



“What We Heard”

Summary Findings of the Shared Governance-Watershed Management Planning Workshops

Shared Governance and Watershed Management Planning Project Team

February 2008



Table of Contents

Background and methodology.....	5
Section 1: Developing a shared governance model.....	6
Q1. Roles and responsibilities	6
Q2. Relationships and accountability	7
Q3. Partner commitments.....	8
Q4. Government’s role	10
Q5. Implementing consensus decisions.....	11
Q6. In the absence of consensus.....	12
Q7. Ensuring participation.....	13
Section 2: Developing a watershed management planning framework.....	14
Q8. Goals of a watershed management plan	14
Q9. Components for watershed management planning.....	15
Q10. Outcomes.....	16
Q11. Monitoring.....	16
Q12. Knowledge and research.....	17
Q13. Defining the role of the Alberta government.....	18
Q14. Defining the role of municipalities.....	19
Q15 <i>Water for Life</i> partnerships.....	20
Q16. Engaging partners and the public-at-large.....	20
Q17. Timing	22
Q18. Resourcing.....	22
Q19. Authority of watershed management plans	23
Q20. Accountability of <i>Water for Life</i> partners for implementation	23
Q21. Integrating resource management plans	24
Appendix One: Workshop participants	26

Background and methodology

The Shared Governance Model and Watershed Management Planning Framework Project Team hosted four by-invitation, full-day facilitated workshops across Alberta in November. Participants were identified by Project Team members from each of the sector groups represented at the Alberta Water Council, with additional participation from Watershed Stewardship Groups, regional health authorities and First Nations. A list of participants is provided as Appendix One.

Workshop participants received a *Discussion Guide* and *Companion to the Discussion Guide* in advance and were encouraged to work their way through the 21 questions included in the *Guide* in preparation for the workshops. Workshop participants received a plenary introduction to the session, and then facilitators worked through each of the 21 questions with breakout groups of between eight and thirteen members, depending on overall attendance at each workshop. Each breakout group was assigned a recorder from Alberta Environment staff, who recorded participant comments on flip charts as the workshops proceeded. Comments made by participants were not attributed, and this report represents a summary of all the comments made by participants. Flip chart transcriptions have been retained by Alberta Environment. Finally, workshop participants were encouraged to provide written submissions if they wished, either to emphasize particular points or to address issues that had been neglected in the workshops.

A summary of workshop responses follows each question as presented in the *Discussion Guide*. When workshop participants made clear recommendations with respect to any one question, or a recommendation could be deduced from participant comments, those have been included for discussion.

The *What We Heard* report captures and consolidates workshop participants' points-of-view into a summary document. No attempt was made to evaluate the factual accuracy of any viewpoint expressed or to reconcile opposing points-of-view.

This report has been used by the Project Team to inform its debate over key issues to be resolved as it works to develop a shared governance model and watershed management planning framework. Workshop participants will be granted an as yet undetermined opportunity to participate further in the development of the model and framework.

Section 1: Developing a shared governance model

Q1. Roles and responsibilities

Are the roles and responsibilities assigned to the AWC, WPACs and WSGs appropriate? What other responsibilities could or should be assigned?



For the most part, workshop participants affirmed that the roles and responsibilities of each *Water for Life* partner as provided in the *Discussion Guide* were appropriate, though there was much discussion about conflicting documentation that caused confusion among *Water for Life* partners (*Water for Life*, “Enabling Partnerships,” *etc.*). Participants requested a clear delineation of roles and responsibilities to which they could make reference among the partnerships as each pursued its own activities. A persistent minority emphasized the importance of clarifying the Province’s role with respect to each of these organizations. A larger percentage said they’d like a clearer position from government about how it intended to work with *Water for Life* partners and to receive their recommendations.

While WPACs seem comfortable with the role as described, they are not willing to take on any additional responsibility. With that view, they would like the government to make a clear declaration of its own roles and responsibilities within *Water for Life* so that all parties are aware of the intersection of those roles and responsibilities. Another concern was that the responsibility for watershed management feels to some participants – across all sectors – as if it has been reassigned to volunteers rather than to paid, professional government staff. Though raised later, WPACs feel that they have not been granted sufficient resources to enable them to deliver on expectations.

There was much discussion about the position of WSGs within the *Water for Life* structure. WSG participants were particularly eager to discuss the differences within that designation. In many cases, WSGs pre-exist both WPACs and *Water for Life* and these mature WSGs often arose out of local concern for a smaller watershed. On the other hand, some WSGs coalesce around single issues and their activity may or may not be meaningfully connected to larger watershed management planning objectives. Some WSG participants suggested that WSGs actively engaged in planning for smaller watersheds need somehow to be formally included in WPAC activity and structure. Some went so far as to suggest WSGs were better positioned to make recommendations than WPACs. Others suggested that the name itself is problematic (it includes too many “stewardship” groups, many of which are only peripherally involved in watershed management issues). Finally, the ability of WSGs to create and define themselves without government guidelines and their ‘willy-nilly’ inclusion under the *Water for Life* banner was seen to introduce confusion. All of this indicates that the roles and responsibilities of WSGs are not clear and need additional attention.

Q2. Relationships and accountability

What type of relationship between the AWC and WPACs will best support the achievement of *Water for Life* goals?

What should be the relationship between WPACs and WSGs?

What should be the relationship between AWC and WSGs?

How should partnerships be held accountable to one another to achieve outcomes they themselves have defined?

There was some modest concern expressed that the first two *Water for Life* goals concerning safe drinking water and healthy aquatic ecosystems somehow opposed the third concerning adequate supplies for economic purposes – or, at least, that the goals are viewed that way by some participants. In other words, to achieve the third, the first and second must be somehow compromised. A small number of participants stressed emphatically that thinking about the goals had to change such that solutions were focused on achieving all three through appropriate management and best practices, not merely ‘balancing’ the first two with the third.

Participants were mostly content with the suggestion that:

- AWC is responsible for the development of strategic *policy* at the provincial level;
- WPACs are responsible for *planning* at the watershed or basin level; and
- WSGs perform a combination of grassroots ‘work,’ public education and engagement activities. More, however, will be said about the work of WSGs below.

However, it was also suggested that both AWC and WPACs may occasionally stray into the other’s principal area of responsibility; that is, WPACs may occasionally be involved in policy development and AWC may occasionally be involved in planning.

There was also broad agreement that the relationship between the partners need not be, in fact, *should* not be, hierarchical, though it was strongly suggested that the links between them need to be better formalized. There was a strong minority opinion that a hierarchical relationship would enhance accountability.

