



*Presenting the new*

# Model Stormwater Management Ordinance

*for Illinois counties and communities*

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# Agenda

Background

Using the Ordinance

Flowchart

Conclusions

# Urban Flood Awareness Act

Report on:

- Extent, cost, prevalence, policies
- Strategies to mitigate flooding

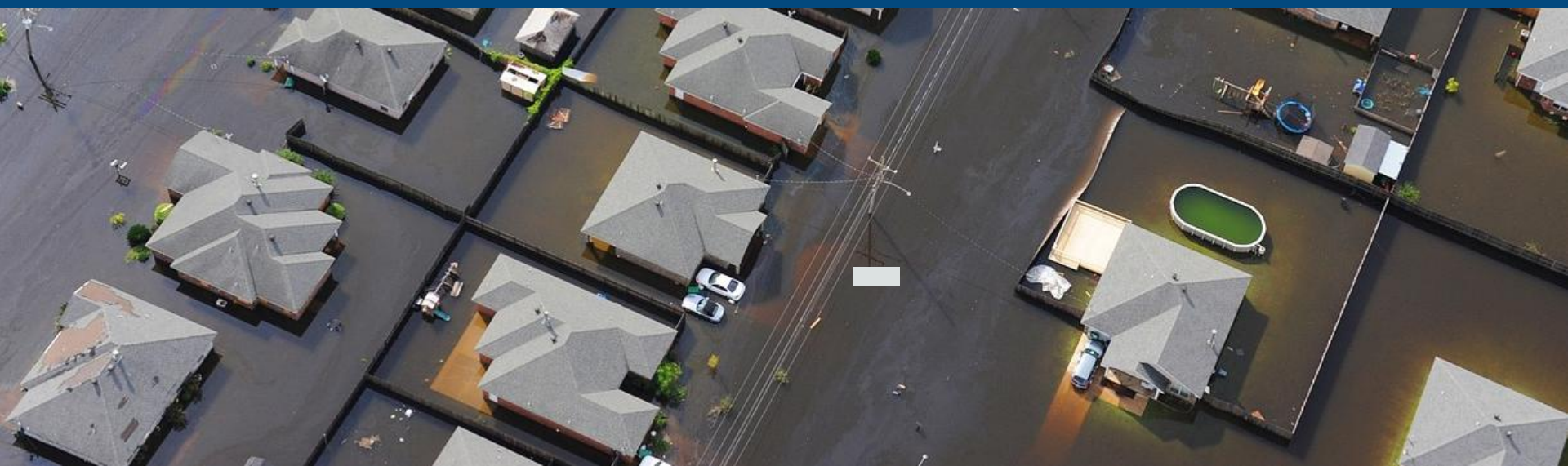
Legislation granting stormwater planning and management authority to IL counties



