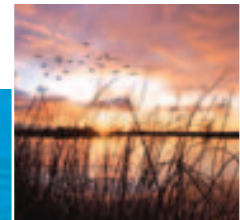


ALBERTA WATER COUNCIL

alberta's strategy for sustainability

water for life
strategy
renewal



W O R K B O O K

JULY 2007

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THREE WAYS TO SUBMIT

There are three ways to submit responses to the questionnaire that begins on page 8:

ONLINE AT: www.waterforlife.gov.ab.ca/awc/renewal/index.html

By MAIL: MPA Public and Government Affairs
Suite 1350, 734– 7th Ave SW
Calgary, AB T2P 3P8

BY FAX: (403) 215-6749

INFORMATION: *Water for Life Strategy Renewal Project*
Mon. to Fri. 8:15 am to 4:30 pm
Tel: (780) 427-9451

There are four sections to this workbook.

1. STRATEGY RENEWAL

Explains the purpose, process and context for moving forward

2. QUESTIONNAIRE

Seeks responses about issues, challenges, opportunities, barriers, ideas and priorities for the *Water for Life* strategy renewal

3. BACKGROUND INFORMATION

- *Water for Life* Principles and Overview
- Summary: Implementation Progress *Water for Life*
- Milestones of the *Water for Life* Strategy
- Selected Other Alberta Water Council Initiatives
- Emerging Themes

4. REFERENCES

Let Your Experience Guide You

For those very familiar with the *Water for Life* strategy and progress on its implementation since November 2003, proceed directly through the first section and questions.

For those seeking a refresher on aspects of the *Water for Life* strategy, review the Background Information before proceeding to the questions.

For those seeking detailed information on the *Water for Life* strategy, refer to the documents and websites in the Reference section of this workbook.



1. STRATEGY RENEWAL

Message from the Alberta Water Council

The Alberta Water Council welcomes all participants to the renewal of *Water for Life: Alberta's Strategy for Sustainability*. Now is the time to step back and examine the strategy at its highest level as March 2007 marked the end of the short-term timeframe set in the 10-year implementation plan for *Water for Life*.

The renewal is not a “re-do” of the initial strategy. It will build on what we have learned during the first years of implementation and draw on any new thinking. Its purpose is to confirm the strategic intent of *Water for Life* and recommend to the Government of Alberta any changes in direction and focus needed to keep the strategy dynamic and responsive to the challenges emerging around us.

We invite you as leaders in the area of water management to bring your expertise and strong understanding of the strategy and its implementation to assist us. We encourage all interested Albertans to do the same. Please consider what issues and opportunities have come to the fore and what barriers prevent us from sustaining this forward-looking approach.

The Council extends thanks to all those on its Strategy Renewal Project Team and Steering Committee for their stewardship of this initiative.

Life and our quality of life in Alberta depend on having a healthy, sustainable water supply for the environment, for our communities and for our economic well-being. We look forward to considering your ideas of how we continue to achieve these fundamental goals in the years ahead and thank you in advance for what we know will be valuable input.

Alberta Water Council

Participating in the Renewal

Purpose

The Honorable Rob Renner, Minister of the Environment, asked the Alberta Water Council (AWC) to lead the renewal of the *Water for Life* strategy. The Council will recommend to the provincial government what is needed to keep the strategy dynamic in light of Alberta's rapid growth and the most current water management thinking.

The purpose of the renewal is twofold:

- to re-establish at the fundamental level the strategic intent of *Water for Life*; and
- to recommend any changes in direction and focus needed to meet the strategic intent over the next decade.

The renewal is not a "re-do" of the original strategy; it seeks to adjust and if necessary expand the strategic intent to ensure responsiveness to emerging issues, current information and the realities faced four years into implementation of a ten-year plan.

Participants

Ideas of how to renew the *Water for Life* strategy are being sought from the constituents of the sectors which make up the Alberta Water Council, as well as from interested Albertans.

Gathering Feedback – July and August 2007

The Council welcomes your considered opinion. We are seeking forward-looking comments on the strategic intent. We want to fully understand your viewpoint and the rationale behind it. Please include rather than exclude information. The questions and this workbook frame the discussion; they are not intended to limit it. Please fill in a questionnaire and send us any other written submissions that illuminate your views.

There are three ways to submit your responses: through the internet, by mail or by fax. **The closing date for submitting materials is August 24, 2007.**

Internet

Questionnaires and written briefs can be submitted online at: www.waterforlife.gov.ab.ca/awc/renewal/index.html

Mail or Fax

MPA Public and Government Affairs
Attn: Maureen Payne
Suite 1350, 734 – 7th Ave SW, Calgary, AB T2P 3P8
Fax: (403) 215-6749

Analyzing and Reporting Feedback – Fall 2007

The feedback received will be reviewed, analyzed and reported by the consultancy firm of MPA Public and Government Affairs. The Council's Strategy Renewal Project Team will then develop initial recommendations. Progress reports will be made available as the renewal proceeds.

Presenting Recommendations – Early 2008

The final recommendations for the renewed *Water for Life* strategy will be presented by the Alberta Water Council to the provincial government through the Minister of the Environment.

Privacy Statement

The Alberta Water Council is seeking information, views and opinions to assist in developing recommendations on the Renewal of the *Water for Life* Strategy. The collection of this information is authorized under section 33 (c) of the Freedom of Information and Protection of Privacy (FOIP) Act and is being managed in accordance with the FOIP Act.

Completed Renewal surveys and submissions will be received by MPA Government & Public Affairs who has been contracted on behalf of the Alberta Water Council's Renewal Project Team to compile input from the engagement process. The personal or corporate information of individuals who have made submissions will only include identification of the sector that they are affiliated with or represent unless the respondent requests making their specific affiliation and position known.

If you have any questions about the collection or use of this information, please contact the Project Manager, *Water for Life* Renewal Project, 9820-106 Street, Edmonton AB, T5K 2J6 or by telephone at (780) 427-9451.

