

Understanding the Current and Potential Role of the Natural Resources Sector in Collaborative Approaches to Water Governance: *Summary of Survey Findings*

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Water
Policy and
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Group



Preface

This document presents the results of the survey administered for the study *Understanding the Current and Potential Role of the Natural Resources Sector in Collaborative Approaches to Water Governance*. The study was completed through a partnership between the Water Policy and Governance Group (WPGG) at the University of Waterloo and the National Round Table on the Environment and the Economy (NRTEE). It contributes to the larger study *Governance for Source Water Protection in Canada: A National Assessment* (www.governanceforwater.ca)

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1. Introduction

The study aimed to explore how natural resource sector firms perceive and experience collaborative approaches to water governance. Specifically, the study aimed to identify (1) benefits that accrue both to firms and the collaborative process, and (2) challenges for firms and to collaborative processes that result from the participation of natural resource sector firms in collaborative processes. Natural resource sector firms are emerging as key stakeholders in collaborative water governance in Canada. Through this work, we have improved understanding of the benefits and challenges of collaborative approaches at a time when they are increasingly being implemented in practice. Important implications for firms in the sector are presented here.

Our study took place through a two round online survey. In Round One, 22 respondents completed the survey. They represented large firms operating in Canada in the mining, oil and gas, forestry, and electricity generation sectors; 18 respondents completed the Round Two questionnaire. A complete listing of all responses collected through Round One (Appendix A) and Round Two (Appendix B) is included in this report for your information.

1.1. First round procedure

During the first round participants were asked to draw upon their experiences in responding to a series of open-ended questions. Because the questions were open-ended, study participants were not constrained in terms of the kinds of roles they could identify. Questions addressed the roles for natural resource sector firms in collaborative approaches to water governance, and the costs and benefits to participating in such approaches both for the firm and for the collaborative process itself.

First-round responses were collated and organized. No suggested outcomes were discarded, but similar suggestions were grouped and one was selected to represent the group so that the volume of information could be reduced. These responses formed the basis for the Round Two questions, which sought to determine the level of consensus or support for these statements across natural resource sector firms.

All first-round responses are collected in Appendix A. The table in the Appendix also shows how responses from the first round were aggregated to make the questions posed in the second round.

1.2. Second round procedure

In the second round, participants evaluated the major viewpoints expressed during the first round (i.e., the statements that represented one or more first round suggestions). This approach allowed participants to see what their anonymous peers thought about the key issues being considered and gave them a chance to re-evaluate their own suggestions. In total, 67 questions were presented based on the answers to the first-round open-ended questions.

To evaluate the suggested associated benefits and costs, panelists were asked to provide an overall rating of appropriateness (for roles) and significance (for benefits and challenges) for each statement using a four point rating scale. The option “can’t decide” was also provided. Data from the second-round questionnaire were analysed using the system outlined in Appendix C.

- *Consensus* measured whether or not the group agreed on the importance or unimportance of a statement. Possible results were high consensus, medium consensus, low consensus, or no consensus at all.
- *Agreement* indicates where on the rating scale there was a consensus if one occurred, e.g., a consensus on a statement being “Very Significant” or “Significant”.

This analysis permitted ready identification of statements the group as a whole accepted as either significant or insignificant, versus those over which the group was divided. The underlying assumption of this analysis is that if a diverse group of people with pertinent expertise agrees that an associated benefit or cost is significant, then it can tentatively be accepted as significant, and vice versa.

2. Results

2.1. The role of natural resource sector firms in collaborative approaches to water governance

Participants suggested 12 roles they thought were appropriate for natural resource sector firms in collaborative processes (Appendix A). Respondents came to a high consensus on a number of the proposed roles. High consensus existed on the appropriateness of the following roles:

- Represent our company's position to ensure the company's needs are addressed;
- Communicate potential impacts/risks of proposed courses of action;
- Provide clear, technically sound descriptions of the company's water use and explanations as to why water use is essential or important for the industry;
- Ensure stakeholders understand that risk/impact mitigation comes at a financial cost and that this trade-off is a key consideration in decision-making; and,
- Play an active role in decision-making processes that affect industry operations.

A high consensus also existed regarding the majority of other roles, albeit at a lower perceived degree of appropriateness (appropriate – very appropriate). Only one statement resulted in low consensus: Provide opportunities for other stakeholders to raise concerns/make suggestions that can lead to improvements in the company's operations.

These results suggest that participants believed that firms in the sector should participate within collaborative processes to provide information and to advance the firm's position. Collaborative processes provide an opportunity to educate other participants and to influence decisions that affect industry operations. The results indicate the perception that this path of communication is primarily one-way. In support of this finding, there was a low consensus on the suggestion that it is appropriate for other stakeholders in collaborative processes to suggest changes to the firm's operations. These results may indicate that from the perspective of industry, there are limitations as to what collaborative processes can accomplish.

2.2. Benefits for natural resource sector firms from participation in collaborative water governance processes

Sixteen distinct benefits for natural resource sector firms were synthesized from all of the suggestions offered by participants during Round One (Appendix A). In Round Two, when participants were asked to rate the significance of the benefit for their firm, there was a high degree of consensus across all the questions that all the identified benefits were significant or very significant. Benefits that were identified as high consensus, very significant, included the following:

- Gain understanding of the needs/interests/concerns of other stakeholders and what that may mean for our sector;
- Communicate with other stakeholders so that they better understand the role of industry, its interests in water supply and protection, and the challenges, opportunities and implications of decisions for our industry;
- Provide an opportunity for industry to be involved in policy development from the ground up;
- Participation allows industry to provide valuable input at key decision points to inform decision-making;
- Results in the development of stronger, more achievable policy;
- Results in the development of policy that has the support of industry; and
- Participation provides the opportunity to give input on effective methods to achieve a desired goal, while minimizing any negative impact to our industry.

Overall, these results indicate that collaborative processes offer real and important benefits to industry. These benefits included being able to communicate with and shape the perceptions of other participants, and participating in the decision/policy-making processes to shape outcomes. Results indicated that collaborative approaches create a more interactive and relationship-driven approach to decision/policy-making; this outcome was seen as beneficial to natural resource sector firms by study participants.

2.3. Challenges facing natural resource sector firms from participation in collaborative water governance processes

Eighteen distinct challenges for natural resource sector firms were synthesized from all of the suggestions offered by participants during Round One (Appendix A). In Round Two, when participants were asked to identify how significant the challenges identified through Round One were, there was high consensus that most of the challenges were significant to very significant for their firm. This indicates that participation in collaborative approaches does present a wide array of challenges for natural resource sector firms. However, the more interesting result may be the type of challenges that were identified.

Participant responses demonstrated “High” consensus on a number of “Very Significant – Significant” challenges (see Appendix B for this long list). What is important is that all of these challenges related to procedural aspects of collaboration, e.g., who is involved, how they participate, what is needed to build relationships, etc.

