Organizational structure and functions within intermediary organizations

A comparative analysis

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The Canadian Water Network’s (CWN) mission is to provide Canadian water managers and decision-makers with the research-based knowledge they need to address complex water management issues. As CWN approaches the end of its Networks of Centres of Excellence (NCE) funding in 2015, a great deal of thought is being given to what CWN’s legacy will be, and how its organizational structures and functions might be adapted to achieve continued impact beyond 2015.

To help inform CWN’s options for the future, a comparative organizational analysis was conducted to examine the organizational structures, functions, and funding sources of other organizations with missions similar to CWN’s. Specifically, the analysis targeted “intermediary organizations” working between research and research-user communities, with a mandate of using research to inform practice and policy. The primary goal of this analysis was to identify what structures and funding sources were being used by other organizations to accomplish functions that had been identified by prior research as being central to intermediary (knowledge translation and brokering) work.

Participants were employees of 14 Canadian and 1 Australian organization operating in various sectors, including health, environment, public policy, and social innovation. Organizations focused on the health sector represented almost half of the sample, outnumbering organizations devoted to all other sectors, including water. Given the rising importance of water as a political and environmental issue, this finding suggests there may be room for additional intermediary organizations dedicated exclusively to the water sector.

Organizations in the current analysis filled one of four major roles in the larger space between researchers and the research-user (practitioner) community: researcher-driven research funders, practitioner-driven research funders, knowledge translation/brokering specialists and tool developers (“KT/KB organizations”), and research institutes. In this schema, CWN was classified as a practitioner-driven research funder. However, there were some indications that CWN may have recently transitioned from an earlier role as a researcher-driven research funder, and was currently edging into a practitioner-driven research funder role.
The most common and largest funder of intermediary organizations in the analysis was the Canadian federal government. This funding took various forms, including annual funding, public endowments, and grants. Federally funded organizations typically had larger budgets than their non-federally funded counterparts, and research funders – particularly those in the health sector – had substantially higher annual budgets than KT/KB organizations. Member contributions were among the least common sources of primary funding, and in the current sample, organizations that were primarily member-funded reported modest annual budgets. Although a “user-pays” model may be part of the equation for funding future CWN legacy work, other forms of funding – including public endowments – may be worth exploring.

Across the entire sample, participants acknowledged the importance of five previously identified intermediary functions: involving users in the planning and management of projects and programs, interpretation of research into user-accessible formats, appropriate communication of research results to users (reaching), establishing relationships and engaging with users and stakeholders, and evaluating the uptake of research by users and its impact on practice and policy. Of these five intermediary functions, evaluation of impact was found by prior studies using other samples to be the most neglected. This finding was not supported within the current sample of intermediary organizations. Instead, several organizations had impact-evaluation processes in place, while others were in the process of developing new evaluation frameworks or improving old ones.

The findings also suggested that two additional functions may be designated as separate and important intermediary functions: convening researchers and practitioners to facilitate a mutual understanding of goals and perspectives; and capacity building to train practitioners how to use research effectively, as well as to train young leaders who are equipped to break down barriers between researchers and practitioners.

### Intermediary functions

- Planning and management
- Interpretation
- Communication/reaching
- Engagement
- Evaluation
- Convening
- Capacity building

Various organizational structures existed in the current sample, and tended to reflect intermediary organizations’ specific roles. The primary focus of researcher-driven research funders was research program management, resulting in relatively flat organizational structures. In addition, intermediary functions were often outsourced to researchers or confined to a specific initiative. By contrast, practitioner-driven research funders tended to accomplish more of these functions in-house or through governance structures such as advisory committees, and placed a higher priority on involving users in program planning and management. Compared with other practitioner-driven research funders, CWN’s in-house staff was less involved in intermediary functions. One way to advance CWN’s transition from a researcher-driven to a practitioner-driven model may be to increase in-house resources devoted to intermediary functions.
KT/KB organizations were primarily focused on producing knowledge translation-related publications, products and tools in-house, although some also played a significant knowledge brokering role. As a result, KT/KB organizations tended to have groupings of staff around various intermediary functions. They were also more practitioner oriented in their approach to the capacity-building function than other types of intermediary organizations in the current sample. Whereas research funders tended to focus primarily on student development, KT/KB organizations were also concerned with training practitioners. Moreover, KT/KB organizations showed the greatest commitment to evaluating uptake and impact on practice and policy. If CWN wishes to increase the profile of its knowledge translation and brokering activities relative to other research funders, building practitioner capacity and ensuring evaluation of uptake and impact may be two ways to accomplish this.

Two of the three research institutes in the sample operated as evidence-generation arms for their funding agencies, whereas the third operated independently on a public endowment. This independence allowed the third research institute to establish its own priorities, regardless of changes in government leadership and commitment to research funding. If CWN were to consider pursuing federal funding in the future, an independent endowment may provide funding stability as well as freedom in setting program and project objectives.

Despite the many uncertainties and challenges in determining CWN’s legacy post-NCE funding, the results from this comparative organizational analysis suggest that CWN shares many structural and functional commonalities with other intermediary organizations. In addition, evolution was a common theme across many organizations in the current analysis. Like CWN, other intermediary organizations are constantly adapting to fit the needs of their business environment as well as their audience. It is hoped that this analysis will help inform CWN’s evolution as it strives to bring research-based knowledge to bear on practice and policy in water management.
2.0 Introduction

2.1 Purpose of the Study

A central component of the Canadian Water Network’s (CWN) mission is to provide Canadian water managers and decision-makers with the research-based knowledge they need to address complex water management issues. As CWN approaches the end of its federal Networks of Centres of Excellence (NCE) funding in 2015, a great deal of thought is being given to what CWN’s legacy will be, and how its mission will be addressed without NCE support. Important considerations moving forward will be the nature of CWN’s organizational structure and functions, as well as funding sources. Specifically, questions are being asked about how these could be adapted over the next few years to achieve continued impact beyond 2015.

One avenue for addressing these questions may be to draw upon the past and present experiences of other organizations that are similar to CWN. Given CWN’s ultimate goal of informing practice and policy in water management, it follows that organizations with similar mandates of informing practice and policy in their own realms would provide good comparisons.

In the current literature, various terms are used to describe the process of using research to inform practice and policy, each of them containing important nuances and distinctions. Some of the more common terms include (but are not limited to): knowledge translation, knowledge brokering, knowledge translation and exchange, knowledge transfer, knowledge exchange, and knowledge mobilization. For the purposes of the current study, the term “knowledge translation and brokering” will be used to describe this process, which includes packaging research to fit the needs of research users (knowledge translation) as well as a variety of activities involved in linking the researcher and research-user communities (knowledge brokering) (Bielak, in press).

The current study will therefore examine the organizational structures, functions, and funding sources of other organizations with a knowledge translation and/or brokering focus. It is hoped that the results will provide a better understanding of how other organizations approach knowledge translation and brokering, and will be used to inform CWN’s options for the future.

2.2 Prior Work on Knowledge Translation and Brokering Functions

The current analysis was inspired in part by a 2009 report authored by Bielak, Holmes, Savgård, and Schaefer examining the specific functions involved in using research to inform environmental policy-making and regulation. This report, titled “A comparison of European and North American approaches to the management and communication of environmental research,” was conducted as a North American follow up to a 2008 report by Holmes and Savgård. The 2008 report summarized the results of a study that was carried out for SKEP (Scientific Knowledge for Environmental Protection), a network of European environmental ministries and regulators.

Bielak et al.’s (2009) study examined the roles of four groups in the process of using research to inform practice and policy: researchers, research managers, research users, and “intermediaries”
working between the research and research-user communities. Two CWN employees were interviewed for the study, and were both classified as intermediaries according to Bielak et al.’s four-role schema.

The specific functions involved in using research to inform environmental policy-making and regulations examined by the 2009 report were:

- **Planning and management** of research projects and programs, involving users in the process.
- **Interpretation** to make research results available in a way that is accessible and understandable to users.
- **Communication** – bringing research results to the attention of users in a form that is useful.
- **Engagement** – building trust and ensuring that stakeholders’ needs are met.
- **Evaluation** of the effectiveness of research dissemination, as well as evaluation of the impact of the research on practice and policy.

Bielak et al. (2009) concluded that a great deal of similarity exists across organizations in Europe and North America in their approaches to using research to inform environmental policy-making and regulations. The growing importance of the intermediary role was also recognized. Indeed, although not explicitly mentioned in Bielak et al.’s (2009) report, the results suggested that of the four roles examined in the study (researchers, research managers, research users, and intermediaries), intermediaries were the most likely to be involved in all five of the functions studied.

Given that both CWN employees interviewed for Bielak et al.’s (2009) report were classified as intermediaries, and that CWN’s overall mission is to use research-based knowledge to inform practice and policy in water management, it seems fitting that CWN could be considered an “intermediary organization.” The current study will therefore compare CWN with other intermediary organizations operating between researchers and research users, and examine what resources they draw on to perform the aforementioned functions.

### 2.3 Current Approach

In addition to examining intermediary organizations’ use of the five functions (hereafter referred to as “intermediary functions”), this analysis will examine intermediary organizations’ staff and governance structures to determine how these structures support the performance of intermediary functions. To ensure comparability with CWN, the current analysis will focus on organizations acting as intermediaries in terms of their overall mission, rather than on individuals acting as intermediaries within organizations that have a different primary mandate. In keeping with the focus on intermediary organizations, this study will not examine intermediary functions performed by researchers, research managers, or research users, except to mention where intermediary functions have been outsourced by intermediary organizations to members of these groups.

Participants in the reports authored by Bielak et al. (2009) and Holmes and Savgård (2008) included researchers, research managers, research users, and intermediaries working in 11 European countries, Canada, and the United States in various environmental fields including atmospheric science, chemicals management, ecosystem health, energy, forestry, and water quality and management, among
others. A scan of the knowledge translation and brokering community also suggested that the public health and public policy fields have a relatively long history of knowledge translation and brokering work. This investigation will therefore include intermediary organizations operating in a wide range of fields, providing they share CWN’s focus on using research to inform practice and/or policy. For the sake of time, and to ensure relevance to CWN’s Canadian context, the present analysis will focus primarily on Canadian intermediary organizations. However, the inclusion of several international organizations in a follow-up study is being considered as a way to gather information about organizational models that have been successful in international contexts.