Source: Center for  
Neighborhood Technology



Urban flooding: water entering a building not from a river or creek



# *Report Recommendation:*

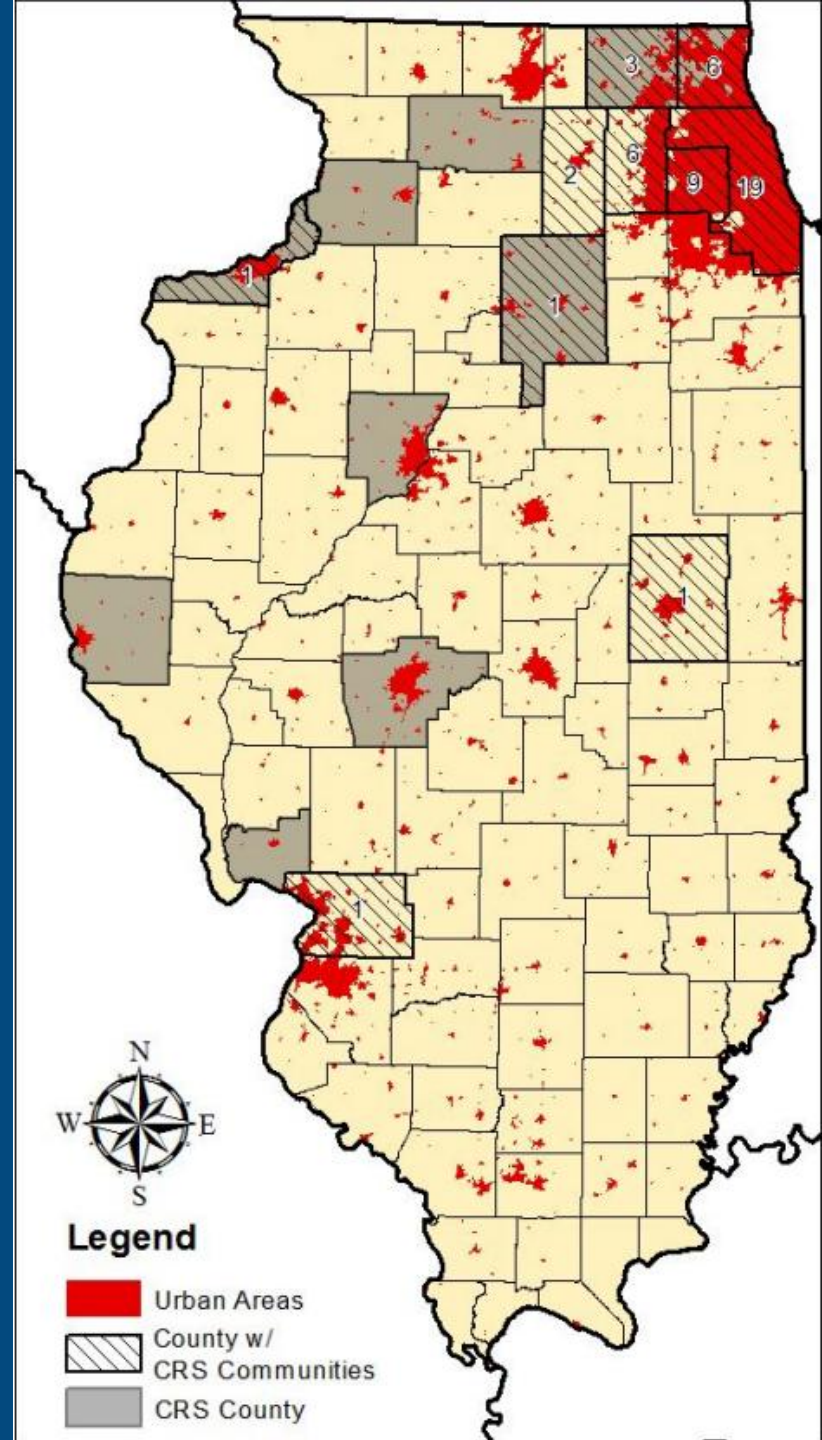
Create a

# **Model Stormwater Management Ordinance**



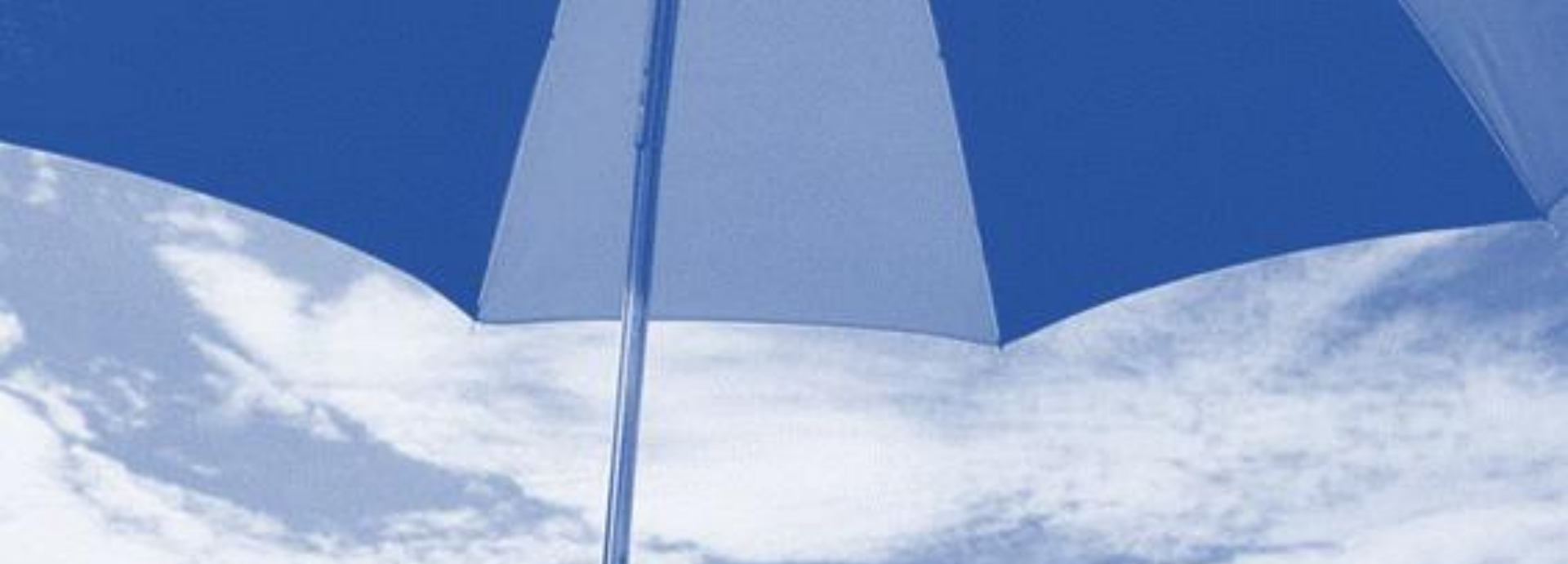
# Who Should Adopt?

## Counties and Communities in Illinois





Tailor to your community  
Stand-alone ordinance or add to existing  
Ask IDNR/OWR to review