Respondents overwhelmingly rejected the view that challenges that address more fundamental concerns about the role and value of collaborative processes were significant for their firm. These included statements such as the following:

- Collaborative approaches are an inefficient way to make decisions;
- Collaborative approaches provide no direct benefit to justify the effort spent on participating;
- Unless collaborative approaches are a regulatory requirement it is difficult to justify the business case for participating as there are already regulatory processes in place that deal with water; and,
- It is difficult to know how to address potential conflicts between regulatory requirements and the requirements of collaborative approaches to decision making.

Participants were unwilling to reach agreement that these as represented challenges for their firm. These results indicate that while firms are well aware of more fundamental challenges associated with collaborative approaches, these challenges do not appear to significantly affect their decision to participate in such approaches. Participants were more concerned about the challenges associated with the operation of collaborative processes. These results suggest that natural resource sector firms support collaborative approaches and are concerned with improving the operation of such processes.

2.4. Benefits for collaborative water governance processes from natural resource sector firms participating in those processes

Eight distinct benefits for collaborative water governance processes were identified as flowing from natural resource sector firms participating in those processes (Appendix A). There was a high consensus that all of these benefits were very significant or significant to very significant. These benefits can be summarized under two themes: firms bring experience, expertise, and resources to the process and by doing so encourage better

informed decisions; and, collaborative processes benefit from industries in the natural resources sector communicating their positions to other stakeholders. Inherent in these themes is the assumption of participants that greater involvement of natural resource sector firms in decision/policy-making improves outcomes.

2.5. Challenges facing collaborative water governance processes from natural resource sector firms participating in those processes

Thirteen challenges for collaborative water governance processes from natural resource sector firm participation were synthesized from the responses to the open-ended questions (Appendix A). Two key themes emerged from the evaluation of these challenges in Round Two.

First, challenges for which there was high consensus that the issues identified were significant to very significant related to procedural concerns about the operation of collaborative processes. Specifically, they related to how industry was perceived by other stakeholders, whether participants had the authority to make agreements, complexity/science and how this was managed through the process, and concerns regarding resource and capacity challenges.

Second, for several statements there was medium or low consensus on the significance of some of the issues raised. This split opinion indicates that these were not seen as significant challenges. The statements that fell into this group related to the roles of industry in collaborative processes. For instance, participants rejected the notion that industry impedes the operation of collaborative approaches by withholding information or dominating proceedings and that industry may engage in collaborative processes with a narrow agenda. These results reinforce the finding that natural resource sector firms are concerned primarily with procedural aspects of collaborative processes, in particular, how they operate and how to make them more efficient/effective.

3. Conclusions

The most important finding from this survey is the high level of agreement reached by participants across all of the Round Two questions. This is noteworthy because participants represented a range of natural resource sector firms operating in the mining, oil and gas, electricity generation and forestry sectors located across Canada. Additionally, the identity of the participants was known only to the researchers. Thus, the results are not based on participants agreeing with each other in an open forum. This suggests that collaborative processes are experienced and perceived in similar ways by people working for natural resource sector firms despite sector and geographical differences.

Findings from this research also suggest that collaborative approaches to water governance provide real opportunities for natural resource sector firms to engage and influence decision/policy-making processes through an important new approach being used in contemporary water governance. Evidence suggests that firms benefit from collaborative governance processes and support their implementation. Firms are concerned

about how these processes operate, and are interested in opportunities to ensure they operate more efficiently/effectively. They also seem to believe that increased industry involvement in decision/policy-making will lead to better outcomes, and that collaborative processes enable this to occur.

The results indicate that collaborative processes offer natural resource sector firms the ability to interact and build relationships with other stakeholders, providing them the opportunity to inform opinion. While collaborative processes do provide the opportunity to understand the perspectives of other participant stakeholders, these perceptions do not significantly shape industry perspectives or operation. One reason for this may be the corporate structure and internal decision-making processes that are part of large natural resource sector firms.

An open question is the extent to which collaborative approaches are more or less effective than traditional, government-led approaches. Put another way, are the outcomes of collaborative governance processes better – socially, environmentally and economically – than traditional regulatory approaches. Similarly, the research does not offer any evidence to suggest one way or the other whether or not collaboration produces outcomes that are more equitable and sustainable. Given the financial and technical resources that natural resources sectors can bring to collaborative processes, these clearly are critical questions that demand further research.

What is clear from this study is that natural resource sector firms are aware of the challenges inherent in collaborative approaches to water governance, and that they believe that these challenges are outweighed by the benefits that these approaches offer, namely the ability to engage with and influence decision/policy-making from the ground up, and the ability to engage with, build relationships, and influence other stakeholders.

Finally, it is important to emphasize that collaborative approaches to water governance should not be viewed as universal alternatives to other ways of governing (e.g., through regulation or using market mechanisms). Collaboration is a tool and like all tools it has strengths and weaknesses. Developing a better understanding of these strengths and weaknesses from the perspective of one key player – firms in the natural resource sector – is an important step towards clarifying when collaborative approaches to water governance should be used.

4. Appendix A: Round One Survey Results

4.1. Q.1. What role(s) do you think that firms in your sector should play in collaborative approaches to water governance?

