club Hills	ILR400177	174	2,883	1,531	796	519	361	-	-	-	-	-
Flossmoor	ILR400337	1,642	27,269	14,476	7,527	4,907	3,417	-	-	-	-	-
Frankfort	ILR400194	70	1,167	619	322	210	146	-	-	-	-	-
Glenwood	ILR400344	448	7,440	3,949	2,053	1,339	932	-	-	-	-	-
Homewood	ILR400357	937	15,561	8,261	4,295	2,800	1,950	-	-	-	-	-
Matteson	ILR400383	4,406	73,189	38,853	20,201	13,171	9,171	-	-	-	-	-
Olympia Fields	ILR400413	1,766	29,341	15,576	8,098	5,280	3,677	-	-	-	-	-
Park Forest	ILR400421	324	5,382	2,857	1,486	969	674	-	-	-	-	-
University Park	ILR400250	896	14,877	7,898	4,106	2,677	1,864	-	-	-	-	-

Table 2-11: WLA (mil col/Day) for MS4 Areas in Deer Creek Segment HBDC

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20% ¹	20 - 30% ¹	30 - 40% ¹	40 - 50% ¹	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Crete	ILR400321	805	12,212	0	0	0	0	-	-	-	-	-
Monee	ILG870335	91	1,374	0	0	0	0	-	-	-	-	-
Steger	ILR400455	271	4,114	0	0	0	0	-	-	-	-	-
University Park	ILR400250	942	14,294	0	0	0	0	-	-	-	-	-

¹ All available WLA at these flow levels previously allocated to a point source discharge (Aqua Illinois – University Park WWTF).

Table 2-12: WLA (mil col/Day) for MS4 Areas in Deer Creek Segment HBDC-02

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Chicago Heights	ILR400174	776	19,262	6,421	3,596	2,337	1,875	-	-	-	-	-
Crete	ILR400321	3,830	95,063	31,688	17,745	11,534	9,253	-	-	-	-	-
Ford Heights	ILR400191	930	23,075	7,692	4,307	2,800	2,246	-	-	-	-	-
Glenwood	ILR400344	335	8,325	2,775	1,554	1,010	810	-	-	-	-	-
Lynwood	ILR400380	220	5,460	1,820	1,019	662	531	-	-	-	-	-
Monee	ILG870335	91	2,247	749	419	273	219	-	-	-	-	-
Sauk Village	ILR400441	703	17,436	5,812	3,255	2,116	1,697	-	-	-	-	-
South Chicago Heights	ILR400449	163	4,040	1,347	754	490	393	-	-	-	-	-
Steger	ILR400455	1,400	34,753	11,584	6,487	4,217	3,383	-	-	-	-	-
University Park	ILR400250	1,168	28,984	9,661	5,410	3,517	2,821	-	-	-	-	-

LAs. Chloride WLAs for MS4s were calculated in a manner consistent with the calculations performed for fecal coliform TMDLs (see **section 2.3.1.4**). The total MS4 load allocations for chloride that are applied to each municipality within each impaired reach's subbasin are shown for each applicable flow category in **Table 2-23**.

