
APPENDIX G: PROCEEDINGS: LAKE AND WATERSHED PLANNING WORKSHOP

Tuesday, December 2, 2008

Queen's School of Urban and Regional Planning, Policy Studies Bldg, Rm. 202

The Project team would like to thank everyone who attended and contributed to the workshop. It was a successful event, and we appreciate your active participation and feedback. Your comments and ideas will be incorporated into our final report. The report will be available online by January at: <http://www.cataraquegion.on.ca>.

Any additional comments can be emailed to us at: desertlake825@gmail.com.

Below, a summary of the discussion points are presented and grouped according the following themes:

- **Issues of Governance**
- **Maintaining Ecological-Character**
- **Lake Planning Process and legitimization**
- **Education and outreach**
- **Financial Incentives**

Other issues and recommendations discussed in the debriefing and question and answer period are also listed below.

Issues of Governance

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- The many layers of government are very confusing for landowners – often dealing with planning departments and conservation authorities is difficult, and they are not always forthcoming about what is allowed on a property – you have to submit an application and wait to hear their decision on it;
- Education could help allow the process to run more smoothly;

Local education & questioning of policy makers

- Local education of landowners is also important to help ask the different ministries what they are doing about certain issues.

Access has always been an issue on lakes (controlled access?)

- Often roads are privately owned or collective – the cost of maintaining them can be very high;
- Many lakes are still somewhat wild because access to them by road is limited – how should this be taken into account when planning for lakes?

Variety of interests on lakes

- There are numerous big interests on lakes – e.g. Mining, full time residents and Resort interests;
- Often these types of interests are the ones that can afford to put roads in; and they are also generally more damaging to the lake environment

How do you relay the importance of lake planning issues to municipal councilors and policy makers? There has to be more emphasis on informing those who make decisions.

Conflict between private property rights and sustainability measures like riparian buffers. Contrasting individual rights and beliefs with the needs of the collective.

The province must look beyond phosphorus as being the only indicator of lake health.

The Source Water Protection initiative only protects municipalities, which have water treatment plants. There is little protection for those people not on a municipal system.

Planners and elected officials should not be involved in the economic development process, as there is potential for conflict of interest – between trying to protect the lake and raise money for taxes.

Enforcement

- The question arose about who would enforce any new by-laws, and who would provide the resources to ensure enforcement occurs.
- The issue was raised that current enforcement is not enough. People knowingly break the law because the penalties are not stringent enough. They get a slap on the wrist. On this point, there was a general agreement that if people build something on their property that is illegal, they should be forced to remove it, rather than simply pay a penalty.

Application process for minor variances is time consuming and can be expensive

- This could probably be taken care of through implementing DPS, but the group still seemed skeptical about “another” permit system.

Ministries need to get on board

- This was related to the fact that often a number of different ministries will approve a development, only to have another ministry disapprove of it. The example that was cited using two different examples from two different lakes was the necessary rebuilding of a bridge. While most people wanted the same, simple bridge to be rebuilt, the Ministry of Transportation demanded that it was a “navigable waterway” and, therefore, needs to be built for boats to pass under it. In one of the cases, the turtle nesting area, which was directly beside the bridge, was destroyed when the new bridge was built.

Maintaining Ecological-Character

Carleton Place has an urban tree by-law that has been quite effective in encouraging the preservation of natural heritage areas.

Maintaining Rural character and Natural Landscape

- Is one of the most important issues on lakes – it covers a lot of the environmental aspects as well;
- Protecting the natural character *adds* value to your property - many people don’t realize this and build unbecoming buildings right on the lake, or cut down all the trees;
- How do you prevent someone from going in and cutting down all the trees? – Who’s going to enforce it?
- Planning should incorporate topography. Setbacks do not always need to be the same for every property – what’s challenging about lakes is that every property is different; there is a need for planning to be more site-specific and flexible.

Light pollution

- The solutions are relatively easy – e.g. getting lights with sensors and timers;
- However, many people just don’t know – education is important.