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • The ability to provide feedback and represent our company's position in a matter essential to our business is imperative. • The forest industry should help ensure our needs are addressed as are those of other stakeholders. • Water is vital in the production of pulp and paper. Water is used, biologically treated to purify it and then discharged back to the same water course from which it came. Water is not consumed; therefore the flow of the water course is generally not affected. However, significant volumes of water are required in most pulp and paper production processes and so water is a vital resource. Mills are often located where the supply of water is adequate. The mill may rely upon water for more than just the process: The mill may own a hydro electric facility and these mills rely on the river to supply electrical power to the facility 	<p>Represent our company's position to ensure the company's needs are addressed (e.g., ensure that adequate supply of water exists for industry purposes)</p>
<ul style="list-style-type: none"> • Regulators may not understand the consequences of a particular regulatory change, • Identifying the risk of extending delay when using a collaborative process • Our role is to communicate the science and information regarding our practices in a way that all stakeholders understand the true risks associate with our water management practices • This means educating people on the social, environmental and financial consequences in our activities in lay-terms using appropriate risk comparisons. • This also means we need to strive for consensus on the fact that resource development is a societal need and that impacts to the environment will occur. • understand potential impacts on water input on potential cumulative effects and solution 	<p>Communicate potential impacts/risks of proposed courses of action (e.g. for social, economic, environmental variables)</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Understand the business and how water is used • understand how much water is used and from what sources • The firms should also be active in consultation with all the key actors in the process to ensure that they are well informed of impact of water usage and the impacts of any proposed governance on the firms operations. • Our involvement is important so that other stakeholders understand what actions we are already taking and so that we can share the constraints or challenges we face. • Clarify real water impact associated with our industry 	<p>Provide clear, technically sound descriptions of the company's water use and explanations as to why water use is essential or important for the industry</p>
<ul style="list-style-type: none"> • People must understand that a no-negative impact scenario is not feasible and that regulatory processes like environmental assessments are in place to minimize the number and severity of impacts to the maximum extent practicable. Economics, whether people like it or not, are fundamental in decision making, so risk/impact mitigation is not proposed at any cost. 	<p>Ensure stakeholders understand that risk/impact mitigation comes at a financial cost and that this trade-off is a key consideration in decision-making.</p>
<ul style="list-style-type: none"> • By participating in these negotiations in a collaborative manner our partners have a say in how things are done and an ownership stake in the project. 	<p>Encourage ownership in the project by external stakeholders.</p>
<ul style="list-style-type: none"> • Ensure that all water use is protective of the environment. • undertaking mitigation planning related to mining sector impacts on watersheds to support sustainable development • contribution to integrated watershed management • Our responsibility is to find the most socially responsible ways to develop these resources in a sustainable manner. 	<p>Ensure that water is allocated/used in a socially responsible and sustainable manner</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • We have also bring resources to the table (money and people) that may allow for solutions which would otherwise not have been possible through just infrastructure management • Water is very important in many of our processes, and we have allocated significant resources in studying and understanding the political and scientific aspects surrounding water. This results in us having a lot of water related data, experts (e.g., hydrogeologists) that can appropriately interpret that data, and can thus provide informed opinions for consideration. • Firms in our sector are best suited to provide explanations of processes and systems that utilize water within our facilities and the associated water use data. • Providing the technical expertise and background context to challenges in order to inform decision-making • We need to ensure accurate information and data is being used and can bring our technical resources to support this. • We can also bring a national and possibly international perspective to regional collaborative initiatives • contributing to scientific studies related to watershed management 	<p>Bring resources to the table (money, technical expertise, research) to inform decision-making</p>
<ul style="list-style-type: none"> • For example, industry may not realize that landowners have a particular concern, and may be able to make voluntary changes to address it. • By participating in these negotiations in a collaborative manner our partners have a say in how things are done • Mining firms also have a responsibility to take feedback provided to them through collaborative governance approaches to accommodate concerns from other stakeholders where possible and explain why they cannot where it is not possible. 	<p>Provide opportunities for other stakeholders to raise concerns/make suggestions that can lead to improvements in the company's operations</p>
<ul style="list-style-type: none"> • Participate with transparency • Firms should provide clear, technically sound descriptions of their water use and explanations why water use is essential or important for the industry. • Firms in the mining sector have a role to play in providing information on their plans and activities to those responsible for making decisions and to those with an interest in the outcomes. 	<p>Participate in collaborative approaches with transparency. Provide information on company plans and activities to those responsible for making decisions and to those with an interest in the outcomes</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Firm prefers clear objectives to be able to measure effectiveness • Provide authorities with clear sustainable development goals 	<p>Encourage the development of clear objectives for the collaborative approach (i.e. to be able to measure effectiveness)</p>
<ul style="list-style-type: none"> • industry may be able to help regulators craft legislation that achieves the intended goal without too many unintended negative consequences • Also, if everyone understands the goal and their part in it, execution is much easier, and legislation need not be so prescriptive. Everyone can be entrusted to actively manage their own area of expertise to achieve a broad goal. • Firms that are water users should play a significant role in setting up governance. • Prior to decisions being taken (i.e. allocation policy) the electricity sector requires significant input into the implications of decisions. • The sector is unique because of the cross cutting policy issues that touch it and therefore can contribute that larger picture to the decision-making. • Responses to emerging issues needs close collaboration to ensure that all potential impacts are managed. • We can help create the legislation to ensure that it is written effectively to maximize its intent while minimizing impact to industry. • Sectors affected by any policy will be able to provide valuable feedback to the development process since it is in their best interest to ensure the policy is successful and achievable. • XXX intends to provide key pieces of information that will help provide a knowledge base from which solid policy decisions can be made. • XXX should also have an opportunity to review the final draft document in order to reinforce the information and feedback that was provided during the development process • Due to the obvious vested interest of firms in our sector to any newly developed water governance strategy or policy, firms should have the opportunity to provide insightful information and opinion and play a key role in policy and strategy development to ensure any new policy is both achievable and successful. • participating in design of efficient and effective governance frameworks that appropriately reflect interests and accountabilities 	<p>Play an active role in decision-making processes that affect industry operations</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • A complete (or as complete as possible) accounting of competing priorities is needed to craft maximally beneficial management plans. • The oil and gas industry contributes significant economic benefits to the provinces both in royalties as well as jobs, and any negative impact to the industry will affect a significant number of citizens. Therefore, it is important for our industry to be engaged in water governance processes to help strike a balance • to arrive at a best case solution for water usage 	<p>Help strike a balance between environmental, economic and social priorities</p>