Looking Ahead

The world has changed since the *Water for Life* strategy was adopted in November 2003. Four years into the implementation of this 10-year strategy, growth continues in Alberta's population and economy, the effects of climate change are front of mind and groundwater resources gain in importance as surface water allocations in some parts of the province near limits. Albertans question how to effectively protect the natural environment, sustain our quality of life and ensure economic and social well-being. We've highlighted a few emerging topics here to stimulate your thoughts on what issues require consideration in the renewal of *Water for Life*. The list is not meant to be exhaustive; the questions that follow ask you to suggest others and more importantly consider how such concerns should be taken into account during renewal.

Growth Pressures

The pace of growth in Alberta is unprecedented. In the past 25 years, our population has grown to 3.4 million from 2.3 million – an increase of nearly 50 percent. At this rate, more than 5 million people will be living here in 25 years. Our economy is also strong. It has grown an average of 4.3 percent a year for nine of the last ten years. Population and economic growth put pressures on finite resources such as water.

Groundwater

To date, the vast majority of water allocated and used in Alberta is from surface water resources. Groundwater has been a relatively untapped resource. Increasing demands for water, combined with surface water allocation limits, make groundwater an important future resource. The Alberta Government commissioned the Rosenberg International Forum on Water Policy to review and make recommendations to strengthen groundwater management in Alberta. The *Rosenberg Report* (see this workbook section 4 References) asserted that Alberta's groundwater resource will be drawn upon increasingly in future yet the groundwater supply may be threatened and the existing governance and management mechanisms specific to groundwater need to be strengthened. To build upon the Rosenberg review, Alberta Environment recently initiated a qualitative risk assessment for groundwater in Alberta.

Climate Change

Consideration needs to be given to the information required to assess and plan for the potential effects of climate change on Alberta's water resource.

Integration of Air/Land/Water

Alberta's landscape is increasingly busy. Oil and gas, forestry, mining, tourism, agriculture and many rapidly growing communities vie for the use of the land and water. The question is how do we most effectively protect the natural environment, sustain our quality of life and ensure economic and social well-being?

Challenges of Managing Alberta's Water Resources

As the *Water for Life* strategy evolves, it becomes increasingly complex. All those involved face the challenges of working effectively in this multi-faceted initiative.

For further details on some of these topics see this workbook section 3 Background Information – Emerging Themes.

AWC Recommendations for *Water for Life* Implementation

The recommendations below follow the structure of the *Water for Life* strategy. They are summarized from the latest *Alberta Water Council Review of Implementation Progress* (see this workbook section 4 References).

GOAL 1. Safe, Secure Drinking Water Supply

According to the Alberta Water Council, excellent progress has been made towards the completion of short-term actions for this goal and the drinking water strategy is well on track.

Recommendations:

- Work closely with municipalities on planning, funding requirements, and source protection measures. This will require significant capital investment.
- In the longer term, continue work on a comprehensive “Source to Tap Multi-Barrier Approach”.

GOAL 2. Healthy Aquatic Ecosystems

The Alberta Water Council asserted that progress was behind schedule and short-term actions towards this goal incomplete as of March 2007.

Recommendations:

- For immediate consideration under the mandate and resources of the Alberta Water Research Institute, redefine research and monitoring needs for achieving healthy aquatic ecosystems, set a plan, and allocate funding to it.
- In the meantime, focus immediate attention on critically sensitive aquatic ecosystems and define a protection framework involving a broad range of stakeholders/partners. Many specific initiatives could be identified under this broad topic area. The Council believes there is existing knowledge upon which sound decisions can be based.
- Increase coordination of watershed protection measures through work underway by the Alberta Government to develop a new framework for land use.

GOAL 3. Reliable, Quality Water Supplies for a Sustainable Economy

The Alberta Water Council underscored the need to energize work within this strategic element. The Council found actions to date tended to enhance existing mechanisms rather than develop new capabilities.

Recommendation:

- Actions and potential of this goal should focus on more innovative tools for managing supply and demand such as leading-edge information systems, effective reallocation practices and holistic management practices. The Council advocates for the active involvement of non-government stakeholders in these efforts and believes the province should strive for first-rate capabilities in water management tools and techniques around a clearly stated vision of supply limitations.

DIRECTION 1. Knowledge and Research

The Alberta Water Council believes Alberta is positioned to achieve outstanding capabilities in this area. The Council considers this direction a key strength of the *Water for Life* strategy.

Recommendation:

- The Council recommended groundwater as one area for future focus. Pressure to manage the groundwater resource continues to increase. The Council acknowledged that groundwater protection had been undertaken with respect to coalbed methane production, and that the Alberta Government recently committed \$3 million for groundwater mapping and assessment. Council noted the work begun is a start on a complex area of major importance. The *Rosenberg Report* also stressed the importance of groundwater.

DIRECTION 2. Partnerships for Watershed Management and Stewardship

The Alberta Water Council reported evidence of good progress in this area noting that short-term targets for watershed management plans were very aggressive and are being redefined. Eight out of eleven Watershed Planning and Advisory Councils (WPACs) have been formed and a grant program for Watershed Stewardship Groups (WSGs) has also been established.

Recommendation:

- The Alberta Government needs to provide sustainable support for the resources the WPACs require. The Council commented that partnerships represent a significant change in policy development and implementation. Ultimate success in this important area will depend upon a substantial level of support and sustainable funding by government and commitment by stakeholder groups.

DIRECTION 3. Water Conservation

The Alberta Water Council stated that after a challenging start, this direction had gained momentum in the areas of monitoring actual water use, understanding the value of water for economic and social purposes, exploring economic incentives, and improving public awareness.

Recommendation:

- Increase widespread participation in conservation efforts. The Council cautioned that a true conservation ethic will take time and effort as it involves changes in public expectations and behaviour. The Council felt that it may be appropriate to facilitate change through specific regulation and public policies.