Not enough consideration is given to the effects of upstream development on lakes further downstream

- Algal blooms—how to control this problem?

Lake Planning Process

Apathy is a common problem—even in the cases in which lake associations exist

- This speaks to the importance of education programs

Public participation is an essential tool in the lake planning process. Municipalities should be taking advantage of local knowledge (cottagers) – in making planning and political decisions. The locals, cottagers, lake associations know the area the best!

Things get accomplished with public demand. Lake associations and the public need to make known what they want – this is the best way to see change.

There is a possibility of a disconnect between planning and sustainability

- Planning ought to connect back to fundamental ecological processes
- More attention needs to be placed on the entire lakeshed/watershed, as opposed to site- or lake-specific planning
- Perhaps the role of the Conservation Authority needs to be strengthened in terms of its ability to better coordinate the larger watersheds/subwatersheds with their individual lakes

Value of lake associations

- Lake associations represent lake stewards and keepers of the lake; Activities include monitoring human activities and reporting these to councillors, as well as the Ministry of the Environment.
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Education

Lake planning is non-existent in planning schools

- Perhaps this could be an area that the School of Urban and Regional Planning at Queen's could build on

How can local communities use the GIS build-out?

- There could be stronger linkages between the planning school and the community in this area

Need for new and old lake property owners to understand they have similar interests

- The issue arose that sometimes new property owners can come to the lake with their own set of opinions and beliefs, but because they are new, residents who have been living there for a long time will discount their opinions. The idea for everyone to complete a survey on why they value the lake can go a long way to uniting and rallying community members around similar goals for the lake.

Financial Incentives

Planning and education are fine, but individual property owners need greater financial incentives in order to undertake more of a stewardship ethic

- Charleston Lake has tax incentives for residents to protect land
- Lake planners/policy makers could look to a program like *Alternative Land Use Services (ALUS)*, which is an ecological goods and services program designed by farmers, for farmers
- Farmers get fair market value in compensation for the delivery and maintenance of environmental services that benefit the entire community (e.g., valuing ‘natural capital’)
- Of course, the problem with a program like this is always having enough funding

Lake Plans are expensive – Lake Associations need financial assistance (Charleston Lake Plan = \$50,000)

Large Group Report Back & Discussion

Access to lakes should be balanced

- Road building is expensive;
- Lake properties should not only be available to those who can afford it.

Community buy-in is key

- People need to understand the process rather than be forced into it

Lakes have communities now – Just because they don’t have a name or traditional geographic organization (e.g. like Seeley’s Bay) doesn’t mean they shouldn’t be treated as a unit. Lake and road associates represent ‘communities’ today

Issue of Notice to the community on development proposals. Is this problematic?

- The radius for notification is the same for development applications in urban areas as it is in rural areas - so around lakes, where the residents are so spread out, the radius isn't nearly large enough. The result is that not enough people are notified of a development proposal until after the fact;
- Also, many seasonal residents are from out of town and by the time they get notice, the process is all over.

Communication on lakes is very difficult, if not nearly impossible

- Most lakes do not even have a lake association – it's not a universal thing; some lakes only have road associations, or more local associations for a part of the lake.

If DPS is used, what about opposing a development?

- In DPS, since most public consultation is front-loaded, no 3rd party appeals (e.g. to the OMB) are allowed
- Is this a concern for lake communities?

The problem with the Planning Act is that it only applies when something is being done (e.g. an application for a severance or minor variance) – this creates a problem for shoreline vegetation removal (because there is no application)

- However, a Shoreline Vegetation By-law is different because it stays in effect continuously, regardless of a development application

Is a planning toolkit enough to protect lakes?

- A combination of planning and community-based approaches may be required to address the complexity of the issues involved.

Summary

The discussion at the workshop involved a number of people from a wide variety of backgrounds. Attendance included: planning students, professors from the planning school and other departments, representatives from lake associations and cottagers, elected officials, lake planning consultants and professionals, enthusiasts and activists. Although the participants' perspectives were varied, all agreed that more careful attention to planning around lake environments is important right now.