4.2. Q.2. What benefits do firms in your sector receive from participating in collaborative water governance processes?

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • a positive corporate image promoting sustainable development • Participation allows us to put a face on our industry, show that there are educated, approachable people working here and working to improve our performance 	<p>Promote a positive corporate image.</p>
<ul style="list-style-type: none"> • Other benefits include getting a better understanding of the issues of the key actors and in some cases having the opportunity to correct misconceptions that may exist within the key actors organizations or contribute additional information (from environmental assessments or ecological risk reviews) that can be used in the development of the governance. • Identifying opportunities through exchange of concerns and dialogue, which happens frequently during development of collaborative management options, plans and strategies • The first benefit for collaboration is an understanding of other parties needs and interests. This helps shape the approach for any planned development to ensure it is sustainable and balanced. • Better perspective on issues facing other collaborators or the values they place on certain natural resources. The social side of this equation is sometimes missed or overlooked. • Build a stronger relationship with a multi-stakeholder group. 	<p>Gain understanding of the needs/interests/concerns of other stakeholders and what that may mean for our sector</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • I think there is a lot of misunderstanding about the priorities of our industry, and our willingness to work as a partner. There can sometimes be a perception that we'll throw money at a problem but aren't really willing to acknowledge the deeper issues. Working as part of these collaborative groups allows us to put a face on our industry, show that there are educated, approachable people working here and working to improve our performance • stakeholders have a better understanding of industries operations • The largest benefit, in my mind, is the opportunity to have an engaged dialogue with the various participants in an effort to clearly explain the nature of our facility operations; water use requirements; activities related to water conservation, studies conducted in relation to water use and releases. • The ability to provide information and convey individual views and perspectives specific to our company. • Provides an opportunity to provide our sectors activities, goals, challenges and successes first hand. • The benefits we receive are: - first hand understanding of concerns / interests that other sectors and stakeholders have and what that may mean for our sector. • By interacting with other groups of different perspectives, we can share information and learn from it. We can educate others about the specifics of oil and gas development, which is important to us due to the great deal of misinformation in the media. We can also learn from the diverse array of participants, and improve our processes from an economic, social, and environmental perspective. • We benefit from getting a better understanding of the issues other stakeholders are facing, and them understanding better our issues and constraints. This allows to identify solutions that would work better for all. • It's an opportunity for industry to educate the public and to hopefully bring the balance to the process. • Improves the understanding of decision-makers on the challenges, opportunities and implications that water governance has for our industry. e.g. We have a process by which the provincial ministry of environment, water manager, and DFO collaborate on identifying key fisheries issues related to our operations. Each regulator has separate but somewhat overlapping mandates. Our utility is often caught between competing regulatory interests and perspectives. The collaborative process that we have put together allows for regulators to discuss issues, and solutions so that all interests are recognized. • Other benefits include getting a better understanding of the issues of the key actors and in some cases having the opportunity to correct misconceptions that may exist within the key actors 	<p>Communicate with other stakeholders so that they better understand the role of industry; its interests in water supply and protection; and the challenges, opportunities and implications of decisions for our industry.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • better understanding of area issues • Managing the passage of water is necessary during the spring to avoid flooding and in the summer to avoid shortages and drought. Power generation has to respect the downstream industrial and recreational users. The best way to address the needs of all users is through collaboration. • The primary benefit has been that we have come to understand the concerns of our stakeholders - not just that certain concerns exist (which we may not previously have been aware of) but also the details of those concerns, all of which is necessary either to plan to rectify those concerns (where they are legitimate), or to begin a dialogue to educate stakeholders and put their concerns to rest. • We benefit from getting a better understanding of the issues other stakeholders are facing, and them understanding better our issues and constraints. This allows to identify solutions that would work better for all. • The first benefit for collaboration is an understanding of other parties needs and interests. This helps shape the approach for any planned development to ensure it is sustainable and balanced. • In addition, by participating in a collaborative process they may receive feedback on their operating plans that will allow them to improve their operations in ways that they wouldn't otherwise have considered. • The process of working together develops the capacity of communities by increasing social and economic benefits. • By interacting with other groups of different perspectives, we can share information and learn from it. We can educate others about the specifics of oil and gas development, which is important to us due to the great deal of misinformation in the media. We can also learn from the diverse array of participants, and improve our processes from an economic, social, and environmental perspective. 	<p>Learn from the diverse array of participants, and improve industry operations from an economic, social, and/or environmental perspective.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • community and stakeholder support; social license to operate • Input from regulators and stakeholders. Opportunity to increase understanding and acceptance of our operations. • The largest benefit is in the form of increased transparency of operation and an improved social license to operate. These aspects of operating a resource extraction business have become critical and firms but be prepared to operate with a level of transparency that they have not previously had to. • Participating in collaborate processes gives us a "social licence" to build and operate our facilities. We have faced criticism from export market participants regarding the effect of our projects on aboriginal people. By participating together with these communities collaboratively we are able to demonstrate a positive commitment to future interactions. Participating in a collaborative approach also assists us in developing better long term working relationships with communities and allows us to meet our workforce needs. 	<p>Participation builds community and stakeholder support for operations (i.e. achieving a 'social licence' to operate)</p>
<ul style="list-style-type: none"> • More creative, cost-effective solutions are often developed. 	<p>Participation leads to more creative, cost-effective solutions.</p>
<ul style="list-style-type: none"> • Having involvement in the process of policy development from inception is necessary to ensure there is a clear understanding of all relevant issues and will help to facilitate open discussion and valuable input from key stakeholders. • XXXs participation benefits the electricity sector greatly as it provides an opportunity to develop policy from the ground up and provide valuable input at key decision points. 	<p>Provide an opportunity for industry to be involved in policy development from the ground up.</p>
<ul style="list-style-type: none"> • XXXs participation benefits the electricity sector greatly as it provides an opportunity to develop policy from the ground up and provide valuable input at key decision points. • Ensuring that management plans take into account the unique requirements for our sector and in some cases, specific plant requirements 	<p>Allow industry an opportunity to provide valuable input at key decision points to inform decision-making.</p>
<ul style="list-style-type: none"> • generally better solutions to long water management • This in turn, results in a strong, achievable policy at the point of completion and has the support of the XXX and its members. 	<p>Results in the development of stronger, more achievable policy.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • A review of the final draft document will also provide an understanding of how all parts are tied together and ensure that information and input has been applied appropriately. • Ensuring that management plans take into account the unique requirements for our sector and in some cases, specific plant requirements • generally more consensus based regulation or governance 	<p>Results in the development of policy that has the support of industry.</p>
<ul style="list-style-type: none"> • Because water governance seems focused on the oil and gas, our participation allows us to find the most efficient way of achieving the intent or direction of governance, while minimizing any negative impact to our industry. 	<p>Participation provides the opportunity to give input on effective methods to achieve a desired goal, while minimizing any negative impact to our industry.</p>
<ul style="list-style-type: none"> • Avoiding enforcement from authorities - a positive impact to amend misleading regulations 	<p>Collaborative approaches provide an alternative to and reduce the need for regulatory approaches.</p>
<ul style="list-style-type: none"> • Overall, the process has served to help us (and others) anticipate potential problems, and devise solutions before situations become critical and/or confrontational. 	<p>Provides an opportunity to anticipate potential problems and devise solutions before situations become critical and/or confrontational.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Information for corporate planning and decision-making • Developing the overall management strategy, because it takes into account, all different perspectives, concerns, issues and objectives in a collaborative manner • Uncertainty and time delays are some of the most undesirable and expensive 'threats' to industry. By participating in collaborative governance processes, we can better predict how we will be governed in the future, and better prepare ourselves for that ahead of time, reducing both uncertainty, and time delays. • Allows for intelligent planning and investment decisions. For example, a hydro facility may have a 100 year lifespan, a coal-fired thermal facility is 45 years. In order to make an investment decision, utilities need to have some confidence that they will get an economic return on the investment. Ensuring adequate water allocation is key to this determination. • The benefits are ensuring that the firm can readily adapt to any new governance that is imposed for water usage/protection. This could include phased in governance over a reasonable period of time to allow firms to implement new technologies to improve effluent water quality to meet new standards. • For us, we get a direction that is cohesive (we have more certainty that we are operating in a way that addresses everyone's needs). • It has also been very useful in anticipating new regulation, and having the opportunity to provide input on what the least burdensome and most effective method may be to achieve a particular goal. 	<p>Participating enables firms to better predict how we will be governed in the future, and better prepare ourselves for that ahead of time.</p>
<ul style="list-style-type: none"> • Ensuring that other environmental requirements are considered, i.e. GHG management which could require Carbon Capture and Storage, a potentially very water intensive process; • The results have greater overall environmental benefit at a lower cost. 	<p>Collaborative approaches generally provide a better approach to water management for the long-term.</p>
<ul style="list-style-type: none"> • Ongoing access to resources 	<p>Participation in collaborative approaches provides an opportunity to ensure ongoing access to resources.</p>

4.3. Q.3. What challenges do firms in your sector face relating to participation in collaborative water governance processes?

