

***RENEWAL***  
***WATER FOR LIFE STRATEGY***

**WHAT WE HEARD**  
**SUMMARY OF RESPONSES TO ENGAGEMENT**  
**July – August 2007**

**October 5, 2007**

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*This report was prepared by MPA Public and Government Affairs (a private consulting company contracted to analyze and report on the input received from the Renewal Engagement process).*

**WHAT WE HEARD**  
**RESPONSES TO THE *WATER FOR LIFE* STRATEGY RENEWAL ENGAGEMENT**

## **CONTEXT**

The *Water for Life* strategy was adopted by the Cabinet in November 2003.

In spring 2007, the Minister of Environment requested that the Alberta Water Council lead renewal of the *Water for Life Strategy*. The renewal is not a “re-do” of the original Strategy. Rather, it seeks to adjust and if necessary expand the intent of the Strategy to ensure responsiveness to emerging issues and current information.

To assist in developing recommendations the Council sought information, views and opinions of Albertans. The input gathered through the engagement process will inform the Alberta Water Council’s recommendations, which will be presented to the Minister of Environment early in 2008.

**This “What We Heard” report summarizes input from participants in the engagement process and does not represent the view of the Alberta Water Council.**

## **APPROACH**

The engagement process utilized a workbook and online questionnaire hosted on the Alberta Water Council website through July and August 2007. Alberta Water Council members undertook an extensive process of soliciting feedback from their sectors, resulting in 245 submissions from individuals or recognized organizations and agencies. All sectors on the Alberta Water Council were represented in these responses with the exception of First Nations which were engaged by Alberta Environment.

Responses were submitted directly to a consultant team. A three-step process was used to analyze the information and produce this report. The first hundred submissions were analyzed to create a core set of common themes, and the remaining submissions confirmed and expanded the common themes. Finally, the input was synthesized into a summary format to consolidate information.

**The analysis focused on identifying and understanding respondents' points of view. No attempt was made to determine the factual accuracy of these viewpoints or to resolve apparent contradictions.**

The *What We Heard* report summarizes major themes. Where more detail was provided in the submissions, it will be taken into account by the Steering Committee and Project Team overseeing the renewal of the strategy when developing the final recommendations for submission to the Alberta Water Council.

## **EXECUTIVE SUMMARY**

The major themes related to concerns and actions suggested by respondents. They can be summarized as follows.

### **Concerns Perceived by Respondents**

Respondents expressed concerns about water and the aquatic environment in Alberta, namely,

- That the aquatic environment in Alberta is being slowly and steadily compromised,
- That Alberta is facing future water shortages,
- That water users, individual and industrial, are not well informed about Alberta's water resource or what they can do to conserve and protect it.

### **Actions Suggested by Respondents**

Respondents felt that the *Water for Life Strategy* was a positive step and remains a valid framework, but that adjustments are needed to ensure it remains dynamic and responsive to emerging challenges. Accelerated implementation is required to meet the intent of the *Water for Life Strategy*.

Respondents called for additional effort concerning key aspects of the *Water for Life Strategy*, namely,

- Additional resources to meet the strategic intent of the *Water for Life Strategy*,
- Statements of goals, actions, and targets for the *Water for Life Strategy* implementation,
- Clarification of authority, roles, responsibilities and accountabilities in the shared governance, partnership model,
- Quicker movement towards environmental protection,
- Review and likely revision of regulatory framework with impact on the intent of the *Water for Life Strategy*,
- Enhanced knowledge and information creation and dissemination,
- Creation of public awareness and education.

## **OVERVIEW OF THEMES**

The themes are based on 245 submissions. The five themes from the engagement are grouped under the headings of Concerns and Actions.

### **Concerns Perceived by Respondents**

Theme #1: That the aquatic environment in Alberta is being slowly and steadily compromised.

Theme #2: That Alberta is facing future water shortages.

Theme #3: That water users, individual and industrial, are not well informed about Alberta's water resource or what they can do to conserve and protect it.

### **Actions Suggested by Respondents**

Theme #4: That *Water for Life Strategy* was a positive step and remains a valid framework, but adjustments are needed to ensure effective implementation.

Theme #5: That accelerated implementation is required to meet the intent of *Water for Life Strategy*.

## ***CONCERNS PERCEIVED BY RESPONDENTS***

Themes #1, #2 and #3 describe concerns about the natural, social and economic environment.