Table 2-23: WLA (lbs/Day) for MS4 Areas in Thorn Creek Segment HBD-04

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist				Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%	
Chicago Heights	ILR400174	6,100	88,225	24,661	8,852	2,172	7,430	-	-	-	-	-	
Country Club Hills	ILR400177	174	2,425	702	252	62	211	-	-	-	-	-	
Crete	ILR400321	3,920	54,767	15,847	5,688	1,396	4,775	-	-	-	-	-	
Flossmoor	ILR400337	1,697	23,710	6,861	2,463	604	2,067	-	-	-	-	-	
Ford Heights	ILR400191	1,110	15,512	4,489	1,611	395	1,352	-	-	-	-	-	
Frankfort	ILR400194	70	981	284	102	25	86	-	-	-	-	-	
Glenwood	ILR400344	1,746	24,394	7,059	2,534	622	2,127	-	-	-	-	-	
Homewood	ILR400357	1,060	14,806	4,284	1,538	377	1,291	-	-	-	-	-	
Lansing	ILR400373	2,060	28,787	8,330	2,990	734	2,510	-	-	-	-	-	
Lynwood	ILR400380	2,991	41,786	12,091	4,340	1,065	3,643	-	-	-	-	-	
Matteson	ILR400383	4,458	62,286	18,023	6,469	1,587	5,430	-	-	-	-	-	
Monee	ILG870335	498	6,953	2,012	722	177	606	-	-	-	-	-	
Olympia Fields	ILR400413	1,841	25,726	7,444	2,672	656	2,243	-	-	-	-	-	
Park Forest	ILR400421	3,141	43,889	12,700	4,558	1,118	3,826	-	-	-	-	-	
Sauk Village	ILR400441	2,446	34,169	9,887	3,549	871	2,979	-	-	-	-	-	
South Chicago Heights	ILR400449	1,010	14,108	4,082	1,465	359	1,230	-	-	-	-	-	
South Holland	ILR400451	909	12,699	3,675	1,319	324	1,107	-	-	-	-	-	
Steger	ILR400455	2,238	31,270	9,048	3,248	797	2,726	-	-	-	-	-	
Thornton	ILR400459	1,155	16,131	4,668	1,675	411	1,406	-	-	-	-	-	
University Park	ILR400250	4,622	64,580	18,687	6,707	1,646	5,630	-	-	-	-	-	

2.3.2.5 Reserve Capacity

In the case of the chloride TMDL, an explicit RC was not included in the TMDL calculations due to the lack of point source loading of chloride from facilities directly impacted by population change believed to be occurring in the watershed. Non-point loads of chloride are not expected to increase as a result of typical levels of population growth anticipated within this watershed.

2.3.2.6 Load Allocation and TMDL Summary

Table 2-24 shows the summary of the chloride TMDL for segment HBD-04. This segment has one tributary point source discharge, Thorn Creek Basin Sanitary District STP (IL0027723) that was assigned a WLA for chloride discharges to this segment. This discharger's permitted design

41 (ILG840199) is a general construction permit within the subbasin, but is unlikely to discharge elevated zinc concentrations and has no zinc permit limit.

Aqua Illinois – University Park WWTF’s design maximum flow (DMF) was used to calculate the WLA during the highest 40% of in-stream flow conditions while the facility’s design average flow (DAF) was used to calculate the WLA at lower stream flow levels (see discussion in **Section 2.3.1.5**). The use of the DMF in place of the more common DAF at higher flow conditions in the WLA calculations serves as an additional conservative measure in the TMDL calculations. This methodology essentially allows for the facility to use the entire treatment and discharge capacity available while still remaining within the WLA.

The DAFs and DMFs were multiplied by Aqua Illinois – University Park WWTF’s monthly average concentration limit for zinc of 0.079 mg/L to establish the WLA for that facility, shown in **Table 2-26**.

Table 2-26: Zinc WLAs for NPDES Permitted Point Sources in the Thorn Creek Watershed

Facility	NPDES Permit Number	Applicable Stream Segment	DAF (MGD)	WLA-DAF (lbs/Day)	DMF (MGD)	WLA-DMF (lbs/Day)
Aqua Illinois – University Park WWTF	IL0024473	HBD-06	2.43	1.60	6.44	4.2

MS4 Discharges

MS4 discharges represent runoff from municipal areas with separate stormwater sewer systems. MS4 discharges are regulated discharges and therefore, are allocated through WLAs, rather than LAs. Zinc WLAs for MS4s were calculated in a manner consistent with the calculations performed for fecal coliform TMDLs (see **section 2.3.1.4**). The total MS4 load allocations for zinc that are applied to each municipality within the impaired reach’s subbasin are shown for each applicable flow category in **Table 2-27**.

Table 2-27: WLA (lbs/Day) for MS4 Areas in Thorn Creek Segment HBD-02

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist			Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%
Chicago Heights	ILR400174	6,100	18.02	6.96	4.18	2.89	2.43	-	-	-	-	-
Country Club Hills	ILR400177	174	0.51	0.20	0.12	0.08	0.07	-	-	-	-	-
Crete	ILR400321	3,920	11.58	4.48	2.69	1.86	1.56	-	-	-	-	-
Flossmoor	ILR400337	1,697	5.01	1.94	1.16	0.80	0.68	-	-	-	-	-
Ford Heights	ILR400191	1,110	3.28	1.27	0.76	0.53	0.44	-	-	-	-	-
Frankfort	ILR400194	70	0.21	0.08	0.05	0.03	0.03	-	-	-	-	-
Glenwood	ILR400344	1,746	5.16	1.99	1.20	0.83	0.70	-	-	-	-	-
Homewood	ILR400357	1,060	3.13	1.21	0.73	0.50	0.42	-	-	-	-	-
Lansing	ILR400373	1,836	5.42	2.10	1.26	0.87	0.73	-	-	-	-	-
Lynwood	ILR400380	2,991	8.83	3.41	2.05	1.42	1.19	-	-	-	-	-
Matteson	ILR400383	4,458	13.17	5.09	3.05	2.11	1.78	-	-	-	-	-
Monee	ILG870335	498	1.47	0.57	0.34	0.24	0.20	-	-	-	-	-

