

The 5 W's of Watershed Development Permitting or "How to Avoid Surface Water Disaster"



STORMWATER MANAGEMENT COMMISSION

Kurt Woolford, P.E., CFM, LEED AP
Chief Engineer

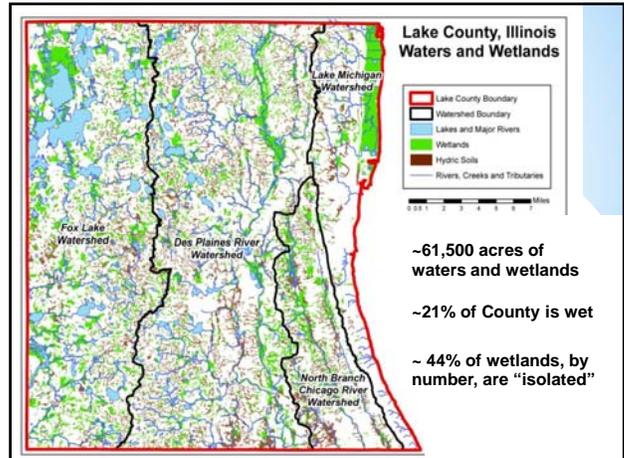


AGENDA



- About Lake County
- SMC's Regulatory Program
- When is a permit required? (types of development)
- What should be submitted? (application requirements)
- Who issues the permit? (SMC or Certified Community)
- Why hasn't the permit been issued? (Top 5)
- Where to get more information? (additional resources)

170 Lakes and 400 Miles of Streams and Rivers



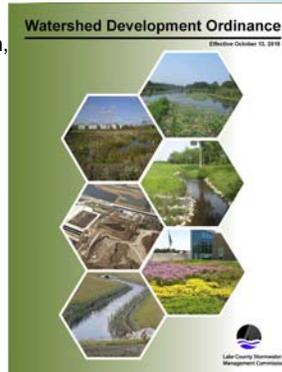
Lake County SMC's Regulatory Program

Establishes consistent, uniform, minimum county-wide requirements for new development.

Seek balanced input from:

- Governmental agencies
- Municipalities
- Environmental
- Property owners and developers

Done in a public forum.



When is a Watershed Development Permit (WDP) Required?

"Regulated Development"

- Hydrologically disturbing 5,000 square feet or more of ground surface.
- Any work in special flood hazard areas / floodplains.
- Drainage modifications where tributary area is 20 acres or more.
- Any work in wetlands.





Application requirements depend on development classification

- **Minor Developments:** Regulated activities with no floodplain impacts requiring compensatory storage, no wetland impacts requiring mitigation, and no detention required. General Permit #2 (GP-2).
- **Public Road Developments:** Regulated activities in the right-of-way by the respective roadway jurisdiction. Also includes individual trail systems and linear railroad projects. Countywide Permit #1 (CWP-1)
- **Major Developments:** All other regulated development.
- **Exempted/Excluded Development:** No development is exempt from the applicable floodplain, floodway, wetland, and sediment control provisions of the WDO. Other provisions may be exempt. Wetlands may be excluded.

Who Issues the Watershed Development Permit?

Certified Community

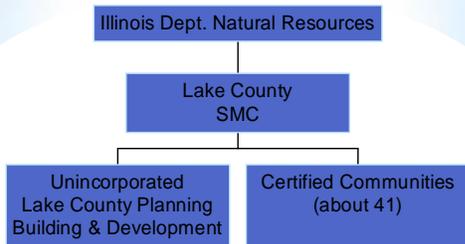
- **Fully-Certified** includes isolated-wetland provisions
- **Standard-Certified** does not include isolated-wetlands (SMC performs isolated-wetland reviews and approvals)



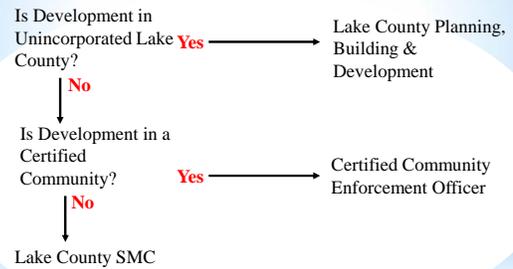
SMC

- **Public road development**
- **Forest preserve development**
- **Public development in the floodplain**
- **Non-Certified Community development**

