

Farmers' Perspectives on Collaborative Approaches to Water Governance: *Summary of Findings*

Prepared for Agriculture and Agri-Food Canada

Contract Information: 01B68-120703/001/CY / 2012-01-31 (POR-060-11)

This report is also available in French

Le sommaire de ce rapport est disponible en français

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Water
Policy and
Governance
Group

June 5, 2012

Preface

This document presents the results of the survey administered for the study *Farmers' Perspectives on 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 Agriculture and Agri-Food Canada (AAFC).

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We would like to thank all of the study participants who contributed their time and energy in support of this study. We would also like to thank Stella Fedeniuk, our research partner at Agriculture and Agri-Food Canada. Alyssa Roth (Water Policy and Governance Group) provided invaluable support. This report was prepared by the WPGG and responsibility for any omissions or errors remains with the authors.

This report should be cited as

Murray, D. and R.C. de Loë. 2012. *Farmers' Perspectives on Collaborative Approaches to Water Governance: Summary of Findings*. Prepared for Agriculture and Agri-Food Canada. Waterloo, Ontario: Water Policy and Governance Group.

This study was made possible through the financial support of Agriculture and Agri-Food Canada, the Canadian Water Network, and the Social Sciences and Humanities Research Council.

Water Policy and Governance Group: About Us

The Water Policy and Governance Group (WPGG) is a multi-university research group. Our focus is water governance and water policy, primarily – but not exclusively – in Canada. Major themes in our research program include water security, source-water protection, water allocation, and adaptation to climate change. We conduct practical, policy-relevant research that contributes solutions to these problems.

Our success is grounded in our network of researchers and partners across Canada and around the world.

Graduate training is a central part of our mission. We accomplish our goals in large part because of the excellence of our graduate students, post-doctoral fellows, and research associates.

For more information about the WPGG, see www.wpgg.ca

Executive Summary

The term water governance refers to the way we make decisions that affect water. Governments are – and will continue to be – dominant actors in the water field. However, the roles of governments and non-government actors in water governance are changing. A particularly important trend in Canada is the increasing use of multi-sector, collaborative approaches to water governance where diverse actors work together to address problems. Farmers are emerging as key stakeholders in collaborative water governance in Canada. Developing a better understanding of these strengths and weaknesses of collaborative approaches from the perspective of farmers is an important step towards clarifying when collaborative approaches to water governance should be used.

This study aimed to explore how agricultural representatives perceive and experience collaborative approaches to water governance. Specifically, the study aimed to identify (1) benefits that accrue both to farmers and the collaborative process, and (2) challenges for farmers and to collaborative processes that result from the participation of producers in collaborative processes. Between January and March 2012 a two-round confidential online survey of farmers who had experience engaging in collaborative approaches to water governance was conducted¹. In designing the panel for the study, the aim was to include farmers who represented the types of farming operations in Canada.

An important finding from this survey is the high level of agreement reached by participants across many of the Round Two questions. This is noteworthy because participants represented a range of agricultural sectors located across Canada. This suggests that collaborative processes are experienced and perceived in similar ways by farmers despite sectoral and geographical differences. However, in interpreting these findings it must be acknowledged that some provinces and territories were poorly represented or not represented at all in the study. Future research with wider geographical coverage can examine this result in more detail.

The survey provided rich information on farmers' perspectives on collaborative approaches to water governance. Results of the survey suggest that participants see participation in collaborative processes as a “two-way street”. Farmers feel they both contribute to, and gain from, participation in collaborative approaches. Participants identified that participation brings learning, both in terms of technical knowledge and broader understanding about the problems, complexity, and governance processes. Farmers 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.

¹ The expenditures for this study totaled \$14,999.62

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1. Introduction

The term water governance refers to the way we make decisions that affect water. Governments are – and will continue to be – dominant actors in the water field. However, the roles of governments and non-government actors in water governance are changing. A particularly important trend in Canada is the increasing use of multi-sector, collaborative approaches to water governance where diverse actors work together to address problems. Examples of water governance in Canada where collaboration is used are found in Ontario (Source Protection Committees), Alberta (Watershed Planning and Advisory Committees) and Quebec (Watershed Organizations).

This study aimed to explore how agricultural representatives perceive and experience collaborative approaches to water governance. Specifically, the study aimed to identify (1) benefits that accrue both to farmers and the collaborative process, and (2) challenges for farmers and to collaborative processes that result from the participation of producers in collaborative processes. Farmers are emerging as key stakeholders in collaborative water governance in Canada². Through this work, we have improved understanding of the benefits and challenges of collaborative approaches at a time when they are increasingly being implemented across the country. Important implications for farmers and for collaborative approaches are presented here.

The methodology used in this study involved a two-round, online survey where farmer participants were anonymous to each other. In designing the panel for the study, the aim was to include farmers who represented the types of farming operations in Canada. Participants were selected based on two main criteria: (1) they farmed, some full-time and some part-time, and (2) they have had first-hand experience with collaborative approaches to governance for water in Canada. Round One questions were available in both official languages. Two approaches were used to recruit panelists:

- The second author drew on his own cross-Canada network of water practitioners to identify potential panelists and to solicit suggestions from people involved in collaborative water governance across Canada.
- Simultaneously, members of the research team identified potential panelists through review of publicly available participant lists from water-focused meetings and workshops and far.

Collectively, these techniques produced a preliminary list of 86 potential panelists who were contacted to confirm that they met the criteria and had the necessary expertise and experience. Some of the people contacted initially suggested other colleagues who had more appropriate expertise. In Round One, 25 people completed the survey (29% of those invited). In Round Two, 23 of the 29 Round 1 respondents completed the questionnaire. A complete listing of all responses collected through Round One (Appendix A) and Round Two (Appendix B) is included at the end of this report. In recognition of the time commitment involved, participants who completed both rounds of the study were offered a gift card from a local merchant.

² Expenditures for the study totaled \$14,999.62.

Participants farmed across Canada, with British Columbia and Ontario highly represented (Table 1). The strong participation of farmers from Ontario is due to the fact that Source Protection Committees in that province are mandated to include farmer representatives. Farmers were involved in a wide range of agricultural production activities (Table 2). Hay and field crops and livestock production were highly represented in the survey. Many farmers identified that they were engaged in multiple forms of production. Of the 23 Round 2 participants, 40% used irrigation. Attempts were made to recruit farmers from Quebec. Despite the questions being available in English and French, in the end no Quebec farmers participated. This speaks to the need for more targeted recruitment strategies and also has implications for the ability to generalize findings from the survey.

While the identity of participants was known to the researchers, participants remained anonymous to each other. The panelists themselves only knew that they were interacting with other farmers. This approach was adopted as anonymity contributes to maximum openness and candour.

1.1. First round procedure

Questions in the first round addressed the roles of farmers in collaborative approaches to water governance, and the challenges and benefits of farmers participating for both farmers and the collaborative process. Participants were asked to draw upon their experiences in responding to a series of open-ended questions. These questions allowed study participants to be unconstrained in terms of the kinds of roles, benefits and challenges they could identify.

First-round responses were collated, analyzed and synthesized. No suggestions were discarded during the synthesis process. However, similar suggestions were aggregated into general statements for Round Two that captured themes and issues raised in Round One. This greatly reduced the volume of information participants had to consider in Round Two. Synthesized statements formed the basis for the Round Two survey, which sought to determine the level of consensus or support for these statements across farming representatives.