Municipality	NPDES ID	MS4 Area in Watershed (acres)	High	Moist				Mid-Range	Dry				Low Flow
			0 - 10%	10 - 20%	20 - 30%	30 - 40%	40 - 50%	50 - 60%	60 - 70%	70 - 80%	80 - 90%	90 - 100%	
Olympia Fields	ILR400413	1,841	5.44	2.10	1.26	0.87	0.73	-	-	-	-	-	
Park Forest	ILR400421	3,141	9.28	3.59	2.15	1.49	1.25	-	-	-	-	-	
Sauk Village	ILR400441	2,446	7.22	2.79	1.68	1.16	0.97	-	-	-	-	-	
South Chicago Heights	ILR400449	1,010	2.98	1.15	0.69	0.48	0.40	-	-	-	-	-	
Steger	ILR400455	2,238	6.61	2.56	1.53	1.06	0.89	-	-	-	-	-	
Thornton	ILR400459	949	2.80	1.08	0.65	0.45	0.38	-	-	-	-	-	
University Park	ILR400250	4,622	13.65	5.28	3.17	2.19	1.84	-	-	-	-	-	

2.3.3.5 Reserve Capacity

An explicit RC was not included in the TMDL calculations for zinc due to the lack of point source loading of this constituent from facilities directly impacted by changes to population or increased development within the watershed. Non-point loads of zinc are also not expected to increase as a result of the population growth anticipated for this watershed.

2.3.3.6 Load Allocations and TMDL Summaries

Table 2-28 shows the summary of the zinc TMDL for segment HBD-02, along with the percent reductions required at various flow levels. This segment has one tributary point source discharge, Aqua Illinois – University Park WWTF (IL0024473) that was assigned a WLA for zinc discharges to this segment. This discharger’s permitted design average and design maximum flows were used along with the 93 µg/L permitted effluent limit to calculate the WLAs. The remainder of the WLA applied to this segment’s TMDL are related to the MS4 areas as discussed in **Section 2.3.3.4**. Under low flow and dry conditions, the calculated WLA does not include MS4s as these sources are precipitation and flow dependent.

Table 2-28: Zinc TMDL for Thorn Creek (HBD-02)

Zone	Flow Exceedance Range (%)	LC (lbs/day)	LA (lbs/day)	WLA (lbs/day)	MOS - 10% of LC (lbs/day)	Actual Load ¹ (lbs/day)	Percent Reduction Needed (%)
High	0 - 10	222	72	128	22.22	335	34%
Moist	10 - 20	89	28	52	8.88	126	30%
	20 - 30	55	17	33	5.52	63	12%
	30 - 40	40	12	24	3.96	42	6%
Mid-Range	40 - 50	31	10	18	3.11	37	16%
Dry	50 - 60	25	21	1.60	2.46	28	13%
	60 - 70	21	17	1.60	2.06	24	13%
	70 - 80	17	14	1.60	1.71	19	10%
	80 - 90	15	12	1.60	1.51	17	10%
Low Flow	90 - 100	12	9	1.60	1.20	14	14%

¹ Actual Load was calculated using the 90th percentile of observed zinc concentrations in a given flow range (USEPA 2007)

