

**Municipal Advisory Committee - MEETING AGENDA**  
September 5th, 2018 @ 9:00 AM  
Lake County Central Permit Facility  
500 W. Winchester Rd., 2nd Floor, Libertyville, IL



STORMWATER MANAGEMENT COMMISSION

- I. **Introductions**
- II. **Approval of Minutes**
  - a) Approval of June 2018 Meeting Minutes
- III. **NPDES Municipal Stormwater Program**
  - a) IEPA guidance on Annual Document Reporting  
Ernesto Huaracha, SMC [5]
  - b) Floodplain Design, Construction, and Impacts on Flood Insurance  
Bryan Christopherson, Smart Vent [60]
- IV. **Ordinance Administrative Issues**
  - a) No Action
- V. **SMC/Community Working Relationships**
  - a) Wetland Restoration and Preservation Plan  
Mike Prusila, SMC [20]
  - b) Floodplain Coordinator for NE Illinois  
Marilyn L. Sucoe, IDNR – OWR [10]
- VI. **Inter-jurisdictional Programs, Projects and Grants Forum**
  - a) Inter-jurisdictional Programs - **No Action**
  - b) Projects - **No Action**
  - c) Grants Forum
    - i. Watershed Management Board  
Sharon Østerby, SMC [10]
- VII. **Upcoming Training Opportunities, Meetings, Events**
  - a) Green Infrastructure Training Workshop – November 2018.  
Beth Adler, Des Plaines River Watershed Workgroup [10]
- VIII. **Other Topics for Discussion**
  - a) Any MS4/NPDES related projects, awards achievements you wish to highlight and present to the Lake County community, please email [ehuaracha@lakecountyil.gov](mailto:ehuaracha@lakecountyil.gov).
  - b) If you are not receiving email notifications regarding MAC, please email [ehuaracha@lakecountyil.gov](mailto:ehuaracha@lakecountyil.gov) to be added to the digital email distribution list.
- IX. **Next Meeting**
  - a) MAC Meeting, December 5, 2018 @ 9:00AM
- X. **Adjourn**

\*\*\*PDHs are self-reporting. If you want to apply MAC meetings towards your professional license keep the agenda and minutes w/sign in sheets.

**Municipal Advisory Committee**

**JUNE 6, 2018**

**AGENDA & MEETING MINUTES**

**(COPY ATTACHED)**

## Municipal Advisory Committee (MAC)

Meeting Minutes for Wednesday, June 6, 2018  
Lake County Central Permit Facility, Libertyville



STORMWATER MANAGEMENT COMMISSION

Darren Monico, Village of Buffalo Grove, SMC MAC Chair called the meeting to order at 9:10 a.m.

I. **Approval of Minutes –April 4, 2018.** Minutes approved by consensus.

### II. NPDES Municipal Stormwater Program

a. **Lydia Scott of the Morton Arboretum, presented on the Lake County Woodlands & Forests – Stormwater benefits, protection, and model ordinance on behalf of the Chicago Region Trees Initiative (CRTI).**

- i. Trees are critical infrastructure. They clean our air and water, reduce flooding, provide habitat for wildlife, improve mental and physical health, increase property values and sales in commercial districts, reduce energy usage, and create community cohesion. Every \$1-dollar investment into a tree results in \$3 back on benefits. Tree installation and canopy care should be included in capital improvement budgets.
- ii. 2010 Tree study of region, Canopy Cover 20% of Chicago region, 28% of canopy is invasive buckthorn. Emerald Ash Bore reduced canopy cover to 18%. Average urban canopy nationwide is 39% coverage. Lake County canopy coverage is 30%. 70% of trees are located on private land holdings and coincidentally 70% of our oak ecosystem is located on private land holdings.
- iii. The urban forest includes all trees across public and private land. Oak ecosystems are part of our Lake County heritage (only 17% of trees remain). Multiple small trees do not equate to a mature single large tree in terms of environmental benefits (air pollutant reduction, runoff volume, sequestration). Native trees tend to have larger leaf size compared to non-native species. Larger leaves allow for improved environmental benefits because of more stomatal transference for CO2 and water vapor in and out of leaves. National Tree Calculator, <http://www.treebenefits.com/calculator/>.
  - For an example: a single mature Silver Maple Tree Species 20 inch in diameter will uptake 2,574 gallons. Removing a single tree and replacing with 10, 2-inch trees equals only 1,000 gallons.
- iv. The Chicago Region Trees Initiative provides additional information:
  - Training Opportunities:
    - a. Urban Forest Basic Training for staff. <http://chicagorti.org/UFBT>.
  - Tree Preservation: Urban Forest Management Plan. Tree ordinance models and ordinance checklists for tree preservation. <http://chicagorti.org/OrdinanceTemplates>.
  - Municipal Individual canopy summaries and i-Tree Analysis – Annual Tree/Canopy Benefits, <http://chicagorti.org/CanopySummaries>. In areas of low canopy density coincidentally flooding impacts are high as well as impervious cover land percentage.
  - CRTI Staff will aid municipal staff and/or residents on program development/programming.
  - Contact: Lydia Scott, Director, [lscott@mortonarb.org](mailto:lscott@mortonarb.org) for more information and support.
- v. Trees are the only infrastructure that improves over time.



