

Municipal Planning, Policy, and Implementation to Reduce HAB Causing Factors

John T. Camp, PE – C&S Companies
CPESC, CPSWQ, CFM



Q: What can we do about HABs?

A: Manage surface water quantity and quality
(minimize nutrient inputs)

- Minimize Erosion
- Reduce Impervious Area
- Disconnect Impervious Area
- Install SW Treatment
- Avoid Concentrating SW
- Actively Manage Development Area

STORMWATER 101

Outline:

1. Policy
2. Implementation Examples

1. Policy

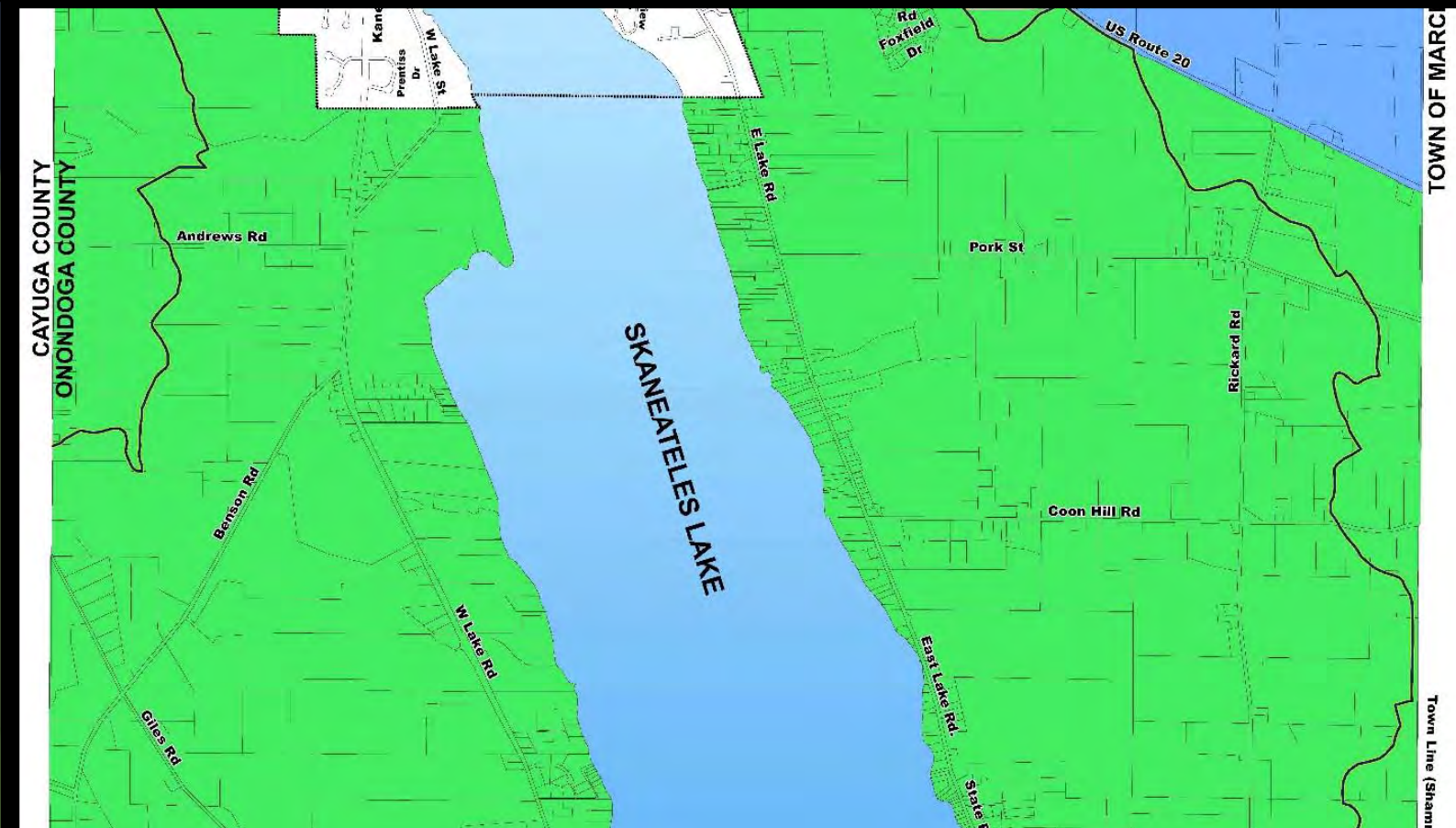
1.1 Codify Development Requirements

ZONING CODE!