Delegation of Stormwater Authority



Lake County Permitting Flow Chart



Certified Communities

(i.e., those who have the responsibility to enforce all WDO provisions)

#	Community	IWLC Review	#	Community	IWLC Review
C1	Arnoch	X	C23	Lake Forest	
C2	Barronckburn		C24	Lake Villa	
C3	Barrington		C25	Lake Zurich	
C4	Barrington Hills		C27	Libertyville	
C5	Beach Park	X	C29	Lindemburn	X
C6	Buffalo Grove		C30	Lung Grove	X
C69	County of Lake	X	C31	Mettawa	
C7	Deerfield		C32	Mundelein	
C8	Deer Park		C33	North Barrington	X
C9	Fox Lake		C34	North Chicago	
C10	Port Barrington		C35	Old Mill Creek	X
C11	Grayslake		C37	Riverwoods	X
C12	Green Oaks	X	C38	Round Lake	X
C13	Gurnee		C39	Round Lake Beach	
C14	Hainesville	X	C40	Round Lake Heights	
C15	Hawthorn Woods	X	C41	Round Lake Park	X
C16	Highland Park		C42	Third Lake	
C19	Inland Lake	X	C44	Vernon Hills	
C20	Kildeer	X	C82	Volvo	X
C21	Lake Barrington	X	C46	Wauconda	
C22	Lake Bluff		C47	Waukegan	

Non-Certified Communities

#	Community	#	Community
C84	Forest Preserve	C83	Public Roads
C81	Fox River Grove	C43	Tower Lakes
C17	Highwood	C45	Waukegan
C18	Indian Creek	C48	Wheeling
C26	Lakemoor	C49	Winthrop Harbor
C28	Lincolnshire	C50	Zion
C36	Park City		



Who issues other floodplain approvals?

Certified Community

- **Base flood elevation (BFE) determinations for depressional flood-prone areas with 20 acres or less of tributary area.**

SMC

- **BFE determinations for depressional flood-prone areas with greater than 20 acres of tributary area.**
- **BFE determinations for riverine flood-prone areas with greater than 100 acres of tributary area.**
- **Changes to regulatory floodway boundaries.**



What about IDNR?

IDNR/OWR retains permit review and approval authority over the following:

- IDNR projects, dams, and applicable impoundment structures.
- All other state, federal, and SMC development located in the floodplain.
- Development within or over Public Waters.
- Regulatory floodways or floodplains with greater than 640 acres (one square mile) of tributary area.

Why hasn't the permit been issued?

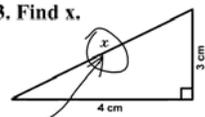


REGULATIONS GETTING IN THE WAY?

How to Get a Permit Faster

#5

3. Find x.

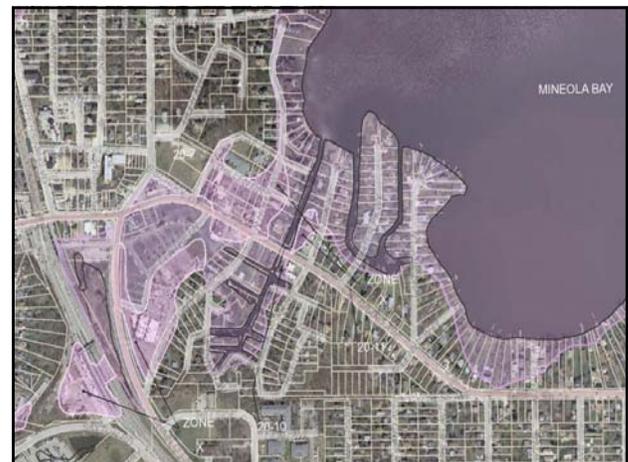


Know the WDO! – take the EO exam and become a card-carrying member. You'll gain a lot of knowledge about the WDO provisions.

