STORMWATER MANAGEMENT COMMISSION

**MEMORANDUM**

To: Watershed Management Board Members

From: Kurt Woolford, Chief Engineer

RE: ***December 5, 2018 WMB Meeting 6:00 P.M.***

Date: November 20, 2018

**The Lake County Watershed Management Board (WMB) will meet at 6:00 PM December 5, 2018 at Lake County Stormwater Management Commission, 500 W. Winchester Road, Libertyville.**

**YOU ARE A WATERSHED MANAGEMENT BOARD MEMBER IF YOU ARE:**

- ✓ **THE CHIEF ELECTED OFFICIAL OF ANY LAKE COUNTY MUNICIPALITY**
- ✓ **A LAKE COUNTY TOWNSHIP SUPERVISOR**
- ✓ **THE PRESIDENT OF AN ACTIVE LAKE COUNTY DRAINAGE DISTRICT**
- ✓ **A LAKE COUNTY BOARD MEMBER**
- ✓ **A DELEGATE OF ONE OF THE ABOVE (See delegate form enclosed)**

The primary purpose of this annual WMB meeting is to evaluate and recommend WMB project funding for 2019. Project recommendations will be forwarded to the Stormwater Management Commission (SMC) for approval in January of 2019. Please review the attached project proposal summaries and staff recommendations in this packet prior to the meeting. Application summaries are included, and the full applications are available upon request. SMC staff will present the projects at the meeting. Project applicants are welcome to provide additional information as desired. Staff will also provide a brief update on the status of this year's projects at the meeting.

WMB members who are unable to attend, but have not yet delegated an alternate, may do so by submitting a delegate form (enclosed) prior to the meeting. You can reach me at 847-377-7720 if you have any questions. Delegate forms may be submitted by e-mail to kwoolford@lakecountyil.gov.

STORMWATER MANAGEMENT COMMISSION

**WATERSHED MANAGEMENT BOARD**
**ANNUAL MEETING**

December 5, 2018
**6:00 PM**

Lake County Stormwater Management Commission
500 W. Winchester Road
Libertyville, IL

**Meeting Agenda**

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**1.0 CALL TO ORDER**
Changes/Additions to Agenda

**2.0 ELECT CHAIRMAN PRO-TEM**
Pledge of Allegiance
Self-introductions of all meeting attendees and identification of voting members

**3.0 APPROVAL OF MINUTES - December 6, 2017**

**4.0 STAFF REPORTS/ PROJECT STATUS UPDATES**
FY2018 WMB Projects – Kurt Woolford
FY2019 Budget and Policy Update

**5.0 OLD BUSINESS**

**6.0 NEW BUSINESS**
FY2019 WMB project proposals
SMC staff evaluation and recommendations
Public comment and information
WMB Project recommendations to the Stormwater Management Commission

**7.0 ADJOURNMENT**

STORMWATER MANAGEMENT COMMISSION

**DES PLAINES RIVER, FOX RIVER, LAKE MICHIGAN &**
**NORTH BRANCH CHICAGO RIVER**
**WATERSHED MANAGEMENT BOARD**
**REPRESENTATIVE APPOINTMENT FORM**

**Name of Chief Elected Officer:** _____

**Representing:** _____
**(City, village, township, active drainage district)**

**Watershed(s):** _____

**Appointed Delegate:** _____

**Address:** _____

**Phone:** _____

**FAX:** _____

**e-mail:** _____

**The above named shall be my representative on the Watershed Management Board(s) in my absence and may vote on my behalf during my term of office, or until otherwise notified.**

_____
**(Signature of Chief Elected Officer)** **(Date)**

STORMWATER MANAGEMENT COMMISSION

**WATERSHED MANAGEMENT BOARD**
**ANNUAL MEETING**
**MINUTES**

**December 6, 2017**

## 1.0 CALL TO ORDER

Kurt Woolford opened the meeting at 6.05 p.m. by welcoming everyone and called the meeting to order. The procedures for the meeting were explained. Votes were to be conducted by consensus unless a clear majority could not be determined, at which time a roll call vote would be called. He asked if there were any changes or additions to the agenda. Hearing none, he moved on to the next agenda item.

## 2.0 ELECTION OF A CHAIRMAN PRO-TEM

Kurt stated that he had previously received a nomination to conduct the meeting as Chairman Pro-Tem; Craig Taylor. Kurt asked for any other nominations. There were none. There was a vote for Craig Taylor to be Chairman Pro-Tem, all were in favor, none opposed.

Craig Taylor led the Pledge of Allegiance and then asked for everyone to introduce themselves and state what entity they represented. Self-introductions followed.

## 3.0 APPROVAL OF THE MINUTES-DECEMBER 6, 2017

Craig Taylor asked if there were any corrections, comments or changes to the minutes. Hearing none, he asked for a motion to approve the minutes of the December 8th, 2016 meeting. A motion was made by Anne Maine and seconded by Kathleen O'Connor.

## 4.0 STAFF REPORTS/PROJECT STATUS UPDATE

Kurt Woolford noted that the WMB packet contained the WMB Project Status Summary spreadsheet. He then provided a summary of current WMB projects; 27 were ongoing or completed, and 1 was withdrawn. Kurt stated that SMC staff had an increased project workload from the carryover of previous years projects that were delayed by the July 2017 flooding event.

## 5.0 OLD BUSINESS

There was no old business to report.

## 6.0 NEW BUSINESS

Project managers presented the fiscal year 2018 WMB applications for each watershed.

**WATERSHED MANAGEMENT ASSISTANCE PROJECTS FOR 2018**
Ashley Warren presented the one WMAG application received. It was as follows:

1. North Branch Watershed Workgroup (NBWW) (recommended)

**DES PLAINES RIVER WATERSHED**
Neil Schindelar went over the eleven project applications in the Des Plaines Watershed. They were as follows:

1. Buffalo Creek Stream Restoration - Crossings Pond Park (recommended)
2. Countryside Manor Swale Maintenance (SIRF Recommended)
3. DPR Hydrologic Restoration & Enhancement Project, Phase 1 (recommended)
4. Interlaken Ridge Detention Pond Spillway
5. West Shore Park Creek Bed Project
6. Specific Conductance & Chloride Sampling-A
7. Specific Conductance & Chloride Sampling-B
8. Wooded Ridge Road Culvert Replacement Project
9. Lincolnshire Creek Drainage Improvements Project
10. Maple Park Public Shoreline Project
11. Indian Creek Drainage Improvements Project

**NORTH BRANCH OF THE CHICAGO RIVER WATERSHED**
Ashley Warren went over the three project applications in the North Branch of the Chicago River Watershed. They were as follows:

1. Whispering Lake Stormwater Mgmt. Initiative Project (recommended)
2. I-94 Stormwater Creek & Wetland Restoration Project (recommended)

**FOX RIVER WATERSHED**
Sharon Østerby summarized the seven project applications received in the Fox River Watershed. They were as follows:

1. N. Cedar Crest Drive Culvert Replacement (SIRF recommended)
2. TLIA Wagner Park Bioswale/Wetland Restoration Project (recommended)
3. FWA Bioswale & Buffer Zone Project (recommended)
4. Flint Creek Stream Gage Installation Project (recommended)
5. Hainesville Drainage Improvements Project
6. Lake Catherine & Channel Lake Vegetation Mapping Project
7. Orchard Hills Common Area Restoration Project-Phase I

**LAKE MICHIGAN WATERSHED**
Kelcey Traynoff summarized the one project applications received in the Lake Michigan Watershed. They were as follows:

1. McCormick Ravine Stormwater Improvements Project (recommended)

**2017 WMB PROJECT COMMENTS AND QUESTIONS**
Anne Maine asked if Waste Water Treatment Facilities which are in both the Des Plaines River Watershed and the North Branch will participate and pay dues to both the DRWW and NBWW. Ashley Warren stated that information was still being gathered.

Kurt Woolford wrapped up the staff presentations showing the list of projects, order of listing and the funding available. Kurt also mentioned there was an overwhelming demand for funding this year. Kurt

also reminded the WMB that they can accept motion to approve staff recommendations or make changes to funding recommendations.

**WMB FUNDING RECOMMENDATION APPROVALS**
A motion was made by Anne Maine, and seconded by Sandy Hart, to accept the staff recommended projects and funding levels. FY18 WMB Project recommendations will be recommended to the Stormwater Management Commission at January 2018 meeting.

**7.0 ADJOURNMENT**
There being no further comments, questions or reports, the meeting was adjourned at 6:45 p.m.

**WMB Meeting Attendees**

| Name | Representing |
|---|---|
| Craig Taylor | Lake Co. District 19 |
| Anne Maine | Lake Co. District 21 |
| Sandy Hart | Lake Co. District 13 |
| Ron Gurak | Squaw Creek Clean Water Alliance |
| Joe Popeck | Squaw Creek Clean Water Alliance |
| April Nielsen | ILM-Fields of Cambridge Project |
| Maggie Gulledge | Resident-Green Forest Subdivision |
| John Gulledge | Resident Green Forest Subdivision |
| Brian Joyce | Resident-Lake Forest |
| Kathleen O'Connor | Libertyville Township |
| Jim Anderson | LCFPD |
| Rosemary Heilemann | Resident-Buffalo Grove |
| Mike Reynolds | Village of Buffalo Grove |
| Erika Frable | Village of Hawthorn Woods |
| Kurt O. Thomsen | Flint Creek Project |
| Faye Sinnott | Spring Creek/Flint Creek Coordinator |
| Rob Bowman | Fox Waterway Agency |
| David Lothspeich | Village of Long Grove |
| Marc Speziale | Resident |
| Steve Stiller | Wauconda Township |

**SMC Staff**
Mike Warner
Kurt Woolford
Kelcey Traynoff
Ashley Warren
Neil Schindelar
Jacob Jozefowski
Sharon Østerby

# WMB PROJECT STATUS SUMMARY

| WATERSHED | WMAG PROJECTS | PROJECT STATUS-COMPLETION DATE |
|---|---|---|
| Des Plaines River | FY17 Loch Lomond Lake Management Plan | Completed in **2018** |
| North Branch Chicago River | FY18 North Branch Watershed Work Group | Completed in **2018** |
| **WATERSHED** | **WMB PROJECTS** | **PROJECT STATUS-COMPLETION DATE** |
| Des Plaines River | FY16 Lakeridge Rest Association ADID wetland | Target Completion in **2019** |
| | FY17 Dady & Decker HOA Shoreline Protection | Target Completion in **2019** |
| | FY17 Diamond Lake Coop Preservation Strategy | Target Completion in **2019** |
| | FY17 SIRF Greenbay Terrace & Maplewood Stormsewer | Target Completion in **2019** |
| | FY17 Grandwood Park Northern Berm | Target Completion in **2019** |
| | FY18 Buffalo Creek Stream Restoration Project | Target Completion in **2019** |
| | FY18 SIRF Countryside Manor Swale Maintenance Project | Target Completion in **2019** |
| | FY18 SIRF Nicholas Dowden Storm Sewer Project | Completed in **2018** |
| | FY18 DPR Hydrologic Rest. & Enhancement Project | Target Completion in **2019** |
| North Branch Chicago River | FY15 Banbury Lake Outlet/Cranbrook Rd Ditch Improvements | Target Completion in **2019** |
| | FY18 Whispering Lake-Stormwater Management Initiative Project | Target Completion in **2019** |
| | FY18 I-94 Stormwater Creek & Wetland Restoration Project | Target Completion in **2019** |
| Fox River | FY16 Timber Lake Bioswale & Stream Restoration | Target Completion in **2019** |
| | FY17 Fish Lake Drain Dredging & Shoreline Improvements | Target Completion in **2019** |
| | FY17 SIRF Columbia Bay Dr. Drainage Improvements | Target Completion in **2019** |
| | FY18 Flint Creek Stream Gage installation Project | Completed in **2018** |
| | FY18 SIRF N. Cedar Crest Drive | Target Completion in **2019** |
| | FY18 TLIA Wagner Park Bioswale/Wetland Restoration Project | Target Completion in **2019** |
| Lake Michigan | FY18 Forest Park Restoration | Target Completion in **2019** |