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

Table 1: Participants by Province

Province	Number of Participants	
	Round 1	Round 2
British Columbia	8	6
Alberta	1	1
Saskatchewan	1	1
Manitoba	1	1
Ontario	12	12
New Brunswick	1	1
Prince Edward Island	1	1
<i>Total</i>	<i>25</i>	<i>23</i>

Table 2: Types of agricultural production undertaken by participants

Type of Agricultural Production	Number of Times Selected by Study Participants
Hay and field crops	17
Vegetable	4
Livestock (e.g., beef, swine, poultry)	14
Fruits, berries or nuts	3
Sod, nursery products or Christmas trees	2
Dairy	3

Note: Respondents could select more than one type of production.

1.2. Second round procedure

In the second round, participants evaluated the major viewpoints expressed during the first round (i.e., the aggregated statements). This approach allowed participants (1) to see what their anonymous peers thought about the issues being considered and (2) gave participants a chance to re-evaluate their own suggestions. In total, 67 aggregate statements were presented based on responses to the first-round open-ended questions.

To evaluate the suggested associated roles, benefits and challenges, panelists were asked to assess the degree to which they agreed with each statement using a four point rating scale. No “neutral” option was provided, in other words, participants were required to “Strongly Agree”, “Agree”, “Disagree” or “Strongly Disagree” with every statement. The option “can’t decide” was provided for cases where participants were unable to judge. Data from the second-round questionnaire were analysed using the system outlined in Appendix C. This simple technique allows for the identification of consensus and the level of agreement (where a consensus occurred).

- *Consensus* measures whether or not the group agreed on the plausibility of a statement. Possible results were high consensus, medium consensus, low consensus, or no consensus.
- *Agreement* indicates where on the rating scale there was a consensus if one occurred, e.g., a consensus on a statement where participants “Strongly Agree” or “Agree”.

This analysis permitted identification of statements the group as a whole accepted, 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 associated benefits or challenges are real, then it can tentatively be accepted as important relative to that group’s interests and perspectives.

2. Results

This section summarizes results according to the six questions that provided the basis for Round One.

2.1. The roles of farmers in collaborative approaches to water governance

Participants suggested eight roles they thought were appropriate for farmers in collaborative processes (Appendix A). Participants identified a desire to be integrated into decision-making processes. This is to be expected as all stakeholders seek to have their position heard and to influence decisions that will affect their practices. An unexpected finding was the multiple roles that participants identified as appropriate for farmers. For example, participants suggested that farmers needed to defend their right to farm, to ensure that water allocations are maintained to support farming, and to educate other stakeholders about farming practices and farming needs. This perspective may be at odds with other roles identified by respondents, such as building relationships, protecting water, rivers, and wetlands, better understanding the process of collaboration, and understanding water governance decisions-making.

Respondents came to a high consensus that they strongly agreed on the appropriateness of the following roles:

- Represent the needs of farmers and work to develop solutions that protect the interests of agriculture;
- Be involved in all aspects of decision making from the beginning; and,
- Educate other people about agriculture and the importance of water for agriculture.

A high consensus also existed regarding the other roles that were identified by respondents, albeit at a lower level of agreement (Strongly Agree – Agree). These roles concerned the importance of building relationships, protecting water, self-education, and initiatives producing acceptable compromises.

An important finding related to the identification of roles of farmers within collaborative processes. On one hand, participants supported (High Consensus, Strongly Agree) representing the needs of farmers and working to develop solutions that protect the interests of agriculture. Participants also supported (High Consensus, Strongly Agree - Agree) the role to protect water quality and quantity through stewardship activities. These results identify that participants believe that protecting water resources can be complementary to protecting farming rights.

There was an emphasis on the importance of education, both in terms of farmers educating others on the realities of farming and self-education by farmers of the impacts and opportunities of water governance. It is noteworthy that farmers identified the importance of compromising when participating in collaborative approaches. This result speaks to the potential to achieve meaningful outcomes from collaborative approaches and indicates that farmers are not inherently against compromise. Finally, the strong degree of consensus for the appropriate roles for farmers in collaborative governance indicates that farmers across Canada and representing diverse production sectors have similar views on their roles in collaborative approaches to water governance.

2.2. Benefits for farmers and the agricultural sector from participation in collaborative water governance processes

Sixteen distinct benefits for farmers were synthesized from all of the suggestions offered by participants during Round One (Appendix A). The benefits specific to individual farmers from participating in collaborative water governance processes identified by respondents can be classified under three themes. Benefits included the following:

- Learning: improving technical knowledge about farm practices, water quality and quantity problems, and the process by which they are being addressed;
- Educating/informing: contributing knowledge and experience to help craft decisions and outcomes; and,
- Protection: stability for their lifestyle and right-to-farm.

These results indicate that participants in collaborative water governance processes gain individual benefits from participation. Farmers feel that their participation contributes to creating better decisions and outcomes and offers them a way to defend and protect their way of life.

In Round Two, farmers had the opportunity to review the benefits identified in Round One and to identify the extent to which they agreed that they accrued to farmers from participating in collaborative approaches (Appendix B). Collaborative approaches vary from province-to-province, with each approach each having different mandates, roles and responsibilities, and membership. Despite these differences the results demonstrate a high level of agreement across statements, revealing that the benefits to farmers from participating in collaborative approaches are consistent across Canada.

The high consensus and strong agreement on benefits demonstrates that participation in collaborative approaches does offer real benefits to farmers in learning, educating/informing and protection themes. Participants clearly rejected the notion that farmers do not benefit from participation in collaborative approaches (Question 24, Appendix B). Participants strongly endorsed the notion that collaborative approaches can help to avoid regulations by demonstrating that problems can be addressed through good farming practices.

When asked to consider benefits that accrue to the agricultural sector as a whole from individual farmers participating in collaborative approaches participants respondents with benefits that can be classified under two themes:

- Strength in numbers: the sector as a whole benefits from an improved image and gains a stronger voice through which to influence decision-making; and,
- Building relationships: learning from each other and advancing their position through building relationships with other stakeholders (including government).

When considering benefits to the agricultural sector as a whole, participants came to a high consensus that they Strongly Agree- Agree with the synthesized benefits identified in Round One. These findings support the statement that farmers do perceive there to be benefits from participating in collaborative approaches, and that these perceived benefits are consistent across Canada despite differences in collaborative approaches.

2.3. Challenges facing farmers from participating in collaborative water governance processes

Sixteen challenges for farmers were synthesized from all of the suggestions offered by participants during Round One (Appendix A). They can be identified as personal or procedural challenges. Personal challenges included the following:

- Resources: time commitment is significant and there are costs associated with being away from the farm;
- Consequences: participation may reveal infractions; and,

- Capacity: building the technical knowledge needed to participate in the process requires commitment.

Six procedural challenges also were identified:

- Power differential: participants feel their perspective is overshadowed by other sectors;
- Limited continuity: participants change in the process, which makes it hard to build relationships and maintain momentum;
- Complexity: collaboration requires multiple stakeholders, making decision-making complex and challenging;
- Technical support: more help is needed to understand complex problems; and,
- Commitment: representing the farming community is difficult. There are multiple perspectives and not many individuals wish to make the commitment to participate.

When evaluating these challenges in Round Two participants determined that some challenges were commonly experienced, while others were not. There was a high consensus on Strongly Agreed – Agreed that the following challenges faced farmers when participating in collaborative approaches:

- Finding time to attend meetings is a challenge because time in meetings is time away from the farm;
- Everyone wants to do the right thing when it comes to the environment but it usually comes at an extra cost to farmers.
- It's difficult to stay on top of regulatory requirements and decision making processes.
- The agricultural perspective is often overshadowed in governance processes by other perspectives (e.g. urban demands).

Many of the procedural challenges identified in Round One, when presented in Round Two, failed to achieve a clear consensus (see Appendix B for complete list). Further, participants clearly rejected the statements that:

- Participation in collaborative decision-making processes is a waste of time; the results do not justify the commitment
- There is limited continuity in the process because people change on a yearly basis.