It should be noted that because of time and resource restrictions, this analysis is not intended to be a comprehensive study of all Canadian intermediary organizations. Rather, it is intended to provide a snapshot of several types of intermediary organizations that currently exist in Canada, enabling CWN to make a rough sketch of how other organizations are going about the task of using research to inform practice and policy. It should also be noted that this analysis is exploratory, and is not attempting to test any hypothesis. A major benefit of this approach is that it allows rich data to be collected and, without tight restrictions, unanticipated directions and new themes may emerge. These new themes can then be used to inform the current results, providing a basis for additional questions and hypotheses to be tested in future investigations. Finally, given the exploratory nature of the current study and the small sample of intermediary organizations, firm conclusions should not be drawn from the results. Rather, it is recommended that the study’s results be used to inform thinking and to suggest directions for further consideration.

3.0 Method

3.1 Selection of Organizations and Interviewees

The search for candidate organizations was conducted online. Because CWN is part of the NCE program, which focuses on creating links between the research and research-user communities, this search began by looking at the websites of other NCEs. The websites of a large number of Canadian and international organizations dealing with water, the environment more broadly, health, and policy were also examined. Many organizations’ websites cited a list of partners, and these were also considered as potential leads.

Preliminary screening of potential organizations was based on information gathered from vision and mission statements. Specifically, to be included in the study, an organization’s website had to suggest that using research to inform practice or policy was an important part of its mandate. Through this process, a large number of research-based organizations without a strong knowledge translation or brokering component were eliminated from further consideration. Organizations with a strong advocacy role were also eliminated on the basis that CWN is focused on bringing high-quality research to inform practice and policy, rather than on advocating for a particular position. Finally, organizations that were focused primarily on commercialization of research were eliminated because of a lack of fit with CWN’s goals.
The initial search generated a list of approximately 120 Canadian and international organizations that loosely fit the profile of an intermediary organization. Using the above criteria, this list was shortened to approximately 30 organizations that appeared to be good candidates. Given the current focus on Canadian rather than international organizations, Canadian candidates were the primary targets.

Potential interviewees (typically one to two senior employees at each organization) were contacted via email, provided with an overview of the purpose of the study, and asked to participate in a one-hour face-to-face or phone interview. Employees were informed that although the main goal of the interviews was to gather information about each organization’s structure, functions, and funding sources, additional information would be collected to help categorize the organizations and gauge their similarity to CWN (size, sector, budget, etc.). The vast majority of potential interviewees who were contacted about the study agreed to participate. Indeed, many cited a keen interest in this type of investigation, and indicated that they would like to receive a copy of the final report.

The final count of interviewees (22 in total) included 20 employees representing 14 Canadian organizations (including CWN) and 2 employees representing 1 international (Australian) organization. See Appendix A for a list of participants and their organizational affiliations. See Appendix B for a brief description of each organization.

**3.2 Interview Questions**

A semi-structured interview format was chosen for this analysis. In a semi-structured interview, the interviewer provides all interviewees with the same list of questions and follow-up questions. The interviewer and interviewee then use these questions to guide their conversation. Advantages of the semi-structured interview format are that it provides enough structure to ensure that the same topic areas are covered in each interview, while allowing the interviewee to discuss additional points that may be relevant, but aren’t covered by the interview questions. Semi-structured interviews are valued for the rich data they provide. As a result, semi-structured interviews are commonly used in qualitative research and are especially appropriate for exploratory studies such as the current analysis.

Consistent with the purpose of the study, the interview questions asked participants to discuss what functions they believe are involved in using research to inform practice and policy and which of these functions their organization is involved in. Participants were also asked to describe the structure of their organization (i.e., number of employees, structure of reporting relationships), as well as the nature of their organization’s governance structures, and how these structures are set up to accomplish the aforementioned organizational functions. To enable appropriate comparisons among organizations, participants were also asked to describe their organization’s mission and to provide general demographic information about their organization (sector, funding sources, etc.).
By definition, intermediary organizations operate in a large space between researchers on one hand, and research users (hereafter referred to as “practitioners” or simply “users”\(^1\)) on the other. To enable additional comparisons among the wide range of organizations in the current analysis, participants were asked to rate their organization on a 10-point scale assessing their organization’s degree of research versus practitioner focus (where 1 = completely research focused, 10 = completely practitioner focused). See Appendix C for a complete list of the interview questions.

When available, organizational charts were obtained to provide further clarity about organizational and governance structures. Follow-up emails and phone calls were used to address any questions that remained following the interviews.

### 4.0 Findings and Discussion

#### 4.1 Organizational Role and Focus

##### 4.1.1 Categorization of Organizations by Role

As a preliminary means of organizing the large amount of data that was collected from the 15 intermediary organizations, it was deemed useful to categorize the organizations according to what role they played in the intermediary space between research and practitioners. Three broad categories of organizational roles were immediately apparent:

1. Research funders – organizations that provided funds for research projects and used these findings to inform practice and policy.
2. KT/KB organizations – although all organizations in the current sample conducted knowledge translation and/or brokering activities as part of their mandates, organizations in this category specialized in these activities or produced tools to facilitate knowledge translation and/or brokering by others.
3. Research institutes – organizations that facilitated knowledge transfer by collecting and synthesizing information that was presented directly to practitioners, or that provided research support to investigators working on practitioner-oriented research.

Within the research funder role, two subcategories were identified:

1a. Researcher-driven – research funders with research programs that were primarily driven by the interests of researchers and investigators, but were involved in knowledge translation and/or brokering activities through external or associated mechanisms.

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\(^1\) The terms “practitioner” and “user” were substituted for “research users” due to the broad range of intermediary organizations participating in the current study. In some cases, the users of the outputs produced by participating intermediary organizations would not recognize themselves – or be recognized by others – as conventional users of research. The identities of these practitioners and users varied greatly from organization to organization, and included the following groups: local, provincial, and federal policy makers; provincial health authorities; public health practitioners; environmental health professionals; forest managers; water industry and water regulatory agencies; and municipal water and wastewater managers, among others.
1b. Practitioner-driven – research funders with research programs that were more directly informed by the needs of practitioners.\(^2\)

This categorization scheme was a finding that emerged from the data, rather than one that was prepared in advance to be discussed with interviewees. However, grouping the 15 organizations according to these four broad categories proved to be a useful tool for organizing the rest of the study results. As such, many of the study’s findings will be discussed in relation to these four groupings.

4.1.2 Self-ratings of Research versus Practitioner Focus

In addition to the objective categorization of organizations according to the specific role they played in the intermediary space between research and practitioners, interviewees’ subjective judgments of their organization’s overall degree of research versus practitioner focus were plotted using Question 11 from the interview protocol (see Appendix C). As expected, responses to this question varied depending on the organization, and ranged from 1 (entirely research focused) to 9 (heavily practitioner focused).\(^3,4\) See Appendix D for a graph depicting the results by organization, and Appendix B for a list of organizational abbreviations. In the course of collecting interviewees’ responses to this question, several interesting observations were noted.

Among the four NCEs represented in the study sample (CWN, Canadian Stroke Network, Stem Cell Network, Sustainable Forest Management Network), all participants mentioned that their NCE had begun by being relatively research focused, allowing researchers to drive the organization’s agenda. However, as time went on, they became increasingly practitioner focused by expanding their KT/KB activities and allowing research users to influence the organization’s agenda. This was especially true in the case of SFM Network, which had reached the end of its NCE funding and was preparing to close its doors in June 2010. In anticipation of shutting down operations, SFM Network had spent the last year and half focusing primarily on knowledge exchange, including writing books and holding workshops to make its research results as accessible as possible to users.

A very similar pattern emerged in the two interviews with representatives from Water Quality Research Australia. During the period from 2007 to 2009, WQRA transitioned from being a federally funded Cooperative Research Centre (CRC) to an industry-funded model. Before WQRA was established, the CRC for Water Quality and Treatment had experienced difficulties in maintaining an industry-focused agenda because of the nature of the administrative requirements that were necessary to obtain federal funding. By contrast, the new industry-funded model required WQRA to consider the needs of

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\(^2\) Although several organizations were involved in more than one of the identified roles (either at the time of the interview or in the past), organizations were categorized according to their dominant role based on their current activities at the time of the interview.

\(^3\) In cases where interviewees described a relative shift in their organization’s research versus practitioner focus over time (see following paragraphs), the interviewee’s rating of the organization’s current position at the time of the interview was plotted.

\(^4\) For several organizations, multiple ratings of research versus practitioner focus were obtained through interviews with more than one interviewee. For these organizations, an average rating was calculated and plotted in Appendix D.
its industry funders throughout the project selection and project management processes. Both the researchers and practitioners involved in the management of WQRA hoped to see WQRA’s research have a real impact on water quality and water regulations in the future.

In addition to becoming more practitioner focused (according to interviewees’ subjective judgments), three of the NCEs (CWN, SCN, SFM Network) mentioned shifting toward funding more multidisciplinary research following their first few years of NCE funding. This may reflect the fact that practitioners’ knowledge needs are rarely neatly confined within the boundaries of a single scientific discipline. As NCEs attempt to answer research questions that are relevant to practitioners’ real-world needs, they may be more likely to fund multidisciplinary research.

The relation between interviewees’ subjective ratings of their organization’s research versus practitioner focus and the post hoc classification of organizations according to role revealed several findings of note. One counterintuitive finding was that interviewees representing research funders tended to rate their organization toward the middle of the research- versus practitioner-focus continuum, regardless of how much user input their organization appeared to invite. That is, interviewees from practitioner-driven research funders did not rate their organizations as being more practitioner-focused than interviewees from researcher-driven research funders. The reason for this consistent middle rating may be because interviewees were taking into account the entire scope of the organization’s activities, including funding research on the one hand, and practitioner-focused knowledge translation and brokering activities on the other. Indeed, the two subcategories of research funders were both found to engage in practitioner-oriented work, but through different means (see Section 4.5, “Interaction between Functions and Structure, by Organizational Role,” for more information about research funders’ practitioner-focused activities).