# FISCAL YEAR 2019

# WMAG/WMB APPLICATION SUMMARY & RECOMMENDATIONS

| Project | Applicant | Score | Total Cost | Requested Amount | Funds Available | SMC Staff Recommended Funding |
|---|---|---|---|---|---|---|
| **WATERSHED MANAGEMENT ASSISTANCE ($12,000 available)** | | | | | | |
| Squaw Creek Watershed Plan | Long Lake Improvement & Sanitation Assoc. | 400 | $ 12,000 | $ 12,000 | | $ 12,000 |
| | ***WMAG TOTAL*** | | **$ 12,000** | **$ 12,000** | **$ 12,000** | **$ 12,000** |
| **DES PLAINES RIVER ($70,140 available)** | | | | | | |
| Conservation@Home | Openlands | 400 | $ 109,784 | $ 27,446 | | $ 27,446 |
| Chickamauga Drainage Improvements | Village of Long Grove | 280 | $ 61,828 | $ 30,914 | | Recommended to SIRF |
| VOLZ Kildeer Creek | Village of Lake Zurich | 275 | $ 337,500 | $ 30,000 | | $ 30,000 |
| | ***DES PLAINES RIVER WATERSHED WMB TOTAL*** | | **$ 509,112** | **$ 88,360** | **$ 70,140** | **$ 57,446** |
| | *UNALLOCATED FUNDS TO FOX RIVER WATERSHED* | | | | $ (12,694) | |
| | | | | | $ - | |
| | ***TOTAL DES PLAINES WATERSHED FUNDING*** | | | | **$ 57,446** | **$ 57,446** |
| **NORTH BRANCH CHICAGO RIVER ($35,070 available)** | | | | | | |
| Dady Slough Flood Control Project | Lake County SMC | 445 | $ 3,523,084 | $ 35,070 | | $ 35,070 |
| | ***NORTH BRANCH CHICAGO RIVER WMB TOTAL*** | | **$ 3,523,084** | **$ 35,070** | **$ 35,070** | **$ 35,070** |
| | | | | | $ - | |
| | ***TOTAL NORTH BRANCH WATERSHED FUNDING*** | | | | **$ 35,070** | **$ 35,070** |
| **FOX RIVER ($35,070 available)** | | | | | | |
| Larkdale Storm Sewer Rehabilitation Project | Village of Wauconda | 365 | $ 122,690 | $ 60,000 | | Recommended to SIRF |
| Farm Trails Drainage Project | Farm Trails HOA-Lake Barrington | 325 | $ 18,000 | $ 9,000 | | Recommended to SIRF |
| Millennium Park Water Quality Improvement Project | Village of Fox Lake | 310 | $ 42,950 | $ 21,400 | | $ 21,400 |
| Duck Lake Channel & Shoreline Improvement | Duck Lake Woods HOA-Grant TWP | 300 | $ 63,688 | $ 31,844 | | $ 31,844 |
| Tower Lake Drainage Study & Planning Project | Village of Tower Lakes & TLIA | 265 | $ 32,000 | $ 16,000 | | $ - |
| Riverwalk Rill System Maintenance | Riverwalk HOA-Port Barrington | 220 | $ 42,500 | $ 21,250 | | $ - |
| Grass Lake Wetland Restoration Project | Fox Waterway Agency | 185 | $ 60,472 | $ 17,872 | | $ - |
| Lake Marie Shoreline Erosion Project | CA Improvement Association-Antioch | 155 | $ 67,600 | $ 33,800 | | $ - |
| | ***FOX RIVER WATERSHED WMB TOTAL*** | | **$ 449,900** | **$ 211,166** | **$ 35,070** | **$ 53,244** |
| | *UNALLOCATED FUNDS TRANSFERRED FROM DES PLAINES RIVER WATERSHED* | | | | $ 12,694 | |
| | *UNALLOCATED FUNDS TRANSFERRED FROM LAKE MICHIGAN WATERSHED* | | | | $ 1,720 | |
| | *CONTINGENCY FUNDS* | | | | $ 3,760 | |
| | ***TOTAL FOX RIVER WATERSHED FUNDING*** | | | | **$ 53,244** | **$ 53,244** |
| **LAKE MICHIGAN ($26,720 available)** | | | | | | |
| Shiloh Park Senior Center Site Improvements | Zion Park District | 480 | $ 484,000 | $ 25,000 | | $ 25,000 |
| Bull Creek North Branch Cleanup | Village of Beach Park | 380 | $ 70,000 | $ 25,780 | | $ - |
| | ***LAKE MICHIGAN WATERSHED WMB TOTAL*** | | **$ 554,000** | **$ 50,780** | **$ 26,720** | **$ 25,000** |
| | *UNALLOCATED FUNDS TRANSFERRED TO FOX RIVER WATERSHED* | | | | **$ (1,720)** | |
| | ***TOTAL LAKE MICHIGAN WATERSHED FUNDING*** | | | | **$ 25,000** | **$ 25,000** |
| **FY19 TOTAL WMB ($183,000 AVAILABLE)** ***$4,000 Contincency Included** | ***WMB GRAND TOTAL*** | | **$ 5,048,095** | **$ 397,376** | **$ 183,000** | **$ 182,760** |

STORMWATER MANAGEMENT COMMISSION

**M E M O R A N D U M**

November 19, 2018

TO: Watershed Management Board Members
FR: Sharon Østerby, Water Resource Professional
RE: FY2019 WMB Requests; Funding Recommendations for Watershed Management Assistance Grants

SMC received one request for Watershed Management Assistance Grant (WMAG) funding. A total of $12,000 is available for Watershed Management Assistance Grants (WMAG) for Fiscal Year 2019. The primary purpose of the WMAG program is to support the growth and sustainability (i.e., organizational capacity) of local watershed partnerships in Lake County. For the purposes of the program, a "watershed partnership" is defined as an inclusive, enduring, diverse, community-based group organized to identify and resolve watershed problems and issues. The attached table, "WMB Funding Evaluation – Watershed Management Assistance Grant Requests," provides SMC staff's evaluation of submitted WMAG applications based on the WMB-approved prioritization criteria for WMAG requests.

The prioritization criteria are:

1. **Participant Involvement-**Explanation of how stakeholders representing interests and perspectives reflective of the watershed community will be involved in developing sound approaches and lasting solutions to identified problems.
2. **Problem Identification-**Identification of one or more clearly defined watershed problems that will be addressed.
3. **Desired Results-**Identification of realistic and clear goals and objectives.
4. **Progress Measures-**Identification of a method for evaluating the immediate and long-term effects of the partnership.
5. **Outreach Efforts-**Demonstration of how the proposed actions will develop the partnership and increase its sustainability.
6. **Action Plan-**Development of a clear work plan with tasks, end results, products to be completed, and a time frame.

Below is a brief summary of the proposed project, describing how the application addresses the six prioritization criteria and containing staff's recommendation to the WMB regarding each project:

1. **Squaw Creek Watershed Planning Project.** An application was submitted by the Long Lake Improvement Association and SMC. The estimated project cost is $12,000, of which $12,000 is requested. There is no local match requirement for the WMAG. The proposed project scope includes preparing regular meetings, workshops and seminars, newsletters, website content, and social media content to support the Squaw Creek Watershed Plan update. The Squaw Creek Watershed plan update is supported by multiple jurisdictions and local and state organizations.

   Project evaluation:

   1. The application lists the representative watershed stakeholders that are and will be involved with the partnership.
   2. The application defines non-point source pollution and flood damage as watershed problems to be addressed.

3. The application identifies a specific goal and measurable objectives to complete the planning process for the Squaw Creek Watershed Plan update.
4. The application identifies that progress which will be measured through the adoption, approval, and implementation of the Squaw Creek Watershed Plan update.
5. The Squaw Creek Watershed Based Plan update will help to further develop the organization's relationship with their members/homeowners and the community at large and should increase the long-term sustainability of this group and watershed planning efforts.
6. The application includes a work plan describing the tasks to be completed and the expected outcomes.

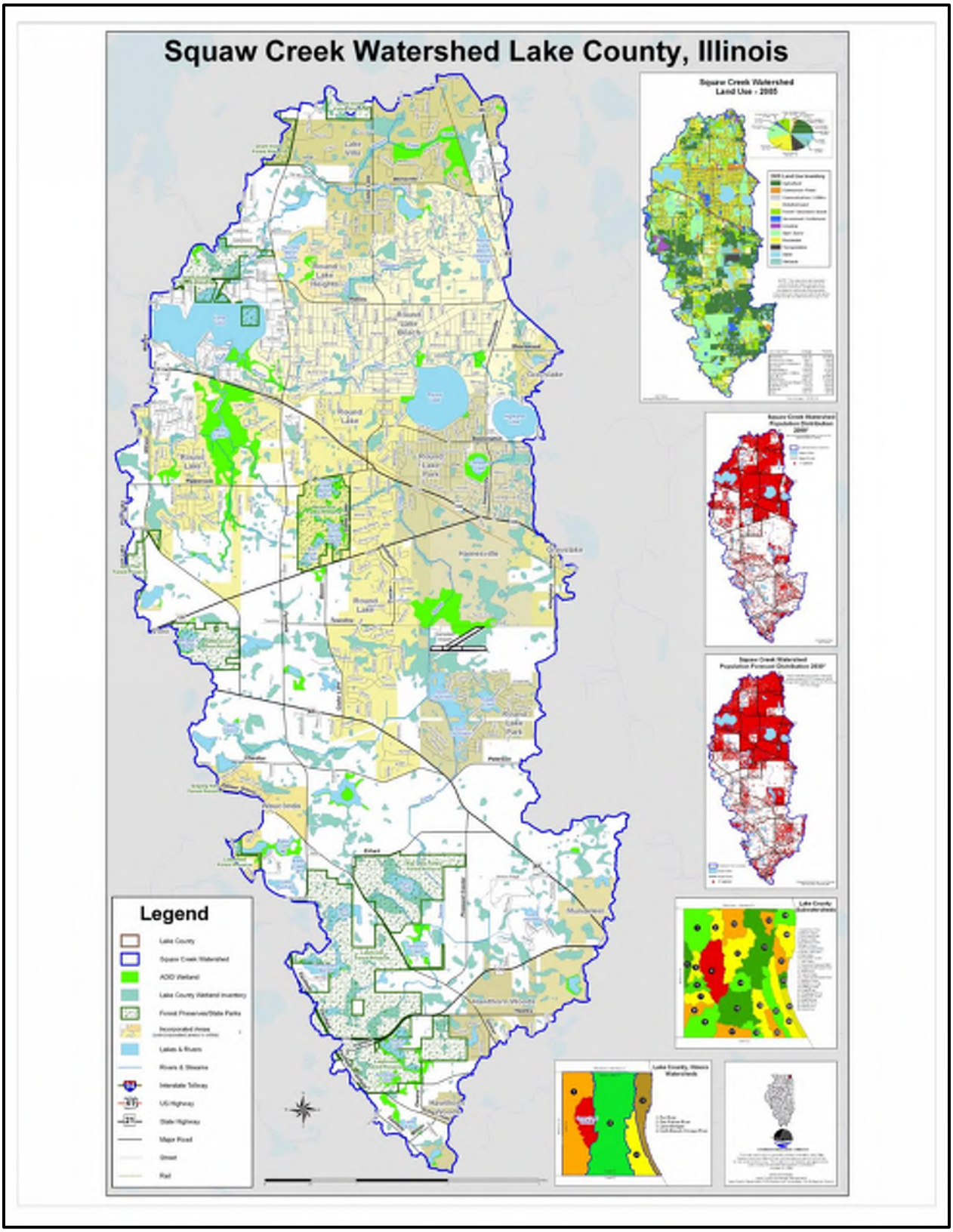
This project ***IS RECOMMENDED*** for WMB funding in the amount of $12,000.

# WATERSHED MANAGEMENT ASSISTANCE

| WMAG | | | | North Branch Watershed Workgroup | | WMAG Total |
|---|---|---|---|---|---|---|
| **Rank** | **Prioritization Criteria** | | **Maximum Possible Weight** | **Rating** | **Score** | |
| 1 | Participant involvement | | 20 | 4 | 80 | |
| 2 | Problem identification | | 20 | 5 | 100 | |
| 3 | Desired results | | 15 | 4 | 60 | |
| 4 | Progress measures | | 15 | 3 | 45 | |
| 5 | Outreach efforts | | 15 | 5 | 75 | |
| 6 | Action plan | | 10 | 3 | 30 | |
| | Bonus Credit: | First-time WMAG funding | 5 | 5 | 5 | |
| | Bonus Credit: | Subwatershed representation | 5 | 0 | 5 | |
| | Bonus Credit: | Local unit of government support | 5 | 5 | 5 | |
| | Bonus Credit: | Outside funding utilization | 5 | 0 | 5 | |
| | Bonus Credit: | Demonstrate partnership sustainability | 5 | 0 | 5 | |
| | Bonus Credit: | Includes restoration plan component | 5 | 0 | 0 | |
| | **Weighted Score Total (Minimum score greater than 210 required for funding)** | | | 400 | | |
| | Total project cost | | | **$12,000** | | **$12,000** |
| | Applicant in-kind hours | | | 0 | | **0** |
| | Applicant cost share | | | $0 | | **$0** |
| | Applicant's WMB funding request | | | $12,000 | | **$12,000** |
| | Applicant's request for SMC in-kind hours | | | 0 | | **0** |
| | Total Available Funds for the program = | | $ 12,000 | | | **$12,000** |
| | Staff recommendation for watershed funding | | | $12,000 | | **$12,000** |
| | Staff recommendation for SMC in-kind hours | | | | | **$0** |

WMAG Funding Evaluation – Watershed Management Assistance Grant Requests

Squaw Creek Watershed – Planning Area



STORMWATER MANAGEMENT COMMISSION

# DES PLAINES

## M E M O R A N D U M

November 20, 2018

TO: Watershed Management Board Members
FR: Juli E. Crane, Principal Wetland Specialist
RE: FY2019 WMB Requests; Funding Recommendations for Projects in Des Plaines River Watershed

SMC received three requests for WMB funding for projects in the Des Plaines Watershed, with total project costs of $509,112 and requested funding in the amount of $88,360. The amount of funding allocated for projects in the Des Plaines Watershed for Fiscal Year 2019 is $70,140. SMC staff recommends WMB funding for two of the projects and alternate funding for the third project.

1. **Interjurisdictional Benefits -** Benefit multiple jurisdictions (government entities, HOAs, not-for-profits), will have interjurisdictional impacts, and/or will benefit the major "trunk"/regional scale drainage system of the watershed. ("Trunk" defined as that part of the drainage system that drains more than 100-acre drainage areas and has the potential to have inter-jurisdictional impacts.)

2. **Flood Hazard Reduction Benefits -** Have beneficial results or impacts, including non-transportation related flood hazard reduction, during flood events up to and including 100-year events. (A 100-year event being a flood event with the probability of occurrence in any given year of 1%.)

3. **Structural Damage Reduction -** Mitigate structural damages due to floods and other stormwater related causes with consideration of the number of structures affected including, but not limited to, removing, elevating, flood-proofing or otherwise protecting buildings from future danger of flood damage or structural damage related to flood-induced erosion. Also, these criteria include Lake Michigan Watershed specific mitigation of damages due to stormwater, flood and wave induced problems on bluff, ravine and lakeshore areas.

4. **Water Quality Benefits -** Reduce surface water quality impairments utilizing best management practices.
5. **Natural Resource Benefits -** Benefit the environment with an emphasis on non-structural natural resource protection strategies.

6. **Nuisance Flood Reduction -** Alleviate major nuisance flooding and/or blocked transportation access.

7. **Multiple Use Benefits -** Provide multiple-use benefits to communities such as recreation, public education, data collection or others.

8. **Outside Funding Utilization -** Utilize federal and\or state funding to the maximum extent possible.

9. **Public Education Component -** Include a public education and outreach effort aimed at reducing the amount of phosphorus contained in stormwater runoff. This may include reducing the amount of fertilizer applied to lawns, using phosphorus-free fertilizers, and establishing buffer strips along lake shores, stream banks, and wetlands. Applicants may also choose to adopt an ordinance banning the use of fertilizers and detergents containing phosphorus.

SMC staff also awarded bonus credit to those applications satisfying the following 4 WMB-approved criteria:

- Projects for which the applicant's share of the estimated total project cost exceeds 50%.
- Projects that are recommended in a SMC-adopted watershed plan.
- Projects that protect or alleviate structural damages to critical facilities.
- HOAs that document they are currently implementing stormwater best management practices.

The following summaries describe how each application addresses the nine WMB prioritization criteria. The SMC staff funding recommendation follows each summary:

1. **Conservation @ Home.** This application was submitted by Openlands. The estimated project cost is $109,784, with local share of $82,338 and a requested WMB amount of $27,446. The proposed project scope involves mailings to 500 properties, two rounds of meetings with municipal and community leaders, and two plant sale community events with the goal of reaching 500 individuals/corporations/agencies and ultimately achieving at least 100 new on-the-ground actions within the four high-priority municipalities of Libertyville, Lincolnshire, Mettawa, and Riverwoods.