WPACs seem to feel disconnected from AWC and are not clear how they are supposed to work with AWC except in the pursuit (some said ‘vague’ pursuit) of *Water for Life* goals. There was strong support for some sort of formal reporting mechanism that would tie AWC and WPACs more closely together. Participants also seemed to agree that the information flow between AWC and WPACs could be much improved.

There was considerable discussion about the wide variety of WSGs and the kind of work they undertake to perform within smaller watersheds in this question as well, which reflects much of the discussion in Q1. Generally speaking, while hierarchical approvals were rejected, there was lots of discussion about the importance of formalizing the relationship between WPACs and WSGs, especially those in the latter designation that undertake planning activity on smaller watersheds. It looks like it will be important to establish a leadership role for WPACs and that they will then need to have some formal capacity to work, especially, with those WSGs that are themselves engaged on planning activities for subwatersheds within the WPAC boundaries. One participant quipped that if you wanted to understand the current relationship between the parties, you had to “follow the money”; by implication, some sort of fiscal relationship would strengthen ties among the different *Water for Life* partners, as elaborated below.

Some of the ‘relationship issues’ between WPACs and WSGs are addressed when the former enter into funding agreements with the latter; this is not, however, typical and does not address the question in its entirety. Perhaps more to the point, it was suggested that there is *no* relationship between AWC and WSGs, especially since WSGs seem to be autonomous, self-selecting organizations that may or may not subscribe to *Water for Life* principles. If AWC funding were available through appropriate mechanisms to planning WSGs, it was expected that the relationships would be more effective and the accountability gap closed.

There was also some confusion about ‘who’ represents, or constitutes, a WPAC. Several participants seemed to feel that the ‘WPAC proper’ was restricted to the elected Board of Directors and were concerned that they were therefore ‘not represented’ in the decision-making process. Though the *Guide* clearly states that *all* WPAC members must be involved in the development of watershed management plans, there is something about the current practice that leads partners who are not elected to Boards to feel they are being excluded. It appears that there would be value to explore the whole issue of ‘governance’ both internally and externally, in the sense that there should be clearly defined governance guidelines for the internal operation of a WPAC and for the intersecting external jurisdiction of the parties represented by the WPAC membership.

Participants clearly felt that more effective communications among the partnerships was key to their effectiveness. Some proposed regular meetings and reporting structures; others proposed a virtual community that would enable AWC and all WPACs to work through the Internet in areas of common interest, and that this could support WPACs in all sorts of unexplored ways.

Finally, though participants explored the relationship among the *Water for Life* partnerships, several said they felt that the government’s functional relationship to each of these – even though it is a partner at least in AWC and WPACs – was missing.

Q3. Partner commitments

What is the nature of your commitment as an AWC, WPAC or WSG partner that will enable these partnerships to fulfill their mandates? What is your role? For what should you be responsible? To whom are you accountable? That is, what does it *mean* to be a *partner*...

... as an individual?

... as, or on behalf of, a parent organization?

Workshop participants demonstrated a clear appreciation of the complexities of WPAC membership, noting that representation at the WPAC table could vary from time-to-time from acting as an individual, to representing a parent organization, to representing a sector, to representing the WPAC as a whole. Participants seemed confident that full disclosure and mutual respect were sufficient for WPAC partners to fulfill their commitments in support of WPACs as they pursue their mandates.

One workshop generated the observation that:

- as an individual, WPAC members are citizens with knowledge to bring to the process;
- as representatives of a host group, members bring a level of authority to the decision-making process; and
- as members of an organization, they can bring a perspective; *but*
- that this also implies that partners cannot be strictly ‘equal.’

Workshop participants also noted that participants with technical expertise often do not have the authority to represent their sector – that there is a disconnect, at least at the WPAC table, between ordinary participation and decision-making. This applied both to industry sectors and municipal governments.

Again, however, there was much discussion about the mechanisms to support responsibility and accountability. For example, it was frequently suggested that WPACs should publicly issue annual reports that capture the participation of WPAC members and their contributions to the achievement of outcomes. Some workshop participants wanted to know how WPACs are held accountable at/to the AWC. Most participants felt it was important to engage the public-at-large in some capacity to help all partners and partnerships stay focused on *Water for Life* goals.

Industry representatives highlighted their ability to provide data and technical assistance since they are often required to collect the same in connection with their licences and approvals. At the same time, they indicated that the proprietary nature of this information had to be acknowledged and that the Alberta government had an important role in this respect, to be discussed below.

Municipal representatives generally felt that they carried a special responsibility, as elected officials, to engage their citizens and that this role was not properly executed by WPACs directly.

WPAC participants also noted that it was relatively easy to secure funding for specific projects but that they constantly struggled to acquire operational funding. Private sector partners are pleased to be attached to a specific project but are less inclined to provide non-specific funding. Several participants said the Province must fill that breach and provide sufficient operational funding to all WPACs.

Participants wanted it acknowledged that *Water for Life* volunteer partners provided considerable ‘human horsepower,’ which required that they sometimes take time off work without compensation or reduce other obligations. As well, volunteers were subject to burn-out since their WPAC commitments extended into private time. Even industry participants mentioned that they felt over-stretched to respond adequately to meet regulatory requirements and to participate in all the ‘distributed decision-making’ processes contemplated by government.

The capacity/contribution of different partners was characterized as follows, though it is clear these descriptions are not mutually exclusive and that partners from any sector might perform functions ordinarily ascribed to another.

- ENGOs bring well-researched information; historical context; context of environmental ethics (*note*: they are not the sole representative of environmental ethics); and a social dimension to the process.
- Industry brings technical expertise, science, knowledge of process, community impact, and broad based studies to the process.
- Local (and the federal) governments represent both their own interests and the interests of their citizens; and municipalities also represent local businesses and other interest groups.
- Alberta government brings balance to the process and, in addition to its resourcing responsibilities, can serve as an effective arbiter within the legislative environment.

Several respondents said that whatever a particular WPAC may do within a watershed with its partners to achieve watershed management planning, the focus should be on the achievement of *Water for Life* goals and that plans should not creep into land management issues beneath another jurisdiction if the *Water for Life* goals are being met.

Lastly, there was some question as to whether or not it would be appropriate for regional health authorities to be involved in the *Water for Life* partnerships in some capacity since they are responsible for the delivery of the Public Health Act, among the weightiest pieces of provincial legislation.

Q4. Government's role

Is this the appropriate role for the provincial government? Is there something else that it should be doing? How can the provincial government help partnerships and partners to meet their commitments?

At nearly every workshop, introducing variations on a theme, participants said that the Alberta government's role was to provide leadership and clear direction. They said that government among *Water for Life* partners has to be the most committed to the new process or else partners will revert to previous practice.

