

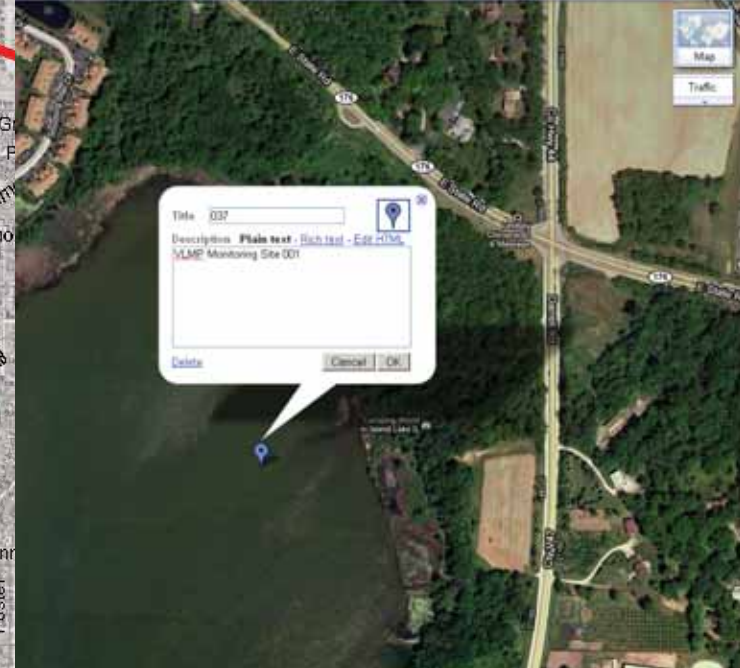
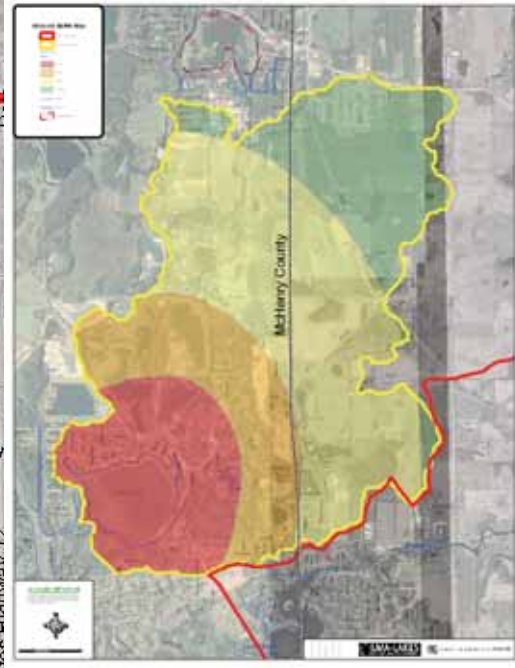
# The Importance of Watershed Planning in Lake and Water Quality Protection

## Watershed Protection Focus

- Understanding what happens on the landscape effects our waters
- Impervious Cover Chart – By Dr. Robert Pitt
- Why form a committee?

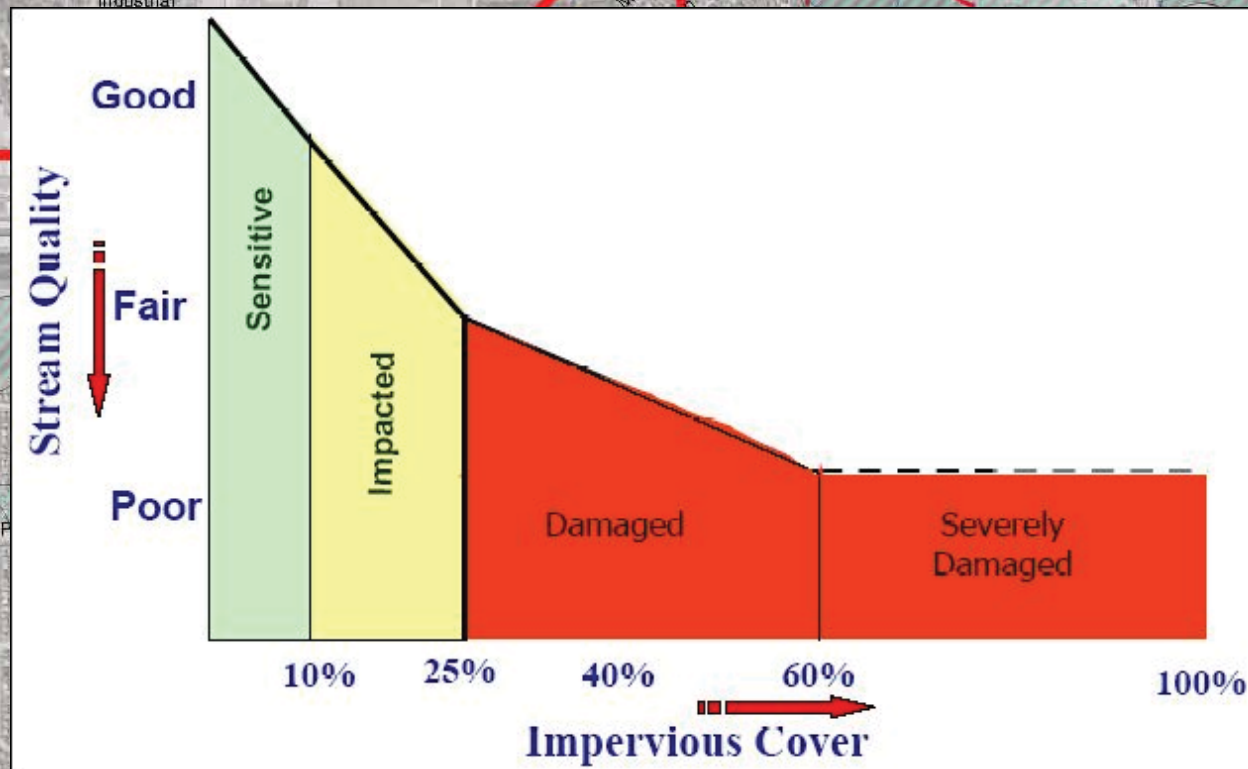
# The Importance of Watershed Planning in Lake and Water Quality Protection