   Project Evaluation:
   1. The project has significant interjurisdictional benefits and is associated with a trunk system that drains an area of more than 100 acres.
   2. The project will promote indirect flood hazard reduction.
   3. The project will promote structural damage reduction.
   4. The project will promote water quality benefits.
   5. The project will promote significant natural resource benefits.
   6. The project will promote actions that provide significant nuisance-related flood reduction benefits.
   7. The project will promote significant multiple use benefits.
   8. Use of non-WMB funding is proposed.
   9. Public education regarding phosphorus reduction of phosphorus loading is a significant element of the project.

   Bonus credits were awarded to this project due to the project being in alignment with educational program goals in the Des Plaines River Watershed-Based Plan and providing greater than 50% of non-SMC cost share funding.

   This project ***IS RECOMMENDED*** for WMB funding at the requested level.

2. **Chickamauga Drive Drainage Improvements.** This application was submitted by the Village of Long Grove. The estimated project cost is $61,828, with local share of $30,914 and a requested WMB amount of $30,914. The proposed project scope involves installation of an inlet, flared

end sections, a catch basin, and a section of 24-inch storm sewer pipe to collect and convey water from Chickamauga Lane to Buffalo Creek via an existing easement.

Project Evaluation:

1. The project will provide above-average interjurisdictional benefit.
2. The project will provide flood hazard reduction benefits.
3. The project will provide structural damage reduction benefits to utility infrastructure.
4. The project will provide water quality benefits.
5. The project will provide natural resources benefits.
6. The project will provide nuisance flood reduction benefits.
7. The project will provide multi-use benefits.
8. Use of non-WMB funding is not proposed.
9. The project will provide public education and outreach on reducing phosphorus loads.

Bonus credit was awarded to this project for addressing goals in the 2015 Buffalo Creek Watershed Plan.

This project ***IS NOT RECOMMENDED*** for WMB funding; an alternate SMC funding source (SIRF) is recommended instead.

3. **Kildeer Creek Restoration.** This application was submitted by the Village of Lake Zurich. The estimated project cost is $337,500, with local share of $307,500 and a requested WMB amount of $30,000. The proposed project scope includes stabilizing the creek, restoring approximately 1,500 L.F. of streambank, and enhancing the adjacent buffer zones with native plants in the section of Kildeer Creek between IL Rt 22 and Quentin Road.

Project Evaluation:

1. The project will provide significant inter-jurisdictional benefits.
2. The project will provide flood hazard reduction benefits.
3. The project will provide limited structural damage reduction benefits.
4. The project will provide water quality benefits.
5. The project will provide natural resource benefits.
6. The project will provide nuisance-related flooding reduction benefits.
7. The project will provide multiple use benefits.
8. Use of non-WMB funding is proposed.
9. Public education and outreach on reducing phosphorus loads is proposed.

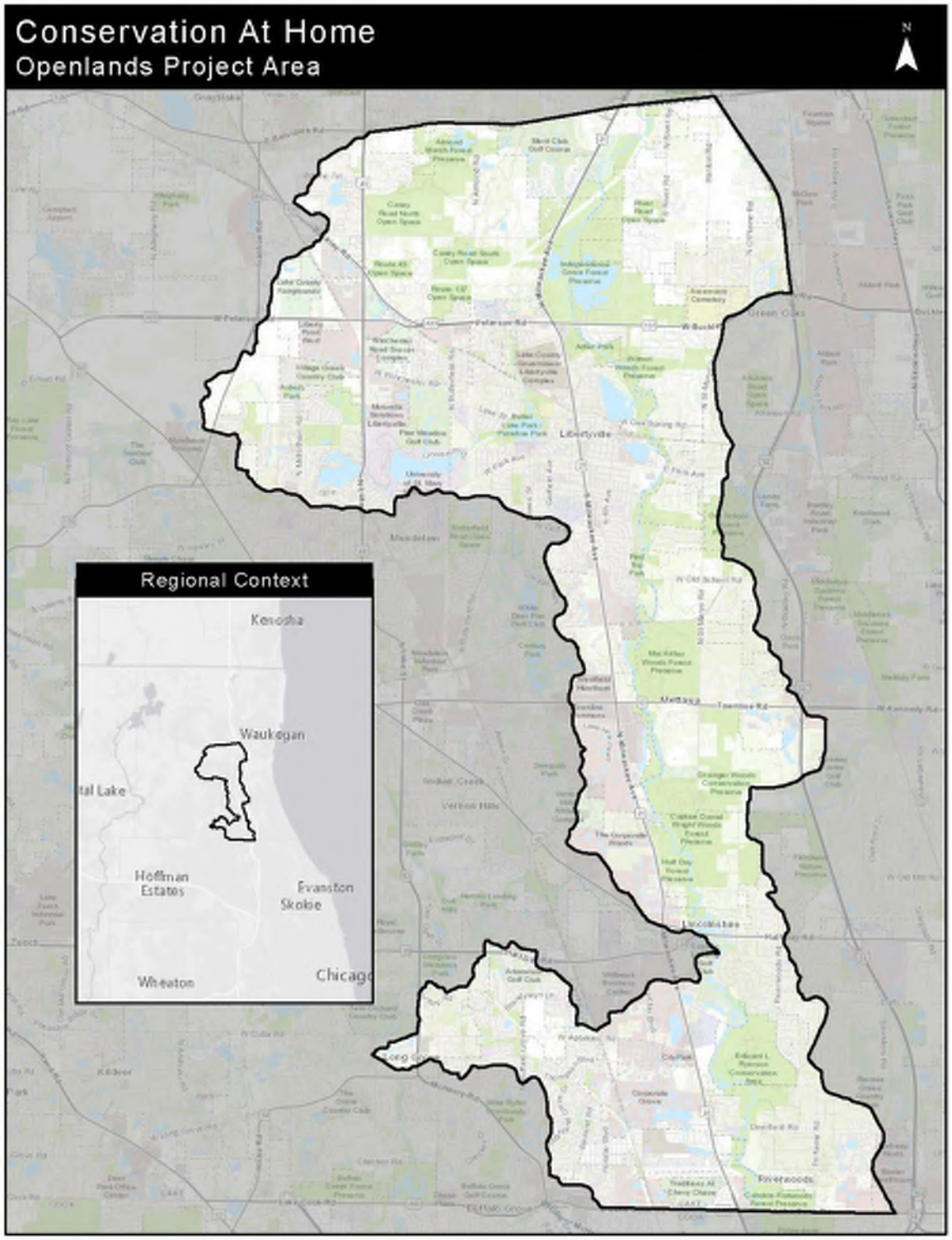
Bonus credit was awarded to this project due to the project being recommended in the North Branch of the Chicago River Watershed-Based Plan and providing greater than 50% of non-SMC cost share funding.

This project ***IS RECOMMENDED*** for WMB funding in the amount of $30,000.

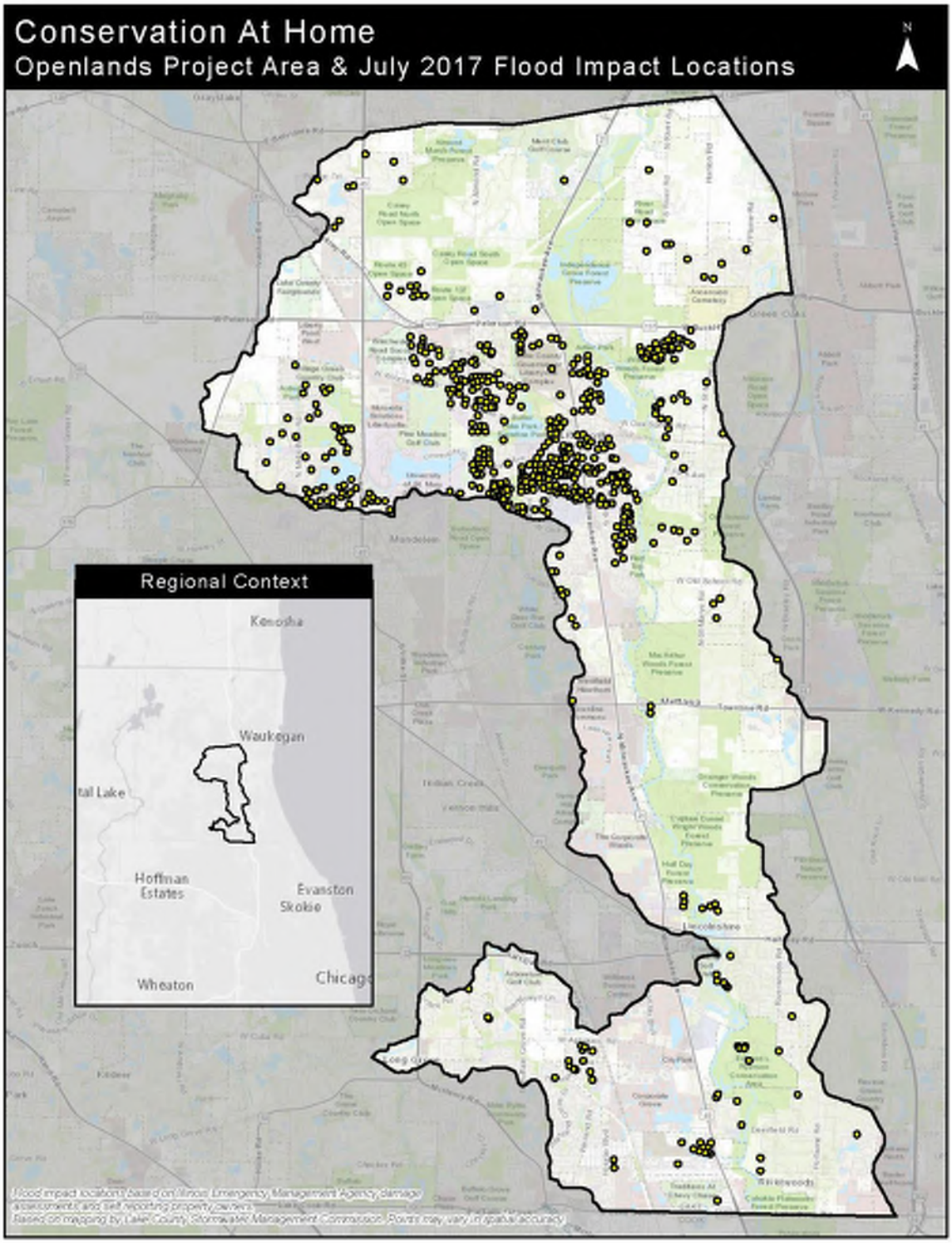
# WMB Funding Evaluation – Des Plaines River Watershed

| Des Plaines River Watershed | | | Conservation @ Home | | Chickamauga Drive | | VOLZ-Kildeer Creek | | Watershed Total |
|---|---|---|---|---|---|---|---|---|---|
| **Rank** | **Prioritization Criteria** | **Max. Possible Weight** | **Rating** | **Score** | **Rating** | **Score** | **Rating** | **Score** | |
| 1 | Interjurisdictional benefits | 25 | 5 | 125 | 4 | 100 | 5 | 125 | |
| 2 | Flood hazard reduction benefits | 20 | 2 | 40 | 2 | 40 | 2 | 40 | |
| 3 | Structural damage reduction | 15 | 2 | 30 | 3 | 45 | 1 | 15 | |
| 4 | Water quality benefits | 15 | 4 | 60 | 2 | 30 | 2 | 30 | |
| 5 | Natural resource benefits | 10 | 5 | 50 | 2 | 20 | 2 | 20 | |
| 6 | Nuisance flood reduction | 5 | 4 | 20 | 2 | 10 | 2 | 10 | |
| 7 | Multiple use benefits | 5 | 5 | 25 | 3 | 15 | 2 | 10 | |
| 8 | Outside funding utilization | 5 | 3 | 15 | 0 | 0 | 0 | 0 | |
| 9 | Phosphorus public education component | 5 | 5 | 25 | 3 | 15 | 3 | 15 | |
| | Bonus Credit: Critical Facilities | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Bonus Credit: Greater than 50% non-SMC cost share | 5 | 1 | 5 | 0 | 0 | 1 | 5 | |
| | Bonus Credit: Measure recommended in SMC adopted Watershed Management Plan | 5 | 1 | 5 | 1 | 5 | 1 | 5 | |
| | HOA Bonus Credit: Current stormwater BMP implementation | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | **Weighted Score Total (Minimum score greater than 210 required for funding)** | | **400** | | **280** | | **275** | | |
| | Total project cost | | $109,784 | | $61,828 | | $337,500 | | $509,112 |
| | Applicant in-kind hours | | | | | | 30 | | 30 |
| | Applicant cost share | | $82,338 | | $30,914 | | $307,500 | | $420,752 |
| | Applicant's WMB funding request | | $27,446 | | $30,914 | | $30,000 | | $88,360 |
| | Applicant's request for SMC in-kind hours | | | | | | | | 0 |
| | Total Available Funds for the watershed = | $70,140 | | | | | | | $70,140 |
| | Staff recommendation for watershed funding | | $27,446 | | SIRF recommended | | $30,000 | | $57,446 |
| | Staff recommendation for SMC in-kind hours | | | | | | | | 0 |