Table 2-30 Ammonia-N WLAs for MS4s Permittees in the Thorn Creek Watershed

MS4 Permittee	NPDES ID	Ammonia-N WLA-DAF (lbs/day)						Total Ammonia-N MS4 WLA (lbs/day)
		HBD-02	HBD-03	HBD-04	HBD-06	HBDA-01	HBDC-02	
Chicago Heights	ILR400174	56.6	-	68.6	85.0	-	1.86	212
Country Club Hills	ILR400177	1.61	-	1.95	-	-	-	3.56
Crete	ILR400321	36.4	-	44.1	-	0.05	9.16	89.7
Flossmoor	ILR400337	15.8	-	19.1	0.96	-	-	35.8
Ford Heights	ILR400191	10.3	-	12.5	-	0.11	2.22	25.1
Frankfort	ILR400194	0.65	-	0.79	-	-	-	1.44
Glenwood	ILR400344	16.2	-	19.6	0.51	0.25	0.80	37.4
Homewood	ILR400357	9.84	-	11.9	-	-	-	21.7
Lansing	ILR400373	17.0	-	23.2	-	1.09	-	41.3
Lynwood	ILR400380	27.8	-	33.6	-	1.65	0.53	63.5
Matteson	ILR400383	41.4	-	50.1	0.90	-	-	92.4
Monee	ILG870335	4.62	11.6	5.59	7.03	-	0.22	29.0
Olympia Fields	ILR400413	17.1	-	20.7	1.29	-	-	39.1
Park Forest	ILR400421	29.2	30.0	35.3	48.6	-	-	143
Sauk Village	ILR400441	22.7	-	27.5	0.00	1.03	1.68	52.9
South Chicago Heights	ILR400449	9.37	0.04	11.3	14.6	-	0.39	35.8
South Holland	ILR400451	-	-	10.2	0.00	-	-	10.2
Steger	ILR400455	20.8	-	25.2	13.8	0.02	3.35	63.1
Thornton	ILR400459	8.81	-	13.0	-	-	-	21.8
University Park	ILR400250	42.9	70.3	51.9	44.2	-	2.79	212
Total		389	112	486	217	4.2	23.0	1,231

2.3.5.5 Reserve Capacity

An explicit RC was included in the TMDL calculations for DO to account for the projected population growth in the watershed. Due to the considerable uncertainty in the impact to loads of the constituents related to DO as a result of projected changes to population or increased development within the watershed, an RC of 10% of the overall LC was selected and applied to each constituent for each impaired reach. The 10% figure roughly equates to the projected population growth within the watershed over the next 10 years (CMAP 2010).

2.3.5.6 Load Allocations and TMDL Summary

Tables 2-31, 2-32, 2-33, 2-34, 2-35, and 2-36 show a summary of the DO TMDLs for Thorn Creek segments HBD-03, HBD-06 and HBD-02, HBD-04, Deer Creek segment HBDC-02, and North Creek segment HBDA-01, respectively. These segments have no point source discharges assigned a WLA. The WLAs applied to these segments' TMDLs are related to the MS4 areas as discussed in Section 2.3.5.4. Phosphorus and overall phosphorus reductions are included without explicit WLAs as a result of the lack of an applicable water quality standard for the receiving waterbodies. As reductions in ammonia and phosphorus will directly reduce the organic and inorganic nutrient loading to the sediment bed, SOD was reduced proportionate to ammonia and phosphorus reductions, and not considered a separate pollutant. Percent reductions are based on actual loads vs. loading capacity less the reserve capacity.

Appendix A-2. Illinois' 2018 303(d) List (sorted by name)