Predictably, interviewees representing KT/KB organizations rated their organizations toward the practitioner end of the continuum. All three research institutes were subjectively rated toward the middle of the continuum by interviewees representing these organizations, who each spoke about the need for their organization’s research to be policy related and useful for practitioners.

4.2 Demographic Information by Organizational Role

4.2.1 Staff Size

A majority of the organizations included in the current analysis were small, with a median number of 9.5 staff positions across all 15 organizations. Three organizations stood out as being relatively larger, with 46, 45 and 19 full-time staff positions, respectively (skewing the average number of staff across all organizations to 14). The largest organization was the Canadian Health Services Research Foundation (CHSRF), a KT/KB organization with numerous teams devoted to specific functions, including teams specializing in several knowledge translation and brokering functions. The second largest was Propel, a research institute with a large number of in-house staff providing research support to scientists and affiliated scientists involved in practitioner-oriented research, as well as a leadership team devoted to building and managing relationships with practitioners. The Institute for Research on Public Policy (IRPP) was the third largest organization, and was also classified as a research institute.
Moderately sized relative to the two largest organizations in the analysis, IRPP hosts several groups of staff overseeing research, operations, and publications.

In summary, a majority of the organizations employed a small team of staff members. Notable exceptions included two of the three research institutes in the current sample, potentially suggesting that research institutes may on average employ more staff than other types of intermediary organizations. For a graph depicting the relation between staff size and organizational roles, see Appendix E.

4.2.2 Sector

Based on data collected during the interviews, participating organizations were grouped into five sectors: health, water, environment,\(^5\) public policy, and social innovation. As shown in Appendix F, health was the most represented sector in the current – albeit limited – sample of intermediary organizations. Only three organizations in the sample (two research funders and one KT/KB organization) were devoted specifically to the water sector. However, it is worth noting that two of the organizations serving the public policy sector (a research institute and a research funder) were engaged in water initiatives at the time of the interviews. Specifically, IRPP had recently published a special edition of its Policy Options magazine titled, “Canada’s Water Challenges,” and was in the midst of hosting a series of working lunches across Canada on the topic. In addition, the Walter and Duncan Gordon Foundation had an ongoing Fresh Water Resources Protection program. One of the KT/KB organizations serving the environment sector also devoted a significant amount of time and resources to water. Namely, Environment Canada’s Science & Technology Liaison Division (S&T Liaison) had recently expanded to cover areas such as wildlife and atmospheric risk assessment, while maintaining a strong focus on its original knowledge translation and brokering work in the area of water.

This breakdown by sector and organizational roles suggests that water is reasonably well-represented in this cross-section of intermediary organizations. However, given the relatively large number of intermediary organizations devoted specifically to health and the rising importance of water as a political and environmental issue, it appears that there may be room for additional intermediary organizations dedicated exclusively to water.

4.2.3 Annual Budget

A wide range of annual budgets was observed across the 15 organizations (see Appendix G). Notably, research funders reported higher annual budgets on average than KT/KB organizations and research institutes. Among the six research funders, researcher-driven research funders reported slightly higher budgets than did practitioner-driven research funders.

The intermediary organization with the highest annual budget in the current sample was CHSRF. Although CHSRF was classified as a KT/KB organization, it should be acknowledged that this organization

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\(^5\) For the purposes of the current analysis, organizations operating in the environmental sector that did not focus exclusively on water were grouped into this category. Organizations focusing specifically on water were grouped into the water category.
also funded research, and operated in the health sector. Given the high cost of medical research, it is not surprising that this dual function organization had the highest annual budget. Indeed, four of the top five annual budgets belonged to intermediary organizations serving the health sector, and two of the three research funders with the highest budgets funded medical research. Both of the latter medical research funders were also researcher-driven, which may explain why researcher-driven research funders reported higher budgets than practitioner-driven research funders in this sample. With the exception of CHSRF, KT/KB organizations reported by far the lowest annual budgets.

Taken together, these results suggest that, on average, KT/KB organizations operate with a much lower annual budget compared with research funders, particularly those that fund medical research.

### 4.2.4 Source of Funding

The Canadian federal government was by far the dominant funder of the intermediary organizations included in this analysis (see Appendix H). Seven of the 14 Canadian organizations cited federal government agencies or departments as their primary source of funding. In addition, the two organizations that were funded by public endowments (CHSRF and IRPP) indicated that these endowments were primarily or exclusively created using funds from federal or a combination of federal and provincial governments. The Canadian Fitness and Lifestyle Research Institute (CFLRI) received annual funding from federal as well as provincial and territorial governments, and although Propel’s core funding was provided by the Canadian Cancer Society (a registered charity), more than half of its total annual funding came from mixture of federal and provincial grants and contracts.

The two member-funded organizations, WQRA and the Canadian Water and Wastewater Association (CWWA), received no annual funding from governments and cited lower annual budgets than many of the government-funded organizations in the current analysis. Although WQRA (the only international organization in this study) reported the lowest annual budget of all the research funders, this may in part be attributed to the fact that WQRA was still very much in its infancy as an industry-funded organization, and was hoping to gain additional member support in the coming years.

In summary, the results for source of funding suggest that federal funding may be a staple for intermediary organizations in Canada, and that federally funded intermediary organizations receive more funding on average than their non-federally funded counterparts.

### 4.3 Organizational Functions

#### 4.3.1 Five Original Functions

One goal of the current analysis was to examine what organizational functions are used by intermediary organizations in their fundamental task of applying research to inform practice and policy.

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6 Although WQRA receives no core funding from governments, WQRA-funded projects may also receive project-specific grants from government departments or agencies.
Recall that in their 2009 report, Bielak et al. examined five functions that they believed to be central to this process:

- **Planning and management** of research projects and programs, involving users in the process.
- **Interpretation** to make research results available in a way that is accessible and understandable to users.
- **Communication** – bringing research results to the attention of users in a form that is useful.
- **Engagement** – building trust and ensuring that stakeholders’ needs are met.
- **Evaluation** of the effectiveness of research dissemination, as well as evaluation of the impact of the research on practice and policy.

Interviewees representing the 15 intermediary organizations were asked to indicate which of these five functions were involved in the process of applying research to inform practice and policy, regardless of whether the functions were done by their organization or left to other organizations or agencies.7

4.3.1.1 **Planning and management.** The results revealed that a vast majority of the interviewees believed that involving users in the planning and management of projects and programs was a critical element in using research to inform practice and policy. Many interviewees stressed the importance of this function for ensuring that research and other outputs are relevant to users, and for increasing the likelihood of uptake of outputs by users.

4.3.1.2 **Interpretation and communication.** These two functions appeared to share several common elements for interviewees in the current study. When presented with the above definitions of interpretation and communication, many interviewees discussed the two functions together, suggesting they are viewed as separate but related steps in the knowledge translation and brokering process.

Given this study’s focus on intermediary functions, the term “communication” was appropriately understood by interviewees as being distinct from other types of organizational communications functions (e.g., marketing, public relations, etc.). However, the need to differentiate intermediary communications from other communications was discussed on several occasions, suggesting that another term could be used in future investigations to better characterize the intermediary communication function.

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7 For ease of presentation to readers and interviewees, descriptions of the five functions presented in the current report and in the interview protocol are paraphrased versions of the original descriptions in Bielak et al.’s (2009) report. It is worth noting that the research conducted for that report was based on interviews with researchers, research managers, research users, and intermediaries who dealt directly with researchers, and was therefore focused on the direct use of scientific research to inform practice and policy. In contrast, this study targets various types of intermediary organizations, including several KT/KB organizations that are less directly involved in the use of scientific research, and more focused on rolling up existing evidence or creating generic knowledge translation and brokering tools to aid practitioners in applying research. Although the descriptions of the five functions used in the current report reflect Bielak et al.’s (2009) original focus on direct contact with scientific research, interviewees were encouraged to interpret the five functions within the context of their own work, which may or may not involve research programs, research results, or research dissemination as the descriptions specify.
Based on interviewees’ comments surrounding interpretation and communication, the following revised definitions may be useful in further distinguishing the two functions in future discussions:

- **Interpretation** – translating research results into a style and format that is understandable to users.
- **Reaching** – bringing research (that has already gone through the process of interpretation) to the attention of users using audience-appropriate channels.

4.3.1.3 Engagement. For many interviewees, the distinction between engagement with stakeholders and planning and management involving users in the process appeared to be unclear. This may suggest that for some intermediary organizations included in the current study, stakeholders and users are one and the same. For others, however, stakeholders may represent a wider circle of involvement – including partners, funders, or members of the general public – that may not necessarily be direct users of the intermediary organization’s outputs. A few interviewees spoke of the importance of establishing a relationship with users built on trust and mutual understanding of the other’s role before becoming jointly involved in a project, suggesting that engagement with users may be a precursor to the planning and management function. As such, it may be useful to distinguish between engagement with users and engagement with other stakeholders, and to specify who these stakeholders might be, in future discussions.

4.3.1.4 Evaluation. Bielak et al. (2009) noted that in their sample of researchers, research managers, research users, and intermediaries, evaluation of research dissemination and impact on practice and policy was an often-neglected function. In the current analysis of 15 intermediary organizations, the results were slightly more positive. Based on interviewees’ responses, approximately one-third of the organizations represented in this sample had an ongoing formal evaluation process in place or had been formally evaluated in the past. Although no classification of evaluation types was presented to interviewees to respond to during the interview, some interviewees described their organization’s evaluation program as being internally hosted, whereas others were conducted by external agencies (e.g., an organization’s government funders). Even more encouraging was the finding that approximately one-third of the organizations in the entire sample were currently in the process of developing formal, internal, impact-evaluation frameworks. A few others indicated that they planned to do so in the future. In addition to these more formal evaluations, several interviewees indicated that their organizations regularly solicited informal feedback from users.