### **THEME #1: That the Aquatic Environment in Alberta is being Slowly and Steadily Compromised**

Many were of the opinion that the aquatic environment in Alberta is under threat, and already showing signs of compromise.

#### ***Sub Theme Concerns over pollution of surface water.***

There was concern that human activity is polluting rivers, streams, and lakes. Some damage is already visible. The concern was referenced by,

- Eutrophication and algae growth, which affect lakes,
- Pollution from industry,
- Poor road construction and use of offroad vehicles, which affect rivers and streams,
- Industrial spills,
- Residential wastewater discharges which can contain pharmaceuticals,
- Occasional pollution from septic systems,
- Need for better protection.

#### ***Sub Theme Concerns over pollution of groundwater.***

There was concern that human activity is polluting groundwater. This was referenced by,

- Pollution from industry, including coalbed methane, oilsands and agricultural operations,
- Limitations on groundwater data which affect the ability to rationalize planning for new developments,
- Need for better protection.

#### ***Sub Theme Concerns over threats to the aquatic environment.***

There was concern over threats to wetlands, riparian areas, and the aquatic environment.

Wetlands are disappearing. This concern was referenced by the need for,

- A current wetlands policy,
- A consensus on the definition of a “healthy aquatic ecosystem”,
- Incentives to protect wetlands on private property,
- Limits to shoreline developments, which affect habitat,

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- Restoration of threatened wetlands,
- Alignment of land development and aquatic habitat preservation,
- Attention regarding non-point sources, cumulative impacts, and the affects of reduced water quantity,
- Better protection.

***Sub Theme Development takes priority, sometimes at the expense of the environment.***

There was concern that environmental consequences are usurped by industrial or residential developmental needs. A better balance is needed. The current practice is not sustainable over the long-term.

***Sub Theme When protective policies are in place, monitoring and enforcement appear to be insufficient.***

There was concern that compromise of the natural environment continues even when a reasonable assumption is that policies exist to protect it. Some thought the problem may be limited enforcement.

**THEME #2: That Alberta is Facing Future Water Shortages**

A pervasive sense that Alberta is moving in the direction of future water shortages underscored many of the points of view heard in the engagement.

***Sub Theme Growth in Alberta's population and economy will affect water supply.***

The concern was referenced by,

- Urban growth, with effects on source and use of water,
- Growth in rural residential development of those not served by municipal water sources, with effects on withdrawal of groundwater,
- Growth in industrial demand, and in use of water for some industries, especially for the oilsands and enhanced oil recovery,
- Growth in logging, due to the pine beetle infestation, with effects on water catchment,
- Possible increases in contamination of groundwater, with effects on supply,
- Loss of wetlands, with effects on supply,
- Pressure for instream dams, with effects on aquatic habitat and downstream flow.



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***Sub Theme Concerns related to allocations and priorities and recent events affecting water supply.***

This concern also encompassed licensing and was referenced by,

- The moratorium on new allocations in the South Saskatchewan River Basin,
- Increasing requests for water transfers, mostly intra-basin,
- Issuance of licenses without understanding of implications of the outcome of the project,
- Issuing development permits before water licenses have been secured,
- Over-allocation of surface water rights, example, to large municipalities, which leads to “hoarding” of license capacity and removes any incentive to conserve.

***Sub Theme Climate change will contribute to water shortage.***

This concern was referenced by,

- Changing weather patterns and effects on glaciers
- Need to prepare for and adapt to possible effects of climate change,
- Need for more storage capacity,
- Concerns about the increasing impact on Alberta of the diversion of water to the United States under the North American Free Trade Agreement (NAFTA).

***Sub Theme The situation regarding future water shortages is different in northern and southern Alberta.***

The south has growing numbers of people and less unallocated water. The north has more unallocated water and growing industrial demand with oilsands development. The need to manage by watershed and not by what may be a public misconception that the whole province is experiencing water shortages was advised.

**THEME #3: That Water Users are not well Informed about Water and the Aquatic Environment or What They Can Do to Conserve and Protect Them**

There was a concern that many publics, individual and industrial, do not understand the nature of Alberta's water resource nor its dynamics. They are still taking water for granted as a permanent part of the environment. Information is there for involved stakeholders, should they look for it, but it hasn't reached the wider public.