Although the *Discussion Guide* set out responsibilities under *Water for Life* that would continue to characterize the role of the provincial government, this question generated some of the widest ranging discussion. A number of sector representatives expressed concern that the provincial government was downloading responsibility for watershed management planning to WPACs (and other organizations) without assigning the resources required to assume that responsibility. Accordingly, though there was little or no disagreement with the role as characterized in the *Guide*, participants did want to talk about government's role more inclusively.

[The] Government of Alberta has a unique role among partners because it has well-defined legislative responsibilities under the *Water Act*. Government has said it will support partnerships by: delineating watershed boundaries; formally recognizing WPACs; providing administrative, financial and technical support; working with federal, provincial and non-governmental agencies to help partnerships define and deliver their objectives; reviewing and responding to AWC, WPAC and WSG recommendations; and developing a provincial Water Information Centre to support data collection, public education and state of watershed reporting (*Discussion Guide*, 7).

Anticipating the afternoon's agenda, most participants agreed that the Province has to provide the 'legislative backstop' with respect to watershed management. There appears to be some anxiety that the Province is looking to download more responsibilities to WPACs and some asked that government be clear about what responsibilities it is going to 'keep': approvals, modeling, monitoring, enforcement, *etc.*, all of which it has performed in the past and for some of which it has exclusive responsibility. Some of these functions will be discussed in more detail below.

Participants insisted, within the *Water for Life* scheme, that the Province was principally responsible to provide the resources – human, technical and financial – WPACs require to deliver watershed management plans to achieve *Water for Life* goals. Providing human resources included continuing to provide administrative support to organizations that are chronically short of employees. The provision of technical resources might be what is envisioned for the Water Information Centre. Participants felt that government must function as a knowledge broker to

coordinate data acquisition, cataloguing/indexing, access and appropriate use, and that information might originate both from within and outside the government through a ‘one-stop’ service provider. This would include monitoring data. Financial support implies sufficient long-term, sustainable funding to discharge the WPAC mandate and support planning with realistic horizons. Many participants felt WPACs are underfunded.

Participants also felt that the government had to coordinate the cross-Ministry involvement in watershed management by breaking down governmental ‘silos.’ This also meant coordinating the integration of different resource management plans – oil and gas development, forestry management agreements, the new land use framework, *etc.*

In some workshops, participants emphasized their opinion that government representatives to WPACs should serve as facilitators or as conduits for information exchange. Since the government, as a whole, has a legislative responsibility, government representatives to WPACs should represent that obligation but should not try to influence policy development or the day-to-day business of a WPAC outside its contractual commitments with government.

In summary, participants felt that without a clearly defined and articulated role for government within *Water for Life*, it was difficult for them to determine the appropriate roles for WPACs and WSGs. Some also complained that existing documents were inconsistent and contradictory, leading to confusion. Participants want roles and responsibilities for the government and all *Water for Life* partnerships to be very clearly defined. They want to know how watershed management plans should be developed – which should be addressed by the framework – and how they will be received and implemented.

A few participants expressed frustration at the ‘cost recovery’ model employed by government, saying that they had to apply for government grants to pay government for that the data it provided. In other words, they applied for government money to pay back to government to support responsibilities that had once been government’s alone. This was very frustrating and participants wondered why this was necessary when they were effectively delivering government policy – the *Water for Life* strategy – on government’s behalf except, perhaps, for internal accounting reasons that had nothing to do with *Water for Life*.

Some participants felt it would be worthwhile for a toolkit to be developed that would help encourage consistency across Alberta as WPACs and WSGs undertook their work, including governance manuals, information access protocols, *etc.* In a related observation, some participants said that government is not consistent applying its own practices, that different offices interpret legislation and/or policy differently and that the participation of government in WPACs was not consistent across the province.

Q5. Implementing consensus decisions

What should be the duty of partnership members and their sponsoring organizations to carry out the consensus decisions of the group – AWC, WPAC or WSG – at the table?

Again, workshop participants seemed mostly confident that partners who have agreed to participate in the watershed management planning process will, for the most part, willingly accept any obligation to support consensus WPAC decisions. There was, however, some concern that consensus decision-making might be too unwieldy a process since some WPACs have upwards of

300 members. At the same time, participants said that if consensus was the target, it had to be upheld or partners would resort to ‘back door’ decision-making techniques.

When the discussion was narrowed to suggest that consensus must be achieved in support of a WPAC’s two principal mandated activities – to develop a state of the watershed report and a watershed management plan, both of which are built upon terms of reference on which consensus must be achieved at the beginning – there was less concern. Consensus would then have to be achieved on the final product of both processes as well. This implies that consensus decision-making is, as defined by AWC, a long-term process that could take a year or more to achieve and that involves the negotiation of interests rather than the defense of positions.

Some concern was raised about the non-profit society status of WPACs and whether that was sufficient or appropriate for the delivery of their function. Society members, as defined in articles of incorporation, should all have membership rights with respect to the Society that may or may not include decision-making rights with respect to watershed management plans. This potential contradiction must be worked out.

It was subsequently raised that WPAC partners need to have the authority to speak on behalf of the party they represent but that the consensus ‘vote’ of that party might have to be obtained independently of a WPAC meeting, *per se*; that is, municipalities might consider a WMP Terms of Reference, indicate its approval through its own processes, and formerly endorse the Terms of Reference as part of consensus building.

Participants also raised the importance of shareholders participating in the process – that the consensus of a non-representative body was not a real consensus. This is addressed below. There was also some discussion of balancing participation in consensus decision-making; that is, there was some discussion of balancing input by sector rather than individual votes in order to ensure that no one sector outweighed the others. That was contrasted, however, with the consensus ideal that all parties participate and all parties achieve a negotiated consensus.

Some alternatives to consensus-decision making were proposed, including the Highwood protocol, which was later submitted to the Project Team. Others are discussed in relation to Q6. Regardless, participants were clear that they expected either the model or the framework to provide them with decision-making tools that would support their effective function in pursuit of watershed management plans.

Q6. In the absence of consensus

The AWC is committed to consensus-decision making as the basis for shared governance. However, there may be instances in which consensus cannot be achieved in a timely fashion, or perhaps not at all. How should *Water for Life* partners proceed when consensus cannot be reached?

Participants agreed that a WPAC should not be held hostage by a recalcitrant party that is not committed to achieving a consensus decision. They felt that setting out a timeframe to achieve a consensus decision would help. Several participants noted that if a consensus cannot be achieved that the partnership will have failed – achieving consensus on state of the watershed reports and watershed management plans are really the litmus test of shared governance.