Despite these relatively encouraging findings concerning participating organizations’ existing activities and interest in future activities surrounding impact evaluation, it should be noted that large challenges remain in this area. Although there was a general consensus among interviewees about the importance of evaluating research dissemination and impact on practice and policy, this sentiment was accompanied by an acknowledgment of the difficulties inherent in this process. Echoing Holmes and Savgård’s (2008) findings, several interviewees indicated that every practice and policy decision is influenced by a multitude of factors, as well as a host of voices coming from many different perspectives. As a result, by the time a decision is made, it is extremely difficult to determine which factors and which voices had an impact. A few interviewees admitted that their organizations had no
impact evaluation processes in place, and some expressed concern that current metrics assessed more traditional research outcomes, such as numbers of publications and highly qualified personnel (HQP), rather than evaluating impact on practice and policy. The latter concern was also expressed in Holmes and Savgård’s (2008) report.

4.3.2 Summary of Five Original Functions

In summary, interviewees acknowledged the importance of the five original functions in the process of using research to inform practice and policy. Involving users in the planning and management of projects and programs was viewed as a critical way to ensure that users’ needs are met, as well as a means to increase uptake by users. Interpretation and communication were cited as critical elements in the knowledge translation and brokering process, although the lines between these two functions often appeared to be blurred in practice. Establishing relationships with users and/or engaging with stakeholders was viewed as an important function, but was also an element in the five-function schema that could benefit from increased clarity. Finally, most organizations in the current sample were aware of the importance of evaluation. Despite the challenges associated with conducting impact evaluations, many organizations had already taken steps toward evaluating the impact of their work on practice and policy, while others were in the course of developing frameworks to do so.

4.3.3 Additional Functions

In addition to indicating which of the aforementioned functions were involved in the process of using research to inform practice and policy, interviewees were asked to specify if any other functions should be added to the list. Two additional functions were mentioned by several interviewees from different organizations. Both functions appeared to be relevant across all four categories of intermediary organizations, rather than confined to a single organizational role.

4.3.3.1 Convening. A few interviewees suggested that bringing researchers and practitioners together – either physically or virtually – was an important function performed by their intermediary organizations. These interviewees reinforced the widely known fact that researchers and practitioners live in vastly different worlds, operate on different timelines, and speak very different languages. Through the convening function, interviewees believed that researchers and practitioners develop respect for one another’s roles and gain an understanding of how they might work together to conduct impact-oriented research and use existing research knowledge to inform practice and policy. For future investigations, a proposed definition for this function might be:

- **Convening**, physically or virtually bringing researchers and practitioners together to facilitate an understanding of mutual roles and how both groups might work together to effectively use research to inform practice and policy.

4.3.3.2 Capacity building. Several interviewees noted the importance of training young leaders who understand how to create links between research and practice. Others indicated that their organizations spend a great deal of time and effort training practitioners to effectively use research to inform their decision-making processes. A potential definition for this function is:
Capacity building, providing training aimed at breaking down barriers between researchers and practitioners and facilitating the application of research to decision-making.

4.3.4 Summary of Additional Functions

Given that the convening and capacity-building functions emerged during the course of the interview process, it was not possible to assess each interviewee’s reactions to these additional functions. However, at face value they appear to be distinct from the five original functions. They were also mentioned by several interviewees and were relevant for research funders, KT/KB organizations and research institutes. Taken together, these findings suggest that convening and capacity building may be worthy of further investigation in future studies examining the functions involved in using research to inform practice and policy.

4.4 Organizational Structure

4.4.1 Organizational Structure Classification

A second purpose of this analysis was to examine what organizational structures are most commonly used by intermediary organizations in accomplishing their goal of applying research to inform practice and policy. To assess structure, interviewees were asked to describe the governance structures of their organizations, and to give a brief overview of the various staff roles and reporting relationships. An examination of the 15 organizations suggested that in terms of staff reporting relationships, the organizations could be categorized as having a flat, intermediate, or grouped structure. In general, smaller organizations tended to have flat or intermediate structures, while larger organizations had grouped structures.

Organizations with a flat structure were characterized by a leader (a president, CEO, or scientific director) at the top, with one direct report to oversee the entire staff (a vice president, executive or administrative director).

Organizations with an intermediate structure took several forms, but were generally characterized by a leader at the top, with one direct report overseeing non-managerial as well as managerial-level staff. In the simplest intermediate structures, managerial-level staff members were specialists with a single direct report, usually an assistant with the same specialty. In more complex intermediate structures, managerial-level staff included specialists as well as area managers. Unlike specialists, who typically oversaw one direct report, these area managers were in charge of two to four staff members working in general (e.g., operations) or specific (e.g., communications, knowledge translation, research analysis) functional areas.

In organizations with a grouped structure, the leader of the organization oversaw several direct reports, all of whom were directors or managers of a general or specific functional area. In the largest and most complex of these structures, there were up to three levels of staff below the director or area manager level, although in most cases there was only one level of staff below area managers. See Appendix I for illustrations of flat, intermediate, and grouped organizational structures.
4.4.2 Governance

A majority of the organizations included in the current analysis were independent entities overseen by boards of directors. Many organizations – most notably those with a strong research funder component – drew on advisory committees to assist their board of directors and/or scientific director (or equivalents) with certain functions. In most cases these advisory committees reported to the board of directors through the scientific director, although in a few organizations boards of directors also had advisory committees reporting directly to them. The most common functions served by these advisory committees were reviewing and adjudicating project proposals, evaluating the progress of existing projects, and providing advice on research priorities.

Despite the small sample of organizations, the composition of these advisory committees revealed an interesting finding. In two of the three researcher-driven research funders, advisory committees comprised a mix of researchers and users, while the third had no advisory committees at all. By contrast, all three of the practitioner-driven research funders had user-only advisory committees or subcommittees, in addition to mixed researcher/user committees or committees comprising only researchers. This pattern was consistent with interviewees’ descriptions of priority-setting and project-selection processes in the two categories of research funders (recall that these processes were used to classify research funders as being researcher or practitioner-driven).

4.5 Interaction between Functions and Structure, by Organizational Role

The previous two sections have presented the results for organizational functions and organizational structure independently. However, given that the purpose of an organization’s structure is to accomplish various organizational functions, the interaction between functions and structure is of great importance for understanding how intermediary organizations fulfill their mandate. As discussed previously, organizations differ in terms of the role they play in the intermediary space between research and practitioners, and it follows that organizations with different roles may have specialized structures in place to accomplish the functions associated with their roles. Therefore, this section describes the interaction between functions and structure, grouped by organizational role.

For brevity and clarity, the current section focuses on aspects of functions and structure that showed clear patterns across groups of organizations. The functions that revealed the clearest patterns of findings were planning and management, interpretation, communication, evaluation, and capacity building. Although the results suggested that engagement and convening were also important intermediary functions, they received relatively less attention from interviewees and displayed less consistency in terms of findings across organizational roles. As a result, these two functions will receive less detail in the current section.

4.5.1 Research Funders

4.5.1.1 Researcher-driven. The most notable aspect of researcher-driven research funders in terms of functions and structure was that they were set up primarily as administrative organizations. The majority of staff members were devoted to functions such as finance management,
communications, office administration, and research program management. Compared with the other types of intermediary organizations included in the current analysis, researcher-driven research funders tended to accomplish very few of the seven intermediary functions (planning and management, interpretation, communication, engagement, evaluation, convening, and capacity building) in-house. Instead, these functions were usually outsourced to funded researchers, or confined to a specific knowledge translation or brokering initiative and associated staff rather than their main research programs.

One implication of researcher-driven research funders’ administrative focus was that involving users in the planning and management of research programs was done by researchers at the project level, while organization-level priorities were set by their boards of directors. This is not to suggest that researcher-driven research funders had no interest in meeting practitioners’ needs. To the contrary, interviewees indicated that users were involved in project-selection processes and sat on advisory committees that advised the boards of directors in two of the three organizations in this category. Furthermore, in all three research funders, academic merit and practical applications were each considered during project selection. However, compared with other organizations in the study, those classified as researcher-driven research funders appeared to take more of a hands-off approach to many knowledge translation and brokering activities, opting instead to concentrate on program management while supporting researchers and other groups in their knowledge translation and brokering efforts.

An exception to this pattern of outsourcing intermediary functions appeared to be capacity building. As mentioned previously, the capacity-building function seemed to have two components: training young leaders (usually students) who understand how to create links between research and practice, and training practitioners to effectively use research in their decision-making. Each researcher-driven research funder had a staff member devoted to capacity building. However, it should be noted that capacity building within these organizations was clearly focused on student development, rather than on practitioner training.

Aside from the three organizations that were categorized as researcher-driven research funders, the only other organizations that outsourced a significant portion of their intermediary functions to researchers were CWN (a practitioner-driven research funder) and CHSRF (a KT/KB organization). This was not surprising, given that both CWN and CHSRF appeared to have roots in the traditional researcher-driven research-funder model. However, at the time of the interviews, these organizations were accomplishing more of their intermediary functions using staff (CHSRF), or through a combination of staff, advisory and management committees (CWN) than they were outsourcing to researchers.

4.5.1.2 Practitioner-driven. Practitioner-driven research funders were similar to researcher-driven research funders in that a majority of the staff members were devoted to administrative, rather than intermediary, functions. However, an obvious difference was observed between the two categories of research funders in how many intermediary functions were handled in-house or at the governance level, as opposed to being outsourced to researchers or limited to specific initiatives.
Most notably, the planning and management function was of great importance in all three practitioner-driven research funders. As mentioned previously, each organization had advisory committees specifically dedicated to involving and assigning decision-making authority to users in the program-planning and project-selection processes. Involving users in planning and management also appeared to be within the duties of several staff members in these organizations. Similar to researcher-driven research funders, high-level priorities appeared to be set by their boards of directors in consultation with various advisory committees, but with increased input from users.

In terms of the interpretation and communication functions, CWN differed slightly from the other two practitioner-driven research funders. As implied in the previous section, CWN outsourced a portion of these functions to researchers, whereas the other practitioner-driven research funders did not. In addition, at the time of the interviews, CWN was increasingly conducting significant interpretation and communication work through its governance structure, particularly through advisory and management committees associated with its nascent consortia program. By contrast, SFM Network had a team of full-time and regular contract staff devoted to these two functions. Having recently transitioned from a government to an industry-funded model, none of WQRA’s industry-funded projects had yet reached a point where interpretation or communication functions had come into play. However, like SFM Network, WQRA planned to hire staff in the future to accomplish these functions.