The following themes were identified as broad-based issues affecting all goals and directions of strategy implementation.

THEME Governance and Management for Long-term Strategy Implementation

Recommendation:

- The Council believes that at this stage of implementation, the strategy runs the risk of becoming inconsistent and fragmented without a strong overall direction and vision. The renewal offers an opportunity to review the appropriate governance structure for long-term implementation. The Council suggested that this could include a specific and senior leadership responsibility to manage, drive and be accountable for the vision and all elements of the strategy.

THEME Funding

Recommendations:

- The Council recommended that the Treasury Board Secretariat annually review all *Water for Life* initiatives for which the Alberta Government is responsible and confirm that funding is coordinated, has priorities and meets the needs of the strategy.
- The Council recommended that a *Water for Life* endowment fund be established to provide income for stakeholders needing long-term funding as well as operating budgets for the Council, WPACs and the Alberta Stewardship Network which supports community WSGs. The fund could also support projects by non-governmental stakeholders related to *Water for Life* actions and outcomes.

THEME Increased Public Awareness

Recommendation:

- The Council suggested that a comprehensive approach to promoting public awareness of water management issues would be a timely addition to the *Water for Life* strategy as it would encourage Albertans to develop a stewardship ethic for this resource. The approach could include modules aligned to the goals and directions.

2. QUESTIONNAIRE

If you are answering by mail or fax and need more space, please attach extra sheets.

SECTION A: About You

Please tell us about yourself so we can collate views from the many sectors which plan for and implement the *Water for Life* strategy.

1. Are you answering this questionnaire as a, (Please check one only)

- Private citizen
- Government employee
- Employee of a private-sector company
- Employee or member of a group or organization
- Other, please explain _____

2. Please provide your contact data. We *may* use this information to send you other pertinent material in future or to recontact you for clarification. We *will not* attribute your specific remarks to you, your department, company, group or organization without your permission. If you prefer not to provide contact data, your views will still be taken into account.

- I prefer not to provide this information

or

Name of your department, company, group or organization (if applicable) _____

Your name _____

Email contact _____

Phone contact _____

3. The following table shows the sectors represented on the Alberta Water Council. Check in Column A the *one* sector with which you most closely identify. If you wish to select more than one sector, use Column B to show any additional identification.

COUNCIL SECTORS	COLUMN A: Council Sector Closest Identification	COLUMN B: Council Sectors Additional Identification
INDUSTRY: Mining		
Oil and Gas		
Forestry		
Irrigation		
Livestock		
Chemical and Petrochemical		
Power Generation		
NON-GOVERNMENTAL ORGANIZATIONS: Wetland Conservation		
Fishery Habitat Conservation		
Lake Environment Conservation		
Environmental		
Watershed Planning and Advisory Councils		
GOVERNMENT (other than Province of Alberta): Large Urban		
Small Urban		
Rural		
First Nations		
Métis Settlements		
Federal		
ALBERTA GOVERNMENT & PROVINCIAL AUTHORITIES: Alberta Environment		
Alberta Sustainable Resource Development		
Alberta Agriculture and Food		
Alberta Energy		
Alberta Health and Wellness		
Alberta Science and Research Authority		
Alberta Economic Development Authority		
NONE OF THE ABOVE	Write in any other sector with which you mainly identify below	Write in any other sectors with which you additionally identify below

SECTION B: About What You See Happening to Alberta's Water

We are interested in Albertans' experiences and views concerning water now and into the future.

4. Considering demand, supply or quality of water in Alberta, and management of the water resource, both now and into the future,

A. In the past year, what if any major *problems* have you and / or your employer / group / organization encountered?

B. What if any major *concerns* do you have?

C. What relevant *trends* do you see, growing in visibility or impact since *Water for Life* was written?



D. What if any *barriers* must be challenged or overcome to achieve or maintain excellence?

E. What if any *opportunities* do you see which will have a positive future impact?

F. Does the *information* you receive about progress with the *Water for Life* strategy meet your needs?

- Completely
- Partially
- Not at all
- Other

Please explain your answer: _____

SECTION C: About the *Water for Life* Strategy – Broad View

Please provide your view of the *Water for Life* Strategy in broad perspective.

5. The Alberta *Water for Life* Strategy was adopted in November 2003 with the ultimate intent of protecting Alberta's water resource and managing it in a balanced fashion for the welfare of Alberta and its citizens. As of 2007, the Strategy is four years into a ten-year life. Has the Strategy lived up to expectations and made a difference to Alberta? Please rate and explain your choice.

- Under performed against expectations
- Met expectations
- Exceeded expectations

Please explain your answer: _____

6. Is the Alberta *Water for Life* Strategy still valid going into 2008 and for the remaining six years? Please rate and explain your choice.

- Still valid, few if any changes needed
- Mostly valid, changes may be needed but the basic structure is sound
- Validity low, major restructuring needed
- Other

Please explain your answer: _____

7. If appropriate, expand on any significant issues which you believe need attention in a renewed *Water for Life* Strategy.

SECTION D: About the *Water for Life* Strategy – Drilling Down

Section D drills down to questions on the major *Water for Life* components. Feel free to address only those with which you are familiar. Answer as few or as many questions as you wish.

8. According to the Alberta Water Council, the *Water for Life* strategy creates the possibility for a new water ethic in Alberta – one based on water conservation, sound science and shared responsibility for watershed management planning. Under this strategy, Albertans can create an enduring legacy that ensures a healthy and sustainable water supply for the environment, for our communities and for our economic well-being. The strategy was developed to encompass nine basic principles. Here are the foundational principles which were adopted in November 2003.