However, participants were also willing to discuss dispute resolution mechanisms in the event that consensus-decision making as defined by the AWC failed. (Again, the Highwood protocol provides an alternative decision-making mechanism that preferences consensus.)

First, participants generally agreed that conflicts most often arise around values-based disputes rather than the use of scientific data. Participants suggested that decision-making ought to begin with science-based criteria, perhaps combined with risk assessment principles. Some participants countered that values-based criteria cannot be negated in favour of ‘science,’ especially since some Aboriginal traditions view science differently than the mainstream culture.

Some participants said that it might be enough to permit dissenting partners to issue a minority opinion that would put their disagreement on the public record but that they might still be able to support a decision overall, in the interests of supporting a WPAC, even if they disagreed with a specific element of that decision.

Some participants advocated bringing in a mediator or arbitrator if the time specified to achieve a consensus is exceeded. However, they were vocal in their opinion that this role should not fall to AWC, also a volunteer body, but to government. Mediation could be either binding or non-binding arbitration.

Some participants, particularly municipalities, wanted it acknowledged that their ability to support a consensus may have less to do with their agreement in principle to a specific course of action than their ability to perform that action. Water quality objectives, for example, whether upstream or downstream, may influence water treatment practices, which may in turn be limited by budget considerations. In that case, further investigation may be required to adjust related outcomes.

Finally, some participants asked what would be the role of the Environmental Appeals Board and the Energy Resources Conservation Board under *Water for Life*.

Q7. Ensuring participation

Since shared governance depends on a consensus-based partnership approach to achieve *Water for Life* goals, what should WPACs do if a key shareholder/partner is not represented?

How can WPACs ensure *balanced* participation from *all* sectors?

Workshop participants were clear that WPACs have an obligation to engage as best as possible all shareholders within a watershed with a shared interest in the management of water resources. In practice, this may be restricted to those parties making regulated use of water or whose land use practices affect water resources – though that is by no means an ‘exclusive’ list. In other words, the sector approach initiated by AWC is the correct approach; WPACs do not have the capacity to be in the business of consulting the general public.

That said, it should be relatively easy to determine the parties within a watershed that might be designated “shareholders,” beginning with those parties that have a water allocation or licence and any parties with land management/planning authority. Further shareholders could include landowners whose land management practices affect any one of several water quality and quantity parameters or aquatic ecosystem health (point and non-point source pollution).

Participants felt it was important that the Alberta government ensure that parties who receive their authority through departments other than Alberta Environment be made well aware of the potential impacts of *Water for Life* and the work of WPACs. Some participants had raised the possibility that watershed management might, in specific instances, challenge the traditional FITFIR principle (first-in-time, first-in-right) in favour of value-based allocations.

Municipalities want it acknowledged that the change to a shared governance model places a particular burden on them to engage their citizens that they may not yet be prepared to accept. WPACs will have to work closely with municipalities to enable them to fully participate.

Section 2: Developing a watershed management planning framework

Q8. Goals of a watershed management plan

It is stated above that watershed management plans should help WPACs to articulate their efforts to achieve *Water for Life* goals, including efforts to influence land use planning that might affect the achievement of those goals. It has also been suggested that these plans should focus on factors that effect water quality, quantity and the maintenance and protection of healthy aquatic ecosystems.



Is this an appropriate scope for watershed management plans?

There was broad agreement that the scope of watershed management plans as described in the *Discussion Guide* was appropriate. This was further refined by some participants who said that watershed management plans would be improved if they focused on risk assessment and risk management using science-based criteria, which will be elaborated below. Some risks would be cumulative and would require a response consistent with the Province's new cumulative effects model. Risks to the watershed would help to define the scope of a plan and, once identified, could be monitored on an ongoing basis.

There was some discussion that the designated watersheds may be too large for WPACs to address without assistance. Planning WSGs are involved in developing WMPs for smaller components of the watershed (lakes, tributary rivers, creeks, *etc.*) and may be meaningful contributors to the larger WMP.

There was some disagreement about who should set water quality, quantity and conservation objectives – whether that was within the Province's domain exclusively or if they could be set by WPACs (or planning WSGs). Some participants wanted to know how objectives for air and land management were going to be integrated into watershed considerations. Others suggested that social, cultural and economic outcomes might be appropriately included in a watershed management plan –the so-called quadruple bottom line (social, cultural, environmental and economic criteria). From that perspective, several participants advocated the inclusion of

environmental goods and services as part of the planning exercise. Finally, some participants were concerned that watershed management plans left in the hands of volunteers could lack the appropriate expertise and rigour that would be expected in a plan prepared by an engineer or an architect, which opened the door to brief discussions about liability and quality assurance. Others noted that their volunteers were often retired professionals as highly qualified as any working professional. The issue landed on the importance of following existing guidelines and ensuring that people with appropriate qualifications undertook specific activities.

This led in some workshops to discussions about guidelines to support the use of performance measures and other indicators, such as when samples should be collected (low/high flow seasons, extreme weather events, *etc.*), trend analysis, traditional land use, archeological and heritage content, and public engagement.

On a related note, participants emphasized again that WPACs cannot assume a regulatory or assurance function in addition to planning; this must remain the responsibility of government.

Q9. Components for watershed management planning

In addition to those elements identified above, what else might be required to develop a watershed management plan?

In its first iteration, a watershed management plan might not include all these elements. Is it appropriate for watershed management plans to be developed incrementally or should they be comprehensive from the start?

Workshop participants were largely complimentary about what they felt was a comprehensive list of elements for a watershed management plan derived from the still-in-development State of the Watershed report guidelines provided in the *Discussion Guide*. The most common suggestion for improvement was to introduce a time-scale and to use trend analysis in the development of watershed management plans. Factors related to industry such as economic performance or environmental impacts – which some felt were neglected – were also suggested to be necessary.

Some other additions included:

- groundwater;
- recommendations for monitoring;
- source water protection;
- point and non-point source pollution;
- industrial development, municipal development and population forecasting;
- flood plain management;
- ecosystem conservation;
- climate change;
- connection to airsheds and air quality management;
- parks and protected areas;
- human health, generally, and pandemic response, specifically;
- water sharing;
- awareness and accessibility of related information;
- intrinsic, aesthetic or quality-of-life values; and
- a prioritization process to focus scarce resources on greatest return.

Retention of the current principle of self-sufficiency, that is, for a watershed to work within its own capacity, was strongly emphasized.

Q10. Outcomes

What kinds of outcomes are appropriate within a watershed management plan? Using the *Water for Life* goals as a starting point, should outcomes relate to water quality and healthy aquatic ecosystems? What else is appropriate?