Alongside the interpretation and communication work being done through CWN’s consortia program committees, it should also be noted that CWN was increasingly using these governance structures to accomplish other intermediary functions such as planning and management, convening, and engagement with users. This concentration of a large number of intermediary functions within a single program was not observed within the other practitioner-driven research funders. Instead, other practitioner-driven research funders tended to employ a range of intermediary functions across all of their programs. CWN’s concentration of intermediary functions in its consortia program was, however, akin to the program-specific intermediary work being conducted by a few of the researcher-driven research funders (e.g., CSN’s use of the Canadian Stroke Strategy as a means for knowledge translation, and SCN’s recent creation of the Stem Cell Foundation). Despite the extremely small sample of organizations, this comparison suggests that CWN may have recently transitioned from an earlier role as a researcher-driven research funder, and was still developing into a new role as a practitioner-driven research funder.

4.5.2 Similarities between Researcher and Practitioner-driven Research Funders

Notwithstanding the differences between researcher and practitioner-driven research funders, and between CWN and the other practitioner-driven research funders, there were also commonalities shared by the larger group of research funders. Compared with the KT/KB organizations and research institutes included in the current analysis, research funders were the least likely to have impact-evaluation processes in place. Four of the six organizations in the research funder group received NCE funds and participated in NCE’s annual reporting process, which measured traditional research metrics rather than impact on practice and policy. Nevertheless, some work on evaluation of impact was being done. Although confined to a specific initiative, CSN was involved in impact evaluation through its
Canadian Stroke Strategy. In addition, CWN indicated that it currently measured and reported on impact as well as traditional metrics, and was working on expanding its impact-evaluation processes. The Gordon Foundation revealed that it had conducted impact evaluations of its grantees’ work, but had not undergone such an evaluation itself.

The analysis of organizational functions also revealed that capacity building took a similar form within practitioner-driven research funders as it did within researcher-driven research funders. Recall that the capacity-building function encompassed training young leaders to create links between research and practice, as well as training practitioners to use research to inform their decision-making. Similar to researcher-driven research funders, practitioner-driven research funders had staff members devoted to the student training aspect of capacity building. Thus, practitioner training was not emphasized in researcher-driven or practitioner-driven research funders. At the time of the interviews, CWN indicated that it was looking into the possibility of developing knowledge translation and brokering tools for researchers, and potentially practitioners as well. Should this initiative move forward, it would represent a departure from other research funders’ focus on the student training aspect of capacity building.

Despite apparent differences between researcher- and practitioner-driven research funders in their handling of the interpretation and communications functions, similarities could also be found. Recall that researcher-driven research funders tended to outsource many intermediary functions, including interpretation and communication, while practitioner-driven research funders tended to perform these functions in-house. However, it should be noted that in both researcher- and practitioner-driven research funders, interpretation and communication were usually performed together, by the same groups or staff members. For example, in researcher-driven research funders, researchers who were responsible for interpretation were also responsible for communication. Likewise, staff members within practitioner-driven research funders who were in charge of communication also tended to be tasked with interpretation.

Another similarity within the broader group of research funders, whether they were researcher- or practitioner-driven, was basic organizational structure. Specifically, all organizations in both research funder categories had flat or intermediate organizational structures. One reason for this finding may be that despite the importance of their intermediary work, the main portion of research funders’ time and budget was spent administering a research program. Given the size of the research programs represented in the sample, this type of mandate seemed to require only one or two staff members devoted to each of the main administrative functions, keeping the staff size small and reducing the need for hierarchical reporting structures.

4.5.3 KT/KB Organizations

KT/KB organizations showed several major structural and functional differences compared with research funders. The most striking difference was that the majority of staff members within KT/KB organizations were devoted to intermediary functions, rather than administrative functions. Consistent with this staff focus on intermediary work, KT/KB organizations tended not to rely on governance
structures such as advisory committees to accomplish intermediary functions. They also tended not to outsource intermediary functions to researchers or other external groups, opting instead to handle these functions in-house. The one exception was CHSRF, which managed a research program in addition to its knowledge translation and brokering work. Consistent with its dual role as a research funder and a KT/KB organization, CHSRF had more staff devoted to administrative functions than other KT/KB organizations. Like other research funders, CHSRF encouraged its researchers to conduct some intermediary work – in particular the planning and management, interpretation, and communication functions. Like other research funders, CHSRF also conducted additional planning and management by drawing on a panel of academics and users to review research proposals. However, consistent with other KT/KB organizations, CHSRF had an even greater number of in-house staff specializing in wide range of intermediary functions, including the functions in which researchers and users were also involved.

As in research funders, high-level priorities within KT/KB organizations appeared to be set by the top levels of management (boards of directors or trustees, or for the two National Collaborating Centres and Environment Canada’s S&T Liaison, federal government agencies or departments). However, there appeared to be a great deal of flexibility for KT/KB organizations to set their own agenda based on internally conducted formal and informal assessments of users’ needs. This assessment of users’ needs and other duties related to the planning and management function was conducted exclusively by in-house staff, with the aforementioned exception of CHSRF.

Compared with research funders, KT/KB organizations in the present analysis showed greater commitment to the evaluation function. At the time of the interviews, one-third of the KT/KB organizations already had an internal impact-evaluation process in place or had been evaluated by an external agency, and two-thirds were actively developing formal, internal impact-evaluation processes. In all cases, these internal evaluation processes were being developed by in-house or contract staff.

The capacity-building function within KT/KB organizations took a slightly different form than it did within research funders. Capacity building was often a lead mandate of KT/KB organizations, which were tasked with producing knowledge translation and brokering tools aimed at practitioners, as well as helping practitioners interpret and use research to effectively inform decision-making. This is not to say that KT/KB organizations were entirely uninvolved in training young leaders. True to its dual role as a KT/KB organization and a research funder, CHSRF provided graduate student and postdoctoral training opportunities through its CADRE program. However, this focus on training young leaders was balanced by its work with practitioners through CHSRF’s Executive Training for Research Application (EXTRA) program, as well as other ongoing initiatives. In addition to their work with practitioners, Environment Canada’s S&T Liaison and the two NCCs were also involved in hosting students on placement through various internship programs.

A variety of basic organizational structures were observed among the KT/KB organizations, spanning the entire range from flat, to intermediate, to grouped. The majority, however, were grouped. The tendency among KT/KB organizations to conduct numerous intermediary functions in-house, combined with the mandate of developing knowledge translation and brokering products and tools in-
house, suggests that groupings of staff may have been necessary to manage each of these tasks. Indeed, a rough mapping of organizational functions onto these organizational structures suggested that groups of staff members were associated with specific intermediary functions.

4.5.4 Research Institutes

The three intermediary organizations that were categorized as research institutes shared the common threads of coordinating, conducting and supporting practitioner-oriented research, but were also the most heterogeneous group of organizations in this study. Specifically, the proportion of staff devoted to administrative and research support versus intermediary functions varied greatly among the three organizations. In addition, there were discrepancies in the variety of intermediary functions that were being accomplished by staff members versus leadership teams. At the Canadian Fitness and Lifestyle Research Institute (CFLRI), the majority of staff members were involved in collecting and synthesizing existing data to meet the information needs of practitioners (interpretation function), while the remaining staff members were devoted to administrative functions. At IRPP, many staff members were involved in a wide range of intermediary functions, although a number were assigned to administrative functions such as event coordination and production of publications. Finally, members of Propel’s leadership team were extensively involved in several of the intermediary functions, whereas the majority of staff members played a research support role for Propel’s scientists and affiliated scientists. Therefore, although the staff at IRPP was involved in a wide range of intermediary functions, staff at CFLRI and leaders at Propel specialized in a relatively narrower range of intermediary functions, and Propel staff was primarily engaged in research support.

One explanation for this variation among research institutes may be that two of the organizations (CFLRI, Propel) acted as evidence-generation arms for very different external agencies, while the third (IRPP) was an independent research institute.

CFLRI was a national research institute that received funding from federal, provincial and territorial (FPT) governments. CFLRI worked in close collaboration with an advisory committee of members nominated by the Physical Activity Recreation Committee (PARC), a FPT committee that provided a means to keep governments informed about CFLRI’s activities. It was through this advisory committee that CFLRI’s findings were interpreted and communicated to government agencies, where they were then used to inform practice and policy. Propel also appeared to be in a similar situation. Funded in part by the Canadian Cancer Society and the University of Waterloo (UW), Propel was established to conduct solution-oriented population health research, program evaluation, and knowledge translation and brokering related to cancer and cancer prevention. Propel’s work included helping researchers obtain funding, supporting data collection and analysis, and connecting researchers to public health decision-makers and the Canadian Cancer Society. Although Propel’s leadership team was involved in several intermediary functions, the Canadian Cancer Society played a large intermediary role – including interpretation of Propel’s findings – in addition to its practitioner role of using Propel’s research to inform its programs and initiatives.
Whereas CFLRI and Propel shared some intermediary functions with external agencies, at IRPP most intermediary functions were conducted by in-house staff members. This finding was consistent with IRPP’s focus on being an independent policy research institute. Indeed, IRPP was funded through a public endowment, and was not dependent on governments or external agencies for continued funding. In addition, IRPP was created to fund independent research, rather than to serve as an evidence-generation arm for an external agency.

Priority setting within the three research institutes was predictably influenced by each organization’s source of funding. Although high-level oversight of CFLRI’s activities was provided by its board of directors, yearly priorities were established by federal, provincial and territorial governments. The planning and management functions inherent in this priority-setting process appeared to be managed by CFLRI’s advisory committee. At Propel, high-level priorities were established by the Canadian Cancer Society and UW’s joint partnership council, in conjunction with Propel’s leadership team. However, at the program level, this leadership team was tasked with ensuring that all end users were extensively involved in the program planning and management. As mentioned previously, Propel received funding from a variety of sources, including federal and provincial departments and agencies, and provided scientific evidence to support the work of numerous users in addition to its work with the Canadian Cancer Society. Therefore, program-level priorities were managed by Propel’s leadership in consultation with various end-users. By contrast, at IRPP, high-level priorities were based on veteran research directors’ assessments of the current and future policy landscape, contingent on approval from IRPP’s board of directors. Users were often incorporated in the planning and management of major programs through ad hoc advisory committees that were convened to provide direction to research directors. Therefore, priority-setting appeared to be more internally based at IRPP as compared with research institutes that were acting as evidence-generation arms for other agencies.