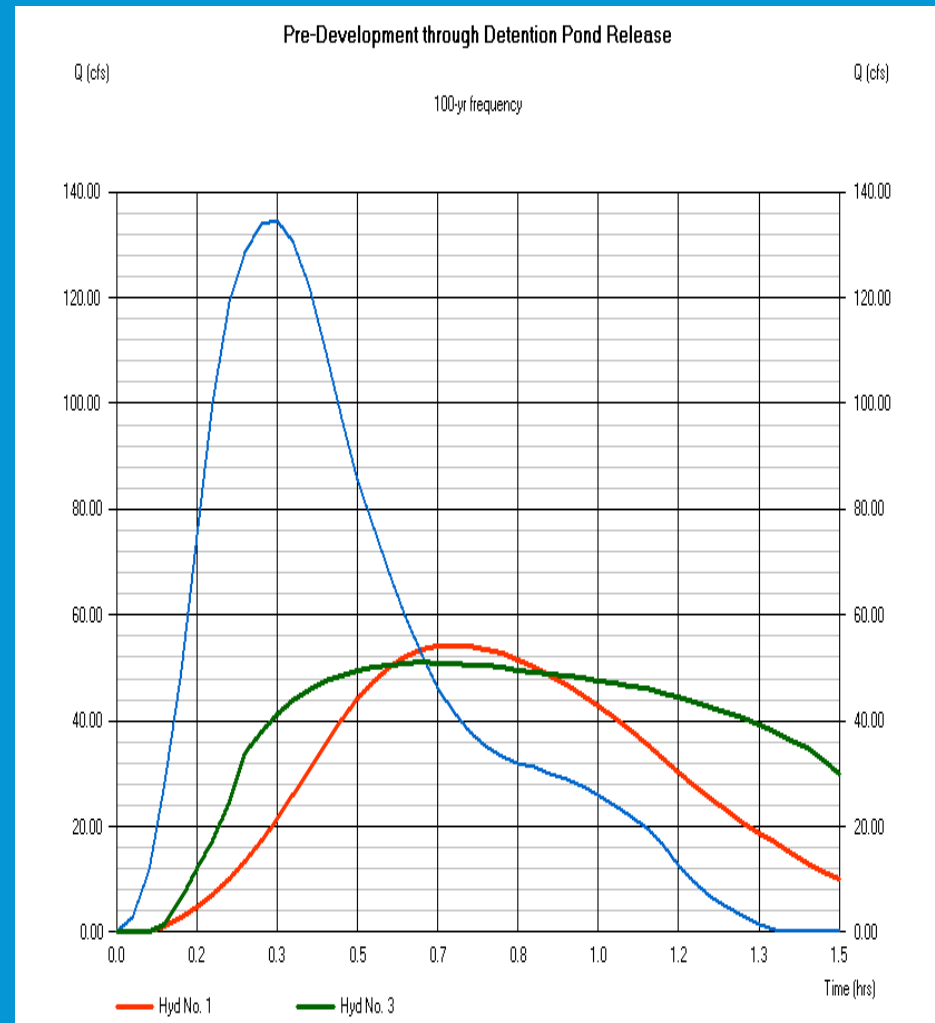
<http://www.dnr.illinois.gov/WaterResources/Pages/UrbanFloodAwareness.aspx>



Download from website



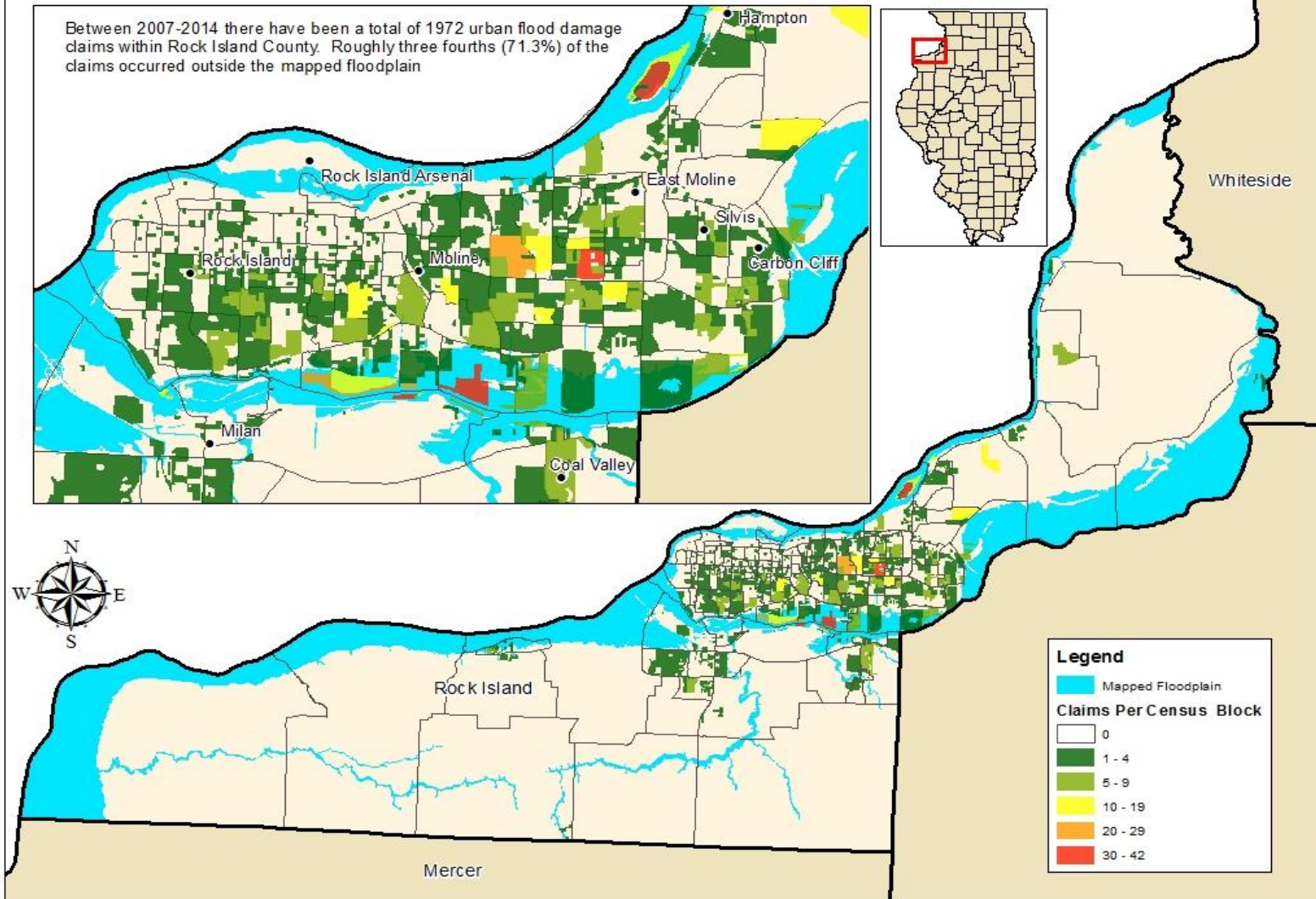
# Why Use the Ordinance?