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • If any party decides to not collaborate, i.e. participates as a win: lose, versus a win: win attitude 	<p>When any stakeholder decides to not collaborate (i.e. participates as a win-lose, versus a win-win attitude) it becomes difficult to reach decisions.</p>
<ul style="list-style-type: none"> • Over representation from a group, i.e. 90% ENGO, 9% Gov't, 1 % industry 4. If only certain voices monopolize the conversation 	<p>Certain voices monopolize the conversation, making it difficult to engage in a collaborative manner.</p>
<ul style="list-style-type: none"> • There is a great deal of misinformation in the media, that is often perception based, rather than science-based. A big challenge is informing public groups on the actual data, so that informed decisions can be made. • Not all participants are sufficiently informed about water issues and might influence less effective policies. • Finding common ground on issues that may cause an imbalance between sectors and/or government • Also, different interest groups and stakeholders may have conflicting priorities, opinions and mandates and the ability to find common ground is sometimes difficult. • It has been very difficult coming up with meaningful principles and guidance to endorse that work for all parties given the drastically different perspectives and priorities. • Significant politics are associated with water issues and the oil and gas industry. Some participants are motivated by influences unrelated to the intent of building sound water policy, which makes it more difficult to focus the issue. 	<p>Different interest groups and stakeholders may have conflicting priorities, opinions, and mandates making it difficult to find common ground.</p>
<ul style="list-style-type: none"> • the involvement of multiple partners/communities makes them very complex and contentious at times 	<p>Collaborative approaches involve multiple stakeholders in decision-making. This can make decision making complex and contentious.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • It has also been difficult understanding how the collaborative process fits into efforts underway to modernize BC's Water Act. The negotiations are slow and there is not a strong sense of understanding of what the end product will be and how it will be used. • The process can increase risks and must be managed carefully. • prior to posting changes to water governance for broader public consultation, it would make sense to have utilities consulted ahead of that process to ensure that whatever changes are proposed are realistic and not unwittingly detrimental. • In general, the dialogue around water governance is very focused on conservation and the absolute protection of water quality and quantity with little sense of what kinds of impacts are acceptable for the purposes of sustaining our society and for providing the economic and social opportunities necessary to support rural communities. 	<p>Outcomes from collaborative processes are uncertain, increasing the risk that outcomes from this approach may negatively affect industry. Not all participants are sufficiently informed about the issues. In this environment it becomes a challenge to ensure that proposed outcomes are realistic and not unwittingly detrimental.</p>
<ul style="list-style-type: none"> • Get an efficient process with clear outcomes • Uncertainty about the outcomes • The current regulatory process already requires stakeholder consultations at the environmental assessment stage of projects, so is this collaborative process really needed? • Water governance processes generally take a lot of time, which increases uncertainty and potential time delays for us. • No direct benefit to justify spending effort 	<p>Collaborative approaches are an inefficient way to make decisions. Collaborative approaches provide no direct benefit to justify the effort spent on participating.</p>
<ul style="list-style-type: none"> • Unless this process is a regulatory requirement, the challenge will always be in justifying the business case for participating. Why participate if we already have regulatory processes in place that deal with water. 	<p>Unless collaborative approaches are a regulatory requirement it is difficult to justify the business case for participating as there are already regulatory processes in place that deal with water.</p>
<ul style="list-style-type: none"> • Addressing "collaborative" water initiatives / governance as well a regulatory agency initiatives. How to address potential conflicts between federal / provincial regulatory requirements and collaborative requirements. 	<p>It is difficult to know how to address potential conflicts between regulatory requirements and the requirements of collaborative approaches to decision making.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> the formative stages of the collaborative water governance processes I have been exposed to have lacked clarity. It has been challenging to get agreement that our company should come forward in a leading role when the process is unclear, and the participation of all key players needed for success, including First Nations, is not a given. We are required to commit with no guarantee of what the process or governance model will look like. 	<p>The formative stages of collaborative processes lack clarity. It is difficult to justify committing to the process when there is no guarantee of what the process or governance model will look like.</p>
<ul style="list-style-type: none"> Trust is probably the biggest issue. You don't get much of a dialogue if your partner in the conversation thinks you're "all talk" - that you have no authority to act on what you're saying or that you might be actively misleading them so as to get "your way." The dialogue is also most productive if people can be frank about their experiences and priorities, and trust and open mindedness is needed to achieve that. Without trust, the conversation stagnates in the superficial: broad motherhood statements that don't get into the real issues or how to resolve them. 	<p>Collaborative processes can be unproductive unless people are frank about their experiences and priorities, and demonstrate trust and open mindedness.</p>
<ul style="list-style-type: none"> If there is not representation by all parties, the risk of something being overlooked 	<p>If there is not representation by all affected stakeholders there is a risk that something may be overlooked</p>
<ul style="list-style-type: none"> Significant negative misinformation exists in the media about the oil and gas industry, and we must direct significant effort to correct these misperceptions and win back the trust of those who have lost confidence in the industry. This reduced the time and effort that can be spent on the issue at hand 	<p>Time required to correct misperceptions and gain trust reduces the time and effort that can be spent on addressing the issue at hand</p>
<ul style="list-style-type: none"> The stigma that industry is singularly focused and not truly interested in the collaborative process. 	<p>The stigma that industry is singularly focused and not truly interested in the collaborative process is a challenge we face.</p>
<ul style="list-style-type: none"> Getting First Nations involvement or buy-in remains a challenge to be overcome. 	<p>Getting First Nations involvement or buy-in remains a challenge to be overcome.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Main challenges are the limited human resources available to participate. These processes are time consuming, and over the years, personnel has been drastically reduced, hence making it more difficult to be available for preparing and participating in these processes. • The main challenge is making resources available to participate in these processes. This is due to on-going work at the firm as well as the demand for other regulatory areas for similar participation. • Our industry receives numerous requests to sit on organizations, such as the WPACS in Alberta, and while we try to do our best, it is time consuming and increases an already heavy workload of our employees. • The risk of not sitting on organizations involved in water governance processes, is that governance is created that will either be less effective, or that might have unintended consequences. • At this time one of the challenges could be the cost of participation in the collaborative water governance process; some firms may not be able to attend a large number of face to face meetings due to budget restrictions. Face to face meetings are important in this type of process and it is important to have a balanced approach to meeting events and locations. • Generating or collecting information to be fed into the process in restricted time frames. • Funding challenges associated with information generation • However, if the process becomes overly cumbersome there could be challenges in terms of resources. • resourcing (staffing) needs to participate in potential numerous regional collaborative initiatives • Limited amount of time available for key personnel. • Limited resources (time) 	<p>Making resources available to engage in collaborative processes is a challenge.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • the process takes significant time and becomes more costly • Water governance processes generally take a lot of time, which increases uncertainty and potential time delays for us. • out of control of the timeline • There is a perception in industry that by participating in a process like this will slow the approval process for projects or activities. Arriving at a decision by committee is normally painstaking and very time consuming. 	<p>Collaborative processes slow the approval process for projects or activities.</p>