This question was addressed with difficulty by nearly all workshop groups. Several chemical parameters and instream flow needs are defined by regulation and so are not appropriate as “outcomes.” Outcomes need to be intelligible to laypeople; they cannot be strictly technical. One group said that outcomes should be used to help sell the plan, that a meaningful outcome captures the issue in language suitable for an ‘over the fence’ conversation. Another group suggested that the inputs to a watershed management plan are science and risk assessment; its outputs are applied science and risk management.

Participants said that “water” can be used as a health indicator for the entire ecosystem, which is how watershed management plans can be linked to other land management practices. Unhealthy water begins the investigation of what is unhealthy – and WPACs can work backwards to identify the origin of the problem and bring those sectors to the table to resolve the issue.

Participants insisted that WPACs must have the flexibility to define outcomes for themselves, that outcomes would not be common across all watersheds.

Participants suggested that watershed management plan outcomes should maintain the function and ecological integrity of watersheds. More specifically, suggestions included the following.

- Restore and protect riparian functionality, *e.g.*, maintain or restore cottonwood stands.
- Adopt biodiversity measures, especially of keystone species, *e.g.*, sage grouse, leopard frogs, or habitat.
- Promote sustainable agriculture (*e.g.*, harvest yields related to water consumption).
- Reduce the incidence of water borne disease.
- Balance consumptive and non-consumptive uses.
- Restore indigenous fisheries, *e.g.*, grayling, Bull trout, walleye.
- Set wetland retention and restoration goals within the watershed management plans.
- Assess groundwater safety in relation to industrial activity (roughly 600,000 Albertans, or 20 percent, get their drinking water from wells).
- Integrate air, water and land management practices.

Finally, there was some discussion about the scope of a watershed management plan, whether it should be constrained by *Water for Life* goals and objectives or, if the members of a WPAC partnership wished, it could expand beyond those parameters.

Q11. Monitoring

How should monitoring be conducted in connection with defined outcomes and performance measures? How is this information best used by WPACs/WSGs to review and evaluate the achievement of planned outcomes?

Monitoring is an essential component of adaptive management. Watershed management plans should set outcomes, strategies to achieve those outcomes, and performance measures to evaluate the effectiveness of those strategies. Performance measures would include monitoring data.

The majority of workshop participants felt that the Province should retain responsibility for monitoring watersheds or provide the resources to WPACs to contract third-party evaluations. WPACs do not believe they have the capacity to do monitoring and would prefer to concentrate on planning and adaptive management. More remote watersheds have real difficulty with collecting and analyzing samples; in the north, they organize emergency vehicle ‘relays’ to ensure that a sample gets to the lab within the allotted time.

Industry representatives noted that they are already doing monitoring in compliance with operating licences and that they would be willing to share this information to support watershed management planning but that data sharing agreements must be negotiated with the Province to ensure proper use of this information since much of it may be proprietary.

Some participants advocated peer review of monitoring data to provide quality control and assurance.

Q12. Knowledge and research

Advances in our knowledge through research and more current information ought to improve watershed management along multiple vectors – pollution control or remediation, ecosystem management, environmental factors, *etc.* How can we continue to build our knowledge base and best disseminate research findings among *Water for Life* partners to improve watershed management and the achievement of planned outcomes?

Due to time constraints, this question was often neglected during workshops. However, in those instances that participants had time to dedicate to the question, it was observed that WPACs ‘are not created equal.’ Expertise and access to knowledge varied among WPACs. Participants also felt that they did not have the same access to information and data that they once did, which made it more difficult to discharge their duties. Participants felt that previous government of Alberta work – such as water modeling, data review and other elements – needed to be expanded upon and so, at the very least, freely shared with WPACs. However, they felt that information transfer is cumbersome and historical data is hard to obtain. As noted above, WPACs sometimes apply for government money to pay government to perform functions that government once performed.

Participants said that much more information had to be publicly available. WPACs and WSGs should post reports on websites and share the information used to inform them. Several participants supported the concept of a virtual community, through which WPACs and WSGs could share an annual index of reports and studies, and other appropriate documents.

Some felt that the Alberta government has to provide assurance on data quality and completeness.

Q13. Defining the role of the Alberta government

Is the current level of involvement of the provincial government in the development of a water management plan appropriate for the transition to watershed management planning?

What is appropriate timing for government to “authorize” or “approve” a watershed management plan that has been endorsed by the partnership?

As noted by several participants, the precedent for watershed management plans is established by the process for water management plans, which is contained in the *Water Act*. The absence of applicable legislation for the former was of concern to some, who wished to have *watersheds* enshrined legally.

It was also noted by perceptive participants that a Director in Alberta Environment had no defensible position from which to “authorize” a watershed management plan because such a plan would have an impact on land use, and therefore be subject to legislation outside the jurisdiction of Alberta Environment, such as the *Forests Act*, *Public Lands Act* and the *Municipal Government Act*, administered by other departments. Accordingly, if one were to follow the precedent of the *Water Act*, watershed management plans could only be “authorized” by some complex interaction among all applicable departments or “approved” by elevation to Cabinet. The preference was for some form of “approval.”

What, exactly, was approved, was subject to debate. Some felt that only the outcomes needed to be formally approved and that the means to achieve those outcomes should be up to the discretion of the WPAC and its member partners. Others were concerned about enforceability if only outcomes were approved since any number of actions could conceivably lead to an outcome, therefore making no one accountable for specific action.

One workshop group suggested implementing an approval matrix that would involve a Director or his equivalent in every department and provincial agency with applicable authority for resource or land management within a watershed: Agriculture and Food; Energy; Energy and Utilities Board; Environment; Health; International, Intergovernmental and Aboriginal Affairs; Municipal Affairs; Natural Resources Conservation Board; Sustainable Resource Development; and the federal departments of Parks and Fisheries and Oceans. On a related note, some participants said that other ministries had to be prepared to help fund watershed management plans if they were to have some sort of “approval” or “authorization” authority. In addition, municipal governments – from the largest urban to the smallest rural communities – would have somehow to be involved, linking, at the least, an “endorsed” watershed management plan to municipal development plans.

Whether government “authorizes” or “approves” a plan that has been endorsed by a WPAC, participants agreed that the appropriate times for the provincial government to deliver such action were consistent with the precedent established by water management plans: when the Terms of Reference are tabled, and when the plan is completed. If WPACs were to become DAOs, such “authorization” or “approval” authority might be transferred.

Participants felt that, in addition to “approving” or “authorizing” a plan, the provincial government had to provide funds to WPACs for professional work (this speaks to liability and competency issues raised above) or provide in-kind expertise. They also felt that government had some “check and balance” responsibility to ensure that a WPAC has engaged the appropriate

stakeholders and that all sectors have been well represented and that regional and global issues, including competitiveness, have been considered.