Some unique requirements in Lake County:

- Certified Wetland Specialist (CWS)
- 80-150% hydrology analyses
- Local floodplains (riverine and depressional)
- Compensatory storage ratios and hydraulic equivalency

1:1 and 1.2:1 Compensatory Storage for Depressional Floodplains



How to Get a Permit Faster

#4



- Avoid or minimize sensitive area impacts if possible. e.g., high quality wetlands, floodways, etc.
- If impacts are necessary, then clearly highlight or hatch these impacted areas on the plans and label quantities.
- Show the wetland limits, wetland buffers, floodplain and floodway on ALL drawings.
- Reports, exhibits, summary tables and calculations should all be consistent with drawings.
- Specify appropriate SE/SC measures – routinely we have several SE/SC-related comments. Become an SMC-listed DECI!

How to Get a Permit Faster

#3

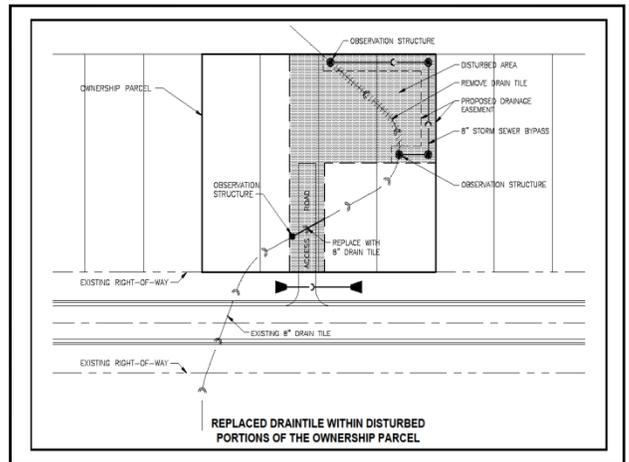


Ensure the stormwater management system has adequate downstream capacity and a maintainable outlet.

Check with the Enforcement Officer for known flood problem areas.

Laying subsurface drain tile with a machine. Shallow tiles and ditches were generally dug by hand. About four miles west of Dawson, Lincoln Park County, circa 1920. (Simpd photo)

HINT: The detention basin should not discharge into a 100-year old clay drain tile.



How to Get a Permit Faster



Call the Enforcement Officer and request a pre-application meeting or discuss review comments before next re-submittal.

Discuss concept drawings and identify project concerns and applicable submittal requirements.

SMC Website Resources www.lakecountyil.gov/Stormwater



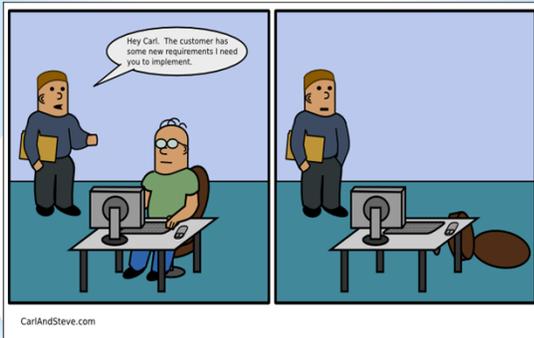
Permit Application

The Watershed Development Ordinance (WDO) Permit is available in two formats - fill-able and PDF. Both sides of the form must be submitted and printed on legal size paper.

- WDO Permit Application PDF Fillable Application (October 20, 2012)
User can open, fill out, save as, print.
- WDO Permit Application PDF Blank Application (October 20, 2012)
User prints and fills out manually.
- WDO Permit Application Word Fillable (October 20, 2012)
User fills out, save as, print.
- Submittal Checklists, Design Standards
- Fee schedule (for SMC permit review only) (Dec. 1, 2011)
- Certified, Non-Certified Communities (May 2013)

Incomplete submittals are the number one reason permits are held up. You are strongly encouraged to schedule a pre-application meeting by contacting [Christine Garner](mailto:Christine.Garner@lakecountyil.gov), 847.377.7705. SMC can also guide you on additional permits you may need from other agencies.

Questions???



CarlAndSteve.com

Kurt Woolford

kwoolford@lakecountyil.gov (847) 377-7700