**STORMWATER MANAGEMENT COMMISSION**

**b. Brian Lutey of Ozinga presented on Permeable Concrete Stormwater Products and Maintenance**

- i. Ozinga developed and implemented a training program to promote appropriate education and installation practices needed for permeable concrete installation.
- ii. Maintenance key to permeable pavement surfaces. The buildup of sediment/organic material in the surface pores expands in freeze/thaw processes, thereby damaging the pore space on the surface. In addition, during rain events, infiltration is not available thereby increasing offsite runoff or flooding.
- iii. Permeable Concrete can be used as a permeable base for pavers (Filterstar) in addition to primary pavement surface (Filtercrete). Permeable concrete should maintain a 20% void space.
- iv. Key to project success:
  - Ensure contractor has training and certification.
  - Ensure contractor selection includes relevant project experience and references.
  - Maintenance Agreements to ensure project success.
  - Determine
- v. Permeable Concrete is an effective pavement to preserve tree canopies and root function. The transference of water and air through the pavement pores allows plant roots to survive and reduces root damage to permeable concrete surfaces.
- vi. Permeable pavements have reduced liability of ice buildups, slipping attributed to moisture. Reduction of deicing products in winter. Rubber Blades should be used for snow plowing.
- vii. Proper planning and design of permeable and non-permeable pavements are an effective budget approach. Maintaining drive lanes in traditional pavement and parking bays in permeable is a cost-effective water quality approach. Permeable systems are cost effective in the context of full project design as there is reduced storm sewer infrastructure needed with a permeable system.
- viii. In planning determine if upstream runoff surfaces will contribute to surface clogging i.e. mulch, soil, other material.
- ix. Maintenance cleaning is essential for maintaining pavement function.

**III. Ordinance Administrative Issues --No Action**

**IV. SMC/Community Working Relationships --No Action**

**V. Inter-jurisdictional Programs, Projects and Grants Forum**

- a. Inter-jurisdictional Programs --No Action
- b. Projects --No Action
- c. Grants Forum --No Action

**VI. Upcoming Training Opportunities, Meetings, Events --No Action**

**VII. Other Topics for Discussion --No Action**

- a. If you are not receiving email notifications regarding MAC, please email [ehuaracha@lakecountytill.gov](mailto:ehuaracha@lakecountytill.gov) to be added to the digital email distribution list.
- b. If your MS4 community has any NPDES related projects, awards achievements you wish to highlight and present to the Lake County community, please email [ehuaracha@lakecountytill.gov](mailto:ehuaracha@lakecountytill.gov) to schedule a presentation.

**VIII. Next Meeting**

- a. MAC Meeting, September 5, 2018 at 9:00AM

**IX. Adjourn**

- a. Meeting adjourned at 10:37 a.m.

**2018 Schedule:**

~~General: April 4, 2018~~

General: September 5, 2018

~~General: June 6, 2018~~

General: December 5, 2018



STORMWATER MANAGEMENT COMMISSION

**Municipal Advisory Committee**

**JUNE 6, 2018**

SIGN-IN SHEET (COPY ATTACHED)



STORMWATER MANAGEMENT COMMISSION

**Municipal Advisory Committee Meeting  
June 6, 2018**

	Name & AGENCY/GROUP	Email Address	MS4 Community
0	John Doe, Consultant Inc.	Ms4@worldwideweb.com	County/Township/City/ Village/Town/Drainage District
1	Ernesto Huarache, SMC	ehuarache@lakecounty.il.gov	GLP
2	ANNE MARRIEN	MARTINA@foxlake.org	FOX LAKE
3	John Tierney, Baxter & Woodman	jtierney@baxterwoodman.com	Gray Lake, Round Lake, Lindenhurst Island Lake, Winthrop Harbor
4	Marc facchini/village of Lincolnshire	mfacchini@lincolnshire.il.gov	Lincolnshire
5	John Garrison	black	B
6	MICHAEL WILSON	SMC	'C



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7	Darren Manico	Buffalo Grove	
8	Chris Bouchard	RHMG, B.F.G.O, WAU	
9	Brian Frank (PB&D)	Frank@lakecounty.il.gov	Lake County
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13	Bill BUECKE, MANHARD CONSULTING	WBUECKE@MANHARD.COM	LAKE ZURICH, IL
14	Wally Pittrich, Lincolnshire	wlpitt@lincolnshire.il.gov	Lincolnshire
15	Scott Grithz	scgrith@lakecounty.il.gov	SMC
16	Beth Adler	badler@lakecounty.il.gov	Dewu
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31	Karen Daulton Lange	KDLange@LakeBarrington.org	Lake Barrington
32	FRED CHANEY	fchaney@libertyville.com	LIBERTYVILLE
33	George Sterner	eifer@nslibertyville.com	Libertyville
34	AL GIERYCH		LCSDOT
35	DR. KRISTIN FRABLE	efrable@usw.org	U. OF MICHIGAN WWS
36	YAMIN YAMIN		DRAINAGE DISTRICTS



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