Order	Priority	Hydrologic Unit Code	Water Name	Assessment ID	Water Size*	Designated Use	Cause
540	Medium	0712000610	DEEP (LAKE)	IL_VTD	225.5	Fish Consumption	Mercury
						Primary Contact	
2579	Low	0712000610	DEEP (LAKE)	IL_VTD	225.5	Recreation	Fecal Coliform
2056	Medium	0512011205	Deer Creek	IL_BEZY	14.34	Aquatic Life	Iron
2057	Medium	0512011205	Deer Creek	IL_BEZY	14.34	Aquatic Life	Oxygen, Dissolved
2058	Medium	0512011205	Deer Creek	IL_BEZY	14.34	Aquatic Life	Temperature, water
1508	Medium	0512011407	Deer Creek	IL_CDB	17.62	Aquatic Life	Manganese
1509	Medium	0512011407	Deer Creek	IL_CDB	17.62	Aquatic Life	Oxygen, Dissolved
1224	Medium	0709000606	Deer Creek	IL_POCE	9.66	Aquatic Life	Cause Unknown
866	Medium	0712000302	Deer Creek	IL_HBDC	8.2	Aquatic Life	Phosphorus (Total)
						Primary Contact	
2638	Low	0712000302	Deer Creek	IL_HBDC	8.2	Recreation	Fecal Coliform
2339	Low	0712000302	Deer Creek	IL_HBDC-02	10.12	Aquatic Life	Oxygen, Dissolved
867	Medium	0712000302	Deer Creek	IL_HBDC-02	10.12	Aquatic Life	Phosphorus (Total)
868	Medium	0712000302	Deer Creek	IL_HBDC-02	10.12	Aquatic Life	Sedimentation/Siltation
						Primary Contact	
2640	Low	0712000302	Deer Creek	IL_HBDC-02	10.12	Recreation	Fecal Coliform
2130	Medium	0713000206	Deer Creek	IL_DSLB	6.25	Aquatic Life	Oxygen, Dissolved
441	Medium	0712000402	DEER LAKE	IL_WGZF	59	Aesthetic Quality	Phosphorus (Total)
571	Medium	0712000611	DEFIANCE	IL_RTB	47.8	Aesthetic Quality	Phosphorus (Total)
572	Medium	0712000611	DEFIANCE	IL_RTB	47.8	Fish Consumption	Mercury
1721	Medium	0713000108	DEPUE	IL_RDU	524	Aquatic Life	Cadmium
1722	Medium	0713000108	DEPUE	IL_RDU	524	Aquatic Life	Endrin
1723	Medium	0713000108	DEPUE	IL_RDU	524	Aquatic Life	Silver
1724	Medium	0713000108	DEPUE	IL_RDU	524	Aquatic Life	Zinc
1725	Medium	0713000108	DEPUE	IL_RDU	524	Fish Consumption	Mercury
1726	Medium	0713000108	DEPUE	IL_RDU	524	Fish Consumption	Polychlorinated biphenyls
838	Medium	0712000403	DES PLAINES	IL_VGZD	21	Aesthetic Quality	Phosphorus (Total)
801	Medium	0712000403	Des Plaines River	IL_G-07	10.78	Aquatic Life	Arsenic
802	Medium	0712000403	Des Plaines River	IL_G-07	10.78	Aquatic Life	Chloride
803	Medium	0712000403	Des Plaines River	IL_G-07	10.78	Aquatic Life	Phosphorus (Total)
804	Medium	0712000403	Des Plaines River	IL_G-07	10.78	Fish Consumption	Mercury
805	Medium	0712000403	Des Plaines River	IL_G-07	10.78	Fish Consumption	Polychlorinated biphenyls
						Primary Contact	
806	Medium	0712000403	Des Plaines River	IL_G-07	10.78	Recreation	Fecal Coliform
807	Medium	0712000403	Des Plaines River	IL_G-08	0.97	Aquatic Life	Oxygen, Dissolved
808	Medium	0712000403	Des Plaines River	IL_G-08	0.97	Aquatic Life	Total Suspended Solids (TSS)
809	Medium	0712000403	Des Plaines River	IL_G-08	0.97	Fish Consumption	Mercury
810	Medium	0712000403	Des Plaines River	IL_G-25	6.92	Aquatic Life	Arsenic
811	Medium	0712000403	Des Plaines River	IL_G-25	6.92	Aquatic Life	Oxygen, Dissolved
812	Medium	0712000403	Des Plaines River	IL_G-25	6.92	Aquatic Life	Sedimentation/Siltation
813	Medium	0712000403	Des Plaines River	IL_G-25	6.92	Aquatic Life	Total Suspended Solids (TSS)
814	Medium	0712000403	Des Plaines River	IL_G-25	6.92	Fish Consumption	Mercury
150	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Aquatic Life	Chloride
151	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Aquatic Life	Oxygen, Dissolved
152	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Aquatic Life	Phosphorus (Total)
153	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Aquatic Life	Sedimentation/Siltation
154	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Fish Consumption	Mercury
155	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Fish Consumption	Polychlorinated biphenyls
						Primary Contact	
156	Medium	0712000405	Des Plaines River	IL_G-15	3.52	Recreation	Fecal Coliform
157	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Aquatic Life	Arsenic
158	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Aquatic Life	Chloride
159	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Aquatic Life	Methoxychlor
160	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Aquatic Life	Phosphorus (Total)
161	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Aquatic Life	Total Suspended Solids (TSS)
162	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Fish Consumption	Mercury
163	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Fish Consumption	Polychlorinated biphenyls
						Primary Contact	
164	Medium	0712000405	Des Plaines River	IL_G-22	4.31	Recreation	Fecal Coliform
165	Medium	0712000405	Des Plaines River	IL_G-26	6.01	Aquatic Life	Cause Unknown
166	Medium	0712000405	Des Plaines River	IL_G-26	6.01	Fish Consumption	Mercury
167	Medium	0712000405	Des Plaines River	IL_G-26	6.01	Fish Consumption	Polychlorinated biphenyls