These results identify that while there are some widely perceived challenges related to participating in collaborative approaches; participants rejected the notion that these challenges are significant enough to limit participation in collaborative approaches. Further, challenges relating to the procedural aspects of collaborative approaches identified in Round One were not perceived as being significant when evaluated in Round Two. Finally, participants did not endorse the notion that farmers lacked the capacity to engage in water governance.

2.4. Benefits for collaborative water governance processes from agricultural representatives participating in those processes

There were seven distinct benefits identified that strengthen collaborative water governance processes through farmers participation (Appendix A). The benefits for collaborative water governance processes can be described under four themes:

- Relationships: participation encourages information sharing, a stronger voice for the agricultural sector, and leads to better outcomes by combining multiple perspectives and forms of knowledge;
- Education/information: farmers should provide knowledge and inform other stakeholders of their perspective in order to shape outcomes. The suggestion is that outcomes are better when they reflect this knowledge;
- Learning: farmers come to appreciate the challenges involved with water governance; and,
- Support: outcomes are more likely to be successfully implemented with the support of farmers.

There was a high consensus for all of the suggested benefits, with consensus occurring at Strongly Agree-Agree or Agreed. Inherent in these results is the perceptions held by participants that greater involvement of farmers in decision or policy making leads to better outcomes and a higher probability that outcomes will be successfully implemented. Such perceptions may explain the willingness of farmers to participate and to support collaborative approaches – they feel that their participation brings knowledge and experience that leads to better outcomes, not just for themselves but for wider society.

2.5. Challenges facing collaborative water governance processes from farmers participating in those processes

Eleven challenges for collaborative water governance processes that result from the participation of farmers were synthesized from the responses to the Round One open-ended questions (Appendix A). Challenges facing collaborative water governance processes can be described under three themes:

- Participation: it is difficult to get farmers to commit to the process, particularly in the growing season, or if they feel that they do not possess enough knowledge about water or related subject matter required in decision-making processes;
- Nature: farmers tend to be independent by nature, sometimes are unwilling to compromise, challenge perspectives that do not match their own, can be suspicious of government, and do not like to be told by others how to manage their operations; and,
- Relationships: some of the relationships between farming representatives and other sectors (including government) are not always the best. This can constrain collaborative processes.

When considering these statements in Round Two, participants rejected the notion that when farmers are involved in collaborative approaches the process takes longer. Participants did endorse the statements related to the nature of farmers, demonstrating high consensus that they Strongly Agree – Agree that

- Farmers' ideas may challenge the ideas of others;
- Farmers may resist change because they are sensitive to increased costs; and
- Farmers may be suspicious of government involvement.

However, for a number of other statements there was limited consensus. These included the statements that

- Farmers are individual and independent – so each will have a different opinion on the issue being addressed;
- Farmers may protect their own interests in the process and not be willing to reach a compromise;
- Intimidation from other stakeholders may stifle the ability of farmers to contribute to outcomes; and,
- Farmers may not understand some of the technical aspects of water problems.

These results reveal that while farmers identify that their personal behaviours and approaches can create challenges for collaborative approaches, they do not agree that these personal characteristics mean that they have trouble working with others or that they find it difficult to reach compromise. This contributes to the belief that their involvement does not make collaborative processes last longer.

3. Conclusions

An important finding from this survey is the high level of agreement reached by participants across many of the Round Two questions. This is noteworthy because participants represented a range of agricultural sectors located across Canada. Additionally, there was no possibility for collusion among the participants because their identities were known only to the researchers. Thus, the results are not based on participants influencing each other in an open forum. This suggests that collaborative processes are experienced and perceived in similar ways by farmers despite sectoral and geographical differences. However, in making this statement it must be acknowledged that some provinces and territories were poorly represented or not represented at all in the study. Future research with wider geographical coverage can examine this result in more detail.

The survey provided rich information on farmers' perspectives on collaborative approaches to water governance. The insights provided by participants reveal the conflicting roles that can occur when participating in collaborative processes. Farmers clearly are aware of the fact that they are representing themselves, their sector, and their way of life when they participate in collaborative processes. They are also aware that they are participating to develop decisions and outcomes that are to benefit the wider community, and society at large, rather than just to themselves. Nonetheless, farmers are independent and, as a sector, quite diverse and divergent in their perspectives.

Collaborative processes work best when participants are open to learning, hearing other perspectives, and new ideas. When participants adopt a defensive or self-interested position, collaborative processes are hindered, and may not be able to function efficiently and effectively. Hence, the willingness of farmers to work for larger social interests helps collaborative processes to succeed. At the same time, though, this willingness can create problems for farmers. Tension may result when farmers participate in collaborative processes with an "open mind", while other members of their community believe that they are involved only to advance the interests of their sector.

The individualistic nature of farmers was evident in the study. Farmers participating in this study saw themselves as individuals who could challenge the ideas and perspectives of others. They had confidence that they possessed knowledge and experience that, when integrated into the decision-making process, create better decisions. At the same time, participants stressed the need for decisions and outcomes to be based on "common sense", and the practical knowledge and experience that farmer's offer. Farmers view themselves as possessing valuable knowledge learned from years of experience, knowledge that may not be held by other sectors.

Participants believed that outcomes and decisions can be improved by incorporation of their practical knowledge. As a result, they saw their role as educating and informing other stakeholders about their knowledge. They believed that they are able to look beyond their own farm and their own situation and can contribute water governance solutions that benefit wider society. Participants stated that farmers are able to work with others and reach negotiated outcomes. This suggests that farmers are aware of the challenges that

they bring to collaborative approaches, but are also aware of ways to manage these challenges so that they do not negatively affect the collaborative process.

Results indicated that involvement in collaborative approaches offers real benefits to individual participants and to the agricultural sector as a whole. Collaborative approaches vary from province-to-province, with each process having different mandates, roles and responsibilities, and membership. Despite these differences the results demonstrate a high level of agreement related to the benefits – demonstrating that the advantages to participating in collaborative approaches are consistent across Canada.

Results of the survey suggest that participants see participation in collaborative processes as a “two-way street”. Farmers feel they both contribute to, and gain from, participation in collaborative approaches. Participants identified that participation brings learning, both in terms of technical knowledge and broader understanding about the problems, complexity, and governance processes.

What is clear from this study is that farmers 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. Participants identified a range of challenges relating to procedural aspects of collaborative approaches in the Round One survey. However, in the Round Two survey these were not identified as extensive challenges for participation in collaborative approaches.

An unresolved question is the extent to which collaborative approaches are more or less effective (socially, environmentally and economically) than other ways of making decisions that affect water (such as regulation). 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. These are critical questions that demand further research.

Finally, it is important to emphasize that collaborative approaches to water governance should not be viewed as universal alternatives to other decision-making approaches (e.g., government-led regulatory approaches). Collaboration is a way of making decisions and like all approaches to decision-making it has strengths and weaknesses. Developing a better understanding of these strengths and weaknesses from the perspective of one key player – the agricultural 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 farmers can and should play in collaborative approaches to water governance?