# Because the flood claims are from outside the floodplain!!

## Rock Island County NFIP & Private Flooding Insurance Claims by Census Block 2007-2014

Between 2007-2014 there have been a total of 1972 urban flood damage claims within Rock Island County. Roughly three fourths (71.3%) of the claims occurred outside the mapped floodplain



# What Is CRS?



VOLUNTARY FEMA Incentive Program  
*Administered by Insurance Services Office (ISO)*

**Communities are rewarded for  
engaging in activities that exceed  
minimum NFIP standards**

19 creditable community activities

10 Class system

Each class = 500 points = 5% insurance premium discount

# Benefits of CRS Program

## Residents



Discounted insurance  
Less stressful disasters  
Better educated  
Reduced flood damage

## Community

Organized programs  
Free assistance  
No economic disruptions  
Reduced flood damage

# CRS: Community Rating System

Model ordinance:  
**strong** CRS score

(300-450 pts)



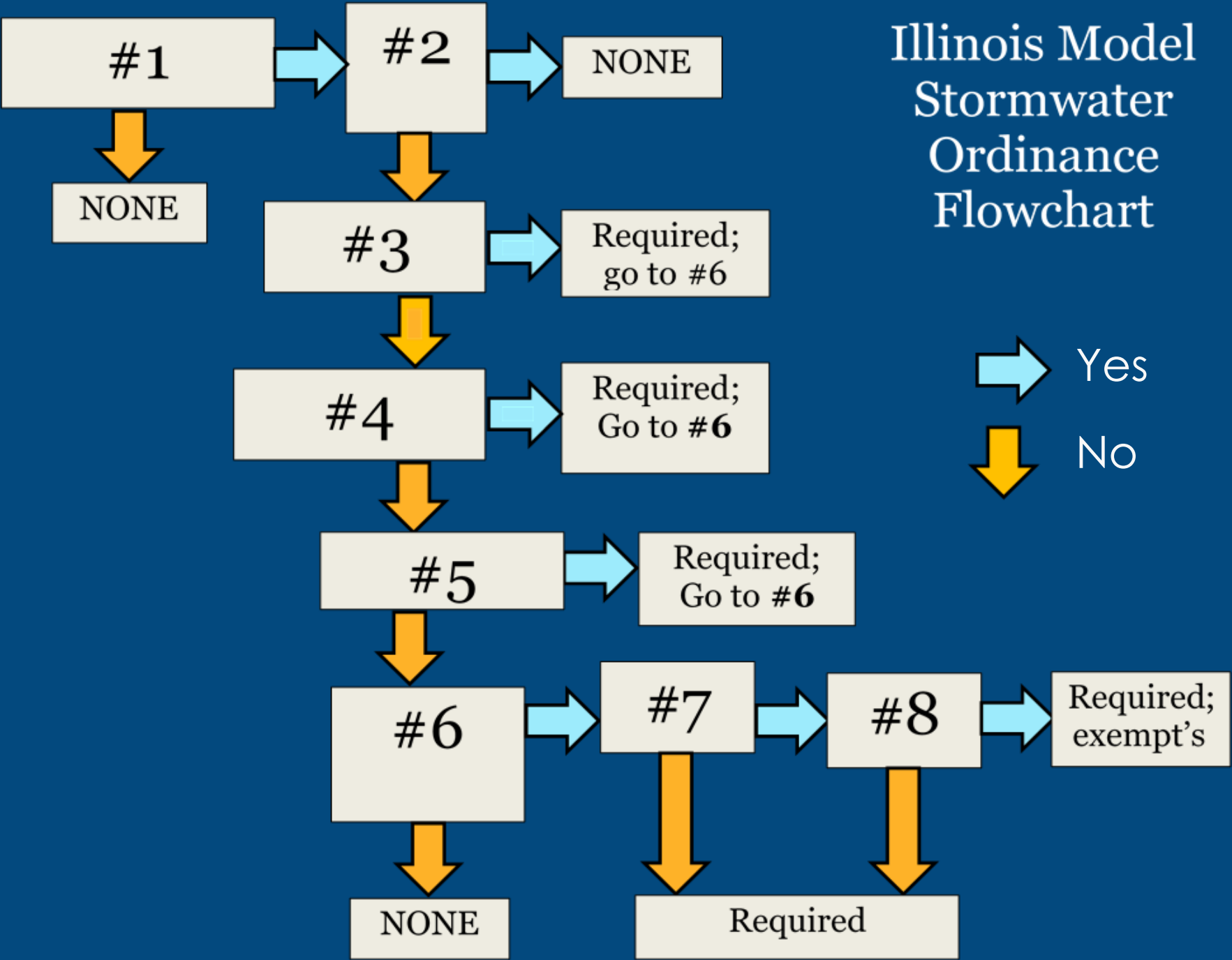
National Flood Insurance Program

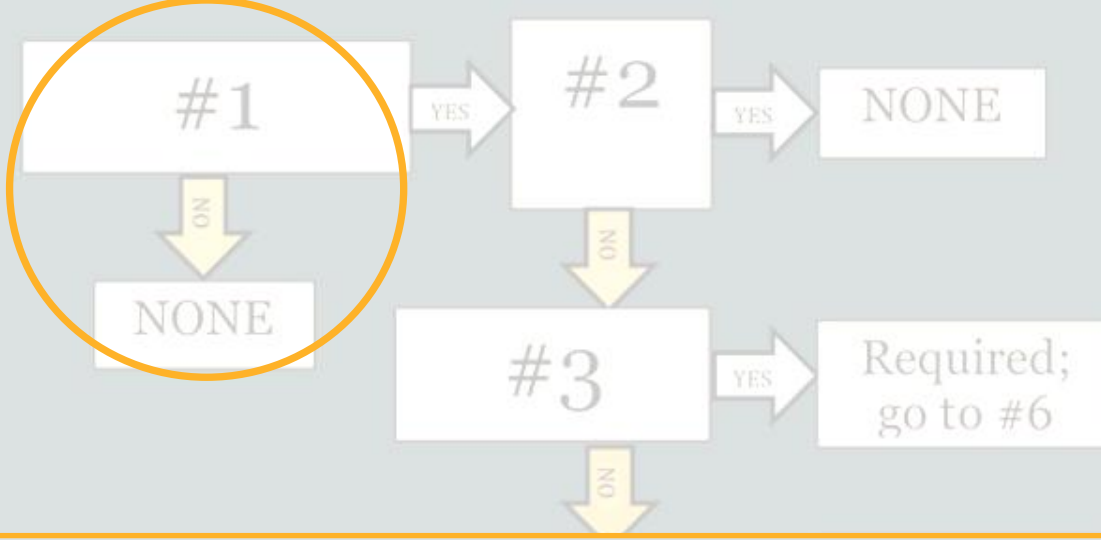
Community Rating System



FEMA

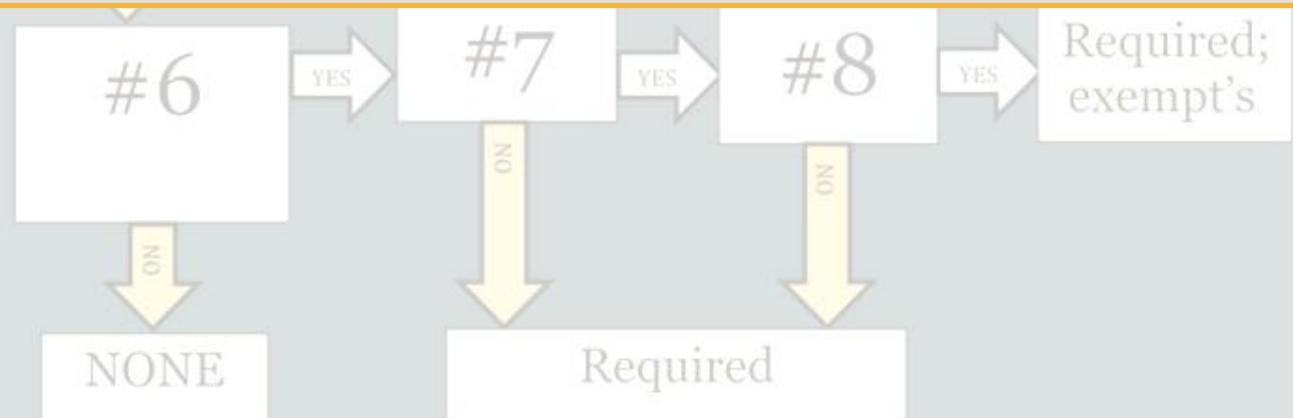
# Illinois Model Stormwater Ordinance Flowchart