4.4. Q.4. How do collaborative water governance processes benefit from the participation of firms in your sector?

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Our priority is not always "to be regulated less" and we do want to work with other stakeholders to ensure we and others are regulated WELL to achieve certain collective goals. • The outcome is better understood by all stakeholders. • The result is better accepted because the process to get there and constraints in coming up with the solution are understood. • There is less of a chance of encountering unexpected and unwanted consequences. • This information is valuable when drafting governance to ensure that there is a balance between protection of the environment and sustainable development • As mentioned with the fisheries committee, it has allowed for regulators to make decisions that are more beneficial and less costly) • Utilities as operators on water systems have unique knowledge and experience to bring to the table which will allow for better informed decisions to be made. • they are directly affected by the decision making process. • Review of the final draft will also benefit the collaborative process as it provides an opportunity for the sectors to reinforce all information that was provided in the policy development. • This will ensure that the policy development is headed in the right direction and increase the probability of implementing a successful policy on water use. • The resulting outcomes of the process are more likely to be based on sound technical basis, and if implemented, are more likely to be both manageable and effective. • Mining is undergoing a transformation at this time - there is increasing realization of the need to contribute to sustainability in order to maintain social license to operate. The leaders are motivated to make collaborative governance successful. 	<p>When industry is involved in collaborative approaches there is less of a chance of encountering unexpected and unwanted consequences.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • In the above mentioned forums, we are given ample opportunity to voice concerns and contribute to solutions with other stakeholders, balancing all concerns and viewpoints to arrive at the best solution for all stakeholders in a WIN:WIN environment • It also allows utilities to get a better understanding of other perspectives so that they can plan and evolve their operations in concert with those perspectives. 	<p>Participation of industry helps to identify win-win solutions to problems.</p>
<ul style="list-style-type: none"> • The process itself benefits when we participate because it becomes more complete. If a large player in watershed management declines to participate the validity of the process is questioned. • The success of any policy depends on those it applies to and having input and collaboration of those sectors at every point of policy development is crucial. 	<p>Industry, as a large stakeholder in water governance, adds validity to the process through participation.</p>
<ul style="list-style-type: none"> • Organizations participating in the governance process can learn about the oil and gas industry and gain a better understanding of water issues and our industry. • stakeholders have a better understanding of our business its need for water and our interests in water supply and protection. • It raises the understanding of those involved of our role and implications of governance on our ability to meet our mandate. • How we operate, what's important to us, what we have already achieved and what we are planning to do. 	<p>Participants in collaborative processes gain a better understanding our business, its need for water, and our interests in water supply and protection.</p>
<ul style="list-style-type: none"> • It also may help to break down possible negative perceptions of the forest industry. 	<p>Industry involvement in collaborative processes can help to break down possible negative perceptions of industry</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • The process would benefit from sound technical input and descriptions of the important role water-use plays in our industry. • The process benefits because firms can bring both experts and information to the table. In most cases the firms have historical information on releases to water bodies and also research or studies on the environmental effects of the releases • It is vital for water governance processes to include oil and gas industry representatives. This is because (a) they have significant knowledge and history on the topic, • Again, our firms are best suited to provide system and process related information along with associated related context. • The collaborative water governance processes benefit from the expertise of water uses and demands of the electricity sector. • They can benefit from the varied experience consulting firms have with respect to local and international water management approaches, leading edge science & technology, innovative solutions based on experience from other clients or jurisdictions. • Collaborative water governance processes benefit by getting information and data on our sectors operation. • The process would benefit from sound technical input and descriptions of the important role water-use plays in our industry. • The mining sector conducts extensive monitoring. We have a lot of data to bring to the table. We also are required to do extensive modelling and predictive work in watersheds where we work. • The mining sector can contribute financially 	<p>Collaborative processes benefit from industry participation because natural resource sector firms can bring both experts and information to the table.</p> <p>Natural resource sector firms have knowledge, experience and financial resources to bring to the table which will allow for better informed decisions to be made.</p>
<ul style="list-style-type: none"> • The oil and gas industry can offer significant knowledge, experience, and expertise in issues surrounding water policy, which will help the policy achieve its intent, maximize its efficiency, and be sustainable in the long term. • The oil and gas industry can help identify and prevent potential unintended consequences of draft policy 	<p>Industry can help identify and prevent potential unintended consequences of draft policy</p>

4.5. Q.5. What challenges do collaborative water governance processes face from firms in your sector participating in those processes?

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> Some solutions may be better suited to certain types of generation technologies or plant design than others. The way to address these challenges is to ensure equal participation and to listen to all concerns in the development of a management strategy for water. The key will be to ensure that the firms are sharing information that they have in their possession to ensure that any governance that is developed provides a good balance between the protection of the watershed and sustainable development. 	<p>Ensuring that firms are sharing all relevant information that they have in their possession can be a challenge.</p>
<ul style="list-style-type: none"> Some oil and gas industry representatives might put forth issues motivated by their own political agendas rather than to promote the intent of the policy. These need to be teased out. Different opinions from individual companies, i.e. opinion of a company that only had wind farms would be different from a company such as XXXX that has wind, Hydro and thermal generation facilities. 	<p>Industry may engage in collaborative processes with a narrow agenda.</p>
<ul style="list-style-type: none"> The biggest challenge will be the argument that the firm is causing no ill effects to the watershed therefore there is no need to produce additional or enhance existing governance. This will likely be at odds with the position taken by a number of other key actors that are involved in the collaboration. The challenges that face a collaborative water governance process would result from the incorporation of multiple viewpoints from multiple sectors. It will be challenging to ensure the needs of multiple users are understood to the extent that would help define clear, effective policy. 	<p>What industry hopes to achieve through the process can be incompatible with what other participants hope to achieve.</p>
<ul style="list-style-type: none"> I am aware that in the past mining companies have been dominant forces in some planning processes. There is a risk of that if planning groups are not well balanced. 	<p>Industry may come to dominate within collaborative processes, resulting in a process that is not well balanced.</p>
<ul style="list-style-type: none"> I suspect those participating in water governance processes will receive conflicting information about the oil and gas industry, and will the difficult job of deciding which information is the most representative. 	<p>Participants in the process receive conflicting information about issues, and have the difficult job of deciding which information is the most representative.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Because the oil and gas industry requires water for producing oil and gas, we have devoted significant resources to increasing our efficiencies, and have already picked the 'low hanging fruit'. Further efforts will be difficult and/or expensive. • No direct benefit to justify spending effort 	<p>Industry has devoted significant resources to increasing our efficiencies, and have already picked the 'low hanging fruit'. Further efforts will be difficult and/or expensive.</p>
<ul style="list-style-type: none"> • One of the largest challenges are regional differences across the country in that water use challenges in one area or region may not be the same as another area or region. These differences could lead to a difference of opinions as to the path going forward. 	<p>Regional differences in water use and availability across the country present barriers in developing consistent approaches.</p>
<ul style="list-style-type: none"> • I'm trying to think of a downside to having us at the table, and I'm failing to do so! • It is also clear that the benefits of a collaborative approach on water governance, far outweighs any challenges. 	<p>The benefits of a collaborative approach to water governance far outweighs any challenges.</p>
<ul style="list-style-type: none"> • Provided you have the right person, i.e. someone who has some authority to act on what's agreed to, and wants to listen to stakeholders as much as promote our own perspective. 	<p>If the industry representative does not have the authority to act on what is agreed then the process will have limited impact.</p>
<ul style="list-style-type: none"> • These participants have to achieve a sense of trust in the oil and gas industry. • some may not believe the data / information our industry provides because we paid a consultant to obtain this information for us. • Generally poor reputation of the industry as a whole • Negative perceptions of many stakeholders related to industry 	<p>The negative perception of some stakeholders of industry inhibits the collaboration process.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Having adequate knowledgeable resources available to participate will be a challenge. • Because of the broad impact of our operations, we are asked to participate in a variety of external provincial and federal consultative processes. There are many processes underway at any one time and we simply do not have the resources to be able to participate in a meaningful way in many of them. • Resources • A potential challenge might involve getting in contact with the correct industry representatives. Suggest a proper avenue would be through CAPP. • Dedicating people to the team for the duration of the process • Delays in implementation due to the longer time for developing the processes. • The challenge to the processes from firms will be to ensure an efficient, meaningful process. 	<p>Being able to fully participate in the process can be a challenge as allocating adequate resources to meet demand is difficult.</p>
<ul style="list-style-type: none"> • The oil and gas industry is extremely complex, and governance participants will have to devote a significant time to learning about how the policy will affect the oil and gas industry, and ultimately how to create effective policy to achieve its intent with respect to the oil and gas industry. • Participants will have to understand the context of public concern, which often is raised in non-Canadian jurisdictions, and appropriately apply it to Canadian jurisdictions. Legislation affecting water policy in the oil and gas industry is numerous, hard to find, and complex. Significant effort will be required to understand the implications of policy-policy interaction. • Understanding of the science behind water management including effects of climate change and land based decisions on basin water balances. The challenge of communicating a complex science to the un-initiated. • another challenge may be in trying to understand a complex (in some cases) industrial process and how our operations compare with others around the world. 	<p>Issues that are dealt with are extremely complex. There is a challenge in communicating complex science/problems to other participants so that they can make informed decisions.</p>