All Round One Responses	Round Two Statements of Roles Synthesized from Round One Responses
<ul style="list-style-type: none"> • Development of solutions. • If they don't speak up the urbanites will set all the regulations without regard for agriculture. • Modernizing water law in British Columbia will require shifting the governance of water from the province to a more local perspective through watershed management plans. As local entities take a larger role in governance, local stakeholders will also be consulted and take a larger role. Since producers are local they will be required to take on a larger role to ensure that the agriculture sector is treated fairly. • Although there are very few representatives for agriculture throughout the province on the Source Water Protection Committees, others have an opportunity to participate through the public consultations where public comments are welcomed and must be included in the policy papers that will be submitted to the Ministry of the Environment. Farmers need to send in their comments and be heard. • If they are to be targeted as source of water threats then they should play a major role in governance processes also to ensure that they face no competitive disadvantage because of governance. • In the Source Water Protection areas mandated by some governments most of the perceived threats are agriculture based. With our pro-active Environmental Farm Plans, Nutrient Management Plans and Strategy's and a level of common sense our role should be prominent • Farmers should be involved in the discussion process for determining alternative solutions as this affects us directly through land use, and water use. • If they are to be targeted as source of water threats then they should play a major role in governance processes also to ensure that they face no competitive disadvantage because of governance. • Without water there is no agriculture which means no food production. Farmers HAVE to be involved to sustain future food production. 	<p>Representing the needs of farmers and working to develop solutions that protect the interests of agriculture</p>

All Round One Responses	Round Two Statements of Roles Synthesized from Round One Responses
<ul style="list-style-type: none"> • Farmers involved with irrigation have an extreme vested interest in water policy and the effects of water allocations. Their livelihood and successes are based on the availability of this resource. The governance process should involve the consultation with this sector as they have learned many lessons over past years and are only too willing to help maintain the availability and supply of water to their operations. The Eastern Irrigation District has found that consultation and rewards are preferential to heavy handed governance. • We have no choice but to play a role if we want water. • Basic usage issues. • They should be involved as allocation of water between domestic use and food production is a critical part of any water governance system. • Farmers are the largest water license holders as a group in the province and therefore have a vested interest to collaborate on water governance processes. In many regions agricultural water demand is 70% or more. 	
<ul style="list-style-type: none"> • Farmer's need to be involved from the very beginning. Sometimes when new processes are implemented, the farmer's role is not taken into account and it may not be the best solution. But if the farmers are involved from the beginning and give their input, the ideas and outcome will be the best one for all involved. • They should be front and center. • I think that they should take an active role. • Be involved at all levels in water governance deliberations and decisions. • Farmers should play a significant role providing they know what their needs are. They should get involved on committees and round table discussions with other permit holders. • Consultation for new programs. 	<p>Being involved in all aspects of decision making from the beginning</p>
<ul style="list-style-type: none"> • General education of common folk on what really goes on at a modern farm; they seem to think the worst. • Common sense background in the water cycle, financial interest we drink it raw importance of the resource. 	<p>Educating other people about agriculture and the importance of water for agriculture</p>

All Round One Responses	Round Two Statements of Roles Synthesized from Round One Responses
<ul style="list-style-type: none"> • Communication is very important amongst farmers. In areas of low water farmers need to talk and self-govern themselves so that everyone gets their share of the water. • Collaborate with the main other user groups (residential, environment, industrial, etc.) • We can be willing to discuss the process with the local municipalities. • Partnerships for implementation. • Participating on peer review boards for agri-environmental projects. Participants in public consultations on source water protection. 	<p>Building relationships through collaboration with other farmers and with other interests</p>
<ul style="list-style-type: none"> • Avoid pollution in water • They need to be involved because for all water is essential • By practicing and using BMP and being good stewards of the land • Water is important to life and farmers are responsible for the life of their crops and animals. Therefore, Farmers should be at the front of any collaborative governance process. • Landowners in general and farmers in particular should play a primary role in this process. With our best management practices we assist in maintaining the viability of water courses and wetlands. 	<p>Helping to protect water quality and quantity through stewardship activities</p>
<ul style="list-style-type: none"> • Even taking time to go through the policy papers and becoming familiar with the mapping will help farmers to understand the impact the Clean Water Act could have on the way they do business in the future. • They need to understand that some of the policies are fair and some are not and the fact that compensation is not a word that the government wants to hear. 	<p>Educating themselves about the impacts of policies and regulations on agriculture.</p>
<ul style="list-style-type: none"> • They also need to make themselves familiar with the Ontario Drinking Water Stewardship money offered by the province to help the public make early changes and know how limited and inadequate this money is and also understand that money has still not been promised to continue into the years after 2012 when farmers will be required to comply with these new policies 	<p>Educating themselves about funding and other opportunities</p>

All Round One Responses	Round Two Statements of Roles Synthesized from Round One Responses
<ul style="list-style-type: none"> • Advisory role, where their input is listened to. Where there is consensus on the outcomes. To come to meetings and just talk without any follow up on outcomes is a waste of time and is how our governments of the past have run their consultations. Most of us have become disenchanted with that process, as we feel the outcomes are already decided. I would rather see more work put into finding a solution or compromise than have the rigidity of regulation forced on us. • We can accept the Ontario source water plan for farms that we are proposing. 	<p>Ensuring that collaborative processes produce acceptable compromises</p>

4.2. Q.2. How do individual farmers benefit from participating in collaborative approaches to water governance?

All Round One Responses	Round Two Statements of Benefits Synthesized from Round One Responses
<ul style="list-style-type: none"> • Educational and informative, especially for the young farmers. • They obtain a better understanding of water issues within their watershed. • Awareness of the water situation throughout the season • Farmers will receive up to date information, and get more in tune with the environmental implications around them. • Farmers learn about the bigger picture and general responsibility for our environment. • Farmers also always benefit by participating which results in educating themselves. This in turn helps in making good choices as they plan into the future. • Farmers learn from each other and specialists what problems there are and the various ways they can be assessed. • From my past experiences, we learn from other participants what is happening elsewhere and perhaps there is a better way of doing business. I should have mentioned the PINUE project many years ago, that was my first experience with field trials that actually showed the reduced use of Nitrogen in crop yields. Its intent was to show the neighbours of the participating farmers that it actually works. We need to be open minded. • Increased technical knowledge 	<p>Learning about environmental concerns</p> <p>Gaining new technical knowledge from farmers and others</p> <p>Learning new sustainable farming practices</p>
<ul style="list-style-type: none"> • The views of other stakeholders. • It makes you more aware of the bigger picture. The process affects more than just your own operation. • Educational for individual farmer as well to learn from other sectors. 	<p>Learning about the views and concerns of other stakeholders</p> <p>Becoming more aware of how other people are affected by collaborative processes</p>

All Round One Responses	Round Two Statements of Benefits Synthesized from Round One Responses
<ul style="list-style-type: none"> • Attending meetings is often the only way to find out your government moved your intake. • They will get a better understanding of how to navigate themselves through government levels. Putting a face with voices is always a better way to communicate and come to a common ground. • Understanding the government process. • Get a good understanding of the process. • Become aware of upcoming issues regarding the potential changes. 	<p>Learning about and understanding how decisions are actually being made Gaining advanced insights into upcoming issues and potential changes that affect farmers</p>
<ul style="list-style-type: none"> • Working as individuals we can voice our concerns and send our message to other sectors and government really an educational component as well so others know how and why we work as we do. • As an irrigation farmer they definitely have a different perspective on water than the general population will. For the most part they have already researched and educated themselves on the best management practices for water allocations and water quality issues. • They also provide the non-farm groups with a better understanding of the water needs of agriculture. 	<p>Educating non-farmers about agriculture and water issues</p>
<ul style="list-style-type: none"> • How they can become better partners in the watershed or community. • Others can send in their comments to each of the source protection committees when they see policies that are not fair and be heard. • Provide first-hand experience of water issues. Word of mouth histories re water. • Making future contacts. • Having valuable contact and relations with various government sectors involved in water taking. 	<p>Establishing relationships and building networks with farmers and other stakeholders</p>
<ul style="list-style-type: none"> • Individual farmers benefit by having their concerns heard at the beginning of the process. • They benefit because they have a say in the processes. • By participating in these processes the individual farmer can have input into future water policy that will affect their operations. • They get to have a voice. • Provide practical advice for consideration of government. • They ensure their perspective is brought forward. • The right model is selected. 	<p>Gives farmers a voice and a say in decision making Creates an opportunity to offer fair and reasonable solutions to water problems</p>