1. All Albertans must recognize there are limits to the available water supply.
2. Alberta's water resources must be managed within the capacity of individual watersheds.
3. Citizens, communities, industry and government must share responsibility for water management in Alberta, and work together to improve conditions within their local watershed.
4. Knowledge of Alberta's water supply and quality is the foundation for effective decision-making.
5. Albertans must become leaders at using water more effectively and efficiently, and will use and reuse water wisely and responsibly.
6. Alberta must preserve the "first-in-time, first-in-right" principle for granting and administering water allocations, but water allocations will be transferable to ensure societal demands and needs can be met.
7. Healthy aquatic ecosystems are vital to a high quality of life for Albertans and must be preserved.
8. Groundwater and surface water quality must be preserved in pursuing economic and community development.
9. Alberta will continue to be a leader in drinking water quality and standards to ensure Albertans have safe, secure drinking water.

A. In 2007, do these principles continue to provide a solid foundation for an effective Alberta *Water for Life* Strategy?

- Still valid, few if any changes needed
- Mostly valid, changes may be needed but the basic structure is sound
- Validity low, major restructuring needed
- Other

Please explain your answer: _____

B. Which of these principles should be *changed*? In what way?

C. Are there *new principles* which should be added? Explain.

9. About Goal One of the *Water for Life* Strategy – to ensure a Safe, Secure Drinking Water Supply in Alberta.

A. How do you assess the state of this goal in Alberta?

- Excellent, risks to drinking water supply virtually nil
- Good, some risks to drinking water supply but generally contained and positive outcomes expected
- Fair, some risks to drinking water supply not adequately contained
- Poor, risks to drinking water supply not contained and may be increasing
- Other

Please explain your answer: _____

B. Does this goal remain a priority for Alberta?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority



C. Within this goal area, what if any actions are priorities for Alberta? Enumerate and provide the rationale.

D. Optional, any additional comments on this goal?

10. About Goal Two of the *Water for Life* Strategy - to ensure Healthy Aquatic Ecosystems in Alberta.

A. How do you assess the state of this goal in Alberta?

- Excellent, risks to aquatic ecosystems virtually nil
- Good, some risks to aquatic ecosystems but generally contained and positive outcomes expected
- Fair, some risks to aquatic ecosystems not adequately contained
- Poor, risks to aquatic ecosystems not contained and may be increasing
- Other

Please explain your answer: _____

B. Does this goal remain a priority for Alberta?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority

C. Within this goal area, what if any actions are priorities for Alberta? Enumerate and provide the rationale.

D. Optional, any additional comments on this goal?

11. About Goal Three of the *Water for Life* Strategy – to ensure Reliable, Quality Water Supplies for a Sustainable Economy.

A. How do you assess the state of this goal in Alberta?

- Excellent, risks to water supply for a sustainable economy virtually nil
- Good, some risks to water supply for a sustainable economy but generally contained and positive outcomes expected
- Fair, some risks to water supply for a sustainable economy not adequately contained
- Poor, risks to water supply for a sustainable economy not contained and may be increasing
- Other

Please explain your answer: _____

B. Does this goal remain a priority for Alberta?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority



C. Within this goal area, what if any actions are priorities for Alberta? Enumerate and provide the rationale.

D. Optional, any additional comments on this goal?

12. About Direction One of the *Water for Life* Strategy – Knowledge and Research, with the intent that Albertans will have the knowledge needed to achieve the outcomes.

A. How do you assess the state of this direction in Alberta?

- Excellent, knowledge base virtually complete
- Good, knowledge base is incomplete but confidence in timely completion is high
- Fair, knowledge base is incomplete and confidence in timely completion is uncertain
- Poor, knowledge base is incomplete and confidence in timely completion is negative
- Other

Please explain your answer: _____

B. Does this direction remain a priority for Alberta?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority

C. Within this direction, what if any actions are priorities for Alberta? Enumerate and provide the rationale.

D. Optional, any additional comments on this direction?

13. About Direction Two of the *Water for Life Strategy* – Partnerships, with the intent that citizens and stakeholders will have opportunities to participate in watershed management on a provincial, regional and community basis.

A. How do you assess the state of this direction in Alberta?

- Excellent, partnership network virtually completely functional
- Good, partnership network not completely functional but confidence in finding timely solutions is high
- Fair, partnership network partially functional and confidence in finding timely solutions is uncertain
- Poor, partnership network not functional and confidence in finding timely solutions is negative
- Other

Please explain your answer: _____

B. Does this direction remain a priority for Alberta?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority



C. Within this direction, what if any actions are priorities for Alberta? Enumerate and provide the rationale.

D. Optional, any additional comments on this direction?

14. About Direction Three of the *Water for Life Strategy* – Conservation, with the intent that Albertans become leaders in using water efficiently and effectively.

A. How do you assess the state of this direction in Alberta?

- Excellent, implementation of range of conservation measures virtually complete
- Good, implementation of range of conservation measures incomplete but confidence in timely completion is high
- Fair, implementation of range of conservation measures incomplete and confidence in finding timely solutions is uncertain
- Poor, implementation of range of conservation measures incomplete and confidence in finding timely solutions is negative
- Other

Please explain your answer: _____

B. Does this direction remain a priority for Alberta?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority

C. Within this direction, what if any actions are priorities for Alberta? Enumerate and provide the rationale.

D. Optional, any additional comments on this direction?

SECTION E: About Common Themes for Renewal

The Alberta Water Council in its latest *Review of Implementation Progress of Water for Life* noted that three themes persist in the discussions of renewal. Please provide your views on the importance of possible directions for each.

15. About Governance and Management of the long-term implementation of the *Water for Life* strategy,

A. For the success of a renewed *Water for Life* strategy, are revised or new approaches to Governance and Management of the implementation of this strategy a priority?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority

B. What changes or actions are priorities? Enumerate and provide the rationale.



C. What type of management systems or outcome-based approaches to the integration of air/land/water are needed?
How would this be achieved?

