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2013 Municipal Water Policy on Wetlands

Convention Policy Paper



1. Background

Benefits and Challenges

Wetlands provide valuable ecological services to communities. Their ability to store water provides natural stormwater management that can mitigate the risk of floods, while reducing the need for costly infrastructure. This service will become increasingly valuable as extreme weather events become more common. Among the most ecologically rich places in the province, wetlands also support biodiversity which adds to municipalities' aesthetic appeal and environmental integrity. As the only breeding ground for dragon flies, healthy permanent wetlands even play a role in controlling mosquito populations.

Economic and population growth is putting increasing pressure on wetlands and hampering their ability to provide ecosystem services. Unfortunately, the long term ecological consequences and economic costs of losing wetlands are often not taken into account in development decisions.

Objective

The Government of Alberta recently released a new *Alberta Wetland Policy* with a goal to “conserve, restore, protect and manage Alberta’s wetlands to sustain the benefits they provide to the environment, society and the economy.” AUMA has engaged our members in developing our own wetlands policies in order to guide our response to the Government of Alberta’s new policy and our input on its implementation.

The objective of AUMA’s 2013 Municipal Water Policies on wetlands is to:

- Raise the profile and understanding of wetlands.
- Contribute a municipal perspective to the implementation of provincial wetland policies.
- Create an enabling environment that facilitates the ability of municipalities and other partners to conserve and restore these essential bodies of water.

These wetlands policies are part of a broader initiative to develop a set of comprehensive water policies over a number of years in order to effectively respond to provincial and federal policies and programs and to build municipal capacity to respond to water related challenges and opportunities. Appendix “A” provides the Municipal Context and Principles that are guiding AUMA’s policy development.

2. Wetland Policy Statements

Engagement in a new wetland policy

Concerns of Municipalities

In the 30 years preceding the release of the new Alberta Wetland Policy, wetland management was guided by an interim policy, Wetland Management in the Settled Areas of Alberta. The policy sought to maintain wetlands in a natural state and mitigate disturbance whenever possible. The policy only covered Alberta's White Area, even though 90 percent of province's wetlands are in the Green Area. Despite the intent of the policy, the White Area loses wetlands at an estimated rate of 0.5 percent a year adding to the over 64 percent of wetlands that have been lost in the last 100 years.

The Government of Alberta's new policy, which covers the entire province, took a number of years to develop and specific stakeholders were consulted in its development. For example, in 2008 the Alberta Water Council provided the government with recommendations for a new wetlands policy and implementation plan to which municipalities contributed. The new policy is high level, and implementation will be phased in over the next few years.

AUMA hopes that implementation will proceed in a timely manner and create an environment that will better enable the province, municipalities and other wetland organizations to conserve wetlands.

The following municipal wetlands policies will inform AUMA's response to the new provincial policy and input on its implementation

Policy

- 1) AUMA urges the Government of Alberta to:
 - a) Immediately engage municipalities and other wetlands stakeholders in implementing the new wetlands policy for the entire province in order to prevent further wetland loss.

Wetland Inventory

Concerns of Municipalities

It is essential for municipalities, the provincial government and other wetlands stakeholders to have a solid understanding of the extent, location and function of Alberta's wetlands in order to make sound management decisions. While a handful of municipalities have conducted wetlands inventories, most do not have the expertise or financial resources to complete one on their own let alone keep it up to date. The Government of Alberta has conducted a province-wide inventory available at GeoDiscover Alberta. However, the accuracy of the inventory could be improved along with the accessibility and ease of use of the information.

Policy

- 2) AUMA urges the Government of Alberta to:
 - a) Continuously improve the accuracy of the Provincial Wetland Inventory and make the data more user friendly and accessible.
 - b) Expand the inventory to include information on wetland function.
 - c) Identify provincially/ecologically significant wetlands that require enhanced protection including the identification of compensatory wetland habitat.
- 3) That the AUMA work with the Government of Alberta and other wetland experts to develop a guide for municipalities to use in partnering with developers and land owners to conduct more detailed localized wetlands inventories to better integrate protection of wetlands into land use and sustainability plans.