**Project Area Location: Conservation @ Home: Libertyville, Mettawa, Lincolnshire, and Riverwoods.**

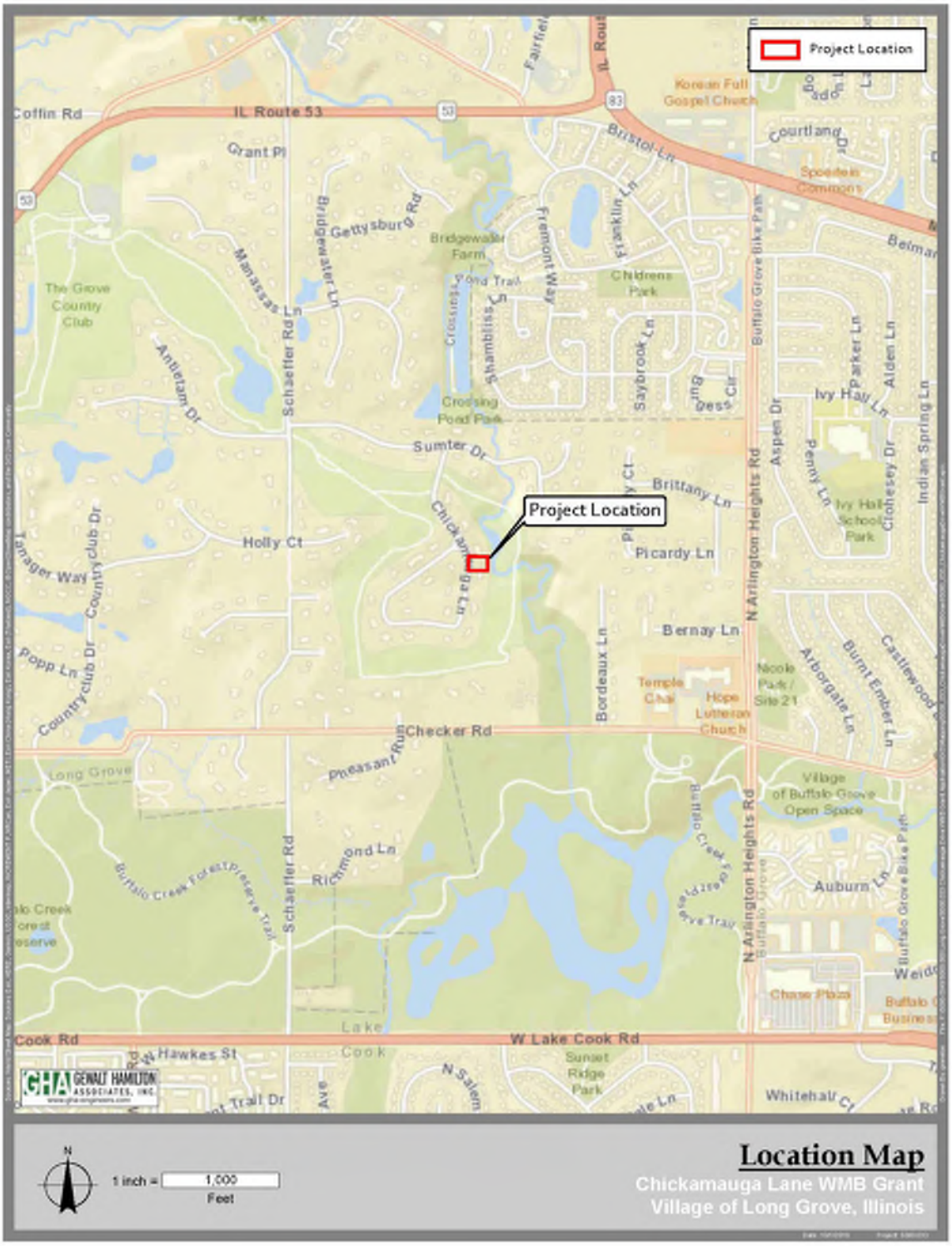


**July 2017 Flood Structural Impact Locations within Conservation @ Home Focus Area**



**Conservation @ Home Program In Action**

**Project Location: Chickamauga Drive Drainage Improvement, Long Grove**



**Proposed Improvements at Chickamauga Drive, Long Grove**

May 09, 2017
South End of 1566 Chickamauga Driveway Culvert

May 09, 2017
Standing on Chickamauga, looking east towards swale between properties

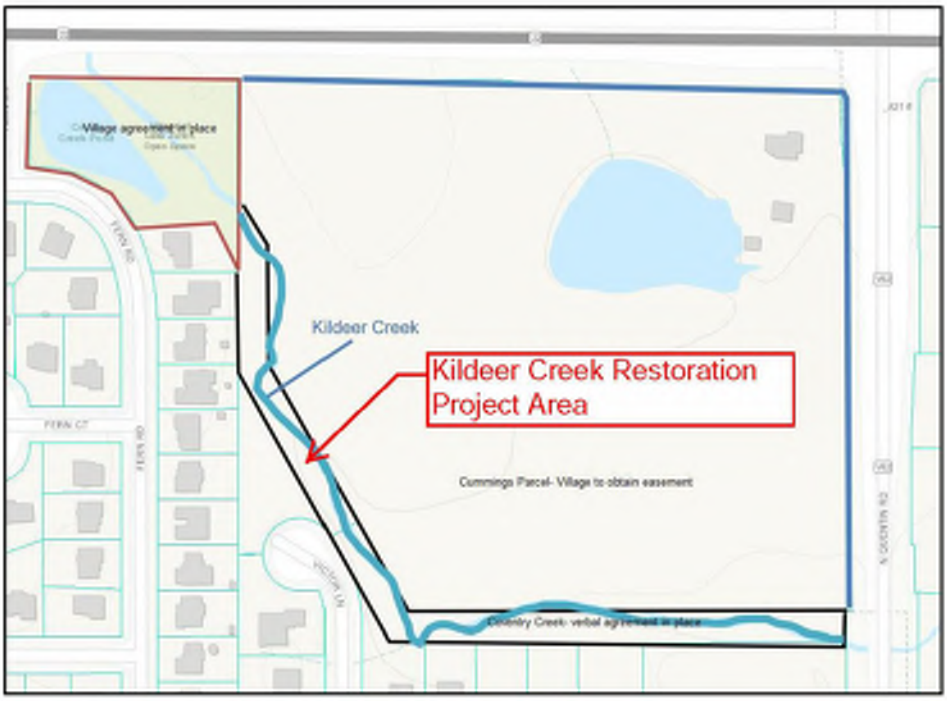
September 27, 2018
North End of 1564 Chickamauga Driveway Culvert

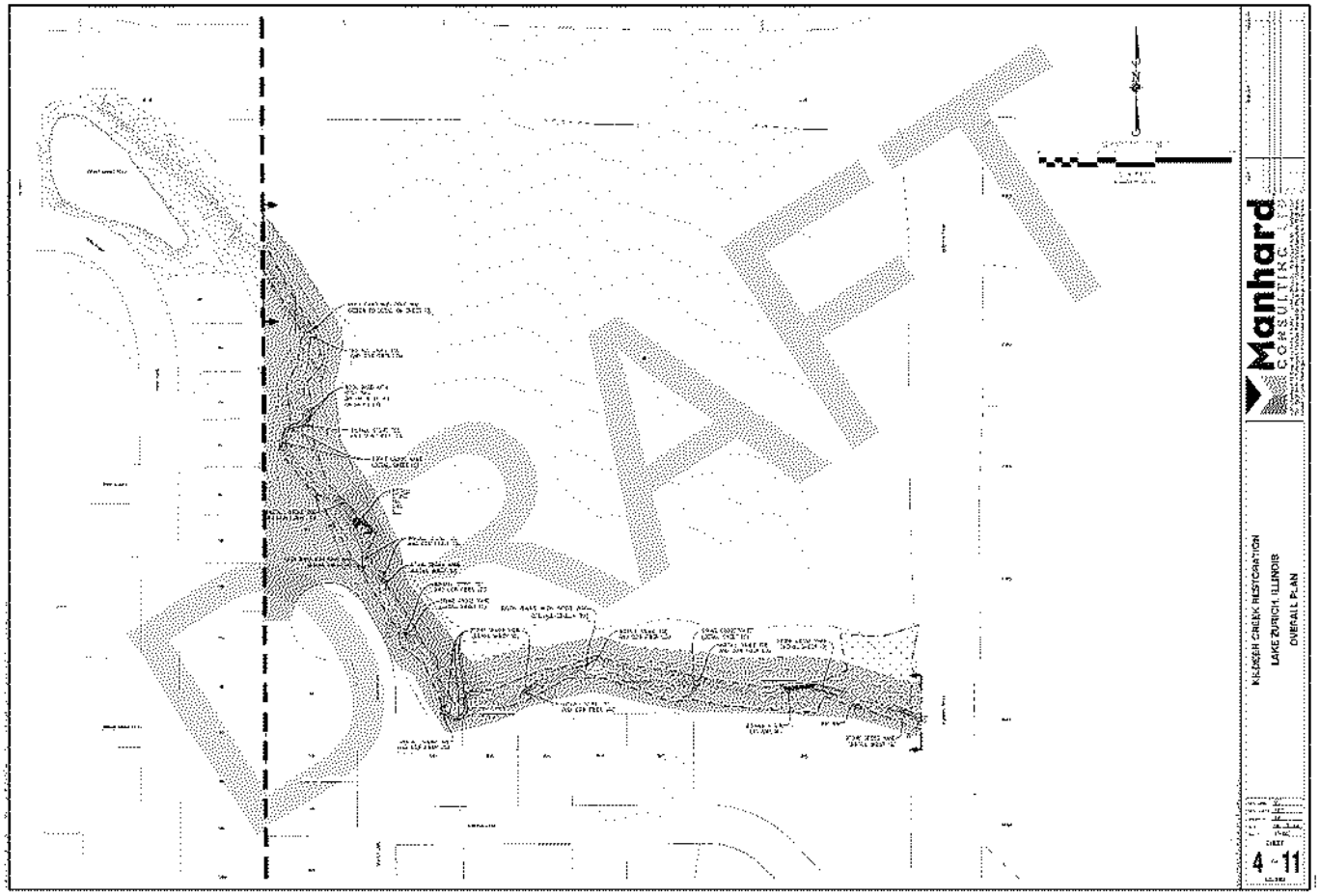
September 27, 2018
South End of 1564 Chickamauga Driveway Culvert

September 27, 2018
South End of 1566 Chickamauga Driveway Culvert

September 27, 2018
Damaged Utility Cluster on northern side of eroded swale

**Project Location for Killdeer Creek Restoration, Lake Zurich.**



STORMWATER MANAGEMENT COMMISSION

# M E M O R A N D U M

November 20, 2018

To: North Branch Chicago River Watershed Management Board
From: Ashley Strelcheck, Water Resource Professional
Re: FY2019 WMB Grant – Funding Recommendations for Projects in the North Branch Chicago River Watershed

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SMC received one application for a project in the North Branch Chicago River Watershed with a total project cost of $3,523,084 and requested funding in the amount of $35,070. The available funding for projects in the North Branch of the Chicago River Watershed for Fiscal Year 2017 is $35,070. SMC staff recommends this project. The attached table, "WMB Funding Evaluation-North Branch Chicago River Watershed", provides the SMC staff evaluation of submitted application based on the following prioritization criteria:

1. **Interjurisdictional Benefits -** Benefit multiple jurisdictions (government entities, HOAs, not-for-profits), will have interjurisdictional impacts, and/or will benefit the major "trunk"/regional scale drainage system of the watershed. ("Trunk" defined as that part of the drainage system that drains more than 100-acre drainage areas and has the potential to have inter-jurisdictional impacts.)

2. **Flood Hazard Reduction Benefits -** Have beneficial results or impacts, including non-transportation related flood hazard reduction, during flood events up to and including 100-year events. (A 100-year event being a flood event with the probability of occurrence in any given year of 1%.)

3. **Structural Damage Reduction -** Mitigate structural damages due to floods and other stormwater related causes with consideration of the number of structures affected including, but not limited to, removing, elevating, flood-proofing or otherwise protecting buildings from future danger of flood damage or structural damage related to flood-induced erosion. Also, these criteria include Lake Michigan Watershed specific mitigation of damages due to stormwater, flood and wave induced problems on bluff, ravine and lakeshore areas.

4. **Water Quality Benefits -** Reduce surface water quality impairments utilizing best management practices.
5. **Natural Resource Benefits -** Benefit the environment with an emphasis on non-structural natural resource protection strategies.

6. **Nuisance Flood Reduction -** Alleviate major nuisance flooding and/or blocked transportation access.

7. **Multiple Use Benefits -** Provide multiple-use benefits to communities such as recreation, public education, data collection or others.

8. **Outside Funding Utilization -** Utilize federal and\or state funding to the maximum extent possible.

9. **Public Education Component -** Include a public education and outreach effort aimed at reducing the amount of phosphorus contained in stormwater runoff. This may include reducing the amount of fertilizer applied to lawns, using phosphorus-free fertilizers, and establishing buffer strips along lake shores, stream banks, and wetlands. Applicants may also choose to adopt an ordinance banning the use of fertilizers and detergents containing phosphorus.

SMC staff also awarded bonus credit to those applications satisfying the following 4 WMB-approved criteria:

- Projects for which the applicant's share of the estimated total project cost exceeds 50%.
- Projects that are recommended in a SMC-adopted watershed plan.
- Projects that protect or alleviate structural damages to critical facilities.
- HOAs that document they are currently implementing stormwater best management practices.

Below is a brief summary of each proposed project, describing how each application addresses the WMB-approved prioritization criteria. SMC staff recommendations are also presented below.

1. **Dady Slough Flood Control and Wetland Enhancement Project.** An application was submitted by Lake County Stormwater Management Commission. The estimated project cost is $3,523,084, of which $139,250 is the applicant's share. $35,070 is currently being requested from the WMB. The proposed project scope includes consists of acquisition of approximately 25 acres of undeveloped land in Park City and Waukegan. Soil will be excavated from the slough in order to increase flood storage capacity. The project also proposes to enhance existing low-quality wetlands by adding additional wetland plants and seed which can improve habitat, attract more wildlife, increase aesthetic value to society, and potentially increase the wetlands' effectiveness in performing functions such as flood water storage, sediment retention, or pollution abatement. Additionally, a path will be added to create public access for residents, and in support of future environmental studies curriculum for the Cristo Rey Magnet School students.

Project evaluation:

1. The project will provide significant inter-jurisdictional benefits.
2. The project will provide flood hazard reduction benefits.
3. The project will provide structural damage reduction benefits.
4. The project will provide water quality benefits.
5. The project will provide natural resource benefits.
6. The project will provide significant nuisance-related flooding reduction benefits.
7. The project will provide multiple use benefits.
8. Use of non-WMB funding is proposed.
9. Public education and outreach on reducing phosphorus loads is proposed.

Bonus credit was awarded to this project due to the project being recommended in the North Branch of the Chicago River Watershed-Based Plan and providing greater than 50% of non-SMC cost share funding.

This project ***IS RECOMMENDED*** for WMB funding in the amount of $35,070.