All Round One Responses	Round Two Statements of Benefits Synthesized from Round One Responses
<ul style="list-style-type: none"> • By working together many farmers have offered fair and reasonable solutions to protect these water sources and this benefits all farmers who farm in these well head protection areas. • If they have something specific to them they can benefit by getting involved and getting things implemented to fit their circumstances 	
<ul style="list-style-type: none"> • It may stop large tracts of land from being controlled by local government • Farmers benefit by hopefully preserving their land base and demonstrating a level of due diligence. • By showing that we can manage the farm operation and not cause any negative effects thus eliminating regulator regulations • Protect their right to farm. 	<p>Allows a chance to protect the land base on which agriculture depends Avoids regulations by demonstrating that problems can be addressed through good farming practices</p>
<ul style="list-style-type: none"> • It helps them determine what steps and actions need to be taken to secure water resources for their farm. • Long term secure access to water at a reasonable cost. 	<p>Helps to ensure secure access to water for the farm operation</p>
<ul style="list-style-type: none"> • Some farmers will benefit directly through participation by understanding and then taking advantage of Stewardship money or Municipal money that has been offered to get ahead of the policies that are presently proposed. 	<p>Helps farmers to gain access to funding from governments and other organizations for stewardship</p>
<ul style="list-style-type: none"> • Same as everyone else. 	<p>Farmers do not benefit in different ways from other participants in collaborative approaches.</p>

4.3. Q.3. How does the agriculture sector (farming as a whole) benefit from individual farmers participating in collaborative water governance processes?

All Round One Responses	Round Two Summaries of Benefits Synthesized from Round One Responses
<ul style="list-style-type: none"> • It demonstrates to the overzealous Environmentalists that agriculture does care about the environment and maintaining a safe supply of drinking water while feeding the masses. • Farming as a whole benefits because the general public views the farmers as positive role models in water usage, one would hope. • Other sectors of society see the strong sense of responsibility and concern farmers have for the environment and how actively they practice stewardship. This increases public trust for farmers. All farmers learn from these efforts new and better ways to take care of environment. • Positive impression left of agribusiness and stewardship of water. 	<p>Contributes to a more positive image, in other words, that farmers care about water and are good water stewards</p>
<ul style="list-style-type: none"> • Consolidates message across area, if we have a combined voice its much stronger, again the education of other sectors and government is invaluable. • Theory of one letter represents 100 opinions • It is difficult for an individual farmer to participate on his own, he generally, will not be listened to, only be told "I will take it under advisement". • From the mass information from all sectors of farming, a comprehensive approach can be taken to address specific concerns. 	<p>Consolidates the opinion of farmers in the area, which allows for a stronger, combined voice.</p>
<ul style="list-style-type: none"> • They get to share their thoughts/concerns rather than have things dictated to them. • As the world population continues to grow agricultural production will have an ever increasing dependence on the irrigation section to guarantee food production as more will need to be produced with less. By this I mean as agriculture land is swallowed up urban expansion, more production will be required on smaller areas. The only way that this attainable is to intensify the process with irrigation. The farmer having representation during the governance process will provide a perspective not always readily available. • They ensure their perspective is brought forward. 	<p>The agriculture sector will be strengthened if farmers are able to influence the outcome of governance decisions.</p>

All Round One Responses	Round Two Summaries of Benefits Synthesized from Round One Responses
<ul style="list-style-type: none"> • By having agriculture represented during these collaborative water governance processes farmers are able to impact the outcome of the policies written. • The right model is selected. • If agriculture is not part of the governance process the whole sector will be affected. Having individual farmers engaged will help provide direction on water governance that would not be taken if they were not involved. • If farmers participate they get to influence policy that makes rules on what they do. • It can tell the governing body that that farmers are willing to do a good job to protect the right to farm. 	
<ul style="list-style-type: none"> • Secure access to water for all ag sectors; long term resource planning. 	Supports long-term planning, which helps provide secure access to water for the agriculture sector as a whole
<ul style="list-style-type: none"> • They also provide the non-farm groups with a better understanding of the water needs of agriculture. • A great deal of the need for agricultural representation is to educate other members of the committee who know little to nothing about agriculture. They continue to learn as we continue to collaborate. • better public understanding of importance of water for agriculture and food security. • When policies are not fair agricultural representative can not only let the rest of the group know but also explain why and offer suggestions. (An example might be when a livestock farmer has a manure pit located near a WHPA-A or B with a score of 10 the committee wanted to ban expansions. We explained that the expansion may just be to bring this pit up to the standard of the day, would have to comply with nutrient management and would result in being more protective. With this explanation our policies now allow expansions as long as they result in being more protective.) We continue to education environmental lawyers, members of Sierra Club, Health officials, Municipal representatives and so many more. Believe me they have come a long way over the 4 years. • It is very important farmers are involved all too often polices are developed that prohibit farming or add ridiculous costs to farming. 	The agriculture sector as a whole benefits (e.g., reduced costs, better regulations) when non-farmers learn about farming
<ul style="list-style-type: none"> • They will get a better understanding of how to navigate themselves through government levels. Putting a face with voices is always a better way to communicate and come to a common ground. 	Helps other farmers learn how to deal with governments

All Round One Responses	Round Two Summaries of Benefits Synthesized from Round One Responses
<ul style="list-style-type: none"> • Becoming aware of every sectors water needs as well as gaining relationships with government bodies. 	Helps other farmers become aware of the needs of other sectors
<ul style="list-style-type: none"> • It is good to have people involved that share the same perspective as your own. • Every operation has different circumstances and water needs and it is important that all of those are heard. 	Increases the chance that different sectors within agriculture are understood better
<ul style="list-style-type: none"> • Same as everyone else. 	Benefits for the agriculture sector from participation are no different than for other sector represented.
<ul style="list-style-type: none"> • Better understanding of the reasons and thoughts in regards to the need for changes. • It depends on if your collaborative work is just meeting to talk or if you have some visual field trials that we can see the research. Most of us have farm groups that we belong to and I have been in my past a huge supporter of research sharing at farm events. word of mouth is a great tool in our communities. • Learning what to do and practicing good working practices makes the farmer responsible for contributing to keeping our water from being polluted 	[Relevant to Q2]
<ul style="list-style-type: none"> • Farmers will receive up to date information, and get more in tune with the environmental implications around them. 	[Relevant to Q2]
<ul style="list-style-type: none"> • The challenge is to have producers involved that have a good understanding of the industry needs, not just their own farm. 	[Relevant to Q4]