Municipalities continued to express concern about the downloading of additional responsibilities – and related expense – through the watershed management planning process. Their budgets are more problematic than those of industry or the other orders of government, tied so directly to mill rates and property taxes on an annual basis. Their capacity to absorb additional costs, they said, was much less than their counterparts at the provincial and federal levels.

The question of timing did not attract much comment. For the most part, participants said anything that was appropriate to fit the circumstance, with one concrete suggestion being immediate (three months or less, conditional on “endorsement” of the plan by the members of the WPAC), interim “authorization,” a one-year review by all appropriate parties, and then formal “approval” after that.

Some felt that government had to serve as an interdepartmental clearinghouse for all initiatives within a watershed to ensure the coordination of multiple parties.

Participants were curious to see what impact the new cumulative effects management framework would have on watersheds. Participants also noted that the province still has much work to do with respect to groundwater monitoring, mapping and management.

Finally, participants said there should be only one framework for integrated land and water management (see the Land Use Framework), and that reconciling disparate initiatives was the responsibility of government.

Q14. Defining the role of municipalities

What should be the role of municipal councils in the development and implementation of watershed management plans?

What should a WPAC or WSG do to ensure that the municipalities responsible for regulating land use within the watershed contribute to the recommendations in the plan and then implement them?

In general, municipal representatives were content to act as member partners of WPACs (or WSGs) and to participate in the development of watershed management plans as long as the nature of their relationship to citizens was acknowledged. Some municipal representatives suggested that since there is no legislative requirement to participate in the development of watershed management plans, participation must be voluntary, particularly since participation could involve a considerable investment of resources. Some felt the province needs to require municipal participation, particularly since many municipalities are large users of water. It could be reasonably concluded that some of the reticence expressed by municipal representatives arises out of past experience with downloading provincial services to municipalities.

Workshop participants felt that water outcomes should drive land use – in this case, municipal development plans – but that this observation would apply beyond municipalities. Municipalities could write the principles from watershed management plans into municipal development plans if they were active participants in the development of the plan.

Participants noted they did not feel able to discuss groundwater issues but knew they were important; roughly 20 percent of Albertans get their water from a groundwater source.

Finally, some representatives wanted clarification on what their endorsement of a watershed management plan ‘means’ in a legal context.

Q15 *Water for Life* partnerships

What should be the role of a WSG in the development of a watershed management plan?

What should be the role of AWC in the development of watershed management plans?

This is one of those questions that attracted considerable discussion, especially from those participants that represented mature WSGs.

There are several instances, especially in the south, in which citizen-based stewardship groups have been formed to protect smaller watersheds that pre-date *Water for Life*. Many of these are reasonably sophisticated and have established working relationships with relevant municipalities and other stakeholders. These organizations clearly represent an opportunity for improved watershed management planning across Alberta and must, in some way, work with WPACs and/or contribute to the development of basin-based watershed management plans.¹ In fact, the Framework for Watershed Management Planning should be applicable at any scale and so could be used by watershed planning WSGs as they work to develop watershed management plans for smaller watersheds that have traditionally been the focus of their interest.

These WSGs, however, cannot be confused with other spontaneously-generated citizen-based stewardship groups – such as municipal and improvement districts (several are listed by the Alberta Stewardship Network as watershed stewardship groups), the North Peace Applied Research Association, or the Lesser Slave Lake Bird Observatory.

By contrast, few participants felt that the AWC had a specific role with respect to watershed management planning other than to promote applicable provincial policy and the consistent application of that policy by WPACs and WSGs. In the opinion of workshop participants, AWC has no direct role in the development of watershed management plans. It does, however, have a much larger role than it currently fills to coordinate communication among *Water for Life* partners in support of those plans, the management and sharing of information and the promotion of best practices. A small minority thought the AWC should review plans to ensure the consistent application of *Water for Life* across the province.

Q16. Engaging partners and the public-at-large

Given that WPACs could have dozens of member partners all involved in the shared governance model, when and how should partners be engaged?

How can WPACs work with other authorities to determine ‘appropriate public consultation’ to support the development of a watershed management plan?

¹ The *Water Act* defines provincial river basins rather than watersheds.

The second part of this question provoked interesting discussion, the most provocative of which was the following (paraphrased) question “If WPACs don’t, in themselves, represent the public, then what good are they?” The implication was that implementing WPACs changes existing approval contexts and that there must be a good reason to do so. That challenge provides interesting context.

The short answer as to when and how member partners should be engaged could be paraphrased as “all the time.” That is, WPACs need to be working with their member partners as they articulate terms of reference prior to their endorsement by the membership, as they complete the investigative work required to develop a plan, as they define outcomes and related strategies for the watershed, and as they prepare a plan for endorsement by member partners prior to submission to the provincial government. WPACs need to enhance their capability to communicate effectively with stakeholders in all sectors throughout the watershed.

Improving that capability addresses, or perhaps even alleviates, the requirement to do what is ordinarily understood as “public consultation.” Participants noted that the *Water Act* provides no guidance in this area but that member partners – municipalities and industry – have existing legal obligations to engage their publics in connection with planning activities that would have an impact on watershed management. In that sense, implementing shared governance shifts the ‘public consultation’ obligation to member partners. However, WPACs would still need to coordinate and support that effort among their partners by producing the appropriate resource materials and working with member partners and their designates.

Participants felt there is one challenging exception to the above: rural landowners. Land management practices can have considerable impact on the watershed but it is difficult to reach landowners whose traditional land use practices may or may not improve the watershed. There are existing groups such as Cows and Fish that do some of this outreach work. Participants felt further exploration is required in this area.

There was some confusion that arose here and that was referenced above between what is the operative body of a WPAC. Is it the staff, Board of Directors, committees, or the entire membership? Some expressions of dissatisfaction suggest that WPACs need to do a better effort of articulating governance within their own organizations, let alone the idea of distributing decision-making through a shared governance model for watershed management planning, so that members are more involved and more appreciative of the challenges and opportunities presented. That would affirm the assertion above that WPACs need to engage their members – through their professional staff – “all the time.” This capacity needs to be developed, however, in some WPACs and nurtured by AWC. This is also an area that it was suggested could be technology enabled and that web capability could be shared by all WPACs if built on the right platform.

One WPAC hosts a quarterly forum for all its members, issues bi-weekly newsletters, and includes guidelines for sector participation in its Board election process.

Some felt that WPACs should focus on public education.

Q17. Timing

What is the appropriate timing for a partnership to endorse a watershed management plan and its associated recommendations?