Compared with the other types of intermediary organizations, research institutes were the most likely to have undergone external evaluations. All three research institutes in the current sample had been evaluated by their funder (or in the case of IRPP, its board of directors). In addition, CFLRI indicated that it conducted formal, in-house evaluations of its impact, while IRPP regularly held informal self-evaluation sessions involving its entire staff. Interviewees representing Propel indicated that in its most recent external evaluations of Propel, the Canadian Cancer Society had begun moving toward more impact-related metrics, and away from traditional research-related metrics. Interviewees suggested that they would be working with the Canadian Cancer Society to continue this trend in future evaluations of Propel’s impact.

The capacity-building function did not appear to be a priority for research institutes. Although Propel indicated that it supervised and mentored a fairly large number of graduate students and interns working with affiliated scientists on specific research projects, the other research institutes did not mention any capacity-building initiatives.
4.5.5 Similarities between KT/KB Organizations and Research Institutes

Research institutes were similar to KT/KB organizations in that they tended to operate under grouped organizational structures. The exception was CFLRI, which was among the smallest organizations in the analysis – it operated under an intermediate structure, but showed elements of a grouped organization despite its small size. Unlike KT/KB organizations, however, staff within research institutes appeared to be less likely to be grouped according to intermediary functions, and more likely to be grouped according to administrative or research support functions. IRPP, which engaged a greater proportion of its staff in a wider range of intermediary functions compared with the other research institutes, was the most similar to the KT/KB organizations as a portion of its staff appeared to be grouped around intermediary functions.

Another similarity between KT/KB organizations and research institutes was that the interpretation and communication functions were often accomplished by different groups or individuals. This contrasts with research funders, where the two functions were usually completed by the same group. For example, at IRPP the interpretation function was outsourced to researchers, while communication with policy-makers was largely handled by IRPP staff. At CFLRI, interpretation was done by in-house research staff, whereas communication with policy-makers occurred through an advisory committee. A similar pattern of separating the two functions was observed within several KT/KB organizations. For example, at the National Collaborating Centre for Environmental Health (NCCEH) interpretation was conducted by in-house knowledge translation scientists, while the majority of information delivery to practitioners was handled by another senior staff member. One reason why KT/KB organizations and research institutes were more likely to separate these two functions could be that interpretation and communication are more central to the missions of KT/KB organizations and research institutes than to the missions of research funders (the latter of which must also fund research). As a result, KT/KB organizations and research institutes may have greater flexibility in being able to devote money and staff resources to treating the two functions as separate processes.

5.0 General Summary and Conclusions

The purpose of this study was to examine organizational structures, functions, funding sources, and other characteristics in a sample of intermediary organizations to determine how they go about their task of using research to inform practice and policy. The analysis revealed some interesting results across the group of 15 organizations, as well as some patterns that emerged in association with various categories of intermediary organizations.

5.1 Organizational Roles and Focus

Participating intermediary organizations were grouped into one of four general categories: researcher-driven research funders, practitioner-driven research funders, KT/KB organizations, and research institutes. Compared with other categories of organizations, interviewees representing KT/KB organizations rated their organizations as being the most practitioner oriented. Interestingly, researcher-driven research funders were not rated as being more research focused (and hence less
practitioner oriented) than practitioner-driven research funders. Instead, both types of research funders were typically rated toward the middle of the research-versus-practitioner-focus continuum, suggesting that the two types of research funders took their respective intermediary roles very seriously.

5.2 Demographics

Intermediary organizations in this sample were typically small, with an average of 9.5 full-time positions per organization. The most notable exceptions were two of the three research institutes, which had considerably more employees on staff.

The findings indicated that relatively few of these intermediary organizations were focused exclusively on the water sector. Although one environmental and several public policy organizations were engaged in water initiatives at the time of the interviews, it should be noted that one of the three intermediary organizations focused exclusively on water was based in Australia, while another – CWN – had an uncertain future in terms of funding and direction after 2015. These results suggest that although the water sector may be reasonably well represented in the present community of intermediary organizations, there may soon be an opportunity for more Canadian intermediary organizations dedicated to water.

With regard to monetary resources, the results revealed that KT/KB organizations had lower annual budgets on average than all other categories of intermediary organizations in the current analysis. This may be in part because other categories of intermediary organizations must spend more money to accomplish their objectives. In the case of research funders, these objectives may include funding costly research in addition to conducting other intermediary activities. However, it may also be the case that specialized knowledge translation and brokering as well as tool-development work being conducted by KT/KB organizations is undervalued relative to other functions, such as funding, supporting, or conducting practitioner-driven research. Indeed, numerous interviewees attested to the importance of hands-on knowledge translation and brokering work and indicated that more resources are needed for this effort in Canada. Despite discrepancies in funding across the categories of intermediary organizations, the most common and largest source of funding for intermediary organizations in Canada was the federal government. This funding took various forms, including annual funding, public endowments, and grants.

5.3 Organizational Functions

Across all four categories of intermediary organizations, interviewees agreed that the five intermediary functions studied in Bielak et al.’s (2009) report were central to their work. Notwithstanding the similarities between the current results and Bielak et al.’s findings, this study did suggest that a clearer distinction between the interpretation and communication functions may be warranted. In addition to revising the definitions for these two functions, another solution may be to refer to communication in the intermediary context as “reaching.” The current results also indicated that it would be beneficial to clearly distinguish between engagement with users and engagement with stakeholders in future investigations. Two additional functions – convening and capacity building –
emerged during the course of the current interviews, and may be worthy of further investigation as intermediary functions.

One difference between this analysis and Bielak et al.’s (2009) study was related to the evaluation function. In Bielak et al.’s (2009) sample of researchers, research managers, research users, and intermediaries, evaluation of research dissemination and impact on practice and policy was relatively rare. By contrast, approximately one-third of the organizations in the current sample had an ongoing evaluation process in place or had been externally evaluated in the past. Other organizations were in the midst of developing evaluation frameworks, or cited interest in doing so in the future. This difference may be attributed to the fact that the current study focused exclusively on intermediary organizations, rather than including other groups such as researchers and research managers. Indeed, researchers and research managers may be more focused, and better trained, on using research to achieve academic objectives rather than to inform practice and policy. In addition, in many cases intermediary organizations were required to show an impact of their work on practice and policy to receive continued funding. Despite the increased emphasis on impact evaluation in the current sample, several interviewees acknowledged the difficulties inherent in developing and maintaining an evaluation framework to effectively monitor impacts on practice and policy. It appears that a great deal of work remains to be done in this area.

**5.4 Organizational Structure**

In addition to being categorized by role, intermediary organizations were classified according to staff reporting structure: flat, intermediate, or grouped. Organizations’ governance structures were also examined. When organizational roles, functions, and structures were examined in conjunction with one another, several interesting patterns emerged.

Researcher-driven research funders were primarily administrative in terms of staff focus. They tended to outsource many intermediary functions to researchers, and limited intensive knowledge translation and brokering activities to specific initiatives rather than incorporating them into their main research programs. Instead, they focused on managing research programs and providing basic support to researchers in their knowledge translation and brokering activities. Practitioner-driven research funders were also primarily administrative, but handled relatively more intermediary functions in-house using staff or elements of their governance structures, such as board advisory committees. Planning and management of research programs involving users in the process was an especially important function for practitioner-driven research funders. In both categories of research funders, high-level priorities were typically set by boards of directors in consultation with various advisory committees. However, users were given increased input into the priority-setting process by practitioner-driven research funders as compared with researcher-driven research funders, partly through membership on user-only advisory committees that were found only within the governance structures of practitioner-driven research funders.

Whether researcher- or practitioner-driven, research funders tended to have flat or intermediate staff reporting structures, which were congruent with their primary focus on managing
research programs. Consistent with their emphasis on funding research, research funders were less likely than other categories of intermediary organizations to conduct evaluations of their impact on practice and policy, or to have their impacts evaluated by an external agency. They were also unlikely to devote separate resources to the interpretation and communication functions, and capacity-building activities were primarily focused on student development. Despite the differences between researcher- and practitioner-driven research funders and the increased focus on knowledge translation and brokering activities within practitioner-driven funders, the current findings suggest that practitioner-driven funders are more similar to researcher-driven research funders than to KT/KB organizations.

In contrast with research funders, staff members at KT/KB organizations were primarily focused on intermediary, rather than administrative, functions. As such, KT/KB organizations tended not to outsource or rely on their governance structures for intermediary functions, instead choosing to manage these functions using in-house staff. Organizational structures reflected this tendency, as staff-reporting relationships were often grouped according to intermediary functions. Similar to research funders, high-level priorities were typically set by the top levels of management. However, there also appeared to be a great deal of flexibility within KT/KB organizations to set program agendas based on formal and informal assessments of users’ needs, conducted by staff members.

Consistent with their emphasis on user-focused intermediary work, KT/KB organizations were the only category of organizations consistently rated by interviewees as more practitioner focused than research focused with regard to overall activities (recall that this subjective rating was made by all interviewees, and was in addition to the objective classification of organizations according to role).

Compared with other categories of intermediary organizations, KT/KB organizations also appeared to be the most practitioner oriented in their approach to capacity building. In several cases, building practitioners’ capacity to interpret and use research to effectively inform decision-making was the lead mandate of the organization.

Also consistent with KT/KB organizations’ focus on intermediary work was their commitment to conducting evaluations of their organizations’ impact on practice and policy. Findings indicated that several KT/KB organizations already had internal impact-evaluation processes in place, or that they had been evaluated by external agencies in the past. In addition, it was telling to note that at the time of the interviews, two-thirds of the KT/KB organizations had full-time or contract staff members devoted to developing an internal impact-evaluation framework. This finding suggests that the importance of impact evaluation is increasingly being recognized, and that KT/KB organizations have recently seen the need to devote their own resources to this function.