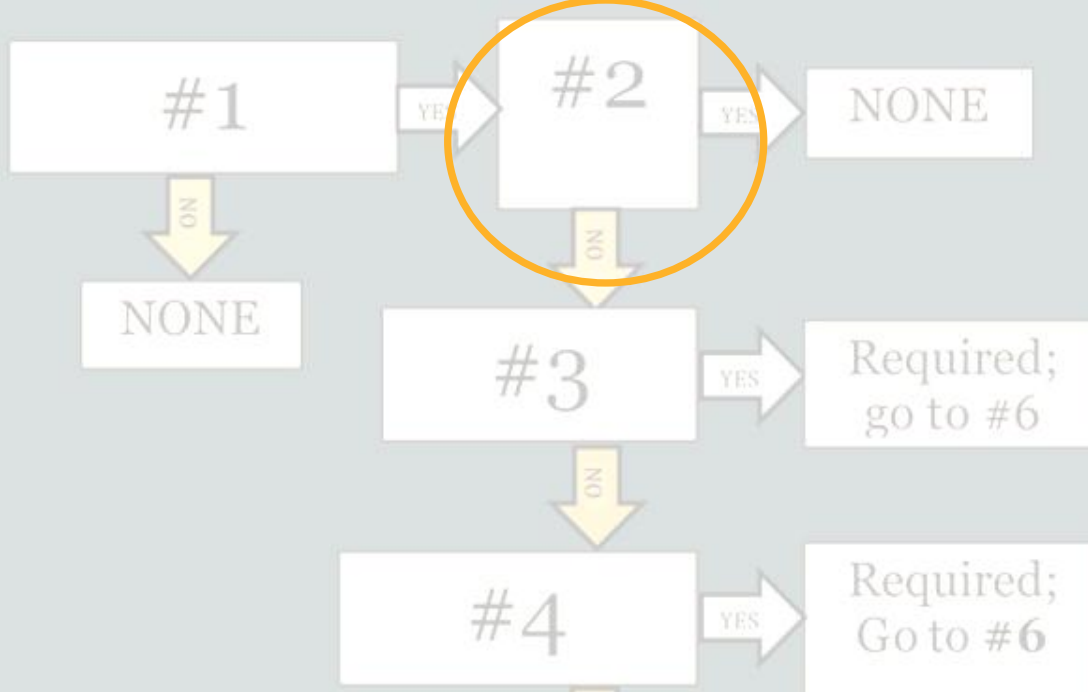




# #1: Development?

## Any man-made change to real estate





## #2: Exempted Development?

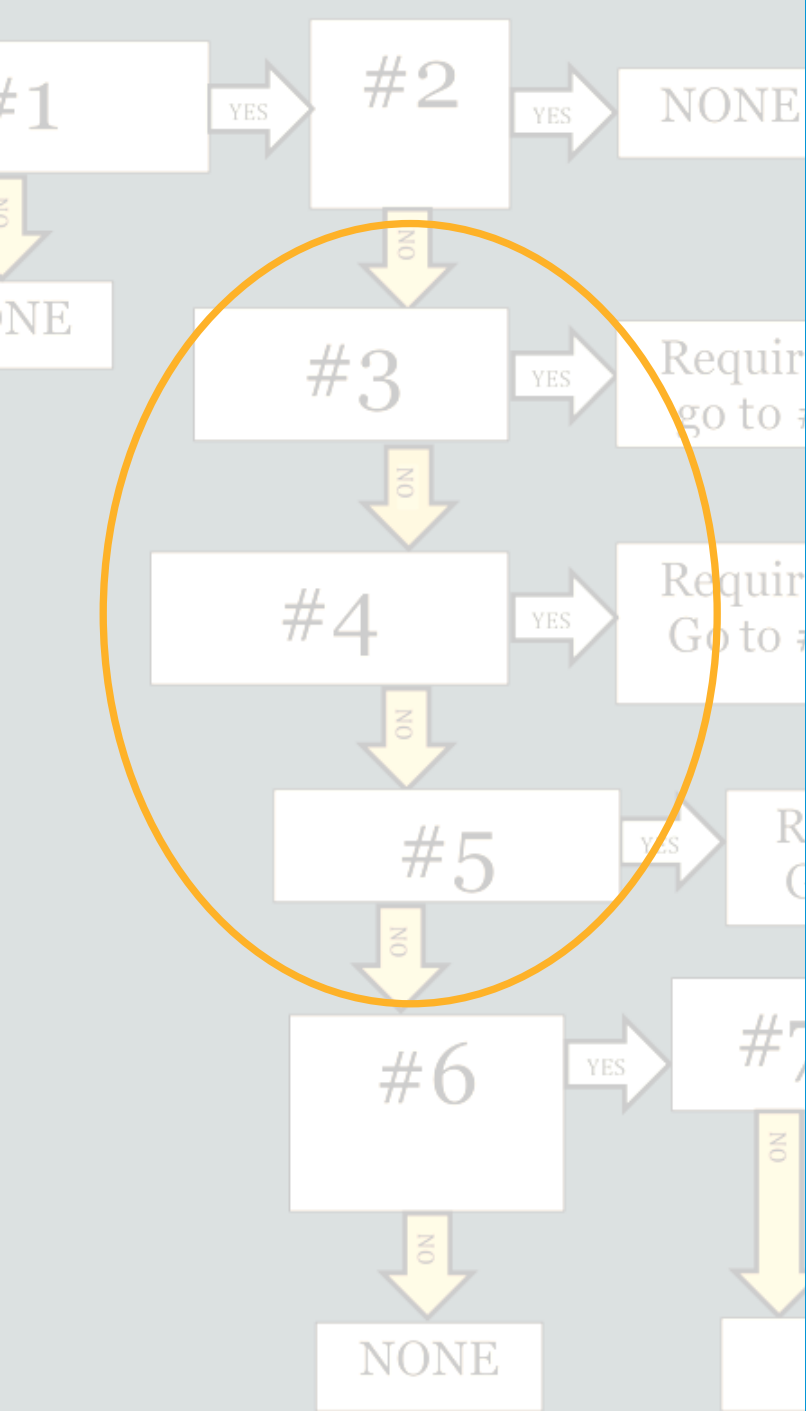
Agricultural activity

Forest management, timber operations

Less than 5,000 ft<sup>2</sup> of land

Conservation plan practices





Wetland Impact?