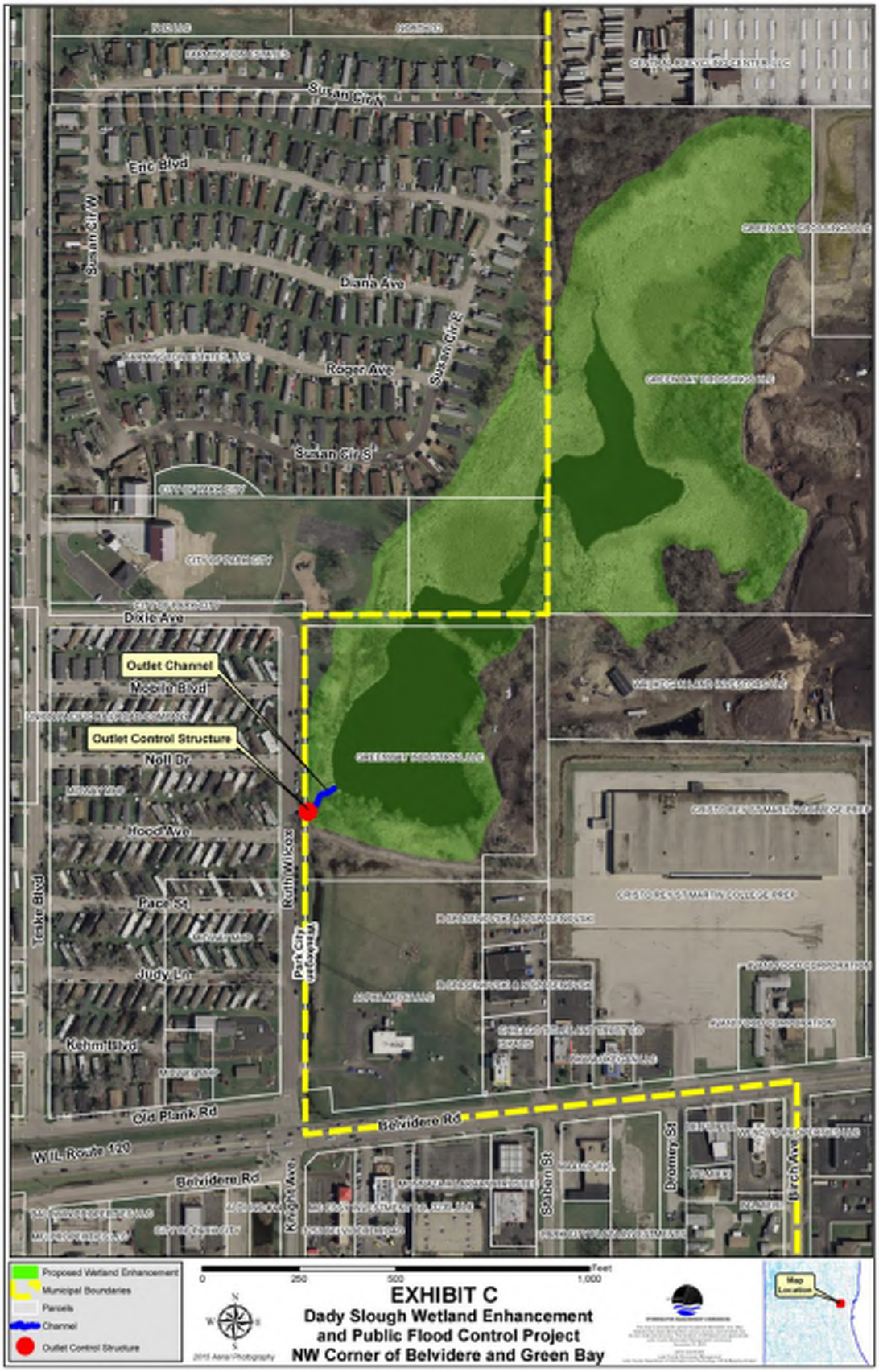
If you have any questions regarding these projects, please contact Ashley Strelcheck at (847) 377-7710 or astrelcheck@lakecountyil.gov.

# WMB Funding Evaluation – FY19 North Branch Chicago River Watershed

| North Branch Watershed | | | Park City/Waukegan<br>Dady Slough Flood Control Project | | Watershed Total |
|---|---|---|---|---|---|
| **Rank** | **Prioritization Criteria** | **Max. Possible Weight** | **Rating** | **Score** | |
| 1 | Interjurisdictional benefits | 25 | 5 | 125 | |
| 2 | Flood hazard reduction benefits | 20 | 4 | 80 | |
| 3 | Structural damage reduction | 15 | 4 | 60 | |
| 4 | Water quality benefits | 15 | 3 | 45 | |
| 5 | Natural resource benefits | 10 | 3 | 30 | |
| 6 | Nuisance flood reduction | 5 | 4 | 20 | |
| 7 | Multiple use benefits | 5 | 5 | 25 | |
| 8 | Outside funding utilization | 5 | 5 | 25 | |
| 9 | Phosphorus public education component | 5 | 5 | 25 | |
| | Bonus Credit: Critical Facilities | 5 | 0 | 0 | |
| | Bonus Credit: Greater than 50% non-SMC cost share | 5 | 1 | 5 | |
| | Bonus Credit: Measure recommended in SMC adopted Watershed Management Plan | 5 | 1 | 5 | |
| | HOA Bonus Credit: Current stormwater BMP implementation | 5 | 0 | 0 | |
| | **Weighted Score Total (Minimum score greater than 210 required for funding)** | | **445** | | |
| | Total project cost | | $3,523,084 | | **$3,523,084** |
| | Applicant in-kind hours | | 0 | | **0** |
| | Applicant cost share | | $139,250 | | **$139,250** |
| | Applicant's WMB funding request | | $35,070 | | **$35,070** |
| | Applicant's request for SMC in-kind hours | | 0 | | **0** |
| | Total Available Funds for the watershed = | $35,070 | | | **$35,070** |
| | Staff recommendation for watershed funding | | | | **$0** |
| | Staff recommendation for SMC in-kind hours | | 0 | | **0** |

Rating: 0=no effect, 1=minimal effect, 2=below average effect, 3=average effect, 4=above average effect, 5=maximum effect practicable

**Dady Slough Flood Control and Wetland Enhancement Project Location**



STORMWATER MANAGEMENT COMMISSION

# M E M O R A N D U M

November 20, 2018

To: Fox River Watershed Management Board
From: Sharon Østerby, Water Resource Professional
Re: FY2019 WMB Grant – Funding Recommendations for Projects in the Fox River Watershed

SMC received eight applications for projects in the Fox River Watershed with a total project cost of $449,900 and requested funding in the amount of $211,166. The available funding for projects in the Fox River Watershed for Fiscal Year 2017 is $35,070. SMC staff recommends funding of two projects. The attached table, "WMB Funding Evaluation-Fox River Watershed," provides the SMC staff evaluation of submitted applications based on the following prioritization criteria:

1) **Interjurisdictional Benefits -** Benefit multiple jurisdictions (government entities, HOAs, not-for-profits), will have interjurisdictional impacts, and/or will benefit the major "trunk"/regional scale drainage system of the watershed. ("Trunk" defined as that part of the drainage system that drains more than 100-acre drainage areas and has the potential to have inter-jurisdictional impacts.)
2) **Flood Hazard Reduction Benefits -** Have beneficial results or impacts, including non-transportation related flood hazard reduction, during flood events up to and including 100-year events. (A 100-year event being a flood event with the probability of occurrence in any given year of 1%.)
3) **Structural Damage Reduction - Mitigate structural damages due to floods and other stormwater** related causes with consideration of the number of structures affected including, but not limited to, removing, elevating, flood-proofing or otherwise protecting buildings from future danger of flood damage or structural damage related to flood-induced erosion. Also, these criteria include Lake Michigan Watershed specific mitigation of damages due to stormwater, flood and wave induced problems on bluff, ravine, and lakeshore areas.
4) **Water Quality Benefits -** Reduce surface water quality impairments utilizing best management practices.
5) **Natural Resource Benefits -** Benefit the environment with an emphasis on non-structural natural resource protection strategies.
6) **Nuisance Flood Reduction -** Alleviate major nuisance flooding and/or blocked transportation access.
7) **Multiple Use Benefits -** Provide multiple-use benefits to communities such as recreation, public education, data collection or others.
8) **Outside Funding Utilization -** Utilize federal and\or state funding to the maximum extent possible.
9) **Public Education Component -** Include a public education and outreach effort aimed at reducing the amount of phosphorus contained in stormwater runoff. This may include reducing the amount of fertilizer applied to lawns, using phosphorus-free fertilizers, and establishing buffer

strips along lake shores, stream banks, and wetlands. Applicants may also choose to adopt an ordinance banning the use of fertilizers and detergents containing phosphorus.

SMC staff awarded bonus credit to those applications satisfying the following four WMB-approved criteria:

- Projects for which the applicant's share of the estimated total project cost exceeds 50%.
- Projects recommended in a SMC-adopted watershed plan.
- Projects that protect or alleviate structural damages to critical facilities.
- HOAs that document they are currently implementing stormwater best management practices.

Below are brief summaries of proposed projects, evaluation of project's prioritization criteria, and SMC staff recommendations for WMB project funding.

1. **Larkdale Storm Sewer Rehabilitation Project.** The Village of Wauconda submitted this project application. The estimated project cost is $122,690 of which $62,690 is the applicant's share. The amount requested from SIRF is $60,000. The proposed project scope of work consists of spot repairs and lining of 15", 24" & 42" storm sewers. The storm sewers are separating and causing sink holes. The Village anticipates televising the storm sewer lines in late 2018 with repairs targeted for spring 2019. The proposed improvements will have interjurisdictional, flood hazard, structural damage, and nuisance flood reduction benefits.

   Project evaluation:
   1. The project will provide significant inter-jurisdictional benefits.
   2. The project will provide significant flood hazard reduction benefits.
   3. The project will provide maximum structural damage reduction benefits.
   4. The project will provide moderate water quality benefits.
   5. The project will provide moderate natural resource benefits.
   6. The project will provide moderate nuisance-related flooding reduction benefits.
   7. The project will not provide multiple use benefits
   8. The project proposes to utilize outside (non-WMB or Applicant cost share) funding but has not secured that funding to date.
   9. The project proposes moderate public education and outreach components for reducing phosphorus.

   This project received bonus credit for proposing a cost-share greater than the required minimum 50% of the estimated total project cost.

   SMC Staff referred this project to the SMC's Stormwater Infrastructure Repair Fund (SIRF) program due to the nature and scope of the work. SMC staff recommends SIRF funding for the Larkdale Storm Sewer Rehabilitation Project.

   SMC Staff does ***NOT RECOMMEND*** WMB funding for the Larkdale Storm Sewer Rehabilitation Project.

2. **Farm trails Drainage Project.** The Farm Trails HOA in Lake Barrington submitted this project application. The estimated project cost is $18,000 of which $9,000 is the applicant's share. The amount requested from the WMB is $9,000. The proposed project scope of work consists of the replacing and daylighting the pipe on the east side of the Farm Trails subdivision to create an

open-air drainage system This will carry water faster towards the south east corner of subdivision into the Wagner Fen. The proposed project will have interjurisdictional, water quality, natural resource, and nuisance-related flood reduction benefits.

Project evaluation:

1. The project will provide significant inter-jurisdictional benefits.
2. The project will provide moderate flood hazard reduction benefits.
3. The project will have moderate structural damage reduction benefits.
4. The project will provide moderate water quality benefits.
5. The project will provide moderate natural resource benefits.
6. The project will provide moderate nuisance-related flooding reduction benefits.
7. The project will provide moderate multiple use benefits
8. The project will not utilization of outside (non-WMB or Applicant cost share) funding.
9. The project proposes moderate public education and outreach components for reducing phosphorus.

This project did not receive bonus credits.

SMC Staff referred this project to the SMC's Stormwater Infrastructure Repair Fund (SIRF) program due to the nature and scope of the work. SMC staff recommends SIRF funding for the Farm Trails HOA Drainage Project.

SMC Staff does ***NOT RECOMMEND*** WMB funding for the Farm Trails HOA Drainage Project.

3. **Millennium Park Water Quality Improvement Project.** The Village of Fox Lake submitted this project application. The estimated cost of the project is $42,950, of which $21,550 is the applicant's share. The amount requested from WMB is $21,400. The proposed project scope of work includes removing invasive species, enhancing existing wetlands, and reducing pollutant runoff by removing impervious surface installing buffer strips and installing buffer strips. The proposed project will have interjurisdictional, water quality, natural resource, and multiple use benefits.

   Project evaluation:

   1. The project will provide significant inter-jurisdictional benefits.
   2. The project will provide some flood hazard reduction benefits.
   3. The project will not have structural damage reduction benefits.
   4. The project will provide significant water quality benefits.
   5. The project will provide significant natural resource benefits.
   6. The project will provide significant nuisance-related flooding reduction benefits.
   7. The project will provide maximum multiple use benefits
   8. The project will not utilization of outside (non-WMB or Applicant cost share) funding.
   9. The project proposes significant public education and outreach components for reducing phosphorus.

   This project received bonus credits for a greater than 50% non-SMC cost-share.

   SMC Staff ***RECOMMENDS*** WMB funding for the Millennium Park Water Quality Improvement Project in the amount of $21,400.

4. **Duck Lake Channel & Shoreline Improvement Project**. The Duck Lake Woods HOA and Grant Township submitted this project application. The estimated cost of the project is $63,688 of which $31,844 is the applicant's share. The amount requested from WMB is $31,844. The proposed project scope of work involves grading of the banks, installation of rip rap along the toe of the slope, and installation of native plants behind the rip rap for permanent stabilization. The proposed project has inter-jurisdictional, water quality, and natural resource benefits.

   Project evaluation:
   1. The project will provide maximum inter-jurisdictional benefits.
   2. The project will not provide flood hazard reduction benefits.
   3. The project will not provide structural damage reduction benefits.
   4. The project will provide maximum water quality benefits.
   5. The project will provide maximum natural resource benefits.
   6. The project will not provide nuisance-related flooding reduction benefits.
   7. The project will provide moderate multiple use benefits
   8. The project proposes to utilize outside (non-WMB or Applicant cost share) funding.
   9. The project proposes moderate public education and outreach components for reducing phosphorus.

   This project received bonus credits for this measure which is recommended in the SMC-adopted Fish Lake Drain Watershed-Based Plan.

   SMC Staff ***RECOMMENDS*** WMB funding for the Duck Lake Channel & Shoreline Improvement Project in the amount of $31,844.

5. **Tower Lake Drainage Study and Planning Project.** The Village of Tower Lakes and the TLIA have submitted this project application. The estimated cost of the project is $32,000 of which $16,000 is the applicant's share. The amount request from WMB is $16,000. The proposed project scope of work includes a large-scale assessment of the lakes and watershed to assist with prioritizing projects identified in the watershed plan and possibly identifying additional projects. The proposed project has inter-jurisdictional, water quality, natural resource benefits, and nuisance flood reduction benefits.

   Project evaluation:
   1. The project will provide maximum inter-jurisdictional benefits.
   2. The project will provide minimal flood hazard reduction benefits.
   3. The project will not provide structural damage reduction benefits.
   4. The project will provide moderate water quality benefits.
   5. The project will provide moderate natural resource benefits.
   6. The project will provide moderate nuisance-related flooding reduction benefits.
   7. The project will provide minimal multiple use benefits.
   8. The project proposes to utilize outside (non-WMB or Applicant cost share) funding.
   9. The project does not propose public education and outreach on reducing phosphorus.