Research institutes were a heterogeneous group, with each organization fulfilling a slightly different role in the process of using research to inform practice and policy. Two of the organizations operated as evidence-generation arms for external agencies, and were at least partially reliant on these external agencies for funding. In terms of staff functions, non-leadership team employees at one of these two organizations were primarily engaged in research support roles, whereas the other organization hosted a combination of administrative and intermediary functions (albeit limited in terms
of scope) at the staff level. The third research institute operated independently, with staff members involved in a variety of intermediary as well as administrative functions. Across all three research institutes, however, organizational structures were more likely to be grouped according to administrative or research support, rather than intermediary, functions.

Overall, intermediary functions within research institutes appeared to be influenced by their relationships with their respective funding agencies. Within the two evidence-generation research institutes, overall priorities were overseen by their external funding agencies and end-users were extensively involved in program planning and management. By contrast, priorities at the independent research institute were established by research directors at the staff level, with approval from the organization’s board of directors. Given the reciprocal relationship between two of the research institutes and their funding agencies, it was not surprising that both of these institutes had been the subject of formal external evaluations of their impact. The third organization had also been evaluated by the source of its independent endowment. In addition to these formal, external evaluations, two of the three research institutes indicated that they also conducted formal or informal self-evaluations of their own impact. Capacity building, however, was not a main focus for the research institutes.

5.5 Comparing CWN with Other Research Funders

The current findings suggest that CWN shares many similarities with other practitioner-driven research funders and with research funders more generally. Although CWN was among the three smallest organizations in the sample, CWN’s current staff size of 7.5 full-time equivalent positions (excluding the scientific director) was only slightly below the average of 8 full-time staff positions that was observed within the group of practitioner-driven research funders. Given the limited sample of organizations included in the current analysis, there is not enough evidence to suggest that CWN’s staff size is meaningfully smaller than its peers. Like many of the other research funders, CWN had an intermediate staff reporting structure. Compared with the larger group of research funders, CWN was also typical in terms of its primary funding source, namely, the federal government. It should be noted, however, that one of the three practitioner-driven research funders was primarily funded by user members (WQRA). CWN has recently begun conducting significant intermediary work and testing the success of a “user-pays” research model through the CWN consortia program. For both WQRA and the CWN consortia program, the next few years will be critical for determining whether a user-pays model can be successful in the Australian and Canadian water sectors, respectively.

CWN was similar to other practitioner-driven research funders in its use of advisory committees to facilitate the planning and management intermediary function. Where CWN differed, however, was in its use of consortia-related committees within its governance structure to conduct other intermediary functions, such as interpretation, communication, convening, and engagement with users. Indeed, other practitioner-driven research funders tended to use intermediary functions across all of their programs, rather than confining them to a single program. CWN’s concentration of intermediary functions within its consortia program was more similar to the practices of researcher-driven research funders, which tended to confine their intermediary work to specific programs or initiatives. This pattern suggests that CWN may be transitioning from a researcher-driven to a practitioner-driven research-funder model. If
CWN were to follow in the footsteps of the other practitioner-driven research funders in this study, it may begin to conduct more intermediary functions such as interpretation and communication using in-house staff, and to apply additional intermediary functions across all of its programs. In the future, CWN may also differ from other research funders in the breadth of its capacity-building work. Whereas research funders typically focus on the student-development aspect of the capacity-building function, there is a possibility that CWN may become involved in developing knowledge translation and brokering tools for researchers and practitioners alike.

One theme that emerged repeatedly during conversations with research funders (particularly NCEs) was a general, self-identified shift from being research to practitioner focused over the lifetime of the organization. Several NCEs also indicated that they had become increasingly multidisciplinary in terms of their research programs. CWN was no exception to either of these trends, exemplifying progressively more practitioner-focused and multidisciplinary work in both its regular and consortia research programs.

Like other practitioner-driven research organizations, CWN acknowledged the importance of impact evaluation. Compared with the current small sample of practitioner-driven research organizations, CWN had a more extensive impact-evaluation framework in place, and indicated that it will continue to develop this framework in the future. The current results support Bielak et al.’s (2009) observation that impact evaluation is a challenging function, and suggest there is room for improvement within the numerous organizations that are currently without an evaluation framework or are in the process of developing one.

5.6 Future Directions

Future investigations of organizational structure and intermediary functions may benefit from examining further the nature and scope of the convening and capacity-building functions that emerged during the current study. It may also be important to encourage study participants to distinguish between the interpretation and communication functions, as well as between engaging with stakeholders and engaging with users.

Follow up investigations with international intermediary organizations may shed further light on the interactions between organizational structure and functions within intermediary organizations. Additional examples of funding models, such as alternative endowment and user-pay arrangements, may also be sought out to inform CWN’s options for the future.
6.0 References


## Appendix A: Alphabetical List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex Bielak</td>
<td>Director</td>
<td>Science and Technology Liaison, Environment Canada</td>
</tr>
<tr>
<td>Dale Bischoff</td>
<td>Network Manager</td>
<td>Sustainable Forest Management Network</td>
</tr>
<tr>
<td>Keith Cadee</td>
<td>Member, Board of Directors</td>
<td>Water Quality Research Australia</td>
</tr>
<tr>
<td>Roy Cameron</td>
<td>Executive Director</td>
<td>Propel Centre for Population Health Impact</td>
</tr>
<tr>
<td>Vickie Cammack</td>
<td>Founding Executive Director</td>
<td>PLAN Institute for Caring Citizenship</td>
</tr>
<tr>
<td>Christina Chociolko</td>
<td>Network Coordinator</td>
<td>National Collaborating Centre for Environmental Health</td>
</tr>
<tr>
<td>Donna Ciliska</td>
<td>Scientific Director</td>
<td>National Collaborating Centre for Methods and Tools</td>
</tr>
<tr>
<td>Ray Copes</td>
<td>Former Founding Director</td>
<td>National Collaborating Centre for Environmental Health</td>
</tr>
<tr>
<td>Cora Lynn Craig</td>
<td>President and Chief Scientist</td>
<td>Canadian Fitness and Lifestyle Research Institute</td>
</tr>
<tr>
<td>Jaime Dawson</td>
<td>Senior Science Policy Analyst</td>
<td>Science and Technology Liaison, Environment Canada</td>
</tr>
<tr>
<td>Duncan Ellison</td>
<td>Executive Director</td>
<td>Canadian Water and Wastewater Association</td>
</tr>
<tr>
<td>Katie Lafferty</td>
<td>Executive Director</td>
<td>Canadian Stroke Network</td>
</tr>
<tr>
<td>Drew Lyall</td>
<td>Executive Director</td>
<td>Stem Cell Network</td>
</tr>
<tr>
<td>Katherine Marshall</td>
<td>Director, Planning and Operations</td>
<td>Propel Centre for Population Health Impact</td>
</tr>
<tr>
<td>Tim Morris</td>
<td>Program Officer, Fresh Water Resources Protection Program</td>
<td>Walter and Duncan Gordon Foundation</td>
</tr>
</tbody>
</table>
**Organizational structure and functions within intermediary organizations: A comparative analysis**

(Appendix A, continued)

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suzanne Ostiguy McIntyre</td>
<td>Vice-President, Operations</td>
<td>Institute for Research on Public Policy</td>
</tr>
<tr>
<td>Nancy Quattrocchi</td>
<td>Vice President, Corporate Services</td>
<td>Canadian Health Services Research Foundation</td>
</tr>
<tr>
<td>Karl Schaefer</td>
<td>Head, Strategic Science - Policy</td>
<td>Science and Technology Liaison, Environment Canada</td>
</tr>
<tr>
<td>Mark Servos</td>
<td>Scientific Director</td>
<td>Canadian Water Network</td>
</tr>
<tr>
<td>Martha Sinclair</td>
<td>Senior Research Fellow</td>
<td>Water Quality Research Australia</td>
</tr>
<tr>
<td>France St-Hilaire</td>
<td>Vice President, Research</td>
<td>Institute for Research on Public Policy</td>
</tr>
<tr>
<td>Zakiah Taha</td>
<td>Environment Canada Science Horizons Intern</td>
<td>McMaster University/ Science and Technology Liaison, Environment Canada</td>
</tr>
</tbody>
</table>
### Appendix B: Descriptions of Participating Organizations