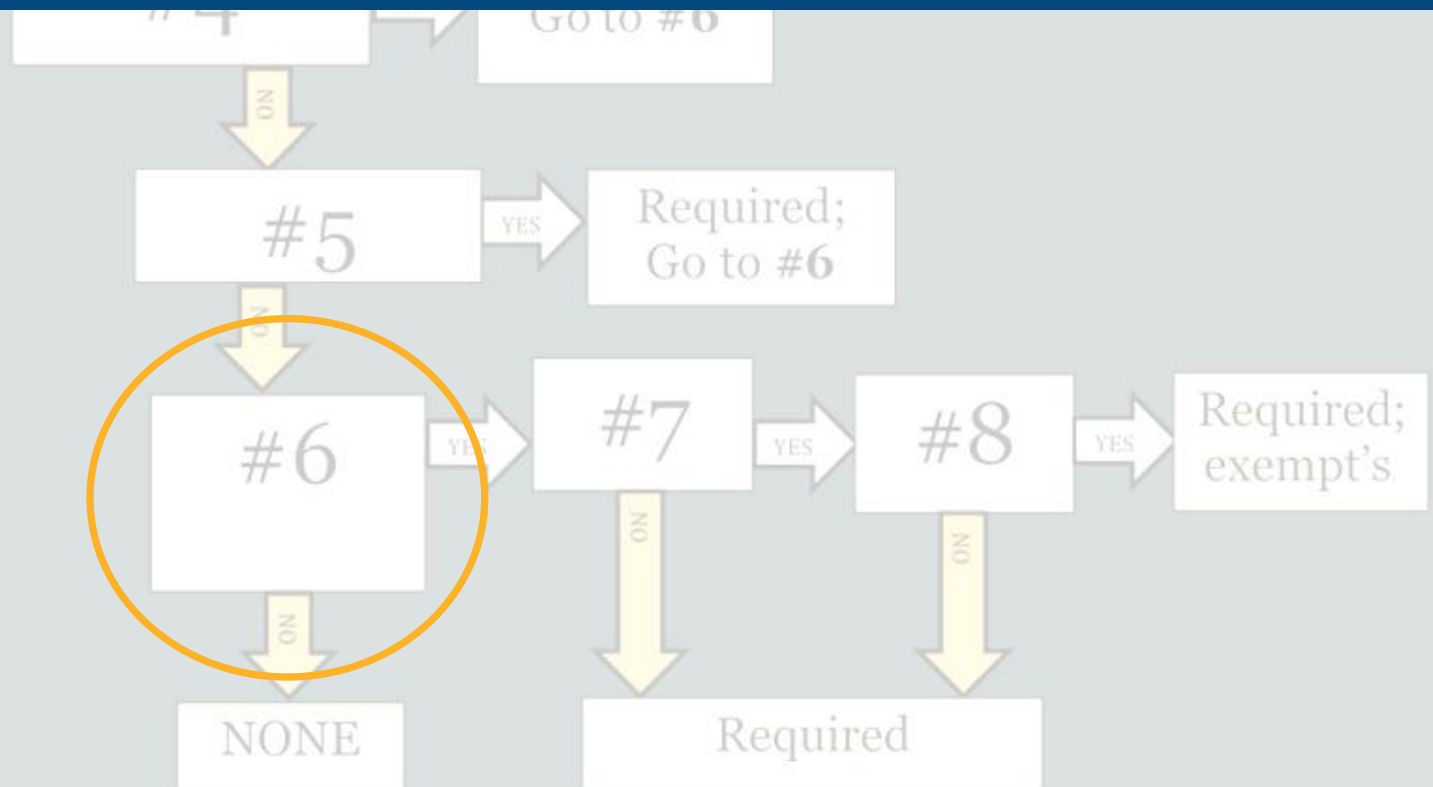
Special Flood Hazard Area?

Runoff direction change?