4.4. Q.4. What challenges face farmers who participate in collaborative water governance processes?

All Round One Responses	Round Two Summaries of Challenges Synthesized Derived from Round One Responses
<ul style="list-style-type: none"> • Time • time to read, attend meetings • Time invested is usually voluntary and extensive • Farmers are not able to attend meetings during planting and harvest seasons. Night meeting work the best but most meeting like this are day time meetings. • No surprise here, it's our time and the time of year that the process would be happening. We have a certain amount of control over our day, but to travel to larger urban centres to sit in a meeting room has become a challenge that is not affordable for us. I sometimes feel they just would rather someone else take care of it, it is a frustration that has been around a long time. • It takes time away from sometimes more pressing farm issues. Adding another stressor to a farmer's life. • Extraordinary waste of time compared to action. Been attending meetings since 1980 warning of critical water shortages, still no action. • Time away from the farm. • Participating farmers also have to make a long term commitment when getting involved. 	<p>Finding time to attend meetings is a challenge because time in meetings is time away from the farm.</p> <p>Participation in collaborative decision-making processes is a waste of time; the results do not justify the commitment.</p>
<ul style="list-style-type: none"> • Restrictive policy has been a fairly prescriptive process at times financial impacts of plans • Cost of implementing BMP • The main challenge is usually cost when it comes to implementing anything new. Everyone wants to do the right thing when it comes to the environment but it usually comes at an extra cost. 	<p>Everyone wants to do the right thing when it comes to the environment but it usually comes at an extra cost to farmers.</p>
<ul style="list-style-type: none"> • Sometimes lack of education on the science or actual process • The farmer is tasked with having to educate not only themselves on water issues but also support their own viewpoint. • Understanding the process. • Getting good advice and technical support is challenge 	<p>Farmers sometimes lack the education needed to understand issues</p> <p>It can be difficult to get good technical advice to support decision making</p> <p>It's challenging for farmers to educate themselves on water issues</p>

All Round One Responses	Round Two Summaries of Challenges Synthesized Derived from Round One Responses
<ul style="list-style-type: none"> • The first challenge is to educate one's self in hydrology and geology to be able to make fair decisions and present a responsible face for agriculture. I personally asked for assistance from John Fitzgibbon who passed the same information onto other agricultural representatives to assist them as well. Another Other challenges are to understand all types of agriculture and make sure that each is taken into consideration when presenting our ideas. • Keeping up with all the paper work involved in regulation to keep producing produce and following all new regulations. • Lack of technical or scientific knowledge. 	<p>It's difficult to stay on top of regulatory requirements and decision making processes</p>
<ul style="list-style-type: none"> • Will they be heard? • Being heard • They are definitely a minority when considering the urban demands for water and its availability. Until the population begins to realize the pressures on future food supplies they will not appreciate the value of irrigation going forward. • We are usually in the minority. It affects our land and water courses, this could affect our production, which could in turn affect our income. 	<p>The agricultural perspective is often overshadowed in governance processes by other perspectives (e.g. urban demands).</p>
<ul style="list-style-type: none"> • Neither who understand farming • Frustration at lack of knowledge other sectors have about farming • Challenge is to make the farm view understood by many people who know nothing about agriculture and still blame Agricultural Source Material for all the challenges in Walkerton and forget about the poor location of the well, crack in the casing of the well and inadequate management of the well. • Scrutiny and lack of common sense by Gov't Bureaucrats who have no connection with the rural landscape • often they are looked upon as being the cause of many water problems • There is a negative connotation that goes along with water and agriculture due to a lack of understanding of what producers actually do. it is important that their voice is at the table 	<p>Other participants do not understand farming and have negative attitudes towards farming</p>

All Round One Responses	Round Two Summaries of Challenges Synthesized Derived from Round One Responses
<ul style="list-style-type: none"> As the largest users of water in many areas around the globe other user groups are often looking to agriculture in times of stressed supplies with the intent to divert agriculture allocations to other uses. Activists and opinionated critics 	
<ul style="list-style-type: none"> They face not only the municipality but the MOE. Pressure from non-farm community for shared conservation efforts. 	It is difficult to work with multiple stakeholders.
<ul style="list-style-type: none"> Dealing with different faces and voices on a yearly basis, no continuity. These farmers will have to have a transparent operation, with doors and windows open at all times. 	There is limited continuity in the process because people change on a yearly basis.
<ul style="list-style-type: none"> Sometimes not all farmers are on the same page Helping other farmers understand is sometimes difficult Dealing with fears and fearful people is challenging 	Representing the farming sector as a whole can be challenging for individuals because farmers often do not hold the same views. Helping other farmers to understand the issues and the processes can be difficult.
<ul style="list-style-type: none"> Willingness to participate as well as the potential of revealing possible infractions. 	Participation in collaborative processes may reveal possible infractions.
<ul style="list-style-type: none"> The other challenge that so many do not get involved unless it is their property that will be impacted. Many farmers do not take into consideration that they can help other farmers by submitting their comments and who knows where the future wells will be. Farmers basically would lose production in times when regulated water use was initiated. Animals could die and crops for food could perish and the farmer could lose his/her business/farm/markets and Canada could become more dependent on imports. If only some participate in the process, then the ones who are not committed could benefit by utilizing sources of water when restrictions are in place. Our local county federations try to keep up with issues that affect our farmers but when they don't come to meetings it is not helpful 	Many farmers do not get involved unless it is their property that will be impacted.
<ul style="list-style-type: none"> Same as everyone else 	Farmers have the same challenges as other stakeholders.

4.5. Q.5. How are collaborative water governance processes strengthened or improved when farmers participate?

All Round One Responses	Round Two Statements of Improvements Synthesized from Round One Responses
<ul style="list-style-type: none"> • More communications among groups leads to more info sharing more info sharing better problem solving. • My experience has shown that information sharing is a good thing, the participant needs to feel that they can ask questions and gain more knowledge and come away feeling that they are allowed to share with others. 	<p>More communication among groups leads to more information sharing.</p>
<ul style="list-style-type: none"> • We have a stronger voice. Method of communicating to the general public as well as government agencies. 	<p>Through participation farmers gain a stronger voice to communicate to the general public and to government</p>
<ul style="list-style-type: none"> • By using opinions of all sectors of society. • Everyone is at the table we bring knowledge to the table we get hurt feelings if you do not invite us • You receive more information from different views which educates the farmer, plus we can share our views with the non-farming community. • As I have said before farmers working on these committees and working with other farmers sharing ideas, strengthens the good and great ideas, educates all of us and lets the committees and government understand better ways improve water sources. • They are improved when farmers participate because instead of the farmers just being told what they need to do and how, when they have input from all sides it seems to work better for all involved. The farmers can help other sides see things from their point of view. • Improved processes farmers bring the strength of their associations with them. 	<p>Combining knowledge of the issues from multiple stakeholders/sectors leads to better outcomes for society</p>
<ul style="list-style-type: none"> • I don't think there is a black and white issue out there, not all farmers are going to feel comfortable, especially if they are not aware of what the issue is, but some of the experiences of farmers need to be shared and those areas of dissent should be further explored to find out why we disagree with a position...I would reference the water taking permit process where Ontario has had it for a long time and Michigan and the other great lake states were resistant. Not that farmers in Ontario were happy, but there were collaborative efforts to have the farmers find a solution to how they used the water. I felt at the 	<p>Farmers offer first-hand, “on-the-ground” experience that other stakeholders lack.</p>

All Round One Responses	Round Two Statements of Improvements Synthesized from Round One Responses
<p>time that one or two jurisdictions that were using the permitting process shouldn't be doing it for the benefit of the whole great lake region. there were divergent views, especially from the environmental groups. It isn't a short process but I feel the farmers benefit from seeing the different positions that exist. It's even better if we can move those positions even a little.</p> <ul style="list-style-type: none"> • Farmers have the "on the Ground" experience that needs to be part of the discussions. Science is only good when it can be applied. Farmers are able to bring an economic reality to the table • Practical application versus desk riders • The industry is heard through people with first-hand experience • Farmers bring a different perspective on water issues to the table at these processes. Farmers have had to educate themselves on efficiencies regarding a tightening supply all the while respecting the fact that they will need to produce more with less. Routinely urbanites only view water as a resource that comes out of their tap any time that it is required. • First-hand experience and word of mouth histories. • a more common sense approach and practical solutions that actually work on the landscape may be one benefit • Farmers bring a level of pro-active ideas and common sense to the table 	
<ul style="list-style-type: none"> • The municipality will learn that the farmer is really trying to do a good job in most cases. • Government sectors get a much better feel for how the average farmer operates and what their needs are. • Better knowledge of agriculture water needs. • The general knowledge of what happens and things that are needed on a farm is greatly improved. • Better understanding of farming related water issues by the general public and other user groups. Better understanding of the proactive steps many farmers are taking to conserve water and reduce impact on water quality by farming operations. Enabling of water management planning processes involving all uses in the watershed. 	<p>Other stakeholders learn how farms actually operate, and what farmers' needs are.</p>