This question was another that generated little debate. For comparison purposes, it was noted that Forest Management Agreements with a 20-year planning horizon typically take five years to complete and are revised every ten years (these plans address water as it relates to the management of timber). In Ontario, government grants five years to complete a plan from the appointment of a Chair to a water planning agency.

Participants seemed to feel that if WPACs did a good job of engaging their partners through the development of Terms of Reference, and updating them regularly through the data collection process, setting outcomes and related strategies, then endorsing a watershed management plan should be relatively uncomplicated – though it could, realistically, still take six months to a year since some partners would need to assess the impact of a plan on other resource or land management plans. The timing would, of course, be subject to the complexity of the relationships between the partners and the endorsed outcomes.

Q18. Resourcing

What is the cost to develop and implement a watershed management plan and how should it be funded?

In general, participants felt that neither the provincial government nor AWC had a realistic impression of what it costs to develop a watershed management plan.

One of the challenges is that there is a distinction between collecting and analyzing the required data and writing the plan itself, with the former being much more expensive. The total cost is likely to be determined by data deficiencies. It was also noted that in-kind contributions sometimes make it difficult to estimate costs. At any rate, estimates ranged from between \$500,000 to \$3 million per year for three to five years. A more easily assimilated estimate was that the province could assume it would cost \$30 million to develop watershed management plans for the entire province, roughly equivalent to the budget of the proposed Alberta Water Research Institute. Environmental Impact Assessments conducted by industry, for comparison purposes, routinely cost between \$2 and \$6 million.

Participants did want to raise two related questions.

The first is that it is more important to decide the source than the amount of resourcing. One suggestion was that a fee for licence-holders would be the first step toward a ‘user fee’ that would help to enhance accountability for the wise use of a public resource. The second was the observation that it is much easier for WPACs to raise project funding from partners than it is to raise operational funds; they are constantly challenged to find sufficient money for routine operations.

Lastly, one WPAC, citing its success leveraging investment with government ‘seed’ funding, promised a 400% return on investment.

Q19. Authority of watershed management plans

What type of authority is needed to implement watershed management plans? Should they be mandatory, *i.e.*, backed with legislative force, or should they be advisory? Some combination of the two? How can WPACs/WSGs be assured that their efforts have value?

This question generated less diverse commentary than was anticipated.

In general, participants agreed that watershed management plans had to have some combination of mandatory and advisory effect. The intersection of jurisdictions once land use is incorporated complicates the question. Parameters related to water quality, quantity and conservation objectives can be easily enforced under the existing legislative and regulatory framework. Parameters related to land use are more difficult to enforce without further investigation and better integration of complementary land and resource management plans.

One means of distinguishing between mandatory and advisory elements was risk assessment. Those areas in which risk is high should be mandatory; those in which risk is low could be advisory. Some suggested that the Project Team should review the practices of the Clean Air Strategic Alliance, which is a combination of voluntary and mandatory, supported by regulation, measures.

Participants also noted that any WPAC member who “endorsed” a plan had a moral obligation to fulfill its commitment to achieving the outcomes in the plan. Annual reporting would help to enforce that obligation.

Participants noted that, under adaptive management, monitoring should lead to other actions in support of outcomes. They wanted the Project Team to help them learn how to address outcomes over the long-term and also to understand what it meant for the Province to provide the “legislative backstop.”

It was noted that it could take five years to get “watershed” included in current or new legislation. Some participants asked if elected officials had been engaged to ensure that they understood the implications of *Water for Life* and the strategic direction envisioned by the implementation of watershed management plans.

Q20. Accountability of *Water for Life* partners for implementation

How should responsibility and accountability for the implementation of watershed management plans – actions and outcomes – be distributed among *Water for Life* partners within a WPAC? Is there a special role for the provincial government?

If a WPAC partner has endorsed a watershed management plan but is not meeting its obligation to achieve the outcomes of the plan, how can the WPAC best work to resolve the discrepancy and help that partner to honour its commitment?

Should WPACs have a role with respect to legislated enforcement activity?

As noted above, workshop participants felt that any WPAC member who “endorsed” a plan had a moral obligation to fulfill its commitment to achieving the outcomes in the plan. There may be instances in which outcomes are not being met that could be resolved by providing opportunities to partners to adjust strategies, *etc.*, to better support those outcomes. Municipalities, as noted

above, are concerned about their capacity to meet watershed outcomes. Full implementation of a plan, dependent on capacity, could take five to ten years in some cases.

If there is a special role for government with respect to implementation, it is connected with monitoring, compliance and enforcement, roles that participants felt really should not be adopted by WPACs (or WSGs).

Most participants did not feel that WPACs have a role with respect to enforcement, which would undermine their ability to work cooperatively with member partners whose activity might be subject to enforcement action. At most, participants seemed to feel that WPACs could serve a ‘watchdog’ function in connection with assessing outcomes and performance but that the enforcement authority should remain with the provincial government.

Since the land use provisions of a watershed management plan would be outside the jurisdiction of Alberta Environment, participants noted that there must be a mechanism to involve other government departments and agencies to ensure implementation.

At the same time, several participants were concerned with the government’s current approach to voluntary compliance with industry, questioning why anyone who was not in compliance would voluntarily report on themselves. Industry participants said that the government’s current commitment to enforcement was inadequate and that, even internally, they were challenged to meet regulatory requirements because the province failed too often to enforce those requirements.

Some participants felt, as above, that the legislative weight of watershed management plans would be enhanced if they were formally approved by Cabinet.

Participants felt that the authority of a watershed management plan and the accountability of WPAC partners for its implementation were intimately linked but that until they had more clarity about government’s role, as captured above, it was difficult to make recommendations. There was a lengthy discussion of what it means to be the “legislative backstop” under current legislation, the lack of “watershed” in the *Water Act*, and the implications of Cabinet approval.

Q21. Integrating resource management plans

Where and how do you think linkages between watershed planning and other planning processes should be enhanced?

How should the goals and objectives of watershed management plans influence other management plans? And *vice versa*?

This question generated much discussion but participants were not able to make substantial recommendations on how best to resolve the challenges. However, they were keenly aware of the challenges of integrating a tremendous number of land and resource management plans, the highest profile initiative currently being the Land Use Framework. Still, there was very broad agreement that it is government’s responsibility to coordinate the integration of all these plans and initiatives.

Industry representatives said that they were certainly prepared to participate in this new process but that they required some certainty as well in order to operate. This meant that they could not manage multiple processes that had different requirements and different compliance targets.

Some participants suggested that regulatory overlap had to be eliminated; some suggested that the ‘most stringent’ plan should be the standard but that is more referential and integrative.