All Round One Responses	Round Two Questions Derived from Round One Responses
<ul style="list-style-type: none"> • Processes that are unfocussed and demand excessive time make it difficult for industry to maintain continued support. • Ensuring that there are clear terms of references and outcomes defined would make it easier to allocate resources where they will have the best fit. • Uncertainty about the outcomes 	<p>Decision-making processes that are inefficient/unfocussed make it difficult for industry to maintain continued support.</p>

5. Appendix B: Round Two Survey Results

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Please indicate the extent to which you believe the following roles are appropriate for firms in your sector when they are engaged in collaborative approaches to water governance.							
Represent our company's position to ensure the company's needs are addressed (e.g., ensure that adequate supply of water exists for industry purposes)	0	0	3	15	0	High	VA
Communicate potential impacts/risks of proposed courses of action (e.g. for social, economic, environmental variables)	0	0	3	15	0	High	VA
Provide clear, technically sound descriptions of the company's water use and explanations as to why water use is essential or important for the industry.	0	0	5	13	0	High	VA
Ensure stakeholders understand that risk/impact mitigation comes at a financial cost and that this trade-off is a key consideration in decision-making.	0	0	5	13	0	High	VA
Encourage ownership in the project by external stakeholders.	1	5	7	5	0	Low	NONE
Ensure that water is allocated/used in a socially responsible and sustainable manner	0	1	9	8	0	High	VA-A
Bring resources to the table (money, technical expertise, research) to inform decision-making	0	3	7	8	0	High	VA-A
Provide opportunities for other stakeholders to raise concerns/make suggestions that can lead to improvements in the company's operations	1	5	7	5	0	Low	NONE

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Participate in collaborative approaches with transparency. Provide information on company plans and activities to those responsible for making decisions and to those with an interest in the outcomes	0	2	9	7	0	High	VA-A
Encourage the development of clear objectives for the collaborative approach (i.e. to be able to measure effectiveness)	0	1	7	10	0	High	VA-A
Play an active role in decision-making processes that affect industry operations.	0	0	4	14	0	High	VA
Help strike a balance between environmental, economic and social priorities	0	2	6	10	0	High	VA-A
Please indicate the extent to which you believe these benefits from participation in collaborative water governance processes are significant for firms in your sector							
Promote a positive corporate image.	0	0	7	11	0	High	VS-S
Gain understanding of the needs/interests/concerns of other stakeholders and what that may mean for our sector	0	0	3	15	0	High	VS
Communicate with other stakeholders so that they better understand the role of industry; its interests in water supply and protection; and the challenges, opportunities and implications of decisions for our industry.	0	0	4	14	0	High	VS
Learn from the diverse array of participants, and improve industry operations from an economic, social, and/or environmental perspective.	0	1	12	5	0	High	VS-S

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Participate in collaborate processes to build community and stakeholder support for operations (i.e. achieving a 'social license' to operate).	0	0	8	10	0	High	VS-S
Participation leads to more creative, cost-effective solutions being developed.	0	0	10	7	1	High	VS-S
Provide an opportunity for industry to be involved in policy development from the ground up.	0	0	3	15	0	High	VS
Participation allows industry to provide valuable input at key decision points to inform decision-making.	0	0	0	18	0	High	VS
Results in the development of stronger, more achievable policy.	0	0	1	17	0	High	VS
Results in the development of policy that has the support of industry.	0	0	5	13	0	High	VS
Participation provides the opportunity to give input on effective methods to achieve a desired goal, while minimizing any negative impact to our industry.	0	0	3	15	0	High	VS
Collaborative approaches provide an alternative to and reduce the need for regulatory approaches.	1	0	9	8	0	High	VS-S
Provides an opportunity to anticipate potential problems, and devise solutions before situations become critical and/or confrontational.	0	0	6	11	1	High	VS-S
Participation enables firms to better predict how we will be governed in the future, and better prepare ourselves for that ahead of time.	0	1	2	15	0	High	VS
Collaborative approaches generally provide a better approach to water management for the long-term.	0	0	11	6	1	High	VS-S

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Participation in collaborative approaches provides an opportunity to ensure ongoing access to resources.	0	1	7	10	0	High	VS-S
Please indicate the extent to which you believe these challenges relating to participation in collaborative water governance processes are significant for firms in your sector:							
When any stakeholder decides to not collaborate (i.e. participates as a win-lose, versus a win-win attitude) it becomes difficult to reach decisions.	0	2	6	9	1	High	VS-S
Certain voices monopolize the conversation, making it difficult to engage in a collaborative manner.	0	2	11	4	1	High	VS-S
Not all participants are sufficiently informed about the issues. In this environment it becomes a challenge to ensure that proposed outcomes are realistic and not unwittingly detrimental.	0	0	8	9	1	High	VS-S
Different interest groups and stakeholders may have conflicting priorities, opinions, and mandates making it difficult to find common ground.	0	0	11	6	1	High	VS-S
Collaborative approaches involve multiple stakeholders in decision-making. This can make decision making complex and contentious.	0	0	10	7	1	High	VS-S
Outcomes from collaborative processes are uncertain, increasing the risk that outcomes from this approach may negatively affect industry.	0	5	10	2	1	Medium	VS-S
Collaborative approaches are an inefficient way to make decisions.	3	3	9	1	2	Low	S