Municipal Government Act

Concerns of Municipalities

The Municipal Government Act (MGA) enables municipalities to conserve wetlands through tools such as land use bylaws and environmental reserves. However, there are limitations as to when these sections can be enacted and how they can be applied. For example, Section 664 (1) of the MGA indicates that a municipal authority can designate a "swamp" as an environmental reserve at the time of subdivision. While swamps are commonly defined as wetlands, there is often disagreement as to what type of wetlands qualify as a swamp. The MGA also allows municipalities to designate strips of land "abutting the bed and shore of any lake, river, stream or other body of water" as environmental reserve. Although wetlands would normally be considered to be a body of water,

land owners and developers often argue that because wetlands are dissimilar from lakes, rivers and streams, jurisprudence dictates that they should not be considered to be a body of water in this case.

The current review of the Municipal Government Act provides the opportunity to strengthen provisions for wetland protection.

Policy

- 4) AUMA advocates that the Municipal Government Act be amended to provide greater clarity in the definition of environmental reserve including:
 - a) Adding wetlands to the list of eligible ecosystems in section 664(1) (a).
 - b) Clarifying which classes of wetland are eligible to be designated as environmental reserves.
 - c) Clarifying that the setback referred to in section 664(1) (c) applies to wetlands.
- 5) AUMA advocates that the Government of Alberta provide guidance on how to measure environmental reserve setbacks.

Wetland Mitigation

Concerns of Municipalities

Wetland management in Alberta is meant to follow the wetland mitigation hierarchy whereby:

- *The first priority is to avoid impacting wetlands whenever possible.*
- *Where avoidance is not possible, proponents will be expected to minimize impacts on wetlands.*
- *As a last resort, and where avoidance and minimization efforts are not feasible or prove ineffective, compensation will be required.*

However, research and municipal experience indicate that this hierarchy is not being followed. Currently avoidance and minimization are skipped in favor of development and compensation. Restoring another wetland (as compensation) may not provide the same ecological benefits to the community as the original wetland. In addition, many municipalities express frustration that they are not consulted in the approval process and in some cases the Government of Alberta has approved destruction of wetlands that were designated for conservation by the municipalities. While developing over wetlands provides economic benefits and can increase the municipal tax base, in the long term the loss of water treatment and storage functions that wetlands provide can create increased stormwater management and treatment costs for municipalities.

Even where wetlands are protected, changes to surrounding landscapes can compromise their functions. Wetlands are part of broader hydrological systems and ecosystems. Their ability to store water and provide habitat is connected to and affected by the health of other aspects of those systems. Development around wetlands, particularly that which may alter drainage patterns or encroach on adjacent natural and/or riparian areas, needs to consider this relationship.

Policy:

- 6) AUMA urges the Government of Alberta to strengthen the wetland mitigation hierarchy with greater emphasis on avoidance by:
 - a) Developing science-based criteria defining the parameters that should be used to determine when avoidance is not possible. The criteria should give greater weight to the long-term ecological and economic impacts of the loss of wetland function than short-term economic gains.
 - b) Considering wetlands as part of hydrologic systems and ecosystems, where changes to other aspects of the system can compromise their function and value.
 - c) Identifying the real cost of restoration and increasing compensation rates accordingly so that it becomes more attractive to avoid wetland loss.
 - d) Developing a formal process to involve municipalities early in the decision making process around applications for wetland disturbance or destruction.

Assessing Relative Wetland Value

Concerns of Municipalities

The Government of Alberta is shifting the way that wetlands are assessed and valued. Previously, the government's wetland management approach focused on the physical area. For each hectare of wetland lost to development, three hectares or greater of wetlands should be restored. The government has now introduced using wetland value as a means of assessing loss and

compensation. This approach will assess the relative contribution of an individual wetland to water quality improvement, hydrology, biodiversity and various human uses in addition to area.