   This project received bonus credits for a measure recommended in a SMC-adopted watershed-based plan, and for a current stormwater BMP implementation.

   SMC Staff does ***NOT RECOMMEND*** WMB funding for the Tower Lakes Drainage Study & Planning project.

6. **Riverwalk Rill System Maintenance Project.** The Riverwalk HOA in Port Barrington submitted this project application. The estimated cost of the project is $42,500, of which $21,250 is the applicant's share. The amount requested from WMB is $21,250. The proposed project scope of work includes removing accumulated branches, debris, and sediment from the rills located throughout the subdivision. The proposed project has inter-jurisdictional and water quality benefits.

   Project evaluation:
   1. The project will provide moderate inter-jurisdictional benefits.
   2. The project will provide moderate flood hazard reduction benefits.
   3. The project will not provide structural damage reduction benefits.
   4. The project will provide significant water quality benefits.
   5. The project will provide some natural resource benefits.
   6. The project will not provide nuisance-related flooding reduction benefits.
   7. The project will provide some multiple use benefits
   8. The project will not utilize outside (non-WMB or Applicant cost share) funding.
   9. The project proposes some public education and outreach components on reducing phosphorus.

   This project did not receive bonus credits.

   SMC Staff does ***NOT RECOMMEND*** WMB funding for this project.

7. **Grass Lake Wetland Restoration Project.** The Fox Waterway Agency submitted this project application. The estimated cost of the project is $60,472, of which $42,600 is the applicant's share. The amount requested from WMB is $17,872. The proposed project scope of work includes the repair of 400 L.F. of the perimeter berm with 1.0 ton of rip-rap. The proposed project has interjurisdictional, and some water quality and natural resource benefits.

   Project evaluation:
   1. The project will provide significant some inter-jurisdictional benefits.
   2. The project will not provide flood hazard reduction benefits.
   3. The project will not provide structural damage reduction benefits.
   4. The project will provide moderate water quality benefits.
   5. The project will provide moderate natural resource benefits.
   6. The project will not provide nuisance-related flooding reduction benefits.
   7. The project will provide some multiple use benefits
   8. The project will not utilize outside (non-WMB or Applicant cost share) funding.
   9. The project does not propose a public education and outreach component on reducing phosphorus.

   This project did not receive bonus credits.

   SMC Staff does ***NOT RECOMMEND*** WMB funding for the Grass Lake Wetland Restoration Project.

8. **Lake Marie Shoreline Erosion Project.** The California Coal & Ice Subdivision Improvements Association submitted this project application. The estimated cost of the project is $67,600, of which $33,800 is the applicant's share. The amount requested from WMB is $33,800. The proposed project scope of work includes the repair of 400 L.F. of the perimeter berm with 1.0 ton of rip-rap. The proposed project has interjurisdictional, and some water quality and natural resource benefits.

   Project evaluation:
   1. The project will provide some inter-jurisdictional benefits.
   2. The project will not provide flood hazard reduction benefits.
   3. The project will provide some structural damage reduction benefits.
   4. The project will provide some water quality benefits.
   5. The project will provide moderate natural resource benefits.
   6. The project will provide moderate nuisance-related flooding reduction benefits.
   7. The project will not provide multiple use benefits
   8. The project will not utilize outside (non-WMB or Applicant cost share) funding.
   9. The project does not propose a public education and outreach component on reducing phosphorus.

   This project did not receive bonus credits.

   SMC Staff does ***NOT RECOMMEND*** WMB funding for the Lake Marie Shoreline Erosion project.

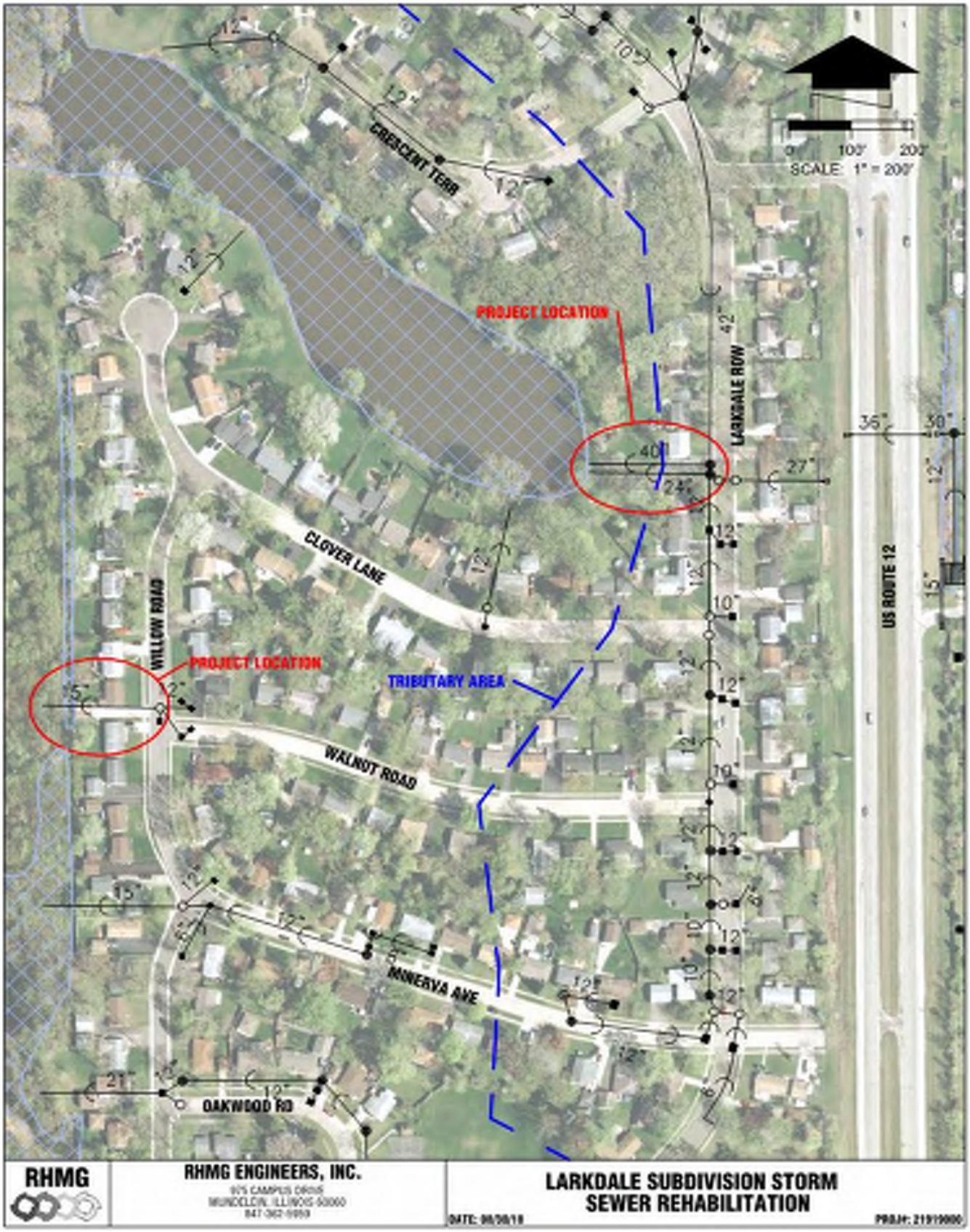
If you have any questions regarding these projects, please contact Sharon Østerby at (847) 377-7706 or sosterby@lakecountyil.gov.

# WMB Funding Evaluation – Fox River Watershed

| Fox River Watershed | | | Wauconda Larkdale Subdivision Storm Sewer Rehab. Project | | Lake Barrington Farm Trails HOA Drainage Project | | Fox Lake Millennium Park $H_2O$ Quality Improv. Project | | Grant Twp. Duck Lake Shoreline Improv. Project | | Tower Lakes Drainage Study & Planning Project | | Port Barrington Riverwalk HOA Rill System Maint. Project | | Fox Waterway Agency Grass Lake Wetland Restoration Project | | Antioch CA Improv. Assoc. Lake Marie Shoreline Erosion Project | | Watershed Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rank | Prioritization Criteria | Max. Possible Weight | Rating | Score | Rating | Score | Rating | Score | Rating | Score | Rating | Score | Rating | Score | Rating | Score | Rating | Score | |
| 1 | Interjurisdictional benefits | 25 | 4 | 100 | 4 | 100 | 4 | 100 | 5 | 125 | 5 | 125 | 3 | 75 | 4 | 100 | 2 | 50 | |
| 2 | Flood hazard reduction benefits | 20 | 4 | 80 | 3 | 60 | 2 | 40 | 0 | 0 | 1 | 20 | 3 | 60 | 0 | 0 | 0 | 0 | |
| 3 | Structural damage reduction | 15 | 5 | 75 | 3 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 30 | |
| 4 | Water quality benefits | 15 | 3 | 45 | 3 | 45 | 4 | 60 | 5 | 75 | 3 | 45 | 4 | 60 | 3 | 45 | 2 | 30 | |
| 5 | Natural resource benefits | 10 | 3 | 30 | 3 | 30 | 4 | 40 | 5 | 50 | 3 | 30 | 1 | 10 | 3 | 30 | 3 | 30 | |
| 6 | Nuisance flood reduction | 5 | 3 | 15 | 3 | 15 | 4 | 20 | 0 | 0 | 3 | 15 | 0 | 0 | 0 | 0 | 3 | 15 | |
| 7 | Multiple use benefits | 5 | 0 | 0 | 3 | 15 | 5 | 25 | 3 | 15 | 1 | 5 | 2 | 10 | 2 | 10 | 0 | 0 | |
| 8 | Outside funding utilization | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 15 | 3 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9 | Phosphorus public education component | 5 | 3 | 15 | 3 | 15 | 4 | 20 | 3 | 15 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | |
| | Bonus Credit: Critical facilities | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Bonus Credit: Greater than 50% non-SMC cost-share | 5 | 1 | 5 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Bonus Credit: Measure Recommended in a SMC-adopted watershed management plan | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | HOA Bonus Credit: Current Stormwater BMP Implementation | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | **Weighted Score Total (Minimum score greater than 210 required** | | **365** | | **325** | | **310** | | **300** | | **265** | | **220** | | **185** | | **155** | | |
| | Total project cost | | $122,690 | | $18,000 | | $42,950 | | $63,688 | | $32,000 | | $42,500 | | $60,472 | | $67,600 | | **$449,900** |
| | Applicant in-kind hours | | 0 | | 0 | | 88 | | 80 | | 0 | | 0 | | 400 | | 0 | | **568** |
| | Applicant cost share | | $62,690 | | $9,000 | | $21,550 | | $31,844 | | $16,000 | | $21,250 | | $42,600 | | $33,800 | | **$238,734** |
| | Applicant's WMB funding request | | $60,000 | | $9,000 | | $21,400 | | $31,844 | | $16,000 | | $21,250 | | $17,872 | | $33,800 | | **$211,166** |
| | Applicant's request for SMC in-kind hours | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | **0** |
| | Total Available Funds for the watershed = | $35,070 | | | | | | | | | | | | | | | | | **$35,070** |
| | Staff recommendation for watershed funding | | SIRF Recommended | | SIRF Recommended | | $21,400 | | $31,844 | | $0 | | $0 | | $0 | | $0 | | **$53,244** |
| | Staff recommendation for SMC in-kind hours | | 0 | | | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | **0** |

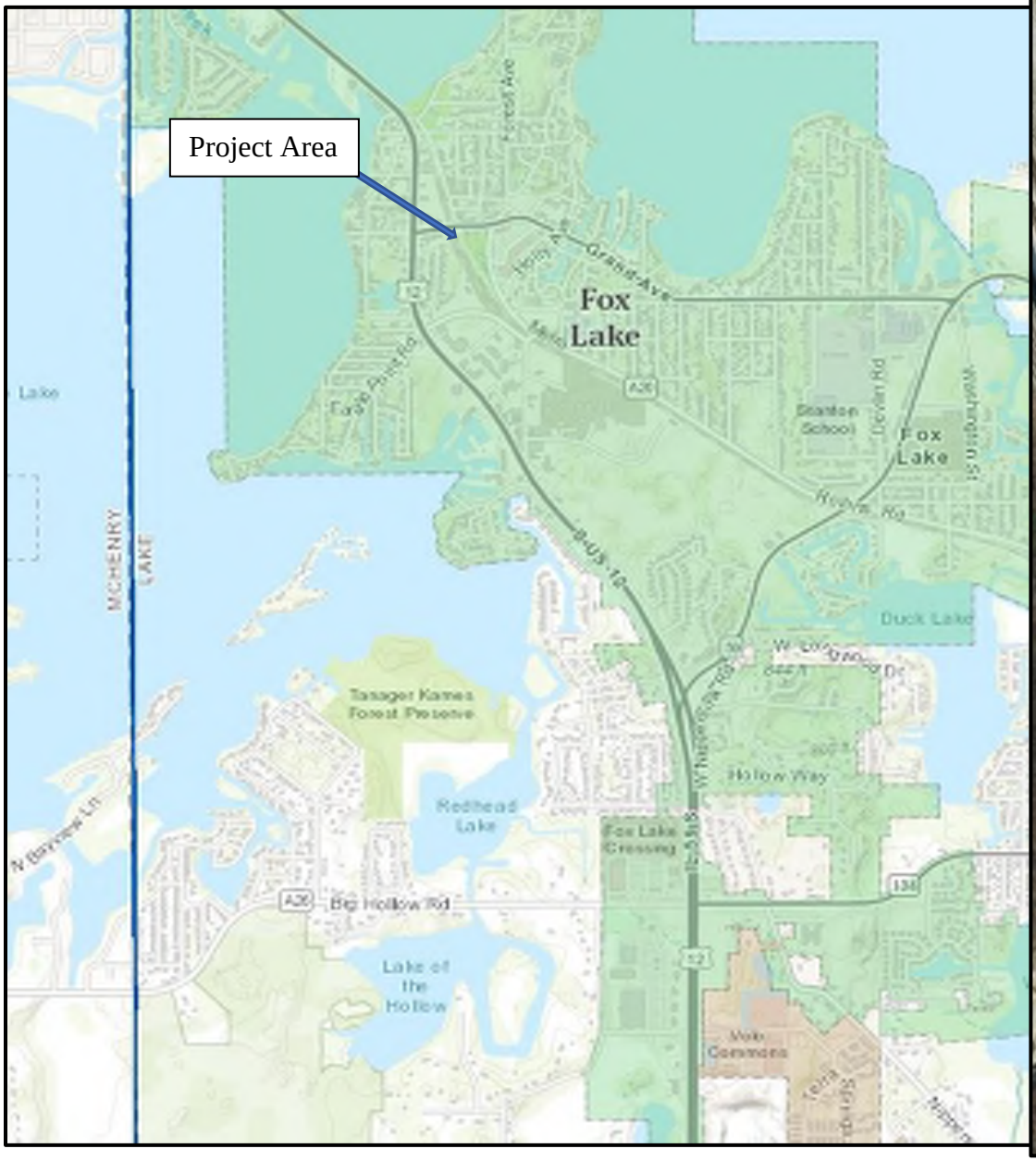
Rating: 0=no effect, 1=minimal effect, 2=below average effect, 3=average effect, 4=above average effect, 5=maximum effect practicable