A number of the challenges surrounding planning for lake environments were brought up. There was general consensus on several key points: education and communication is paramount in achieving comprehensive planning for lakes. As well, community participation, coupled with local buy-in are important. There was a general feeling that there is a need for land-use planning processes in lakeshed areas to be more open and inclusive and

tailored to lake and region environments. In addition, some frustration was expressed that lake planning activities are not realized by municipal counterparts and can stifle stakeholder vision. Overall, the group noted that while a planning 'toolkit' is important, it is not enough to address the complexity of the issues involved, and rather a combination of planning and community-based approaches would be most effective in maintaining the natural landscape and ecological-character of lakeshed environments.

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GLOSSARY

Algal bloom is a rapid increase in the growth of algae in water. This is accompanied by a decrease in dissolved oxygen, and can alter the water to make it toxic and non-potable.

Anaerobic is the condition associated with the lack of free oxygen in an environment.

Biodiversity is the variability among organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Carbon cycle is used to describe the flow of carbon (in various forms such as carbon dioxide) through the atmosphere, ocean, terrestrial biosphere, and lithosphere.

Conservation Easement is a legal property title arrangement where a landowner restricts future development or specific environmental uses on a parcel of land.

Conservation Donation is action allowed under the Government of Canada's *Ecological Gifts Program* where owners of certified ecologically sensitive land can donate the fair market value of a property and be eligible for a charitable receipt.

Conservation Land Tax Incentive Program is an Ontario based program aimed at protecting provincially identified conservation lands on private property through tax incentives.

Drainage Basin is an area occupied by a closed drainage system, especially a region that collects surface runoff and connects it to a stream channel, lake or other body of water. It is also known as a catchment or a watershed. Divisions of this basin are known as subcatchments or subwatersheds.

Dissolved Oxygen is the oxygen freely available in water, vital to fish and other aquatic life.

Ecological Functions refers to the natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions.

Ecologically Sensitive Lands are areas of valuable ecological features, habitat, or species that are protected from urban development (even if they are in an urbanized area).

Ecosystem is any area with a boundary through which the input and output of energy and materials can be measured and related to some unifying factor, and includes the living and non-living environment together with the population or community; or systems of plants, animals and microorganisms, together with the non-living components of their environment, related ecological processes and humans.

Ecosystem Approach is a management approach to natural resource management which aims to sustain ecosystems to meet both ecological and human needs in the future.

Erosion is the carrying away or displacement of solids such as sediment, soil, rock and other particles.

Eutrophication is the over-enrichment of a water body with nutrients, resulting in excessive growth of organisms and depletion of oxygen concentration.

Fair Market Value is the price at which property is transferred between a willing buyer and a willing seller,

each of whom has a reasonable knowledge of all pertinent facts and neither being under any compulsion to buy or sell.

Fee Simple Interest is when an owner owns all the rights in a real estate parcel.

Flood Plain is the area, usually low lands adjoining a watercourse, which has been or may be subject to flooding hazards.

Indigenous refers to species that have originated naturally in a particular region or environment.

Impervious Surfaces are surfaces of land where water cannot infiltrate back into the ground such as roofs, driveways, streets and parking lots.

Infiltration refers to the penetration of water through the ground surface into sub-surface soil or the penetration of water from the soil into sewer or other pipes through defective joints, connections, or manhole walls.

Intensification is the redevelopment of existing lands that results in higher densities or impactful land use activities.

Lakeshed is the immediate drainage basin of a lake.

Lakeshed Plan (also known as Lake Management Plan or Lake Stewardship Plan) is a plan aimed at protecting water quality, fish and wildlife habitat, determine trends, sources of impairment, inappropriate land use practices and undertake lakeshore capacity assessment studies.