## Understanding what happens on the landscape effects our waters



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## Impervious Cover Chart – Pitt, 2001



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## Why form a Committee?



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# Lake Problems: What is your #1 Concern?

- Diverse Lake Management problems and concerns
- In the end we all want the same thing – clean water
- 303D Impaired waters list (EPA)

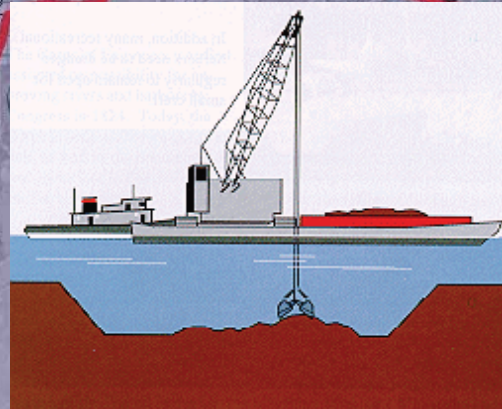


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# WATERSHED CAUSE AND EFFECT

LAKE PROJECT IS THE DIRECT RESULT OF WATERSHED RESPONSE

- Dredging
- Fish Population
- Waters Level
- Weeds and Algae



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Lake Dredging Project: Years of watershed abuse lead to:

- Sediment that moves with rainwater and construction debris
- Nutrients that move with sediment
- Loss of spawning habitat



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Fish Population: Years of watershed abuse lead too:

- Thermal and nutrient pollution, low D.O. levels
- Undue stress on fish and other aquatic organisms
- Poor year to year recruitment
- Additional stocking needs





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Water Levels: Years of watershed abuse lead to:

- A watershed that responds differently than mother nature intended
- Lower than normal water levels during dry periods
- Excessive high water during seasonal or long storm events
- Longer “no wake” conditions from extended lake drawdown



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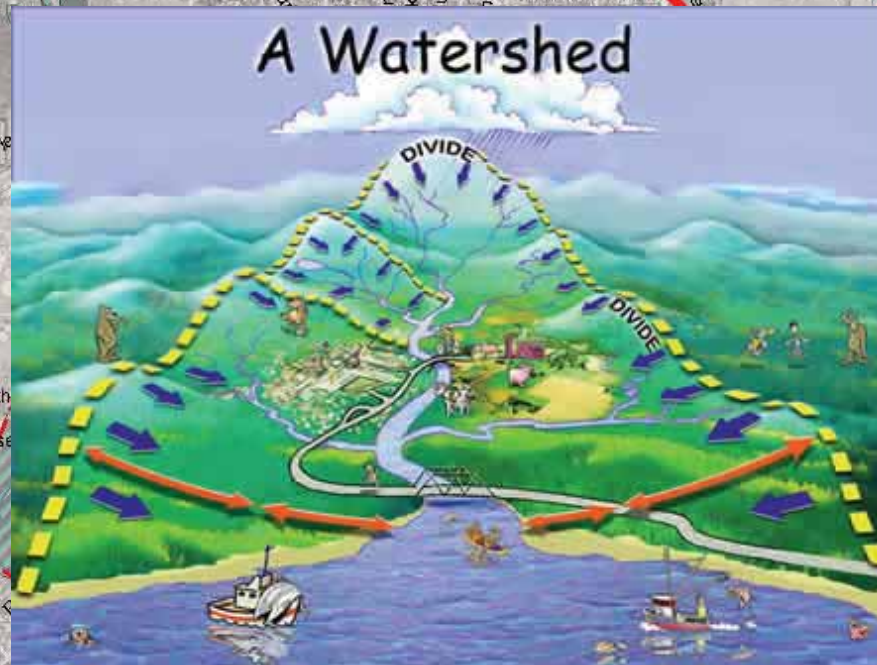
Weeds & Algae: Years of watershed abuse lead to:

- A nuisance to fisherman boaters alike
- Excessive lake coverage with unwanted macrophytes
- Additional costs for mechanical and chemical treatment
- Undesirable spikes in growth from seasonal and storm loading



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**OVER-RIDING OBSERVATION:** You can't manage your lake without some understanding and managing the the watershed that drains to it



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# ENVIRONMENTAL TRENDS

- Are we happy with the way things are?
- Do we need to change anything?
- How do we invoke change?
- Responsible development vs No development
- Predicting trends within the environment



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# HOW DO WE GET HELP?