All Round One Responses	Round Two Statements of Improvements Synthesized from Round One Responses
<ul style="list-style-type: none"> • The farmer can appreciate the complexity of the job • The more we participate the more we realize that we are in the same boat as those around us. • This process also helps farmers understand the challenges of other industries and helps us to be fair in our approach with them when writing policy. It is easier for others to be fair with the agricultural community when we make educated and fair decisions as well. 	<p>Farmers come to appreciate the challenges and complexity inherent in making water governance decisions.</p>
<ul style="list-style-type: none"> • Farmers manage most of the effected land and when involved meaningfully in solution development are very big part of success because they care and have ownership of outcomes • Possible better understanding and compliance. • by having a good working relationship with the farmer who practices good farming practices improves the ability for the farmer to participate in regulation or BMP • We also feel that our voices are heard and we gain confidence in decision making processes going forward. • By having farmers at the lead of water governance, they would have a better understanding of the necessary processes and have the compassion to search out the best solutions for the community of farmers. 	<p>Decisions and plans resulting from collaborative processes are more likely to be successfully implemented.</p>

4.6. Q.6. What challenges does the participation of farmers create for collaborative water governance processes?

All Round One Responses	Round Two Statements of Challenges Synthesized from Round One Responses
<ul style="list-style-type: none"> • It will make the process longer . • Time. • Good and bad Time availability constraints. • It all takes more time to include participation of farmers. • Quorum at planting and harvest season • Trying to get producers out and participating. • Cost to take part some concern if our input is taken . 	<p>When farmers are involved, the process takes longer.</p> <p>It is difficult to get farmers to participate, especially at planting and harvest seasons.</p>
<ul style="list-style-type: none"> • Farmers are individual & independent & each will have a different opinion on the issue being addressed. • The multitude of different needs of the producers. 	<p>Farmers are individual and independent – so each will have a different opinion on the issue being addressed.</p>
<ul style="list-style-type: none"> • it is possible that some farmers may not want to compromise • Some farmers may have the tendency to look at water related issues only from their own perspective; over time this however tends to resolve itself. Big challenges arise where water in a specific watershed is already over allocated and where some form of a water sharing agreement (drought planning) needs to be instituted. Farmers need to realize that they have to share the resource with environmental and other needs. • Some farmers may be there for their own interest rather than for the industry as a whole. • We sometimes want it only our way and fail to recognize the needs of the rest of the community. • The governance process will be slowed down if too many strong-willed farmers are presenting. 	<p>Farmers may protect their own interests in the process and not be willing to reach a compromise.</p>

All Round One Responses	Round Two Statements of Challenges Synthesized from Round One Responses
<ul style="list-style-type: none"> • Independent thinking. They need to be heard and taken seriously, may mean those who want to control are threatened. • Farmers challenge the ideals of Gov't to maintain a viable process for the water governance. • The general public and/or environmental groups may not share the same view as the farmers on the importance of how water is used for agriculture. 	<p>Farmers' ideas may challenge the ideas of others.</p>
<ul style="list-style-type: none"> • By including farmers in this collaborative they are forced to understand that there must be some form of compensation for these farmers and more than the Ontario Drinking Water Stewardship programme which is totally inadequate for the number of properties that will be impacted. They are also forced to understand that in most situations the farmer does not even use this municipal well but has his or her own private well and reaps no immediate rewards from doing "the right thing." They may not want to hear that the farmer at no time wanted the well on his or her land and may have been told many years ago that it would never impact the farm or the way the business is run. Many do not want the straight facts. They just want the easy route where they prohibit many activities in a WHPA-A, B or C with a score of 10 and WHPA-E's with a score of 8 or more. • they challenge the financial aspects of a few paying for the good of many speak with a much more unified voice than other sectors follow most stringent Best management Practices already so are not happy to be pushed for more farmers have been through Nutrient Management Act and EFP so feel already doing their part challenge other sectors to come up to similar specs • Because of some barriers (cost for example), the farmers may not be able to implement all the processes brought up by the other sides involved. Therefore, they could potentially show a negative, but more realistic, view. • Naturally it would be easier for the collaborative water governance process if they did not have to hear how much policies can and will impact agriculture. 	<p>Farmers will challenge other groups through vigorously defending their right to farm and their way-of-life Farmers may resist change because they are sensitive to increased costs.</p>
<ul style="list-style-type: none"> • There aren't that many farmers compared to bureaucrats and the overwhelming effect of intimidation from agencies will stifle the farmers ability to have an effect on outcome. • a lot of the demands in the past of the MOE and the public have created hardship for the farmer.....it has been confrontational to say the least.....these people are not used to listening they want to tell.....hopefully this process will allow the farmer to be on equal ground with the other parties. 	<p>Intimidation from other stakeholders may stifle the ability of farmers to contribute to outcomes.</p>

All Round One Responses	Round Two Statements of Challenges Synthesized from Round One Responses
<ul style="list-style-type: none"> • Often a farmer will not understand some of the rationale behind a given proposal or regulation as it often does not pertain to the reality of food production • Variation of sophistication and professional abilities 	Farmers may not understand some of the technical aspects of water problems.
<ul style="list-style-type: none"> • Suspicion of government involvement in private farm operations. 	Farmers may be suspicious of government involvement.
<ul style="list-style-type: none"> • I would think that any farmer participation would be helpful and shouldn't create challenges. • I don't feel that there would be any challenges, collaborative should mean all-encompassing and would involve everyone genuinely affected by policy's that are created. • ministry has to make sure all other sectors are complying • that depends on the desired outcome. • Whatever is decided we have to live with. I would rather know what is being talked about before it happens so that if planning has to happen we have time to implement it. We are a small part of society, but have a large land base around us. There is usually a cost to everything that takes time. • possibly livestock producers will have to change their watering and runoff somewhat • The pressure to conserve or pay more. 	Farmers do not pose challenges for collaborative processes.

5. Appendix B: Round Two Survey Results

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
Please indicate the extent to which you agree that the following roles are appropriate for farmers to play in collaborative water governance processes.							
1. Representing the needs of farmers and working to develop solutions that protect the interests of agriculture.	19	2	1	1	0	High	SA
2. Being involved in all aspects of decision making from the beginning.	17	5	0	1	0	High	SA
3. Educating other people about agriculture and the importance of water for agriculture.	22	0	0	1	0	High	SA
4. Building relationships through collaboration with other farmers and with other participants.	14	8	0	1	0	High	SA-A
5. Protecting water quality and quantity through stewardship activities.	16	6	0	1	0	High	SA-A
6. Educating themselves about the impacts of policies and regulations.	13	8	0	1	1	High	SA-A
7. Educating themselves about funding and other opportunities.	10	12	0	1	0	High	SA-A
8. Ensuring that collaborative processes produce acceptable compromises.	14	7	1	1	0	High	SA-A