1. Policy

1.2 Allow for more stringent regulations in more sensitive areas
(Encourage Development in less sensitive areas)

- Zoning Districts
- Proximity Triggers
- Overlay Districts



1. Policy

1.3 Create specific requirements in zoning code

- Minimum Open Space
- Stormwater Management Thresholds
- Maximum Impermeable Coverages



1. Policy

1.4 Create a Financial Exceedance Penalty System

- Purchase Conservation Easements
- Stabilize Watercourses



1. Policy

1.5 Create Provisions for Flexibility in the Zoning Code (??)

- “Based on Review by the Engineer”



1. Policy

1.6 Extend Public Sewers!

- (Yes, Extend Public Sewers)
- Rather than Discouraging All Development, Promote Responsible (Re)development



2. Implementation Examples

2.1 Reduction of Stormwater Management Threshold



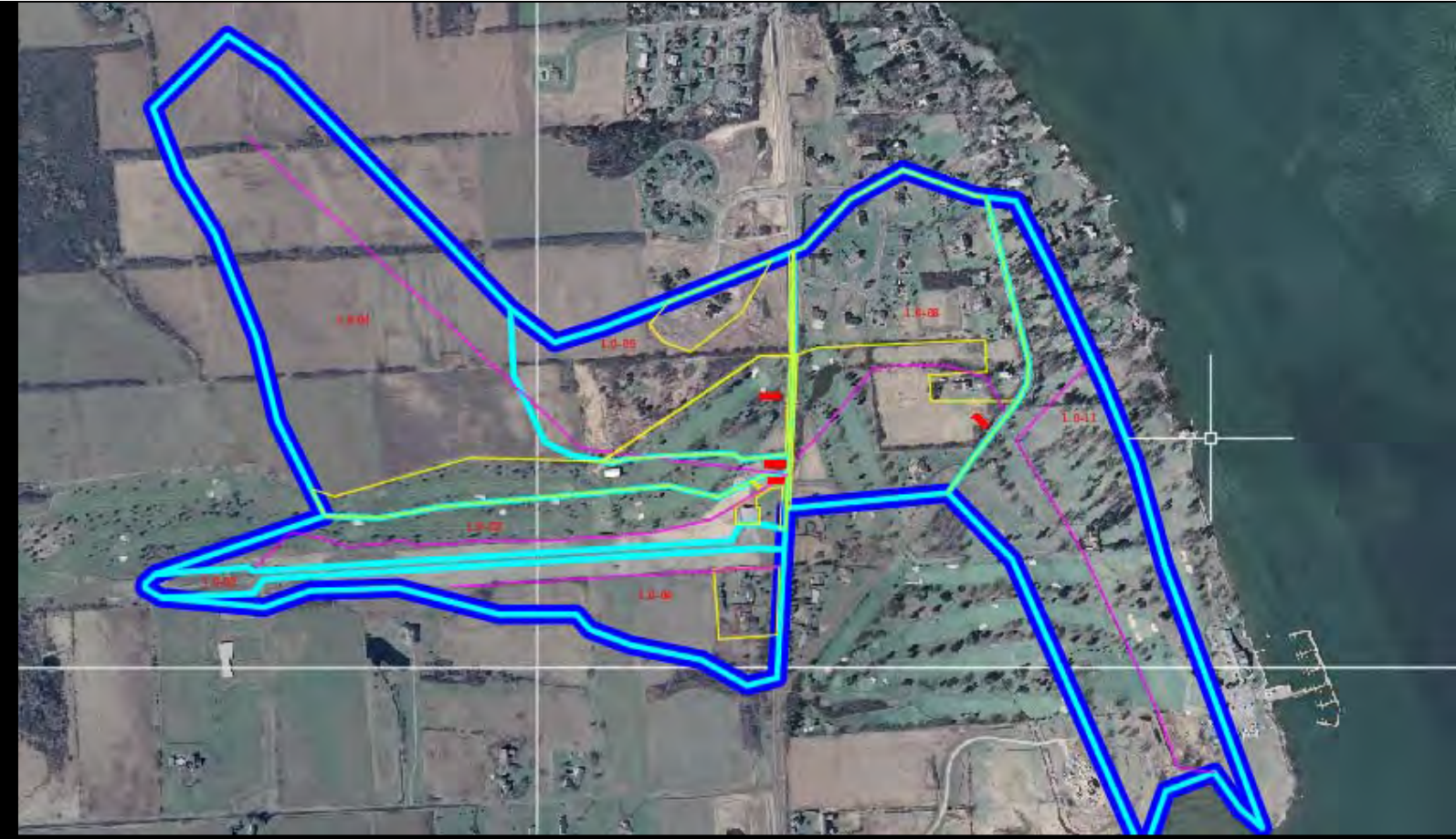
2. Implementation Examples

2.2 Escrow Deposits for Additional Field Inspections



2. Implementation Examples

2.3 Watershed Model Building



QUESTIONS?

John T. Camp, PE
C&S Companies
315-455-2000
315-703-4159

johnc@cscos.com