# #6: Area of Disturbance

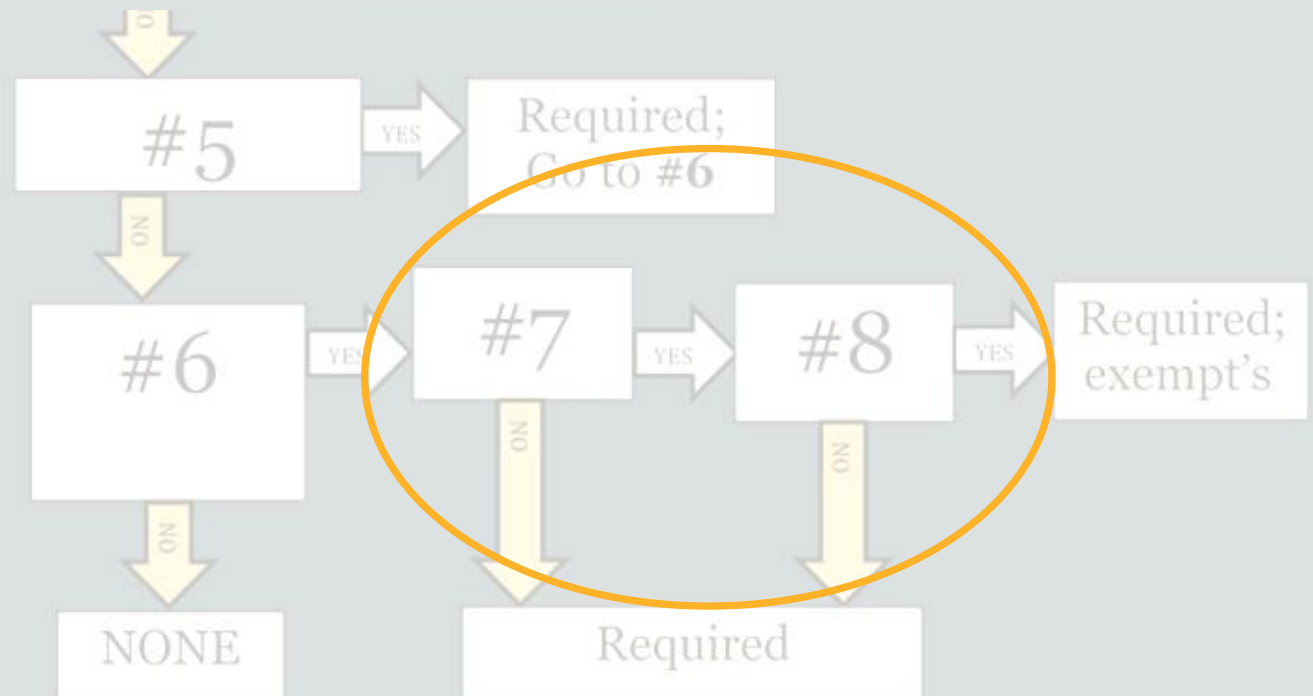
Disturbs  $> 5,000 \text{ ft}^2$

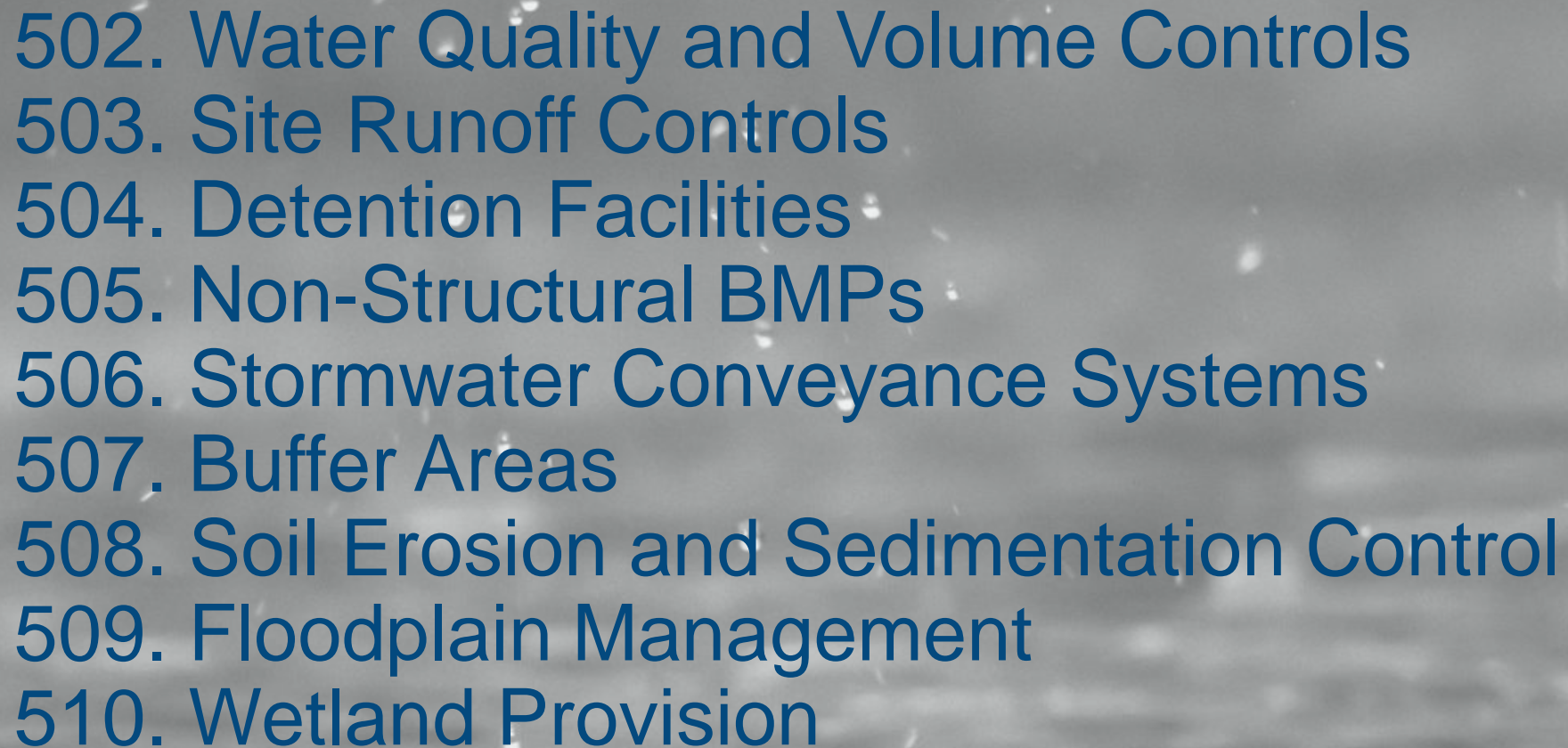
Or adds  $> 5,000 \text{ ft}^2$  impervious area



# Public Road?

Less than 1.0 ac or 1.0 ac/mi?



- 
- 502. Water Quality and Volume Controls
  - 503. Site Runoff Controls
  - 504. Detention Facilities
  - 505. Non-Structural BMPs
  - 506. Stormwater Conveyance Systems
  - 507. Buffer Areas
  - 508. Soil Erosion and Sedimentation Control
  - 509. Floodplain Management
  - 510. Wetland Provision

# Water Quality, Volume Control



First 1”  
from new  
impervious

# Site Runoff



Post  $v_{100}$ ,  $Q_{100}$ ,  $V_{100} < 110\%$  Existing

Post  $Q_{2, 10, 25, 50, 100} < \text{Existing}$





10 year  
critical duration  
design storm

100 year  
overland  
flow path

Conveyance Systems

# Conclusions

Illinois Model Stormwater Ordinance

[http://www.dnr.illinois.gov/WaterResources/  
Documents/IL\\_Model\\_Stormwater\\_Ordinance.pdf](http://www.dnr.illinois.gov/WaterResources/Documents/IL_Model_Stormwater_Ordinance.pdf)

Tailor and Adopt