Appendix A-2. Illinois' 2018 303(d) List (sorted by name)

Order	Priority	Hydrologic Unit Code	Water Name	Assessment ID	Water Size*	Designated Use	Cause
1810	Medium	0514020308	SUGAR CREEK LAKE	IL_RAZO	94	Aesthetic Quality	Total Suspended Solids (TSS)
1853	Medium	0512011105	Sugar Creek-North	IL_BM-C2	2.18	Aquatic Life	Phosphorus (Total)
1854	Medium	0512011105	Sugar Creek-North	IL_BM-C2	2.18	Aquatic Life	Sedimentation/Siltation
2792	Low	0714020404	Sugar Fork	IL_ODLA-01	18.56	Aquatic Life	Manganese
2793	Low	0714020404	Sugar Fork	IL_ODLA-01	18.56	Aquatic Life	Oxygen, Dissolved
1968	Medium	0709000408	Sugar River	IL_PWB-01	5.65	Fish Consumption	Polychlorinated biphenyls
1969	Medium	0709000408	Sugar River	IL_PWB-03	4.67	Fish Consumption	Polychlorinated biphenyls
1098	Medium	0712000409	Sugar Run	IL_GF-01	7.32	Aquatic Life	Arsenic
1099	Medium	0712000409	Sugar Run	IL_GF-01	7.32	Aquatic Life	Manganese
1100	Medium	0712000409	Sugar Run	IL_GF-01	7.32	Aquatic Life	Oxygen, Dissolved
1101	Medium	0712000409	Sugar Run	IL_GF-01	7.32	Aquatic Life	pH
1102	Medium	0712000409	Sugar Run	IL_GF-01	7.32	Aquatic Life	Sedimentation/Siltation
521	Medium	0712000610	SULLIVAN LAKE	IL_RTZL	58	Aesthetic Quality	Cause Unknown
2592	Low	0712000610	SUMMERHILL ESTATE	IL_WTA	49.9	Aesthetic Quality	Phosphorus (Total)
2593	Low	0712000610	SUMMERHILL ESTATE	IL_WTA	49.9	Aesthetic Quality	Total Suspended Solids (TSS)
500	Medium	0712000610	SUN	IL_RTC	24	Aesthetic Quality	Cause Unknown
494	Medium	0712000404	SWAN (Indian Lake)	IL_WGZY	4	Aesthetic Quality	Phosphorus (Total)
1314	Medium	0714010610	Swanwick Creek	IL_NCK-01	20.7	Aquatic Life	Cause Unknown
784	Medium	0714010608	Sycamore Creek	IL_NDCA	5.66	Aquatic Life	Oxygen, Dissolved
785	Medium	0714010608	Sycamore Creek	IL_NDCA	5.66	Aquatic Life	pH
2319	Medium	0709000605	SYCAMORE LAKE	IL_RPZG	7.5	Fish Consumption	Mercury
2320	Medium	0709000605	SYCAMORE LAKE	IL_RPZG	7.5	Fish Consumption	Polychlorinated biphenyls
205	Medium	0712000405	SYLVAN	IL_RGZF	32	Aesthetic Quality	Total Suspended Solids (TSS)
375	Medium	0712000407	TAMPIER LAKE	IL_RGZO	161.6	Aesthetic Quality	Total Suspended Solids (TSS)
595	Medium	0712000611	TAYLOR	IL_VTZY	8.3	Aesthetic Quality	Phosphorus (Total)
596	Medium	0712000611	TAYLOR	IL_VTZY	8.3	Aesthetic Quality	Total Suspended Solids (TSS)
42	High	0713001203	Taylor Creek	IL_DAF-01	24.1	Aquatic Life	Manganese
43	High	0713001203	Taylor Creek	IL_DAF-01	24.1	Aquatic Life	Total Suspended Solids (TSS)
2009	Medium	0713000702	TAYLORVILLE	IL_REC	1148	Aquatic Life	pH
2010	Medium	0713000702	TAYLORVILLE	IL_REC	1148	Aquatic Life	Turbidity
2011	Medium	0713000702	TAYLORVILLE	IL_REC	1148	Fish Consumption	Chlordane
2012	Medium	0713000702	TAYLORVILLE	IL_REC	1148	Fish Consumption	Mercury
1329	Medium	0514020404	Tenmile Creek	IL_ATFI-MC-C4	3.02	Aquatic Life	Cause Unknown
1330	Medium	0514020404	Tenmile Creek	IL_ATFI-MC-D1	8.94	Aquatic Life	Oxygen, Dissolved
2396	Medium	0711000408	The Sny	IL_KC-04	19.95	Aquatic Life	Iron
404	Medium	0712000402	THIRD	IL_RGW	162	Aesthetic Quality	Phosphorus (Total)
405	Medium	0712000402	THIRD	IL_RGW	162	Aesthetic Quality	Total Suspended Solids (TSS)
1838	Medium	0713000306	THOMPSON	IL_WDL	3783	Fish Consumption	Mercury
839	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Aldrin
840	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Chlordane
841	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	DDT
842	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Dieldrin
843	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Endrin
844	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Hexachlorobenzene
2624	Low	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Oxygen, Dissolved
845	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Phosphorus (Total)
846	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Polychlorinated biphenyls
2625	Low	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Silver
847	Medium	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Total Suspended Solids (TSS)
2626	Low	0712000302	Thorn Creek	IL_HBD-02	3.84	Aquatic Life	Zinc
2627	Low	0712000302	Thorn Creek	IL_HBD-02	3.84	Primary Contact Recreation	Fecal Coliform
2628	Low	0712000302	Thorn Creek	IL_HBD-03	6.52	Aquatic Life	Oxygen, Dissolved
2629	Low	0712000302	Thorn Creek	IL_HBD-03	6.52	Primary Contact Recreation	Fecal Coliform
848	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Aldrin
849	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Chlordane
2630	Low	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Chloride
850	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	DDT
851	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Dieldrin
852	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Endrin