Land Securement includes purchasing lands, acquiring the title to lands through donation or holding conservation easements and agreements. Landowners are engaged by consultants, government and non-government partners to purchase or donate ecologically sensitive lands that meet their conservation goals.

Land Severance is the authorized separation of a piece of land to form a new lot or a new parcel of land. Most municipalities with an approved Official Plan have specific policies and requirements for land severance.

Landscape Character Assessment is an assessment to identify different landscape areas which have a distinct character based on a recognizable pattern of elements, including combinations of geology, landform, soils, vegetation, land use and human settlement.

Littoral Zone is the area of a water body defined by the shoreline and the limit of submerged aquatic vegetation growth.

Low Impact Development is a land development strategy to reduce stormwater runoff and pollution loading through practices such as bioretention, grassed swales and pervious surfaces.

Managed Forest Tax Incentive Program is an Ontario based program aimed at conserving forest cover by providing tax incentives for private property owners to manage forests on their land.

Mesotrophic is a body of water that contains some nutrients, and has some organic productivity. These bodies of water are more productive than ones classified as oligotrophic, but are not as nutrient dense as ones classified as eutrophic.

Mitigation includes the prevention, modification or alleviation of impacts on the natural environment.

Mixed-Use Development refers to development in areas where several uses (i.e. retail, residential, commercial and civic uses) are allowed.

Non-Point Source Pollution is pollution that does not come from a specific source.

Nutrient Loading refers to the introduction of excessive amounts of nutrients such as nitrogen or phosphorus into the soil or water.

Official Plan is document that describes a municipal council's policies on how land in their community should be used. It is prepared by planners, and/or planning consultants with input from the public and other stakeholders and helps to ensure that future planning and development will meet the specific needs of your community.

Oligotrophic is a body of water that contains low levels of nutrients, and therefore has little organic productivity. Usually these bodies of water have high levels of dissolved oxygen.

One Hundred Year Flood (for river and stream systems) is the flood, based on an analysis of precipitation, snow melt, or a combination thereof, having a return period of 100 years on average, or having a 1% chance of occurring or being exceeded in any given year.

Rehabilitation refers to the restoration of an ecosystem to a higher functioning condition.

Riparian Area is the vegetated ecosystems along a waterbody through which energy, materials, and water pass. Riparian areas are subject to periodic flooding. This area typically has a high density, diversity and productivity of plant and animal species.

Runoff is the part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters.

Sedimentation is the motion of molecules in solutions or particles in suspensions in response to an external force such as gravity.

Site Alteration refers to activities, such as fill, grading and excavation that would change the landform and natural vegetative characteristics of a site.

Stream Buffer is the use of vegetation to between land and a stream to reduce non-point pollution from land uses and to improve water quality.

Tributary is a river or stream flowing into a larger body of water, such as a river or lake.

Trophic Levels refer to an organism's feeding status in the movement of food energy through an ecosystem. Feeding status is determined by the organism's prey and predators.

Turbidity describes the ability of light to pass through water. The cloudy appearance of water caused by suspended and colloidal matter (particles).

Urbanization is the physical growth of rural or natural land into urban areas as a result of population immigration to an existing urban area.

Vegetative Corridor is the naturally vegetated (or potentially) re-vegetated area that links or borders natural

areas and provide ecological functions such as habitat, passage, hydrological flow, connection or buffering from adjacent impacts.

Waterbody is any area that in a normal year has water flowing or standing above ground to the extent that evidence of an ordinary high water mark is established. Wetlands contiguous to the waterbody are considered part of the waterbody.

Watercourse is a channel through which water flows, such as a stream or a river.

Watershed a watershed comprises all lands drained by a river or stream and its tributaries. It is usually defined by a height of land. Another term for watershed would be a drainage basin.

Wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens.

Zoning By-Law is a common land use tool employed to control the use of land in a municipality. It states exactly how land may be used, where buildings and other structures can be located, the types of buildings that are permitted and how they may be used and the lot sizes and dimensions, parking requirements, building heights and setbacks.



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