- ILMA – your #1 source for understanding lake and watershed ecosystems (HEY WE ARE ON FACEBOOK NOW!) 
- Planning assistance available through IEPA, CMAP, Lake Co (SMC & LMU), NRCS, etc.
- <http://www.epa.state.il.us/>
- <http://www.cmap.illinois.gov/>
- <http://www.lakecountyil.gov/stormwater/default.htm>
- <http://www.lakecountyil.gov/health/want/beachlakeinfo.htm>
- <http://www.il.nrcs.usda.gov/>
- Discussion Forums such as Chicago Wilderness Green Infrastructure, Green Drinks, PODS, etc.
- <http://www.chicagowilderness.org/initiatives.php>
- <http://www.greendrinks.org/>
- Think outside the box – not every watershed is identical

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## STORYTIME

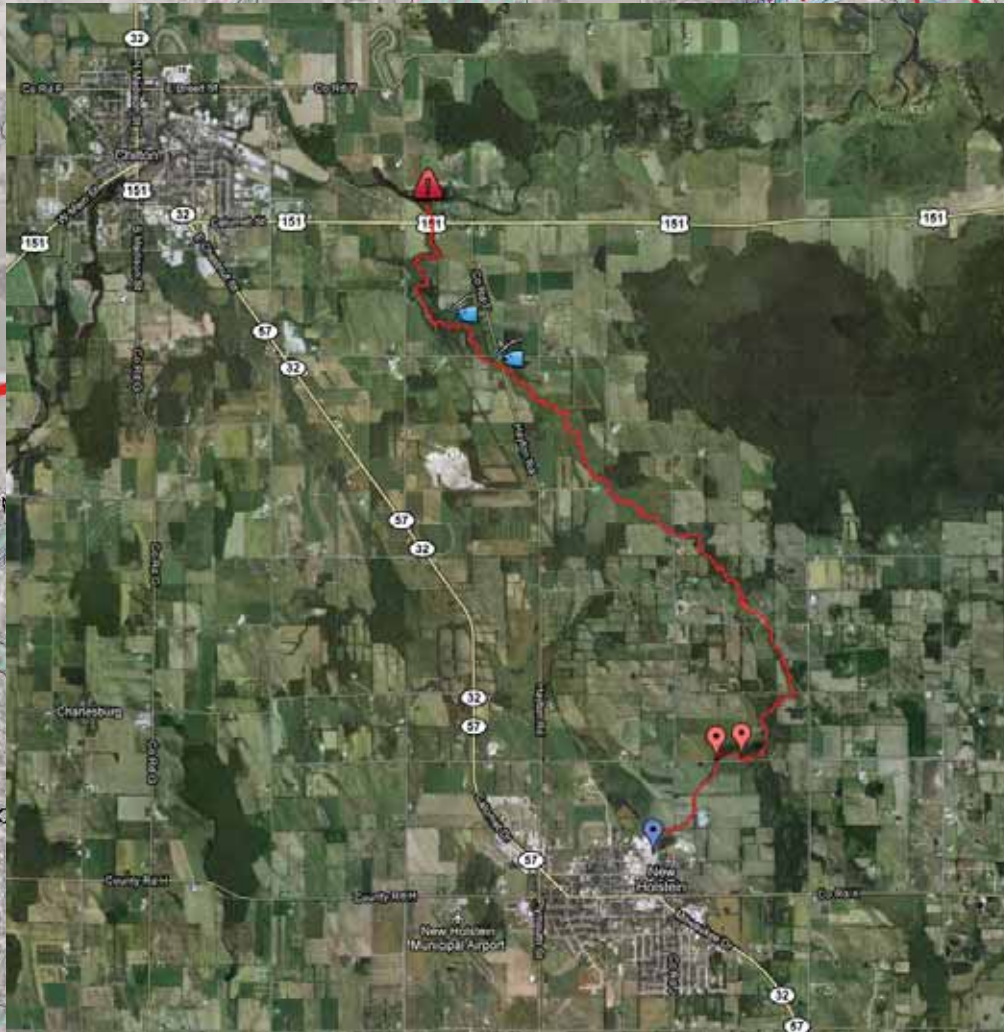
- An entirely healthy looking ecosystem, watershed, or lake does not tell the story of what may lie beneath
- The Jordan Creek, Pine Creek, and Hayton Millpond fiasco
- WDNR – “A Wisconsin Environmental Accountability Project”
- An unseen pollutant results in the strictest of environmental bans in the state of WI

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0.89 miles to first marker

1.21 miles to second marker

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6.17 miles to start of fishing hole

6.73 miles to end of fishing hole

8.24 miles to contaminated fish sample location

Direct Point Source



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**QUESTIONS!**