Appendix A-2. Illinois' 2018 303(d) List (sorted by name)

Order	Priority	Hydrologic Unit Code	Water Name	Assessment ID	Water Size*	Designated Use	Cause
853	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Hexachlorobenzene
2631	Low	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Oxygen, Dissolved
854	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Phosphorus (Total)
855	Medium	0712000302	Thorn Creek	IL_HBD-04	4.32	Aquatic Life	Polychlorinated biphenyls
						Primary Contact	
2632	Low	0712000302	Thorn Creek	IL_HBD-04	4.32	Recreation	Fecal Coliform
856	Medium	0712000302	Thorn Creek	IL_HBD-05	2.92	Aquatic Life	Hexachlorobenzene
857	Medium	0712000302	Thorn Creek	IL_HBD-05	2.92	Aquatic Life	Phosphorus (Total)
						Primary Contact	
2633	Low	0712000302	Thorn Creek	IL_HBD-05	2.92	Recreation	Fecal Coliform
858	Medium	0712000302	Thorn Creek	IL_HBD-06	2.21	Aquatic Life	Aldrin
859	Medium	0712000302	Thorn Creek	IL_HBD-06	2.21	Aquatic Life	Chloride
860	Medium	0712000302	Thorn Creek	IL_HBD-06	2.21	Aquatic Life	Dieldrin
861	Medium	0712000302	Thorn Creek	IL_HBD-06	2.21	Aquatic Life	Hexachlorobenzene
2634	Low	0712000302	Thorn Creek	IL_HBD-06	2.21	Aquatic Life	Oxygen, Dissolved
862	Medium	0712000302	Thorn Creek	IL_HBD-06	2.21	Aquatic Life	Phosphorus (Total)
						Primary Contact	
2635	Low	0712000302	Thorn Creek	IL_HBD-06	2.21	Recreation	Fecal Coliform
2504	Low	Lake Michigan Beaches	Thorndale Beach	IL_QN-13	0.69	Fish Consumption	Mercury
2505	Low	Lake Michigan Beaches	Thorndale Beach	IL_QN-13	0.69	Fish Consumption	Polychlorinated biphenyls
2602	Low	0712000611	TIMBER LAKE (SOUTH)	IL_RTZQ	33	Aesthetic Quality	Phosphorus (Total)
2603	Low	0712000611	TIMBER LAKE (SOUTH)	IL_RTZQ	33	Aesthetic Quality	Total Suspended Solids (TSS)
755	Medium	0712000304	Tinley Creek	IL_HF-01	9.49	Aquatic Life	Cause Unknown
2480	Low	Lake Michigan Beaches	Touhy (Leone) Beach	IL_QN-01	0.41	Fish Consumption	Mercury
2481	Low	Lake Michigan Beaches	Touhy (Leone) Beach	IL_QN-01	0.41	Fish Consumption	Polychlorinated biphenyls
2597	Low	0712000611	TOWER (LAKE)	IL_RTZF	69	Aesthetic Quality	Phosphorus (Total)