According to the government, the consideration of relative wetland value will reinforce the mitigation hierarchy by contributing to decisions as to whether avoidance or minimization is required and, if loss is allowed, used to determine the restoration requirements.

Policy

- 7) AUMA supports the shift towards value based assessment and emphasizes the need for the assessment approach to:
 - a) Be implemented in a manner that ensures there is “no net loss” of wetlands.
 - b) Include valuation of the wetland’s riparian area.
 - c) Consider historic and cultural values.
 - d) Consider wildlife connectivity.
 - e) Consider not just the value of the individual wetland, but the cumulative effects of wetland disturbance on the water balance within the entire drainage area.
 - f) Be conducted consistently across the province by qualified wetland aquatic environment specialists.
 - g) Recognize that wetlands in dense urban areas may not be able to provide the same level of biodiversity, but still provide essential ecological services related to flood control and water quality enhancement.
 - h) Be integrated into a provincial wetland inventory in order to identify high value wetlands.
- 8) Recognizing that the value based approach may be more complex to implement and require additional recourses, AUMA urges the Government of Alberta to establish a mechanism to have proponents of development provide the valuation assessments as part of their development application.

Restoration Agencies

Concerns of Municipalities

Wetland restoration must be carried out by a wetland restoration agency. Ducks Unlimited Canada (DUC) is currently the primary wetland restoration agency in Alberta and there is no certification process that would enable other organization to be recognized as a restoration agency. Many municipalities would like to become restoration agents to leverage their knowledge of local land and water management issues in the restoration of wetlands.

Policy

- 9) AUMA urges the Government of Alberta to develop a wetland restoration agency certification process that:
 - a) Enables municipalities and other interested bodies to become wetland restoration agents if they have access to the appropriate expertise and resources.
 - b) Provides clear guidance on how restoration takes place.
 - c) Includes stringent requirements for long-term monitoring, publicly accessible reporting and third party verification to ensure wetland function is truly restored.

Location of Wetland Restoration

Concerns of Municipalities

When wetland loss occurs, restoration often takes place in other municipalities and sometimes even other watersheds, without consulting either the municipality losing the wetland or the one in which restoration will occur. Municipalities are concerned that they have to deal with the consequences of losing wetland functions, such as flood mitigation, without receiving compensation. While it may not be feasible to always restore a wetland in the same municipality in which one was lost, restoration must take place within the same local tributary or sub-watershed to which the wetland was connected to ensure hydrological functions the wetlands provide are not lost to the area.

Policy

- 10) AUMA urges the Government of Alberta to develop restoration criteria and process which:

- a) Requires wetlands restoration to take place within the same local tributary or sub-watershed in which the original wetland was lost.
- b) Ensures municipalities are consulted in determining the location of the wetland restoration.
- c) If there are no available wetlands for restoration within the same tributary, gives greater consideration to avoiding wetland loss in the first place.

Constructed Wetlands

Concerns of Municipalities

Constructed wetlands are increasingly being used by developers and municipalities to add to the aesthetic appeal of communities and as a form of “green infrastructure” taking advantage of the water retention and purification services that constructed wetlands provide. Under the current restoration requirements, constructed wetlands cannot be used as compensation for a lost wetland as the diverse functions of natural wetlands are very hard to replicate. At the same time constructed wetlands play an important role in flood prevention and can introduce greater biodiversity into urban areas than would otherwise be present.

Policy

- 11) AUMA urges the Government of Alberta to integrate constructed wetlands into restoration requirements with the following specifications:
- a) Subject constructed wetlands to a higher compensation ratio as they are not able to fully replicate the functions of natural wetlands.
 - b) Establish design standards for constructed wetlands based on current scientific research.
 - c) Require an aggressive monitoring and re-vegetation regime.
 - d) Require third party monitoring.
 - e) Manage constructed wetlands according to the wetland mitigation hierarchy in the same manner as natural wetlands.