***Sub Theme People often take water for granted as an infinite resource.***

There was the opinion that the public do not understand,

- The value of water,
- That it is finite,
- That it has a cost attached to it,
- That the environment doesn't just bounce back after all resources are extracted,
- That there really is a looming problem with supply,
- What to do about it – individually or corporately.

***Sub Theme A positive trend is that people are taking notice of water and the need for good management.***

Participants saw indications of the beginnings of change. A new consciousness of the importance of water is appearing. The large cities in particular are promoting water conservation for individuals. Awareness of climate change is contributing to awareness of water.

***Sub Theme Conservation measures often come with costs attached.***

There was concern that conservation measures, individual or industrial, often come with costs attached which implies a reluctance to use them. Widespread conservation measures are slow in coming. If people don't understand the value of water, pay little or nothing for it, and have to pay to conserve, they are not motivated to conserve.

## ***ACTIONS SUGGESTED BY RESPONDENTS***

Themes #4 and #5 address actions which might be taken in response to concerns. Theme #4 addresses strengths and limitations of the *Water for Life Strategy*, and Theme #5 focuses on solutions.

### **THEME #4: That the *Water for Life Strategy* was a Positive Step and Remains a Valid Framework, but Adjustments are Needed to Ensure Effective Implementation**

The *Water for Life Strategy* was widely seen as a strong beginning, but there are factors limiting its effectiveness.

#### ***Sub Theme Water for Life Strategy has been slow in moving from planning to action.***

There was the opinion that the *Water for Life Strategy* was reasonably strong in its intentions and design, but more vigorous implementation is needed. Participants indicated that their opinion was reinforced by some of the recommendations in the Alberta Water Council's 2005-2006 review of *Water for Life Strategy* implementation which speaks of the need to energize portions of the strategy. The opinion that the Strategy needs to move from planning to action was referenced by the observations that,

- Industrial development continues to encroach on water resources,
- Public awareness of the *Water for Life Strategy* is not strong,
- Strong targets which would motivate Albertans are not evident,
- Data to properly inform and assess actions are limited.

#### ***Sub Theme The main barriers to Water for Life Strategy progress are seen as unclear authority and inadequate resources.***

Two major barriers identified to effective progress in the implementation of the *Water for Life Strategy* were unclear authority and accountabilities and inadequate capacity, funding and human resources.

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***Sub Theme There is a strong need to integrate land use and water policies.***

There was a strong opinion that land and water should be managed together. If the two are not aligned, water management may be ineffective. Aspects of this concern included,

- The growth in municipalities making combined land and water management even more urgent,
- The need to align federal, provincial and municipal planning with watershed boundaries,
- Reluctance of volunteers to engage vigorously in water planning when the Land-use Framework is still being developed.

***Sub Theme The principles of the Water for Life Strategy are generally non-controversial with the exception of First in Time First in Right (FITFIR).***

There was the opinion that FITFIR acts as a barrier to effective water management and would benefit from re-examination in light of public good. This is referenced by,

- Limited ability to assess water allocation decisions in light of changing markets,
- FITFIR is at cross purposes with the principle of Albertans using water more effectively and efficiently as well as the *Water for Life Strategy* direction of conservation.

There were those who strongly supported maintaining FITFIR.

***Sub Theme The need for more water monitoring.***

There was the opinion that there is a need for more water monitoring to assure compliance with water policy and regulation.

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***Sub Theme The idea of a partnership model is supported but unclear policy guidelines and strain on volunteer resources hamper operations of the watershed partners.***

The authority given to Watershed Planning and Advisory Councils (WPACs) was said to be unclear. WPACs are volunteer operations. There were concerns with burnout due to demands exceeding the capacity of volunteers. Funding, information, technical and possibly administrative support are needed for the WPAC partnership approach to be sustainable.

Even though there is general support for the concept of a partnership model, inherent difficulties were mentioned. These included,

- The difficulty of achieving consensus when working with multiple stakeholder interests,
- The pace of progress with watershed planning,
- The need for government to continue to govern while seeking good advice from such groups.

***Sub Theme The regulatory framework for water management is not strong enough.***

Arguments for this point of view took the position that Alberta needs to make clear policy goals for environmental practice and support related action in legislation. References were made to,

- Pollution from industrial activity which is allowed to continue,
- Pollution from development within riparian habitat,
- Need to change the emphasis so that water management is prior to land management, rather than the reverse,
- Barriers to environmental control caused by the current system of licensing,
- Neither the *Water Act* nor the *Environmental Protection and Enhancement Act* giving relevant authorities the ability to plan or regulate all activities potentially affecting aquatic ecosystems.