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
Please indicate the extent to which you agree the following are benefits for farmers from participating in collaborative governance processes.							
9. Learning about environmental concerns.	9	14	0	0	0	High	SA-A
10. Gaining new technical knowledge from farmers and others.	13	9	0	0	1	High	SA-A
11. Learning new sustainable farming practices.	11	12	0	0	0	High	SA-A
12. Learning about the views and concerns of other stakeholders.	7	16	0	0	0	High	SA-A
13. Becoming more aware of how other people are affected by collaborative processes.	6	16	0	0	1	High	A
14. Learning about and understanding how decisions are actually being made.	10	13	0	0	0	High	SA-A
15. Gaining advanced insights into upcoming issues and potential changes that affect farmers.	15	7	0	0	1	High	SA-A
16. Educating non-farmers about agriculture and water issues.	15	8	0	0	0	High	SA-A
17. Establishing relationships and building networks with farmers and other stakeholders.	12	11	0	0	0	High	SA-A
18. Gives farmers a voice and a say in decision making.	15	8	0	0	0	High	SA-A
19. Creates an opportunity to offer fair and reasonable solutions to water problems.	13	10	0	0	0	High	SA-A

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
20. Allows a chance to protect the land base on which agriculture depends.	16	5	2	0	0	High	SA-A
21. Avoids regulations by demonstrating that problems can be addressed through good farming practices.	16	5	1	0	1	High	SA
22. Helps to ensure secure access to water for the farm operation.	10	12	1	0	0	High	SA-A
23. Helps farmers to gain access to funding from governments and other organizations for stewardship.	11	10	1	1	1	High	SA-A
24. Farmers do not benefit in different ways from other participants in collaborative approaches.	1	5	11	4	2	Medium	D-SD
Please indicate the extent to which you agree the following are benefits for the agricultural sector from farmers participating in collaborative governance processes.							
25. Contributes to a more positive image, in other words, that farmers care about water and are good water stewards.	15	8	0	0	0	High	SA-A
26. Consolidates the opinion of farmers in the area, which allows for a stronger, combined voice.	10	11	1	0	1	High	SA-A
27. The agriculture sector will be strengthened if farmers are able to influence the outcome of governance decisions.	14	9	0	0	0	High	SA-A
28. Supports long-term planning, which helps provide secure access to water for the agriculture sector as a whole.	11	10	1	0	1	High	SA-A
29. The agriculture sector as a whole benefits (e.g., reduced costs, better regulations) when non-farmers learn about farming.	14	6	2	0	1	High	SA-A

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
30. Helps farmers learn how to deal with governments.	5	15	3	0	0	High	SA-A
31. Helps farmers become aware of the needs of other sectors.	7	16	0	0	0	High	SA-A
32. Increases the chance that different sectors within agriculture are understood better.	10	11	0	0	2	High	SA-A
33. Benefits for the agriculture sector from participation are no different than for other sector represented.	5	7	7	1	3	None	None
Please indicate the extent to which you agree the following are challenges for farmers when participating in collaborative water governance processes.							
34. Finding time to attend meetings is a challenge because time in meetings is time away from the farm.	8	12	2	0	1	High	SA-A
35. Participation in collaborative decision-making processes is a waste of time; the results do not justify the commitment.	0	1	15	7	0	High	D-SD
36. Everyone wants to do the right thing when it comes to the environment but it usually comes at an extra cost to farmers.	10	9	3	0	1	High	SA-A
37. Farmers sometimes lack the education needed to understand issues.	0	9	10	4	0	Low	D-SD
38. It can be difficult to get good technical advice to support decision making.	3	8	9	2	1	None	None
39. It's challenging for farmers to educate themselves on water issues.	0	9	13	1	0	Low	D

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
40. It's difficult to stay on top of regulatory requirements and decision making processes.	5	13	3	2	0	Medium	SA-A
41. The agricultural perspective is often overshadowed in governance processes by other perspectives (e.g. urban demands).	12	8	2	0	1	High	SA-A
42. Other participants do not understand farming and have negative attitudes towards farming.	4	11	5	0	3	Medium	SA-A
43. It is difficult to work with multiple stakeholders.	0	12	9	1	1	None	None
44. There is limited continuity in the process because people change on a yearly basis.	0	6	16	0	1	High	D
45. Representing the farming sector as a whole can be challenging for individuals because farmers often do not hold the same views.	0	13	8	0	2	Medium	A
46. Helping other farmers to understand the issues and the processes can be difficult.	1	11	9	0	2	None	None
47. Participation in collaborative processes may reveal possible infractions.	1	13	8	0	1	Low	A
48. Many farmers do not get involved unless it is their property that will be impacted.	4	16	1	0	2	High	A
49. Farmers have the same challenges as other stakeholders.	3	11	7	0	2	Low	A

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
Please indicate the extent to which you agree the statements below are benefits that farmers bring to collaborative governance processes.							
50. More communication among groups leads to more information sharing.	0	14	0	9	0	Medium	A
51. Through participation farmers gain a stronger voice to communicate to the general public and to government.	10	12	1	0	0	High	SA-A
52. Combining knowledge of the issues from multiple stakeholders/sectors leads to better outcomes for society.	11	12	0	0	0	High	SA-A
53. Farmers offer first-hand, "on-the-ground" experience that other stakeholders lack.	14	8	1	0	0	High	SA-A
54. Other stakeholders learn how farms actually operate, and what farmers' needs are.	9	13	1	0	0	High	SA-A
55. Farmers come to appreciate the challenges and complexity inherent in making water governance decisions.	7	14	1	0	1	High	SA-A
56. Decisions and plans resulting from collaborative processes are more likely to be successfully implemented.	12	8	3	0	0	High	SA-A
Please indicate the extent to which you agree these statements are challenges that farmers create for collaborative governance processes.							
57. When farmers are involved, the process takes longer.	3	2	16	1	1	High	D
58. It is difficult to get farmers to participate, especially at planting and harvest seasons.	10	12	1	0	0	High	SA-A

Round Two Questions	Rating Distribution					Consensus	Agreement
	Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	Blank		
59. Farmers are individual and independent – so each will have a different opinion on the issue being addressed.	2	11	9	0	1	None	None
60. Farmers may protect their own interests in the process and not be willing to reach a compromise.	1	7	13	2	0	Low	D
61. Farmers' ideas may challenge the ideas of others.	7	13	3	0	0	High	SA-A
62. Farmers will challenge other groups through vigorously defending their right to farm and their way-of-life.	10	7	4	0	2	High	SA-A
63. Farmers may resist change because they are sensitive to increased costs.	5	14	2	0	2	High	SA-A
64. Intimidation from other stakeholders may stifle the ability of farmers to contribute to outcomes.	2	8	9	2	2	None	None
65. Farmers may not understand some of the technical aspects of water problems.	0	9	11	2	1	None	None
66. Farmers may be suspicious of government involvement.	7	11	4	0	1	High	SA-A
67. Farmers do not pose challenges for collaborative processes.	5	11	5	0	2	Medium	SA-A

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				
			Strongly Agree (SA)	Agree (A)	Disagree (D)	Strongly Disagree (SD)	-
Representing the needs of farmers and working to develop solutions that protect the interests of agriculture.	High	A	19	2	1	1	0
Farmers are individual and independent – so each will have a different opinion on the issue being addressed.	NONE	NONE	2	11	9	0	1

For the Rating Distributions, the following abbreviations are used:

- SA = Strongly Agree
- A = Agree
- D = Disagree
- SD = Strongly Disagree
- = 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:

- SA = Strongly Agree
- SA-A = Strongly Agree to Agree
- A = Agree
- D = Disagree
- D-SD = Disagree to Strongly Disagree
- SD = Strongly Disagree
- NONE = Neither agree or disagree

'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 agreement category or 80% in 2 related categories ^a
- 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^b: Less than 60% of ratings in 2 related categories

^a *Related* agreement categories are SA-A, and D-SD.

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