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Collaborative approaches provide no direct benefit to justify the effort spent on participating.	3	10	3	0	2	High	I-VI
Unless collaborative approaches are a regulatory requirement it is difficult to justify the business case for participating as there are already regulatory processes in place that deal with water.	1	5	10	0	2	Medium	S
It is difficult to know how to address potential conflicts between regulatory requirements and the requirements of collaborative approaches to decision making.	1	5	6	3	3	NONE	NONE
The formative stages of collaborative processes lack clarity. It is difficult to justify committing to a process with no guarantee of what the process or governance model will look like.	0	3	11	3	1	High	VS-S
Collaborative processes can be unproductive, unless participants are frank about their experiences and priorities, and demonstrate trust and open mindedness.	0	0	8	9	1	High	VS-S
If there is not representation by all affected stakeholders there is a risk that something may be overlooked	0	2	11	3	2	High	VS-S
Time required to correct misconceptions and gain trust reduces the time and effort that can be spent on addressing the issue at hand	3	5	8	1	1	NONE	NONE
The stigma that industry is singularly focused and not truly interested in the collaborative process is a challenge we face.	1	4	11	1	1	Medium	S
Getting First Nations involvement or buy-in remains a challenge to be overcome.	0	1	6	8	3	High	VS-S
Making resources available to engage in collaborative processes is a challenge.	0	2	8	7	1	High	VS-S

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Collaborative processes slow the approval process for projects or activities.	0	2	8	7	1	High	VS-S
Please indicate the significance of the benefits to collaborative water processes that result from firms in your sector participating in those processes							
When industry is involved in collaborative approaches there is less of a chance of encountering unexpected and unwanted consequences.	0	0	9	8	1	High	VS-S
Natural resource sector firms have knowledge, experience and financial resources to bring to the table which will allow for better informed decisions to be made.	0	0	4	13	1	High	VS
Participation of industry helps to identify win-win solutions to problems.	0	0	5	12	1	High	VS
Industry, as a large stakeholder in water governance, adds validity to the process through participation	0	1	5	11	1	High	VS-S
Participants in collaborative processes gain a better understanding our business, its need for water, and our interests in water supply and protection.	0	0	4	13	1	High	VS
Industry involvement in collaborative processes can help to break down possible negative perceptions of industry	0	0	8	9	1	High	VS-S
Collaborative processes benefit from industry participation because natural resource sector firms can bring both experts and information to the table	0	0	3	14	1	High	VS
Industry can help identify and prevent potential unintended consequences of draft policy	0	0	3	14	1	High	VS
Please indicate the significance of the challenges face collaborative water processes from firms in your sector participating in those processes							

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
Ensuring that firms are sharing all relevant information that they have in their possession can be a challenge.	0	4	9	3	2	Medium	VS-S
Industry may engage in collaborative processes with a narrow agenda.	0	5	9	2	2	Low	S
What industry hopes to achieve through the process can be incompatible with what other participants hope to achieve.	0	0	12	4	2	High	S
Industry may come to dominate within the collaborative process, resulting in a process that is not well balanced.	2	10	3	1	2	Medium	I
Participants in the process receive conflicting information about issues, and have the difficult job of deciding which information is the most representative.	0	4	10	3	1	Medium	VS-S
Industry has devoted significant resources to increasing our efficiencies, and have already picked the 'low hanging fruit'. Further efforts will be difficult and/or expensive.	0	1	12	4	1	High	S
Regional differences in water use and availability across the country present barriers in developing consistent approaches.	0	1	8	8	1	High	VS-S
The benefits of a collaborative approach to water governance far outweighs any challenges.	0	1	10	6	1	High	VS-S
If the industry representative does not have the authority to act on what is agreed then the process will have limited impact.	0	3	5	9	1	High	VS-S
The negative perception of some stakeholders of industry inhibits the collaboration process.	0	1	7	9	1	High	VS-S
Being able to fully participate in the process can be a challenge as allocating adequate resources to meet demand is difficult.	0	0	7	9	2	High	VS-S

Round Two Questions	Rating Distribution					Consensus	Agreement
	Very Inappropriate or Very Insignificant (VI)	Inappropriate or Insignificant (I)	Appropriate (A) or Significant (S)	Very Appropriate (VA) or Very Significant (VS)	Blank		
The issues that are dealt with are extremely complex. There is a challenge in communicating complex science/problems to other participants so that they can make informed decisions.	0	3	4	9	2	High	VS-S
Decision-making processes that are inefficient/unfocussed make it difficult for industry to maintain continued support.	0	4	7	5	2	Medium	VS-S

6. Appendix C: System Used to Analyze Round Two Data

The level of consensus is established by determining the percentage of ratings in the various categories. The point of agreement (if such occurs) is determined when calculating whether or not a consensus has occurred. The thresholds for the different levels of consensus strongly influence the results. Those used here are fairly conservative. However, because the distribution of ratings for each statement is included in reporting results, readers concerned about the impact of the thresholds used can judge the amount of consensus and the point of agreement for themselves. While blanks or non-responses were left out of the denominator in calculating percentages, they were considered when evaluating the results of the analysis. Specifically, a non-response rate of one third for a particular statement was selected as the boundary between a satisfactory and unsatisfactory group evaluation.

Example Statement	Consensus	Agreement	Rating distribution				
			Very Insignificant (VI)	Insignificant (I)	Significant (S)	Very Significant (VS)	-
Participation allows industry to provide valuable input at key decision points to inform decision-making.	High	VS	0	0	0	18	0
Participation provides opportunities for other stakeholders to raise concerns/make suggestions that can lead to improvements in the company's operations	Low	NONE	1	5	7	5	0

For the Rating Distributions, the following abbreviations are used^a:

- VS = Very Significant
- S = Significant
- I = Insignificant
- VI = Very Insignificant
- = Can't Decide

These are the ratings respondents were asked to use in Round Two.

'Agreement' indicates *where* there was consensus (if one occurred). Categories include the following:

- VS = Very Significant
- VS-S = Very Significant to Significant
- S = Significant
- S-I = Significant to Insignificant
- I = Insignificant
- I-VI = Insignificant to Very Insignificant
- VI = Very Insignificant
- NONE = Neither significant or insignificant

'Consensus' is a measure of the degree to which the group agreed on the importance of the statement (very significant, significant etc.). The following categories are used:

- High: 70% of ratings in 1 significance category or 80% in 2 related categories ^b
- Medium: 60% of ratings in 1 agreement category or 70% in 2 related categories
- Low: 50% or ratings in 1 agreement category or 60% in 2 related categories
- None^c: Less than 60% of ratings in 2 related categories

^a For questions regarding roles the wording "Appropriate" was used instead of "significant"

^b *Related* agreement categories are VS-S (and VA-SA for questions regarding roles), and SS-VI.

^c When consensus is 'None', significance is always ambiguous('None'). Thus, the respondent group is polarized on the assessment of the statement.