16. About Funding,

A. For the success of a renewed *Water for Life* strategy, are increases or new approaches to Funding a priority?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority

B. What changes or actions are priorities? Enumerate and provide the rationale.

17. About Increased Public Awareness,

A. For the success of a renewed *Water for Life* strategy, is an increase in Public Awareness a priority?

- Immediate, urgent priority
- High priority
- Moderate priority
- Low priority
- Not a priority

3. BACKGROUND INFORMATION

Water for Life Principles and Overview

The Alberta Water Council believes that the *Water for Life* strategy creates the possibility for a new water ethic in Alberta – one based on water conservation, sound science and shared responsibility for watershed management planning. Under this strategy, Albertans can create an enduring legacy that ensures a healthy and sustainable water supply for the environment, for our communities and for our economic well-being.

Principles

The following principles were adopted as part of the original *Water for Life* strategy (see *Water for Life: Alberta's Strategy for Sustainability*, Nov. 2003, page 6).

- All Albertans must recognize there are limits to the available water supply.
- Alberta's water resources must be managed within the capacity of individual watersheds.
- Citizens, communities, industry and government must share responsibility for water management in Alberta, and work together to improve conditions within their local watershed.
- Knowledge of Alberta's water supply and quality is the foundation for effective decision-making.
- Albertans must become leaders at using water more effectively and efficiently, and will use and reuse water wisely and responsibly.
- Alberta must preserve the "first-in-time, first-in-right" principle for granting and administering water allocations, but water allocations will be transferable to ensure societal demands and needs can be met.
- Healthy aquatic ecosystems are vital to a high quality of life for Albertans and must be preserved.
- Groundwater and surface water quality must be preserved in pursuing economic and community development.
- Alberta will continue to be a leader in drinking water quality and standards to ensure Albertans have safe, secure drinking water.

Overview

Water for Life is a balanced and interdependent strategy. It is based on three desired goals and three directions. Each of the directions must drive all three goals. It is important that progress in all areas be consistent and coordinated.

WATER FOR LIFE STRATEGY - 2003

Goals

1. Safe, secure supply of drinking water
2. Healthy aquatic ecosystems
3. Reliable, quality water supplies for a sustainable economy

Directions

1. Knowledge and Research, whereby Albertans will have the knowledge needed to achieve the goals
2. Partnerships, whereby citizens and stakeholders have opportunities to participate in watershed management on a provincial, regional and community basis
3. Conservation, whereby Albertans will become leaders by using water efficiently and effectively

For each Goal and Direction, targets and actions were defined for the Short, Medium and Long Terms. See pages 25-27 in the *Water for Life: Alberta's Strategy for Sustainability*, November 2003 for a matrix of targets and actions.

Summary: Implementation Progress *Water for Life*

The information in this section is summarized from the latest *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*.

GOAL 1. Safe, Secure Drinking Water Supply

FROM THE WATER FOR LIFE STRATEGY 2003

- Commitment:** Albertans will be assured that their drinking water is safe.
- Short Term:** Alberta has a comprehensive strategy to protect Albertans' drinking water.
- Medium Term:** Albertans have full and complete knowledge of drinking water issues and real-time access to information about the drinking water quality in their community.
- Long Term:** Alberta's drinking water infrastructure meets emerging standards and is managed for long-term sustainability.

Standards and programs governing Alberta's municipal water supplies were considered relatively robust and mature before the release of *Water for Life*. Canada recognizes Alberta as a leader in standards and operating performance. The intent of this outcome is to provide Albertans with long-term assurance that they can rely on access to safe drinking water supplies.

Latest Progress Report

According to the Alberta Water Council's latest implementation review, excellent progress has been made towards the completion of short-term actions for this goal and the drinking water strategy is well on track. Comprehensive facility assessments have been completed, emergency protocols strengthened, information for the design, operation and maintenance of private water systems provided, and regionalization projects initiated to address shortcomings in smaller communities. The Council views the strategy as forward-looking and key to addressing the demands of population growth.

AWC Recommendations

The Council cited these opportunities for actions to achieve the strategic outcome intent:

- Work closely with municipalities on planning, funding requirements, and source protection measures. This will require significant capital investment.
- In the longer term, continue work on a comprehensive "Source to Tap Multi-Barrier Approach".

For further information, refer to pages 8-11 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*.

GOAL 2. Healthy Aquatic Ecosystems

FROM THE WATER FOR LIFE STRATEGY 2003

- Commitment:** Albertans will be assured the province's ecosystems are maintained and protected.
- Short Term:** Efforts to protect aquatic ecosystems in critical areas are underway.
- Medium Term:** Water management objectives and priorities for sustaining aquatic ecosystems are established through watershed plans.
- Long Term:** Water is managed and allocated to sustain aquatic ecosystems and ensure their contribution to Alberta's natural capital and quality of life are maintained.

The *Water for Life* strategy recognized that future limits on water availability should be based on the preservation of a healthy aquatic environment. Achieving this outcome requires an objective science-based understanding of aquatic ecosystems, both their current status and their dynamics. In turn, the science-based understanding will be used to establish management objectives within watershed plans.

Latest Progress Report

In its Review of short-term actions towards this goal, the Alberta Water Council asserted that progress was behind schedule and actions incomplete as of March 2007. Specifically, the actions regarding the development of science-based methods to determine the ecological requirements of healthy aquatic ecosystems and the development of systems for monitoring and assessing healthy aquatic ecosystems. In the context of watershed planning, the Council views the setting of objectives for aquatic ecosystems as critical. The Council expressed concern that environmental planning tools will not be ready when they are required by Watershed Planning and Advisory Councils and other planning bodies.

The development of a wetland policy and the setting of initial water conservation objectives under the *South Saskatchewan River Basin Water Management Plan* were considered on target by the Council.