***Sub Theme Research and technology support needs strengthening.***

Participants acknowledged and applauded the creation of the Alberta Water Research Institute. However, there was a concern that research and technology support is unable to sustain the planning envisioned by the *Water for Life Strategy*. This was referenced by,

- The need for more mapping of quality and quantity of groundwater, with effects on ability to understand outcomes of projects. What information is available is usually on too large a scale to be useful for small project planning,
- The need for more socio-economic data on outcomes of water projects,
- The need for more data on cumulative effects of projects.

## **THEME #5: That Accelerated Implementation is Required to Meet the Intent of the *Water for Life Strategy***

The material in this section is a compilation of strategies, directions or actions suggested to strengthen the *Water for Life Strategy*.

### ***Sub Theme Strategy and Governance***

#### **Increase direction and leadership.**

Specific suggestions included,

- Create clear goals, benchmarks, measurements, and targets to allow meaningful assessment of impact and effectiveness,
- Understand the need for enforcement as well as softer approaches. Attitudes take too long to change to rely only on voluntary compliance,
- Increase role of scientific data in decision-making,
- Resolve accountabilities in the governance structure. In particular, clarify role of the province in relation to ultimate responsibility for achieving the strategy's goals,
- Clarify policies on subtopics such as wetlands, stored water, instream flow and protection of water sources,
- Integrate water source protection explicitly into strategy,
- Require renewed emphasis on the leadership role of the Alberta Government,
- Enhance development of highly qualified people (technical & strategic) amongst all partners.

#### **Strengthen legislation.**

Specific suggestions included,

- Be explicit that economic development must be aligned with a finite environmental capacity. Make this a fundamental principle flowing through related legislation or regulation. Create legislation that protects watershed and ecosystems by stopping the causes of damage,
- Adopt a policy of "no net loss" by banning uses which either withdraw water from the cycle or render it unusable,
- Align relevant pieces of legislation such as the *Water Act* and the *Municipal Government Act* to reflect the strategic intent of the *Water for Life Strategy*,
- Establish guidelines to integrate precaution and consideration of uncertainties into the regulatory decision-making process,
- Establish a regulatory framework for source water protection,
- Develop a long-term plan to systematically establish aquatic ecosystem objectives,
- Develop a comprehensive provincial strategy to address groundwater.

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**Strengthen the partnership network.**

The Watershed Planning and Advisory Councils (WPACs) and Watershed Stewardship Groups (WSGs) are volunteer organizations. Realistic expectations are needed. Specific suggestions included,

- Create clear policy regarding authority, roles, responsibilities and accountabilities of partners,
- Create clear guidelines and mandatory requirements for watershed plans; ensure these plans have scientifically based objectives and priorities. Encourage substantive connections between: surface and ground water, land and water, water quality and quantity,
- Complete the provincial watershed management plans,
- Facilitate groups to help partner groups organize themselves,
- Provide the data and technical support which partners need to manage at the watershed level,
- Assist partners with funding for administrative support,
- Increase and improve communications with the Alberta Water Council.

**Sustainable long-term funding and capacity.**

There was the opinion that sustainable, long-term funding and capacity are needed to achieve the *Water for Life Strategy* objectives. If protection of Alberta's water is viewed as due diligence in comparison to benefit received from water, then the implementation of the Strategy may be significantly under resourced. The needs included,

- Support for the partnership network,
- Support for knowledge creation, monitoring and statistical data,
- Possible incentives for conservation, wetlands and aquatic habitat protection,
- Public education and awareness-building.

**Review the membership of the Alberta Water Council.**

Suggestions included,

- Ensure it has enough knowledgeable, neutral members with no interest except protecting Alberta's water,
- Have representation from both the City of Calgary and the City of Edmonton.

**Take action to improve the effectiveness and efficiency of government departments.**

A suggestion was,

- Align policy and practice of all departments dealing with water, including Environment, Health and Wellness, Infrastructure and Transportation, Sustainable Resource Development, and Agriculture and Food.