2598	Low	0712000611	TOWER (LAKE)	IL_RTZF	69	Aesthetic Quality	Total Suspended Solids (TSS)
						Primary Contact	
2599	Low	0712000611	TOWER (LAKE)	IL_RTZF	69	Recreation	Fecal Coliform
2456	Low	Lake Michigan Beaches	Tower Beach	IL_QK-06	1.17	Fish Consumption	Mercury
2457	Low	Lake Michigan Beaches	Tower Beach	IL_QK-06	1.17	Fish Consumption	Polychlorinated biphenyls
1156	Medium	0714020208	Town Creek	IL_OJK-02	7.02	Aquatic Life	Sedimentation/Siltation
1157	Medium	0714020208	Town Creek	IL_OJK-03	2.04	Aquatic Life	Phosphorus (Total)
926	Medium	0714020401	Trenton Creek	IL_OHF-TR-A1	1.3	Aquatic Life	Cause Unknown
927	Medium	0714020401	Trenton Creek	IL_OHF-TR-C1	0.97	Aquatic Life	Phosphorus (Total)
928	Medium	0714020401	Trenton Creek	IL_OHF-TR-C1	0.97	Aquatic Life	Sludge
929	Medium	0714020401	Trenton Creek	IL_OHF-TR-C3	2.03	Aquatic Life	Phosphorus (Total)
1417	Medium	0714020405	Troy Creek	IL_ODMA-TR-C3	0.3	Aquatic Life	Phosphorus (Total)
1345	Medium	0514020605	Tucker Ditch	IL_ADCF	5.97	Aquatic Life	Oxygen, Dissolved
2590	Low	0712000610	TURNER	IL_VTZA	43	Aesthetic Quality	Phosphorus (Total)
2591	Low	0712000610	TURNER	IL_VTZA	43	Aesthetic Quality	Total Suspended Solids (TSS)
756	Medium	0712000304	TURTLEHEAD	IL_RHS	12	Aesthetic Quality	Phosphorus (Total)
						Primary Contact	
1120	Medium	0712000612	Tyler Creek	IL_DTZP-02	16.38	Recreation	Fecal Coliform
948	Medium	0712000406	Union Ditch	IL_GGC-FN-A1	4.08	Aquatic Life	Oxygen, Dissolved
949	Medium	0712000406	Union Ditch	IL_GGC-FN-A1	4.08	Aquatic Life	Sedimentation/Siltation
950	Medium	0712000406	Union Ditch	IL_GGC-FN-C1	1.23	Aquatic Life	Ammonia (Total)
951	Medium	0712000406	Union Ditch	IL_GGC-FN-C1	1.23	Aquatic Life	Chloride
952	Medium	0712000406	Union Ditch	IL_GGC-FN-C1	1.23	Aquatic Life	Oxygen, Dissolved
953	Medium	0712000406	Union Ditch	IL_GGC-FN-C1	1.23	Aquatic Life	Phosphorus (Total)
954	Medium	0712000406	Union Ditch	IL_GGC-FN-C1	1.23	Aquatic Life	Sedimentation/Siltation
1786	Medium	0512010903	Upper Salt Fork Drainage Ditch	IL_BPJG-01	24.05	Aesthetic Quality	Phosphorus (Total)
1787	Medium	0512010903	Upper Salt Fork Drainage Ditch	IL_BPJG-01	24.05	Aquatic Life	Oxygen, Dissolved