A large proportion of participants felt that plan integration can start with watershed management plans – the challenge is how to get recommendations through to decision-makers for action. Some suggested that the Province needed to adopt triple/quadruple bottom line planning across all ministries, which ought to support integration. And, of course, there are issues to be addressed by the other orders of government, municipal – including First Nations and Métis Settlements – and federal.

Appendix One: Workshop participants

November 20: Edmonton, West Harvest Inn

33 participants

Sector	Name	Appointing organization
Industry		
Chemical and petrochemical	Mike Wilchewski	Petro-Canada
	Wilfried Staudt	Petro-Canada
	Thomas A. Hewitt	Imperial Oil
	John Skowronski	Canadian Petroleum Products Institute
Forestry	Keith Murray	Alberta Forest Products Association
	Mark Spafford	ALPAC
Livestock	Carrie Selin	ILWG
	Doug Sawyer	Alberta Beef Producers
Mining	Marc Symbalic	Elk Valley Corporation
Oil and gas	Ronnie Sadorra	EnCana
Power generation	Ken Omotani	TransAlta
Non-government organization		
Environmental	Jason Unger	Environmental Law Center
Fishery habitat conservation	Peter Aku	Alberta Conservation Association
Lake environment conservation	Jay White	Alberta Lake Mgmt. Society
WPACs	Marsha Hayward	Beaver River Watershed Alliance
	Joe Prusak	Beaver River Watershed Alliance
	Les Gammie	North Saskatchewan WA
	Enneke Lorberg	North Saskatchewan WA
	Jeremy Enarson	Battle River Watershed Alliance
	David Samm	Battle River Watershed Alliance
WSGs	Peter Todd	Cooking Lake Group
	Connie Breznahan	Athabasca Bio-regional Society
	Jeff McCammon	Lac La Nonne Watershed Stwd
Wetland conservation	Trevor Matthews	Ducks Unlimited
GoA and prov. Authorities		
	Nelson Fok	Capital Health
Other government		
Federal	Susanne Forbrich	Environment Canada
	Stacey Smythe	Environment Canada
First Nations	Denise Hammel	TSAG (observer status only)
Large urban	Dave Thiele	City of Edmonton
	Len Bracko	City of St. Albert
Rural	Earl Graham	Clearwater County
Small urban	Roger Brekko	City of Lloydminster
	Bruce McIntosh	Summer Village of Island Lake

November 22: Slave Lake, Sawridge Inn and Conference Centre

Participants: 15

Sector	Name	Appointing organization
Industry		
Forestry	Vince Martell	Slave Lake Pulp
Livestock	Stuart McKie	Alberta Pork Producers
	David Anderson	EnCana
Non-government organization		
Environmental	Melissa Brade	Tipping Point Project
	Julie Asterisk	Regional Environmental Action Committee
Fishery habitat conservation	Ed Kolodychuk	AB Conservation Assoc.
WPACs	George Keay, Chair	Lesser Slave Watershed Council
	Gordon Sanders	Lesser Slave Watershed Council
WSGs	Sherri Larsen	Clear Hills Watershed Peace River
	Mike Rudakewich	
Wetland conservation	Stacey Wabick	
GoA and prov. Authorities		
Alberta Environment	Rod Burr	
	Brenda Ziegler	Aspen Health Region
Other government		
First Nations	Roberta Quock	LSLIRC (observer status only)
Small urban	Val Tradewell	Town of Slave Lake

November 26: Lethbridge, Sandman Inn

Participants: 26

Sector	Name	Appointing organization
Industry		
Irrigation	Mario Biemans	Seven Persons
	Lawrence Barany	Chin Ridge Farms Ltd
	Lynn Thacker	Lynn Thacker Ag Corp
	Harold Perry	
Livestock	Martin van Diemen	Alberta Chicken Producers
Oil and gas	Susan Patey-LeDrew	EnCana
	Dave Marks	EnCana
Power generation	James Guthrie	TransAlta
	J.M. (Jim) Hackett	ATCO Power Canada Ltd.
Non-government organization		
Environmental	Deborah Jarvie	Faculty of Mgmt, U of L
	Jennifer Matthews	SEAWA
Fishery habitat conservation	Noreen Ambrose	Cows and Fish
WPACs	Dale Christian	RDRWA
	Ken Miller	Milk River Watershed Council
	Stephanie Palechuk	Oldman Watershed Council
	Cheryl Fujikawa	Oldman Watershed Council
	Grayson Mauch	SEAWA
WSGs	Sandi Remiersma	WSG and WPAC Coordinator
	Brad Bustard	Pincher Creek WSG
	Diana Andrews	Lower Mosquito Creek Water Users Assoc.; SC Member, of Highwood Water Management Plan PAC
Wetland conservation	Julie Pierce	Ducks Unlimited
GoA and prov. Authorities		
	Bob Willard	Energy and Utilities Board
	Audrey Goodwin	Alberta Environment
Other government		
Federal	Shane Petry	Fisheries and Oceans
Large urban	Julie Friesen, Alderman	Medicine Hat
Small urban	Paul Goldade, Mayor	Village of Nobleford

November 27: Calgary, Calgary Radisson Airport Hotel

Participants: 32

Sector	Name	Appointing organization
Industry		
Forestry	Gord Lehn	
	Tom Daniels	Sundre Forest Products
Irrigation	Koos Wysbeek	
	George Poole	
	Tony Bos	
Livestock	Rich Smith	Alberta Beef Producers
Mining	Andy Etmanski	Sherritt International
	Wayne Tedder	Suncor
	Fred Payne	Syncrude
	Sue Lowell	Suncor
	Nancy O'Brien	TransAlta
	Dave Cooper	Matrix Environmental
	Dave Rushford	EnCana
Oil and gas	Debra Code	Enmax
Non-government organization		
Environmental	Carolyn Campbell	Alberta Wilderness Association
Lake environment conservation	Margaret Glasford	
WPACs	Mark Bennett	Bow River Basin Council
	Gloria Wilkinson	Bow River Basin Council
	Beverly Anderson	Red Deer River Watershed Alliance
WSGs	Mac Hickley	River Valleys Committee
	Eric Lloyd	Elbow Watershed Ptnshp
	Gary Lewis	Clearwater County
Wetland conservation	Don Watson	
GoA and prov. Authorities		
	Paul von Schoenberg	Calgary Health Region
	Bob Willard	EUB
Other government		
Federal	Bunny Mah	Agriculture and Agrifood Canada
Large urban	Barbara Lacey	City of Lethbridge
	Paul Goranson	City of Red Deer
Rural	Hugh Pepper	MD Bighorn
	Wayne Richardson	County of Paintearth
Small urban	Julian De Cocq	Cochrane
	Gary Wagner	Cochrane/AUMA

Total workshop participants: 106