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**Improve knowledge creation, monitoring and statistical data.**

Many specific suggestions were made. A selection included,

- Enhance and coordinate the water information, knowledge gathering and reporting system. Information areas included: groundwater, surface water, water quality and quantity, and healthy aquatic ecosystems,
- Report industry water diversion and return, as well as amounts not returned,
- Provide basin-wide modeling tools that identify emerging factors that could compromise raw water quality,
- Collect general water-use data from large users as well as household and traditional agricultural users. Submission should be timely and mandatory,
- Support the Alberta Water Research Institute,
- Communicate with other jurisdictions, to avoid overlaps,
- Develop and / or import technologies which use less water or use non-potable sources when appropriate,
- Study cumulative effects, including socio-economic impacts,
- Expand mapping of aquatic resources in Alberta, especially groundwater.

**Take action to address the potential effects of climate change and / or weather variability.**

Pursue understanding of how climatic variation may affect water quantity, quality and the health of aquatic ecosystems and incorporate actions to address this understanding.

**Align water management with land use planning.**

While some felt this is an important goal, it was acknowledged that it does increase the complexity of planning tasks and may challenge the partnership model. As well, there would be difficulties finding acceptable boundaries when three levels of government and watershed definitions must be considered; achieving consensus with large groups can be difficult. Specific suggestions included,

- Align water management policy with current work on the Land-use Framework,
- Align with the *Municipal Government Act* so that residential, commercial and industrial development must take account of water.

**Address special difficulties confronted by small municipalities or rural areas.**

These included,

- In some cases, cost of water supply pipelines to smaller communities,
- Recruiting and retaining qualified staff to operate water treatment systems.



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**Address difficulties in allocations and priorities.**

These included,

- Investigate ways of using surplus allocations (e.g., from large municipalities), possibly by redistributing throughout the province,
- Review the apparent contradictions between the First in Time First in Right (FITFIR) principle and the common good,
- Provide direction to Alberta Environment directors, through approved Watershed Management Plans, as to which future uses should be issued allocations, the terms and conditions under which allocations should be issued, uses that should be denied, and guidance for new allocations in those basins where allocations have not yet been capped,
- Strengthen or put in place new legislation that promotes water markets and leads to water transfers that support the principle of economic sustainability,
- Facilitate transparent water transfers and reduce transaction costs for buyers and sellers, while protecting rights of other water users and instream flow allocations.

**Accelerate movement to regional water management systems.**

This could reduce the problems of small municipalities and rural areas in keeping clean water supplies, and possibly facilitate intra-basin transfer arrangements.

**Consider creating a new agency responsible for water management.**

Some believed a dedicated agency may accomplish the work more efficiently than attempting to link separate government departments. However, others argued for a holding period to give the *Water for Life Strategy* time to mature. The energy required to make any structural changes could delay action needed to advance critical *Water for Life* goals.

***Sub Theme Preparation for Future Water Shortages***

**Address future water shortages.**

Many solutions were suggested. They included,

- Storage, which might include reservoirs or natural storage in wetlands,
- Increase use of non-potable water for non-essential uses,
- Redistribution of water throughout the province.

***Sub Theme Communications, Public Awareness and Education***

There was the opinion that a culture shift in thinking is needed. Water can no longer be taken for granted as an infinite, ever-available resource. It needs to be understood as a finite resource requiring management.

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**Strengthen efforts to inform and educate the public.**

Be proactive in reaching out. Tell people,

- About the state of Alberta's water supply and habitat, using simple metrics,
- About the issues affecting Alberta's water,
- About the vulnerable condition of Alberta's water supply and habitat,
- That action needs to be taken to protect it,
- That they have a role to play, what that role is, and how they could carry it out.

**Use many channels to reach people.**

Suggestions,

- Continue to develop and maintain an excellent web portal,
- Use media, schools, partnerships and leaders to disseminate information.

**Strengthen communications between the partners involved within the *Water for Life Strategy*.**

Advice,

- Ensure that the Alberta Water Council members are connected to their sectors,
- Ensure that the watershed partners are connected to the Alberta Water Council.

***Sub Theme Conservation***

Expressions of the need for more public awareness and the need for conservation overlapped. Nonetheless, some suggestions specific to increasing conservation were provided.

**Address conservation issues through economics.**

Specific suggestions included,

- Give water a commodity value,
- Charge in relation to its commodity value,
- Use the tax system to incent reduced water use.

**Facilitate conservation by users, individual or commercial / industrial.**

Specific suggestions included,

- Provide guides for users to do their own water audits,
- Promote a variety of conservation tools to individuals.