AWC Recommendations

The Council cited these opportunities for actions to achieve the strategic outcome intent:

- for immediate consideration under the mandate and resources of the Alberta Water Research Institute, redefine research and monitoring needs for achieving healthy aquatic ecosystems, set a plan, and allocate funding to it.
- in the meantime, focus immediate attention on critically sensitive aquatic ecosystems and define a protection framework involving a broad range of stakeholders and partners. Many specific initiatives could be identified under this broad topic area. The Council believes there is existing knowledge upon which sound decisions can be based.
- increase coordination of watershed protection measures through work underway by the Alberta Government to develop a new framework for land use.

For further information, refer to pages 12-15 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*; and the executive summary of the *South Saskatchewan River Basin Water Management Plan*.

GOAL 3. Reliable, Quality Water Supplies for a Sustainable Economy

FROM THE WATER FOR LIFE STRATEGY 2003

- Commitment:** Albertans will be assured their water is managed effectively to support economic development.
- Short Term:** A broad range of water management tools and techniques are implemented.
- Medium Term:** Water management objectives and priorities to support sustainable economic development are established through watershed plans.
- Long Term:** Water is managed and allocated to support sustainable economic development and the strategic priorities of the province.

To ensure that a high quality of life continues for all Albertans, a reliable supply of water must be available to support sustainable economic activity. This outcome recognizes that the future management of the resource must go beyond traditional regulatory and management mechanisms.

Latest Progress Report

The Alberta Water Council underscored in its current Review, the need to energize work within this strategic element. The Council found actions to date tended to enhance existing mechanisms rather than develop new tools and capabilities.

AWC Recommendation

Actions and potential of this outcome should focus on more innovative tools for managing supply and demand such as leading-edge information systems, effective reallocation practices and holistic management practices. The Council advocates for the active involvement of non-government stakeholders in these efforts and believes the province should strive for first-rate capabilities in water management tools and techniques around a clearly stated vision of supply limitations.

For further information, refer to pages 16-18 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*.

DIRECTION 1. Knowledge and Research

FROM THE WATER FOR LIFE STRATEGY 2003

- Commitment:** Albertans will have the knowledge needed to achieve safe drinking water, efficient water use and healthy watersheds.
- Short Term:** Comprehensive water research and education programs are established.
- Medium Term:** Mechanisms are in place to transfer water-related knowledge to Albertans.
- Long Term:** Albertans have the knowledge, tools and motivation to implement actions that will maintain or improve the province's water resources.

Information and knowledge about our provincial water resource are critical to the effective management of the resource. Three components comprise this direction:

1. Scientific knowledge of Alberta's water resource.
2. An understanding of emerging water issues and opportunities.
3. The provision of the knowledge and tools necessary to make effective management decisions.

Latest Progress Report

The Alberta Water Council believes Alberta is positioned to achieve outstanding capabilities in this area. The Council considers this direction a key strength of the *Water for Life* strategy as the progress noted in its *2005-06 Review of Implementation* attests:

- A research strategy has been defined and approved.
- The Alberta Water Research Institute has been formed under Alberta Ingenuity to implement the research strategy; a broad range of stakeholders will be involved through the Advisory Board governance structure.
- \$30 million in government funding has been allocated to water research.

The Council noted that some medium and long-term actions are being developed ahead of schedule including improved mapping, monitoring and distribution on flood risks, and information about all surface water quantity.

AWC Recommendations

The Council recommended groundwater as one area for future focus. Pressure to manage the groundwater resource continues to increase. The Council acknowledged that groundwater protection had been undertaken with respect to coalbed methane production, and that the Alberta Government recently committed \$3 million for groundwater mapping and assessment through the Energy Innovation Fund. Council noted the work begun is a start on a complex area of major importance. The *Rosenberg Report* also stressed the importance of groundwater

For further information, refer to pages 19-21 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*; refer to pages 12-19 of the *Report of the Rosenberg International Forum on Water Policy to the Ministry of Environment, Province of Alberta, 2007*.

FROM THE WATER FOR LIFE STRATEGY 2003

- Commitment:** Citizens and stakeholders will have opportunities to actively participate in watershed management on a provincial, regional and community basis.
- Short Term:** Provincial partnerships for watershed management and stewardship are established.
- Medium Term:** Community watershed partnerships are established and operating.
- Long Term:** Communities are demonstrating leadership in watershed management.

The Alberta Government needs to provide sustainable support for the resources the WPACs require. This goal recognizes that the most effective solutions can be defined by those experiencing the issues affecting their area. Three types of partnerships are being employed to develop the capacity for effective water management input:

1. The Alberta Water Council to oversee *Water for Life* implementation.
2. Watershed Planning and Advisory Councils (WPACs) to involve communities and stakeholders in the management of all major provincial watersheds.
3. Watershed Stewardship Groups (WSGs) to provide planning input and programs for local watersheds throughout the province.

Latest Progress Report

The Alberta Water Council reported evidence of good progress in this area in its latest Review noting that short-term targets for watershed management plans were very aggressive and are being redefined:

- The Council is in its third year of operation and plans to incorporate as a not-for-profit society operating at arm's length from the government.
- Since the report was published, another WPAC was formed, bringing the total to eight out of eleven.
- A grant program for WSGs has been established; it is administered by the Alberta Stewardship Network with funding provided by the Alberta Government.
- The approval of the South Saskatchewan River Basin Water Management Plan underscored the challenges of future watershed planning in the province. Its restrictions demonstrate how critical the information needs and role of WPACs will be in this process.

AWC Recommendation

The Alberta Government needs to provide sustainable support for the resources the WPACs require. The Council commented that partnerships represent a significant change in policy development and implementation. Ultimate success in this important area will depend upon a substantial level of support and sustainable funding by government, and commitment by stakeholder groups.

For further information, refer to pages 22-25 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*.