Ephemeral Wetlands

Concerns of Municipalities

Ephemeral wetlands are important components of the landscape providing a unique habitat to many organisms and playing a critical role in absorbing snowmelt and thereby avoiding spring flooding. There is debate as to whether ephemeral wetlands should be treated the same as more permanent wetlands in terms of mitigation and restoration requirements. Activities impacting ephemeral wetlands, as for all other types of bodies of water in Alberta, are subject to the Water Act. At this time, however, ephemeral wetlands are not typically subject to government’s wetland mitigation framework because of the current challenges in delineating and inventorying them.

Policy

- 12) AUMA urges the Government of Alberta to integrate ephemeral wetlands into the wetland mitigation framework to avoid losing the important functions they provide.

Role of Municipalities in Wetland Conservation

Concerns of Municipalities

Given municipal responsibility for local land and water management decisions, municipalities see themselves as being well positioned to support the implementation of provincial wetland policies at the local level so long as they have access to adequate expertise and resources. At the same time municipal boundaries do not follow ecological boundaries, meaning that destruction of a wetland in one municipality can have negative consequences on water quality and quantity in another. This requires a collaborative regional approach to both understanding the role of wetlands in local hydrology and strategically protecting the values they provide.

Policy

- 13) AUMA will work with the Government of Alberta and wetland related groups to seek opportunities to provide municipalities with greater access to wetlands education, expertise and partnerships.

Integration with other policies and plans

Concerns of Municipalities

The Government of Alberta is currently developing a number of plans and strategies that relate to wetlands. For example, regional land use plans could be used to protect wetland areas. Efforts to protect wetlands can also contribute to climate change adaptation and flood mitigation strategies through the ecosystem services they provide such as water storage much more affordably than other man-made storage options.

Policy

- 14) AUMA urges the Government of Alberta to identify wetland conservation as a component of regional plans and climate change adaptation and flood mitigation strategies.

Appendix “A” Municipal Context and Principles

In order to ensure strategic alignment of the water policies that will be developed over a number of years, AUMA considered the leadership role municipalities play in many facets of water management as well as overarching water management principles that can be used to guide policy development on various topics.

Role of Municipalities

The following statements represent the roles municipalities would like to play, assuming appropriate resources and support are available.

- Municipalities as an order of government have a role to play in responsible water management as leaders in water conservation, efficiency and productivity and maintaining healthy aquatic ecosystems.
- Municipalities operate water and wastewater systems and employ quality assurance, controls and asset management practices towards ensuring the sustainability of their water infrastructure and require support from other orders of government and the AUMA to succeed.
- Municipalities should have effective mechanisms and adequate resources contributing to the ‘Water for Life’ goals of ensuring Albertans have a safe and secure supply of drinking water, healthy aquatic ecosystems and reliable, quality supplies for a sustainable economy.
- Municipalities are engaged in shaping water policies and legislation, and have the authority and resources for effective monitoring, reporting and enforcement in conjunction with other orders of government.
- Municipalities are active partners in implementing provincial and regional land and watershed management plans that reduce the cumulative effects of development on aquatic ecosystems.

Principles for Municipal Water Policy

- Water is essential to municipal sustainability in terms of a community’s economic viability, environmental integrity, social wellbeing, cultural vibrancy and good governance.
- Healthy aquatic ecosystems and source water protection are essential to providing Albertans with safe, secure drinking water and reliable quality water supplies for a sustainable economy.
- In times of water shortages, water for human health must be given the highest priority.
- Water allocation legislation, policies and practices recognize that water is a scarce limited resource with significant present and future value.
- Decision making is supported by clear, scientifically-based, accurate and publicly available information on water availability, quality, use and the health of aquatic ecosystems.
- Water management should be based on a risk management approach that balances capacity, aquatic and human health and economic prosperity.
- The costs of municipal water and wastewater services should be born primarily by users.
- Investment in water resources needs to be a high priority for governments and all water stakeholders.