### Lake Management Plans

"Planning with nature"





#### Contents

- Status of Lake Management Planning
- What is an LMP
- Contents of an LMP: Inputs and Outputs
- Features of eco-design
- Future directions

# Status of Lake Management Planning in Ontario

- No formalized policy framework at the provincial or federal level
- No comprehensive policy in the Provincial Policy Statement
- LMP's largely driven by Lake Associations and stewardship organizations
- Select municipalities are including policies in their Official Plans

#### Why?

- More than a land use plan highly complex subject
- Lack of municipal financial resources competing demands
- Cost vs. perceived benefits
- May be viewed as restricting rather than encouraging development
- Confusion on what is an LMP

### The Stakeholders/Partners



#### What is a LMP

 A comprehensive plan designed to manage human activities and the features of the natural environment of a lake

### Comprehensive Plan

- Comprehensive: essential because of the complex inter-relationship of the ecology of land, water and human and other activities
- Plan: action-oriented document that sets out values, goals, objectives, policies and measures for implementation

#### Manage Human Activities

- Land Use: residential and non-residential, parks, boat launches, dams and flood control features, utility corridors, STPs and water treatment plants
- Aquatic: swimming, boating, fishing, para-sailing, SCUBA diving
- Outdoor Recreation: hiking, hunting, equestrian, snowmobiling, X-country skiing, nature appreciation, ATVs

#### Manage Human Activities

- Resource Uses: pits and quarries, forestry, mining, agriculture, peat, wild rice harvesting
- Heritage Resources: archaeological and marine archaeological resources
- Science & Research activities

## Manage the Natural Environment

- Natural Heritage Features and Areas: wetlands, fish habitat, wildlife habitat, woodlands, valleylands, ANSIs, species of concern and endangered and threatened species
- Invasive species

#### Manage the Natural Environment

- Water: surface and groundwater features, watersheds, recharge/discharge areas, springs
- Lake: size, shape, depth
- Landscape features: soils, geology, slopes, riparian areas, vegetation
- Climactic and natural hazards: floods, micro-bursts, wind events

#### Features of Eco-design

- Limit or restrict cleared areas before construction
- Design to minimize the building footprint
- Minimize excavation, compaction and grade/slope alterations
- Reduce hard surfaces; increase porous surfaces
- Design to optimize solar gain
- Design for low maintenance

## Features of Eco-design

- Increase biomass through generous landscaping
- Recycle building materials
- Use rain barrels and runoff to recreate habitats
- Use textured and natural building materials
- Maintain shorelines in their natural state and/or restore with hardy native species
- Design to allow for the natural movement of animals, plants and processes such as shifting fauna movements and water to pass under buildings

## Lake Management Planning Process





#### Key Inputs

- Existing Land Uses (built-form), trends, conflicts, development potential, land ownership
- User activities: aquatic, boating, outdoor recreation
- Landscape features and constraints
- Water quality, development capacity, source protection
- Natural heritage and habitat
- Cultural heritage
- Legislative policies, programs, regulatory controls

#### Values Statement

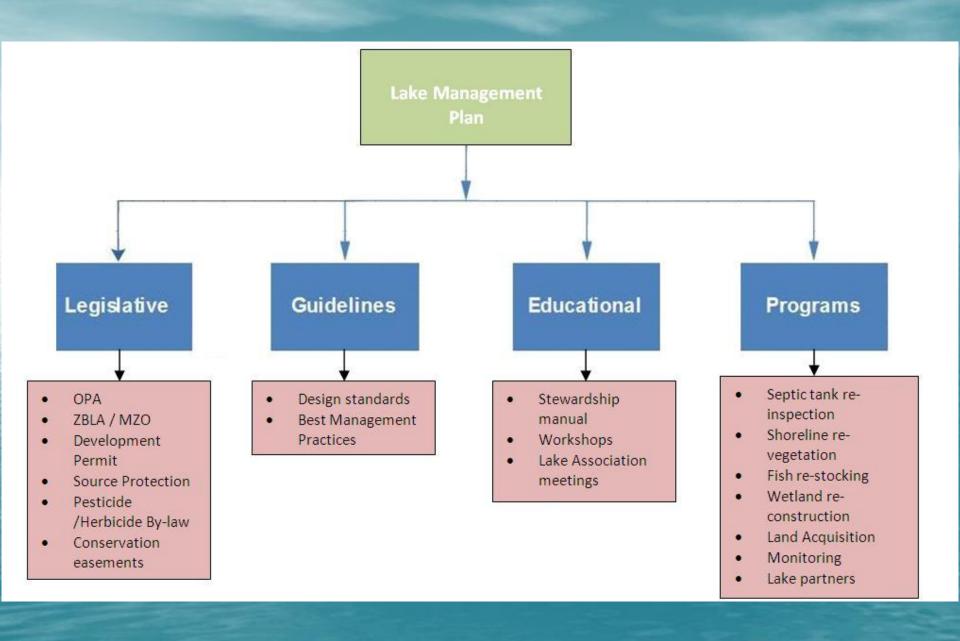
- Sustainable environment
- Optimize development
- Seasonal use only
- Minimize/optimize boat traffic
- Quiet enjoyment
- Optimize recreational use
- Midnight skinny dipping
- Great fishing hole

## Goals and Objectives

- Environmental and ecological sustainability
- Preserve, restore, improve water quality, habitat, shorelines
- Establish cap on development
- Establish educational program
- Establish guidelines for development and redevelopment

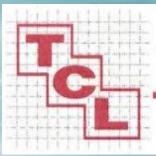
### Lake Management Plan

- Summarize existing conditions, constraints and opportunities (state of the environment)
- Value statement (Mission)
- Goals and Objectives
- Detailed policies
- Implementation: Actions and outputs, timelines, monitoring, evaluation and updating, financial and human resources



#### **Future Directions**

- Build LMP(s) into Official Plan as a secondary plan(s)/OPA(s)
- Develop strong conservation ethic among lake users through education, peer pressure
- Lake associations will become increasingly important as custodians of information and as stewards



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