DIRECTION 3. Water Conservation

FROM THE WATER FOR LIFE STRATEGY 2003

- Commitment:** Albertans will be leaders in conservation by using water efficiently and effectively.
- Short Term:** Albertans understand the value of water to the economy and quality of life.
- Medium Term:** All sectors are demonstrating best management practices and improving efficiency and productivity associated with water use.
- Long Term:** The overall efficiency and productivity of water use in Alberta has improved by 30 percent from 2005 levels by 2015 (firm targets to be confirmed by the Alberta Water Council).

Improving water use involves three factors: conservation, efficiency, and productivity. The cumulative impact of these factors can result in major reductions in the water required to meet the needs and values of a growing population and economy. The intent of this direction is to provide an understanding of how much water we use, what we use it for, its economic value, its environmental value and its importance to our quality of life from a social perspective. This information will support best management practices, informed decision making, and public awareness of the importance of conservation.

Latest Progress Report

The Alberta Water Council stated in its latest Review that after a challenging start, this direction had gained momentum in the areas of monitoring actual water use, understanding the value of water for economic and social purposes, exploring economic incentives, and improving public awareness.

AWC Recommendation

Increase widespread participation in conservation efforts. The Council cautioned that a true conservation ethic will take time and effort as it involves changes in public expectations and behaviour. The Council felt that it may be appropriate to facilitate change through specific regulation and public policies.

Rosenberg Report

Other parallel initiatives, such as water reuse and conjunctive uses, are suggested in the *Rosenberg Report*. Conjunctive use refers to the combined use of surface and ground water systems to optimize resource use and minimize the adverse effects of using a single source.

For further information on this direction, refer to pages 26-28 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*; for further information about initiatives such as water reuse and conjunctive use see pages 5-6 of the *Report of the Rosenberg International Forum on Water Policy to the Ministry of Environment, Province of Alberta (2007)*.

Foundations for Effective Water for Life Implementation

These themes were identified in the *Alberta Water Council Review of Implementation Progress of Water for Life 2005-2006* as broad-based issues affecting all goals and directions of the *Water for Life* strategy implementation.

THEME Governance and Management: AWC Recommendation

The Council believes that at this stage of implementation, the strategy runs the risk of becoming inconsistent and fragmented without a strong overall direction and vision. The renewal offers an opportunity to review the appropriate governance structure for long-term implementation. The Council suggested that this could include a specific and senior leadership responsibility to manage, drive and be accountable for the vision and all elements of the strategy.

THEME Funding: AWC Recommendations

According to the Alberta Water Council, an overall plan to provide significant and sustainable funding for the *Water for Life* strategy is required. The Council identified two financial components:

- Actions that are the responsibility of individual government ministries; where competition for funding exists between a range of other departmental priorities; and
- Activities that fall to non-governmental stakeholders such as Watershed Planning and Advisory Councils which require sustained funding to develop and provide leadership in watershed planning.

The Council put forward two suggestions:

- The Treasury Board Secretariat annually review all *Water for Life* initiatives for which the Alberta Government is responsible and confirm that funding is coordinated, has priorities and meets the needs of the strategy.
- A *Water for Life* endowment fund be established to provide income for stakeholders needing long-term funding as well as operating budgets for the Council, WPACs and the Alberta Stewardship Network which supports community WSGs. The fund could also support projects by non-governmental stakeholders related to *Water for Life* actions and outcomes.

THEME Increased Public Awareness: AWC Recommendation

The Council suggested that a comprehensive approach to promoting public awareness of water management issues would be a timely addition to the *Water for Life* strategy as it would encourage Albertans to develop a stewardship ethic for this resource. The approach could include modules aligned to the three goals and directions.

For further information, refer to pages 29-30 of the *Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006*.

Strategy Development 2001-2003

Recognizing the pressures put on existing water quality and quantity by rapid industrial, agricultural, and municipal growth the Government of Alberta began developing a comprehensive water management approach late in 2001. The three major components of the process - ideas generation, public outreach and consultation, and a ministerial forum on water – resulted in the release of *Water for Life: Alberta's Strategy for Sustainability* in November 2003.

Alberta Water Council (AWC) Appointed May 2004

This provincial advisory body stewards the implementation of the *Water for Life* strategy. It is a partnership between governments and stakeholders with a vested interest in water issues. Members are drawn from 25 sectors in four broad categories: Industry, Non-governmental Organizations, Provincial Ministries and Agencies, and Other Governments. The Council investigates and reports on existing and emerging water issues in Alberta through its Working Groups and Project Teams. For more information see the AWC website.

Watershed Planning and Advisory Councils – Establishment Ongoing

Watershed Planning and Advisory Councils (WPACs) have been established in most watersheds to lead basin planning and evaluation. These multi-stakeholder councils produce state-of-the-watershed reports; provide recommendations in watershed management plans; collaborate with land managers; provide "on-the-ground" actions; advise and support watershed stewardship groups; and present issues of a provincial nature for the Alberta Water Council's consideration.

WPACs will be established for all Alberta's major watersheds; currently, eight of eleven have been formally recognized including the Battle, Bow, Cold Lake-Beaver, Lesser Slave, Milk, North Saskatchewan, Oldman, and Red Deer. Preliminary discussions are underway regarding the Athabasca WPAC; an organization for the Peace is slated for the future. The need for a WPAC for the main stem of the South Saskatchewan was realized after *Water for Life* implementation began and that group will be authorized in the very near future. For more information on Watershed Planning and Advisory Councils, see the Water for Life Website.

Watershed Stewardship Groups – Establishment Ongoing

Watershed Stewardship Groups (WSGs) are volunteer-based partnerships engaged in environmental stewardship at the local watershed level, i.e., lakes, rivers, streams and aquifers. More than 130 groups exist in Alberta. Their activities include: raising public awareness, conducting educational programs and events, participating in best practices, and for some engaging in local watershed planning. Information about Watershed Stewardship Groups is available through the Water for Life website.