# Larkdale Subdivision Storm Sewer Rehabilitation Project-Wauconda

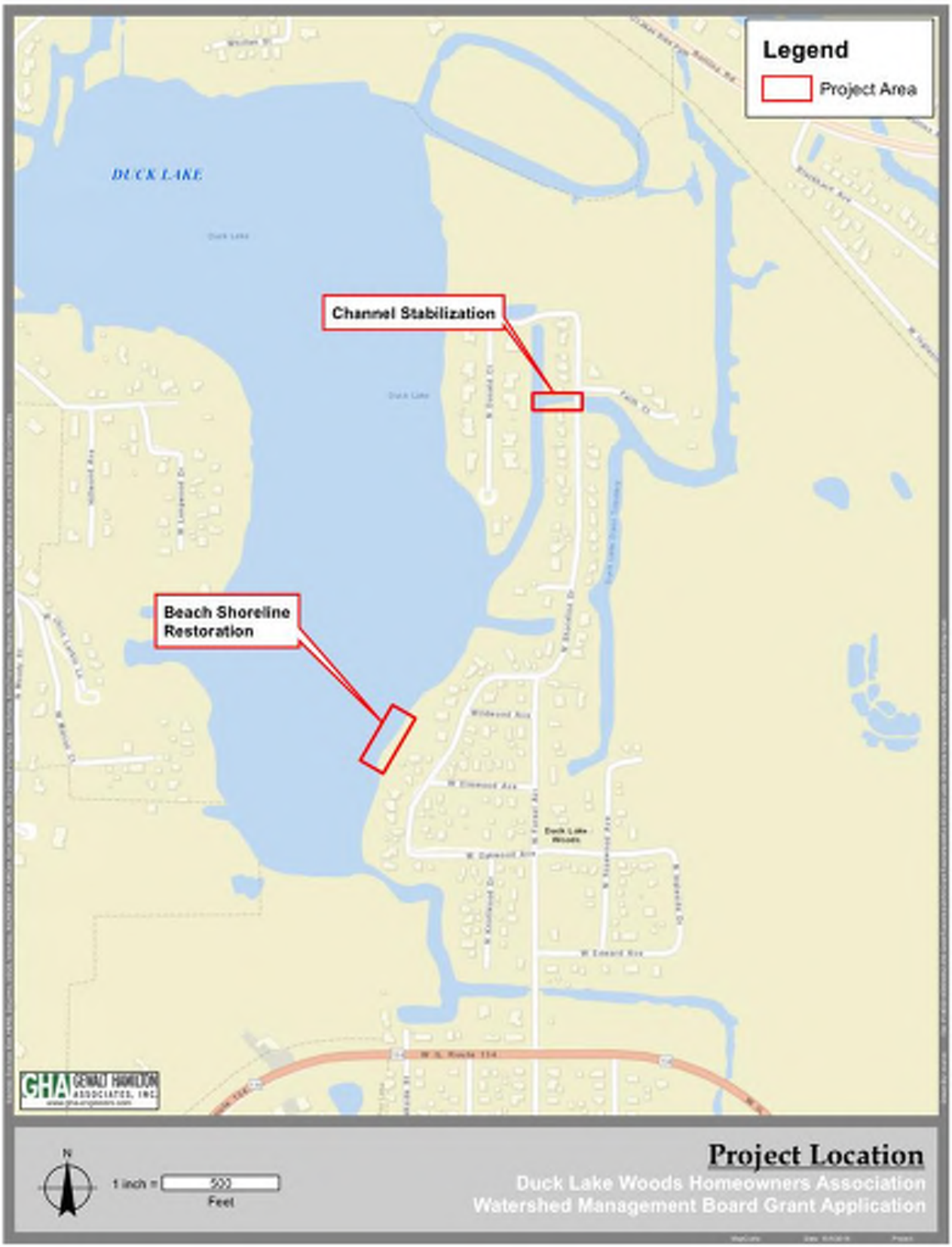


# Farm Trails HOA Drainage Improvement Project, Lake Barrington

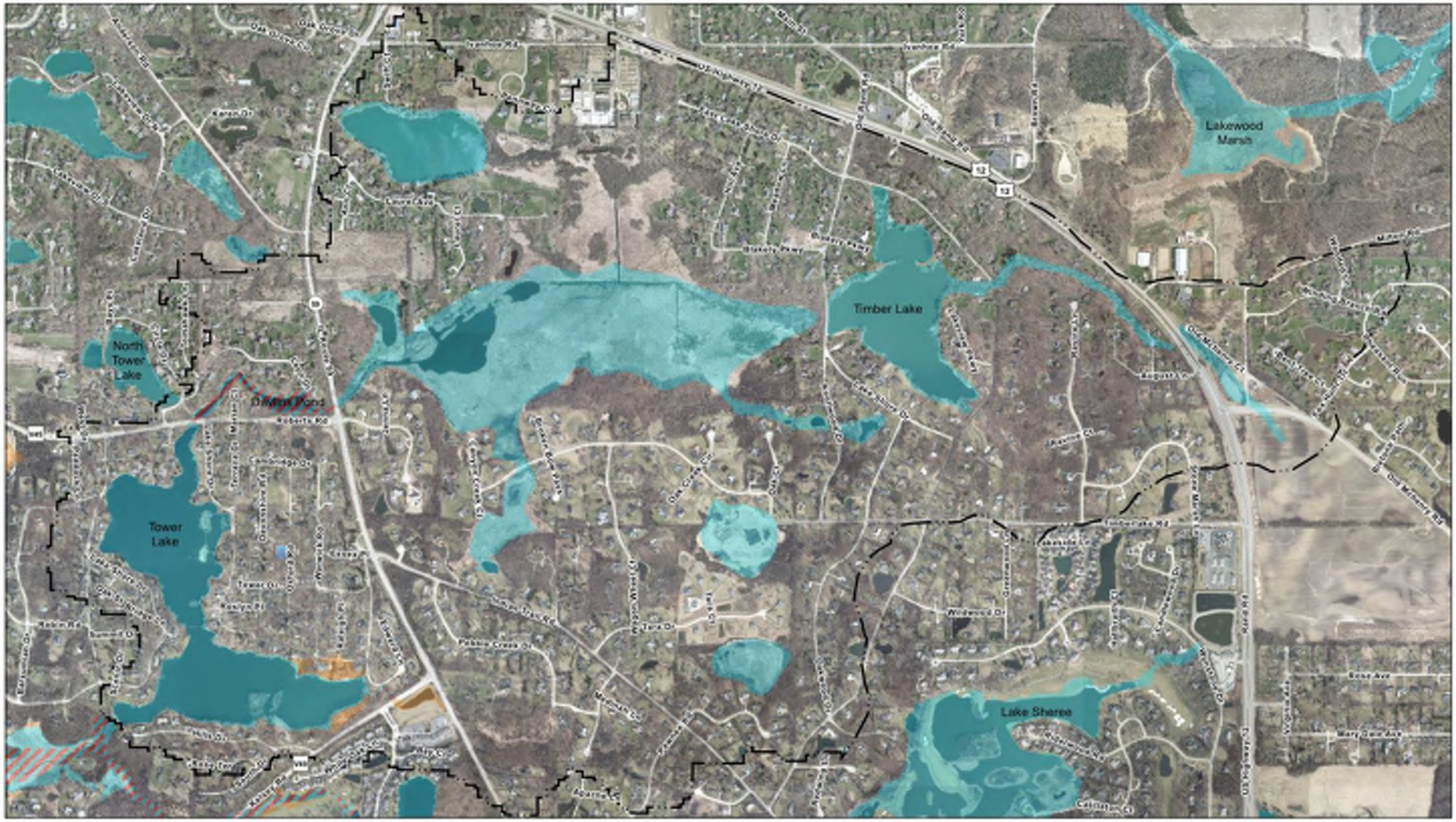
# Millennium Park Water Quality Improvement Project - Fox Lake



# Duck Lake Channel & Shoreline Restoration Project



# Tower Lakes Drainage Study & Planning Project – Tower Lakes




Prepared by:

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Scale: 0 1,000 Feet

Project Number: 18-0808

Orientation:

Date: 10/4/2018

Legend:
- Tower Lakes Watershed (HUC12 and StreamStats)
- Regulatory Floodway (FEMA NFHL)
- 1% Annual Chance Flood Hazard (FEMA NFHL)
- 0.2% Annual Chance Flood Hazard (FEMA NFHL)

Project Name: TLIA Watershed Study

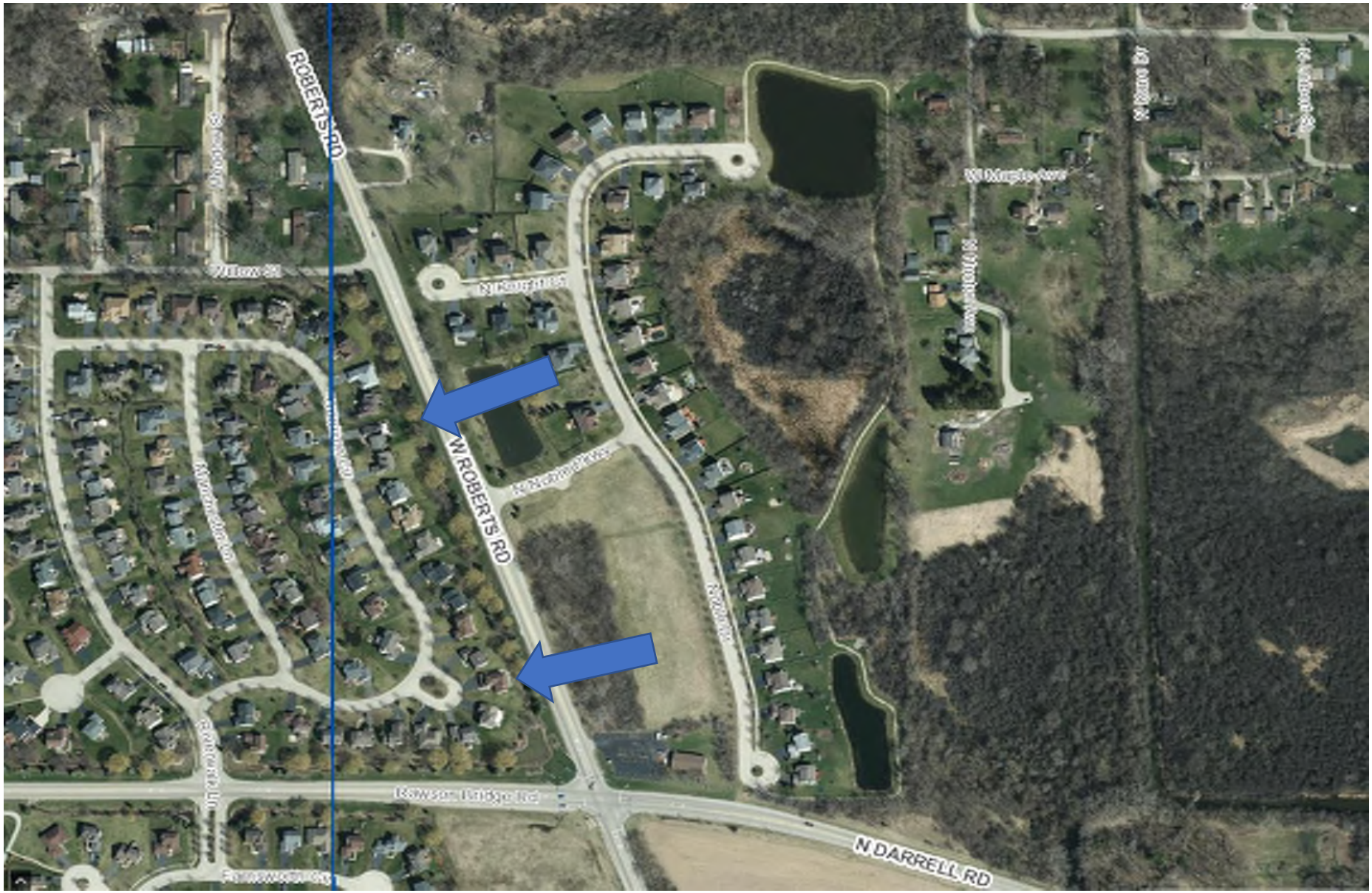
Prepared For: Tower Lakes Improvement Association, Village of Tower Lakes