Alberta Water Research Strategy Developed – January 2006

The AWC collaborated with the Alberta Science and Research Authority (ASRA) to develop a water research strategy in January 2006. Its goals are to provide science-based information, analysis and technologies to inform and support the decisions and actions needed for effective water management in Alberta; and to develop an integrated, effective water research system focused on meeting the strategic knowledge and research needs of *Water for Life*, and on translating knowledge into action. The Water Research Strategy is available through the AWC or ASRA Website.

The Alberta Water Council has overseen many initiatives that have advanced the stewardship of Alberta's water resources. Below are selected examples of projects currently in progress. Further information about the Council, its Project Teams and Working Groups is available on the AWC website.

Water Policy Issues and Gap Identification

The Alberta Water Council is examining Alberta's existing water management system for a number of reasons: to identify policy and legislative issues; to develop a process to rank them; and to recommend approaches to address them. A final report is expected in the fall of 2007.

Wetland Policy Development

Through a public consultation process with Albertans, the AWC is developing recommendations for the Government of Alberta regarding the creation of a new Wetland Policy and implementation plan. The process is in the last round of consultation with a final report expected in the fall of 2007.

Shared Governance and Watershed Planning Framework Development

Two related frameworks are being developed. The *Shared Governance Framework* will describe the roles, responsibilities, accountabilities, and relationships involved in shared governance as well as how shared governance can be established and maintained. The *Watershed Management Planning Framework* will describe how to develop watershed management plans and explain their relationship to other types of planning such as municipal, forestry etc. Detailed work plans for these frameworks are being developed.

Water Conservation, Efficiency and Productivity Sector Plan Development

Meeting the goals of the *Water for Life* strategy requires water-using sectors (industry, agriculture, municipalities etc.) to improve water conservation, efficiency, and productivity in their operations. The AWC is preparing a document that will assist sectors with developing and implementing specific plans to address water use. Work proceeds on the outline for the contents for this document.

Policy Review: Intra-basin Water Movement

The AWC review of the intra-basin water movement policy is considering if changes should be made to the existing policy and if so, under what conditions. Recommendations to the Minister of the Environment are targeted for fall 2007.

Water Resource Information

The AWC is identifying and resolving high priority, system-wide water resource information requirements including topics such as groundwater resources, wetland mapping, and in-stream flow needs assessments. Council members have been surveyed regarding the data needs of their sectors. The Council received a report for its consideration mid-June 2007.

Groundwater

The Alberta Government has continued strategic planning for improved groundwater management since the *Water for Life* strategy was released. The Rosenberg International Forum on Water Policy reviewed and made recommendations to strengthen groundwater management in Alberta (see this workbook section 4 References for report). In addition, Alberta Environment completed a description of groundwater management systems and recently initiated a qualitative risk assessment for groundwater in Alberta. As a result, the following theme areas are being considered:

What policies are needed to manage the sustainability of Alberta's groundwater resources?

Alberta's groundwater policies have generally mimicked those of surface water; however, the inherent physical differences between surface water and groundwater warrant a review and assessment of the best allocation and quality protection policies for groundwater. The Rosenberg review and initial risk assessment feedback challenge Alberta to evaluate the applicability of the "first in time, first in right" allocation policy for groundwater.

How do we best build our knowledge of groundwater resources?

Currently, we understand the province's surface water supplies and systems far better than its groundwater resources. To manage the sustainability of our groundwater resources, groundwater maps and models are considered essential. Long-term investment and partnerships (including the pooling of groundwater data) are necessary to achieve this.

How can we assure that Albertans have safe and secure groundwater supplies?

Currently, more than 600,000 individual Albertans and 180 small communities are entirely or primarily reliant on groundwater for essential water supplies.

Integration of Air/Land/Water

Alberta's landscape is increasingly busy. Oil and gas, forestry, mining, tourism, agriculture and many rapidly growing communities vie for the use of the land and water. Discussions about the integration of air/land/water are timely. The Alberta Government is currently engaging Albertans in the development of a Land-use Framework. The Alberta Water Council and those involved in the *Water for Life* strategy are participating in the Land-use Framework engagement process. *Water for Life* Renewal and the Land-use Framework are two important strategies directing Alberta's policies and actions associated with water and land management in the province. In addition, the Alberta Government is developing a regulatory framework to address the cumulative effects of development. It is essential that all these initiatives are well aligned and complementary. Further information is available on the land use website (see this workbook section 4 References).

4. REFERENCES

Documents

Water for Life: Alberta's Strategy for Sustainability November 2003
www.waterforlife.gov.ab.ca/docs/strategyNov03.pdf

Alberta Water Council Review of Implementation Progress of Water for Life, 2005-2006
www.waterforlife.gov.ab.ca/awc/docs/Review_Report_05-06.pdf

Alberta Water Council Annual Report 2005-2006
www.waterforlife.gov.ab.ca/awc/docs/AWC_AnnualReport_05-06.pdf

Report of the Rosenberg International Forum on Water Policy to the Ministry of Environment, Province of Alberta (2007)
www.waterforlife.gov.ab.ca/docs/Rosenberg_Report.pdf

Websites

Water for Life
www.waterforlife.gov.ab.ca/index.html

Water for Life Strategy Renewal
www.waterforlife.gov.ab.ca/awc/renewal/index.html

Alberta Water Council
www.waterforlife.gov.ab.ca/awc/index.html

Alberta Research and Science Authority
www.asra.ab.ca/

Land-use Framework
www.landuse.gov.ab.ca/

THREE WAYS TO SUBMIT

There are three ways to submit responses to the questionnaire that begins on page 8:

ONLINE AT: www.waterforlife.gov.ab.ca/awc/renewal/index.html

By MAIL: MPA Public and Government Affairs
Suite 1350, 734– 7th Ave SW
Calgary, AB T2P 3P8

BY FAX: (403) 215-6749

INFORMATION: *Water for Life* Strategy Renewal Project
Mon. to Fri. 8:15 am to 4:30 pm
Tel: (780) 427-9451

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