Information about exhibit: 2017 Aerial

Exhibit Title: **Tower Lakes Drainage Area**

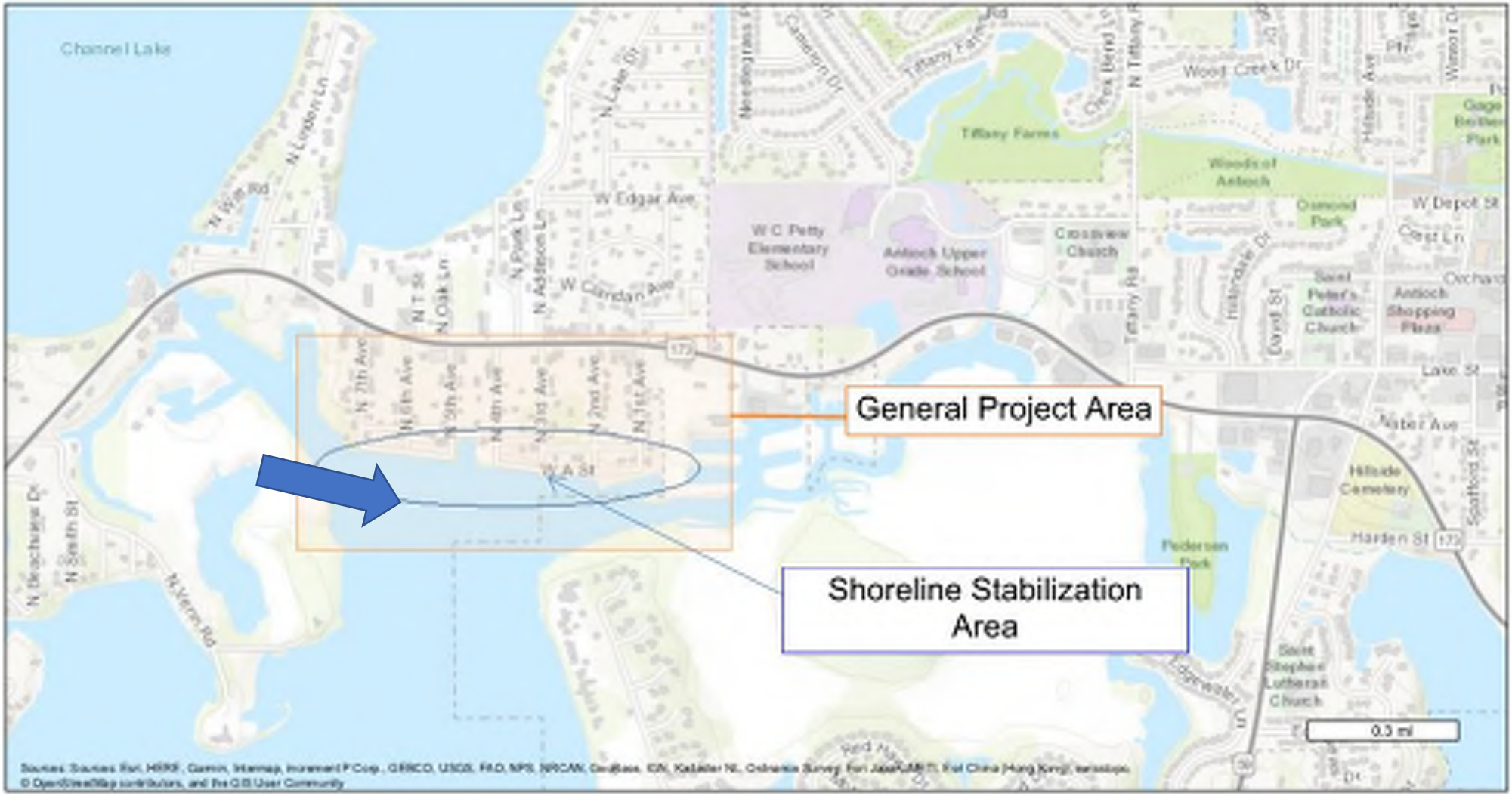
Exhibit: 1

# Riverwalk Rill System Maintenance – Port Barrington



# Grass Lake Wetland Restoration Project-Fox Waterway Agency

# California Ice & Coal CO's Subdivision-Improvement Association
## Lake Marie - Antioch



STORMWATER MANAGEMENT COMMISSION

# M E M O R A N D U M

November 20, 2018

To: Lake Michigan Watershed Management Board
From: Kelcey Traynoff, Regulatory Supervisor
Re: FY2019 WMB Grant – Funding Recommendations for Projects in the Lake Michigan Watershed

SMC received two applications for projects in the Lake Michigan Watershed with a total project cost of $554,000 and requested funding in the amount of $50,780. The available funding for projects in the Lake Michigan Watershed for Fiscal Year 2019 is $26,720. SMC staff recommends funding of one project. The attached table, "WMB Funding Evaluation-Lake Michigan Watershed," provides the SMC staff evaluation of submitted applications based on the following prioritization criteria:

1. **Interjurisdictional Benefits -** Benefit multiple jurisdictions (government entities, HOAs, not-for-profits), will have interjurisdictional impacts, and/or will benefit the major "trunk"/regional scale drainage system of the watershed. ("Trunk" defined as that part of the drainage system that drains more than 100-acre drainage areas and has the potential to have inter-jurisdictional impacts.)

2. **Flood Hazard Reduction Benefits -** Have beneficial results or impacts, including non- transportation related flood hazard reduction, during flood events up to and including 100-year events. (A 100-year event being a flood event with the probability of occurrence in any given year of 1%.)

3. **Structural Damage Reduction -** Mitigate structural damages due to floods and other stormwater related causes with consideration of the number of structures affected including, but not limited to, removing, elevating, flood-proofing or otherwise protecting buildings from future danger of flood damage or structural damage related to flood-induced erosion. Also, these criteria include Lake Michigan Watershed specific mitigation of damages due to stormwater, flood and wave induced problems on bluff, ravine and lakeshore areas.

4. **Water Quality Benefits -** Reduce surface water quality impairments utilizing best management practices.

5. **Natural Resource Benefits -** Benefit the environment with an emphasis on non-structural natural resource protection strategies.

6. **Nuisance Flood Reduction -** Alleviate major nuisance flooding and/or blocked transportation access.

7. **Multiple Use Benefits -** Provide multiple-use benefits to communities such as recreation, public education, data collection or others.

8. **Outside Funding Utilization -** Utilize federal and\or state funding to the maximum extent possible.

9. **Public Education Component -** Include a public education and outreach effort aimed at reducing the amount of phosphorus contained in stormwater runoff. This may include reducing the amount of fertilizer applied to lawns, using phosphorus-free fertilizers, and establishing buffer strips along lake shores, stream banks, and wetlands. Applicants may also choose to adopt an ordinance banning the use of fertilizers and detergents containing phosphorus.

SMC staff also awarded bonus credit to those applications satisfying the following 4 WMB-approved criteria:

- Projects for which the applicant's share of the estimated total project cost exceeds 50%.
- Projects that are recommended in a SMC-adopted watershed plan.
- Projects that protect or alleviate structural damages to critical facilities.
- HOAs that document they are currently implementing stormwater best management practices.

Below is a brief summary of each proposed project, describing how each application addresses the WMB-approved prioritization criteria. SMC staff recommendations are also presented below.

1. **Shiloh Park Senior Center Site Improvements.** An application was submitted by the Zion Park District. The estimated project cost is $484,000, of which $459,000 is the applicant's share. $25,000 is currently being requested from the WMB. The proposed project scope includes reducing the impervious area of the patio, constructing a berm and retaining wall along the south bank of the lake, installing storm sewer beneath the patio to drain and convey stormwater back to the lake via pump system, planting the berm and south shoreline with native vegetation and installing a rain garden. The proposed improvements will help to alleviate flooding and associated damage caused by the rising lake waters. These efforts will also help to improve water quality, reduce structural damage, and provide natural resource and inter-jurisdictional benefits. This project is locally and financially supported through the Zion Park District and the IDNR Coastal Management Program.

   Project evaluation:

   1. The project will provide significant inter-jurisdictional benefits.
   2. The project will provide significant flood hazard reduction benefits.
   3. The project will provide significant structural damage reduction benefits.
   4. The project will provide water quality benefits.
   5. The project will provide natural resource benefits.
   6. The project will provide significant nuisance-related flood reduction benefits.
   7. The project will provide significant multiple use benefits.
   8. The use of non-WMB funding is proposed.
   9. Public education and outreach on reducing phosphorus loads is proposed

   Bonus credit was awarded to this project due to it being recommended in an SMC - adopted Watershed Management Plan (Dead River Watershed - Based Plan).

   This project ***IS RECOMMENDED*** for WMB funding in the amount of $25,000.

2. **Bull Creek North Branch Cleanup.** An application was submitted by the Village of Beach Park. The estimated project cost is $70,000, of which $44,220 is the applicant's share. $25,780 is currently being requested from the WMB. The proposed project scope includes the cleanup of approximately 200ft. of creek, drainage ditch enhancements, storm sewer inlet and pipe installation, as well as installation of rock riffle and rock toe treatments.

   Project evaluation:
   1. The project will provide inter-jurisdictional benefits.
   2. The project will provide flood hazard reduction benefits.
   3. The project will provide significant structural damage reduction benefits.
   4. The project will provide significant water quality benefits.
   5. The project will provide significant natural resource benefits.
   6. The project will provide some nuisance – related flood reduction benefits.
   7. The project will not provide multiple use benefits.
   8. The project will not utilize any outside funding.
   9. Public education and outreach on reducing phosphorus loads is proposed.

   Bonus credit was awarded to this project due to the Village of Beach Park proposing to cover more than the required minimum 50% of the estimated total project cost.

   This project ***IS NOT RECOMMENDED*** for WMB funding.

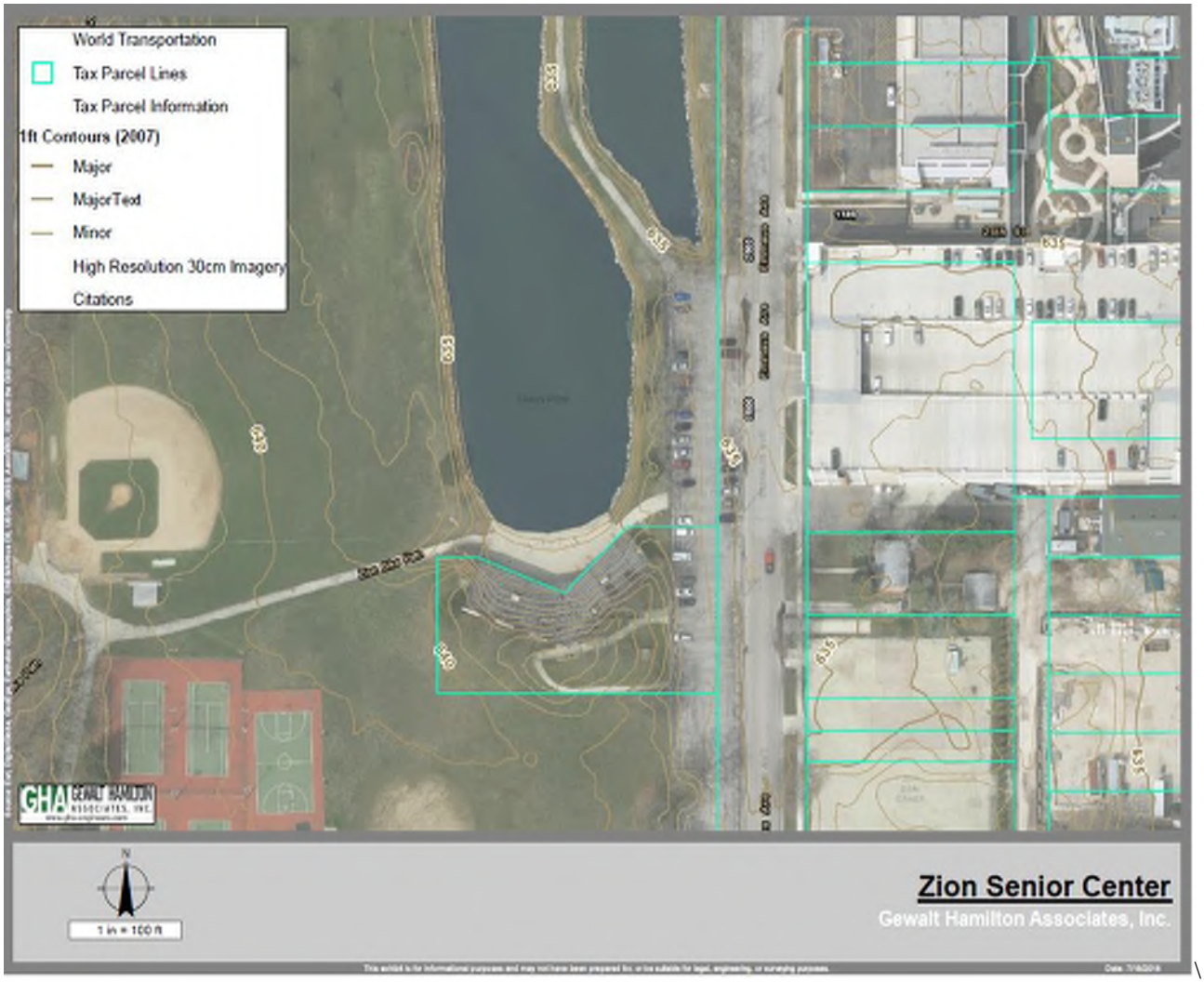
If you have any questions regarding these projects, please contact Kelcey Traynoff at (847) 377-7711 or ktraynoff@lakecountyil.gov.

## WMB Funding Evaluation – Lake Michigan Watershed

| Lake Michigan Watershed | | | Shiloh Park Senior Center Site Improvements | | Bull Creek North Branch Cleanup | | Watershed Total |
|---|---|---|---|---|---|---|---|
| **Rank** | **Prioritization Criteria** | **Max. Possible Weight** | **Rating** | **Score** | **Rating** | **Score** | |
| 1 | Interjurisdictional benefits | 25 | 5 | 125 | 3 | 75 | |
| 2 | Flood hazard reduction benefits | 20 | 5 | 100 | 4 | 80 | |
| 3 | Structural damage reduction | 15 | 5 | 75 | 5 | 75 | |
| 4 | Water quality benefits | 15 | 3 | 45 | 5 | 75 | |
| 5 | Natural resource benefits | 10 | 3 | 30 | 5 | 50 | |
| 6 | Nuisance flood reduction | 5 | 5 | 25 | 2 | 10 | |
| 7 | Multiple use benefits | 5 | 5 | 25 | 0 | 0 | |
| 8 | Outside funding utilization | 5 | 5 | 25 | 0 | 0 | |
| 9 | Phosphorus public education component | 5 | 5 | 25 | 2 | 10 | |
| | Bonus Credit: Critical Facilities | 5 | 0 | 0 | 0 | 0 | |
| | Bonus Credit: Greater than 50% non-SMC cost share | 5 | 0 | 0 | 1 | 5 | |
| | Bonus Credit: Measure recommended in SMC adopted Watershed Management Plan | 5 | 1 | 5 | 0 | 0 | |
| | HOA Bonus Credit: Current stormwater BMP implementation | 5 | 0 | 0 | 0 | 0 | |
| | **Weighted Score Total (Minimum score greater than 210 required for funding)** | | **480** | | **380** | | |
| | Total project cost | | $484,000 | | $70,000 | | **$554,000** |
| | Applicant in-kind hours | | 0 | | 0 | | **0** |
| | Applicant cost share | | $459,000 | | $44,220 | | **$503,220** |
| | Applicant's WMB funding request | | $25,000 | | $25,780 | | **$50,780** |
| | Applicant's request for SMC in-kind hours | | 0 | | 0 | | **0** |
| | Total Available Funds for the watershed = | $26,720 | | | | | **$26,720** |
| | Staff recommendation for watershed funding | | $25,000 | | $0 | | **$25,000** |
| | Staff recommendation for SMC in-kind hours | | 0 | | 0 | | **0** |

Rating: 0=no effect, 1=minimal effect, 2=below average effect, 3=average effect, 4=above average effect, 5=maximum effect practicable

Shiloh Senior Center Site Improvements Location Map

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Bull Creek North Branch Cleanup Location Map