<table>
<thead>
<tr>
<th>Organization</th>
<th>Abbreviation</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Fitness and Lifestyle Research Institute</td>
<td>CFLRI</td>
<td>CFLRI is a federally, provincially, and territorially funded policy research institute that synthesizes the literature and interprets data on factors that influence the physical activity levels of Canadians, and distributes this knowledge to policymakers and professionals in the public and private sectors, as well as to the general public.</td>
</tr>
<tr>
<td>Canadian Health Services Research Foundation</td>
<td>CHSRF</td>
<td>CHSRF is an independent research foundation that operates on an endowment from the federal government. It was established to fund research in applied health sciences (e.g., healthcare delivery) and support evidence-informed policy development, planning and decision-making. CHSRF is increasingly working to build the capacity of healthcare decision-makers to understand and apply research, and to help healthcare organizations implement evidence-based knowledge and improve their ability to engage with the public.</td>
</tr>
<tr>
<td><a href="http://www.chsrf.ca/home_e.php">http://www.chsrf.ca/home_e.php</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canadian Stroke Network</td>
<td>CSN</td>
<td>Founded in 2000 as a federally funded Network of Centres of Excellence (NCE), CSN funds research and fosters collaboration among researchers to create new knowledge in stroke. CSN works to increase the involvement of Canadian researchers and health professionals in stroke, and provides mechanisms to ensure that stroke knowledge is applied and leads to health and economic benefits for Canada.</td>
</tr>
<tr>
<td><a href="http://www.canadianstrokenetwork.ca/">http://www.canadianstrokenetwork.ca/</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canadian Water and Wastewater Association</td>
<td>CWWA</td>
<td>CWWA is a member-supported, national association that represents the common interests of municipal water and wastewater systems and their private-sector suppliers and partners. CWWA provides a strong presence in Ottawa that is recognized by the federal government and interprovincial agencies, and keeps its members informed on national issues. It encourages effective and relevant research, and promotes practical policies and regulations.</td>
</tr>
<tr>
<td><a href="http://www.cwwa.ca/">http://www.cwwa.ca/</a></td>
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</table>
(Appendix B, continued)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Abbreviation</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Water Network</td>
<td>CWN</td>
<td>Established as an NCE in 2001, CWN fosters multidisciplinary, multi-sectoral partnerships and research in water management. Through its research and consortia programs, CWN brings researchers, water managers and decision-makers together to ensure that the best evidence-based knowledge is applied to high-priority water resource management issues.</td>
</tr>
<tr>
<td>Institute for Research on Public Policy</td>
<td>IRPP</td>
<td>IRPP is a federally endowed, independent public policy research institute that was established to foster and inform public policy debate in Canada. In addition to producing non-partisan policy research, IRPP works to bring its research to the attention of – and spark debate among – Canadian governments, citizens, institutions and organizations, with the goal of improving the quality of public policy decision-making.</td>
</tr>
<tr>
<td>National Collaborating Centre for Environmental Health</td>
<td>NCCEH</td>
<td>As one of six National Collaborating Centres funded by the Public Health Agency of Canada (PHAC), NCCEH was established to create links between environmental health practitioners, policy-makers, and researchers. NCCEH synthesizes, translates, and disseminates science-based environmental health knowledge to practitioners and policy-makers, and identifies gaps in environmental health research and practice knowledge to be addressed by future research.</td>
</tr>
<tr>
<td>National Collaborating Centre for Methods and Tools</td>
<td>NCCMT</td>
<td>Established as a National Collaborating Centre by PHAC, NCCMT was created to identify and develop methods and tools for knowledge translation and brokering in public health. NCCMT works to disseminate and promote the use of these knowledge translation and brokering tools by health practitioners, policy-makers, and the other NCCs, thereby contributing to the NCCs’ common goal of improving the use of scientific research to strengthen public health practices and policies in Canada.</td>
</tr>
</tbody>
</table>
### Appendix B, continued

<table>
<thead>
<tr>
<th>Organization</th>
<th>Abbreviation</th>
<th>Brief Description</th>
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</thead>
<tbody>
<tr>
<td>PLAN Institute for Caring Citizenship</td>
<td>PLAN</td>
<td>PLAN disseminates training and materials, and shares practices and policies, to support individuals, organizations, and communities that are working to promote inclusion and reduce the isolation of people who are marginalized.</td>
</tr>
<tr>
<td><a href="http://www.planinstitute.ca/">http://www.planinstitute.ca/</a></td>
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</tr>
<tr>
<td>Propel Centre for Population Health Impact</td>
<td>Propel</td>
<td>Propel was established and is jointly funded by the University of Waterloo and the Canadian Cancer Society. Together with a group of affiliated scientists, Propel conducts applied research and facilitates knowledge exchange by linking researchers to the policy-making community. Through this process, Propel’s work is used to inform the development and implementation of health programs, policies, and services, with the ultimate goal of achieving improvements in the health of populations.</td>
</tr>
<tr>
<td><a href="http://www.propel.uwaterloo.ca/?section=1&amp;page=111">http://www.propel.uwaterloo.ca/?section=1&amp;page=111</a></td>
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<td></td>
</tr>
<tr>
<td>Science and Technology Liaison, Environment Canada</td>
<td>S&amp;T Liaison</td>
<td>Environment Canada’s S&amp;T Liaison branch works to strengthen links between Environment Canada’s science on the one hand, and policy and program development on the other. This work includes providing a platform for effective communication between scientists and decision-makers; disseminating audience-appropriate knowledge syntheses, reports, and other documents; and providing knowledge translation and knowledge brokering support for scientists and decision-makers.</td>
</tr>
<tr>
<td>Stem Cell Network</td>
<td>SCN</td>
<td>SCN was established as an NCE in 2001, and funds developmental stage, preclinical stem cell research. Each of its research programs is focused on the development of tools and therapies that may in the future be used to impact health practice and public policy.</td>
</tr>
<tr>
<td><a href="http://www.stemcellnetwork.ca/">http://www.stemcellnetwork.ca/</a></td>
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</tbody>
</table>
### Sustainable Forest Management Network
**Abbreviation:** SFM Network  
*SFM Network was founded in 1995 and will reach the end of its NCE funding in June 2010. Throughout its mandate, SFM Network funded multidisciplinary research related to forestry and forested landscapes, and fostered a network of researchers as well as industry, government and First Nations partners. SFM Network also undertook significant knowledge translation and brokering work to promote uptake of its research by forestry professionals and policy makers.*

### Walter and Duncan Gordon Foundation
**Abbreviation:** GF  
*The Walter and Duncan Gordon Foundation is an independent, private grant-making foundation that aims to protect the well-being and security of all Canadians through the development of progressive and sound public policies. The Gordon Foundation’s current programs are working to inform public policy by providing grants to research and education projects that enhance northern Canadians’ participation in public policy-making, and to projects that support improved governance and protection of Canada’s fresh water resources.*

### Water Quality Research Australia
**Abbreviation:** WQRA  
*WQRA is a member-funded national research centre that facilitates collaborative research in drinking water quality, recycled water and wastewater management. Founded in 2009, WQRA is working to bring researchers and water industry members together to plan and conduct research projects. Future activities will focus on knowledge transfer, and findings will be used to address current and emerging public health issues.*
Appendix C: Interview Questions

Organization history

1. To provide some context for our conversation, I’d like to talk very briefly about the history of your organization. The main details I’d like to know are:
   a. Year founded
   b. Founding agency and who was involved
   c. What need the organization was designed to fill

Organization characteristics

2. Please provide following general information about your organization:
   a. Location of head office
   b. Number and location of regional offices
   c. Number of employees
   d. How does your organization characterize itself? Choose any that apply:
      i. government, non-government, international non-government, intergovernmental
      ii. for-profit, non-profit
      iii. think tank or policy institute
      iv. private, public foundation
      v. charity
      vi. other (please specify)
   e. Sector served by the organization
   f. Source(s) of income/funding
   g. Annual budget/revenue
   h. Membership and/or representation, if applicable
   i. Partners*
   j. Demographics/diversity of members on governing bodies

Organization vision, mission, and goals

3. Does your organization have a formal vision or mission statement? If so, what is it?
4. What are the organization’s main goals? That is, how does your organization go about achieving its mission?
5. Are these goals related to using research to inform practice and policy?
   a. If yes, what practices or policies is the organization trying to change?

* For the current interview, the term “partner” is broadly defined, and includes partners who provide funding or in-kind support, help to secure other sources of funding, provide links to contacts, or otherwise help your organization achieve its goals.
Organizational functions

6. In your opinion, what are the organizational functions involved in using research to achieve practice and/or policy change? Please list any tasks that your organization does, as well as tasks that it leaves to other organizations or agencies.

7. A report prepared for the Scientific Knowledge for Environmental Protection (SKEP) network of European environmental ministries and regulators identified five functions central to the process of applying research to achieve practice and policy change. These are:
   - **Planning and management** of research projects and programs, involving users in the process
   - **Interpretation** to make results available to users in a form that is useful
   - **Communication** - bringing research results to the attention of users and enabling the use of research
   - **Engagement** with stakeholders
   - **Evaluation** of research dissemination and utilization

8. Are there any other functions you can think of, after having reviewed this list?

Organizational structure

9. Could you please describe the organizational and governance structures of your organization?

10. How does this structure support the organization’s goal of using research to inform practice and policy?

Research versus practitioner focus

11. Other organizations I have talked to tend to vary along a continuum from being more research focused to more implementation, or practitioner focused.
   a. On a scale from 1 to 10, where 1 is entirely research focused, and 10 is entirely practitioner focused, where would you rate your organization in terms of its expertise?
Appendix D: Research versus Practitioner Focus

<table>
<thead>
<tr>
<th>Organizational Role</th>
<th>Research institute</th>
<th>KT/KB organization</th>
<th>Research funder, practitioner-driven</th>
<th>Research funder, researcher-driven</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research funder, researcher-driven</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Research funder, practitioner-driven</td>
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<td></td>
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<tr>
<td>KT/KB organization</td>
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<tr>
<td>Research institute</td>
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</tr>
</tbody>
</table>

Organizational Role:
- IRPP
- CFLRI
- Propel
- S&T
- CWWA
- NCCEH
- PLAN
- NCCMT
- WQRA
- CWN
- SFMN
- SCN
- CSN
- GF

1 2 3 4 5 6 7 8 9 10

Research focused Practitioner focused
Appendix E: Staff Size
Appendix F: Sector

Organizational structure and functions within intermediary organizations: A comparative analysis
Appendix G: Annual Budget

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Budget (millions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research funder, researcher-driven</td>
<td>SCN 6.4M, GF 3.5M</td>
</tr>
<tr>
<td>Research funder, practitioner-driven</td>
<td>CSN 8M, SFMN 6.4M</td>
</tr>
<tr>
<td>KT/KB organization</td>
<td>CWN 5.3M, WQRA 2.1M</td>
</tr>
<tr>
<td>Research institute</td>
<td>Propel 5.5M, CHSRF 16M</td>
</tr>
</tbody>
</table>

† AVG 6M
† AVG 4.6M
† AVG 3.5M (0.9M without CHSRF)
† AVG 2.9M
Appendix H: Source of Funding

Primary Source of Funding
- Federal
- Federal/Provincial/Territorial
- Member
- Public endowment
- Other

Research funder, researcher-driven
- SCN 6.4M
- GF 3.5M

Research funder, practitioner-driven
- SFMN 6.4M
- CWN 5.3M
- WQRA 2.1M

KT/KB organization
- NCCMT 1.35M
- NCCEH 1.35M
- PLAN 0.5M
- CWVA 0.65M
- S&T 0.9M

Research institute
- CHSRF 16M
- Propel 5.5M
- CFLRI 1.5M
- IRPP 1.75M

Research in institute

Annual budget (millions of dollars)
Appendix I: Basic Organizational Structures

Flat Structure

Scientific Director

Administrative Director

Program Manager
Program Manager
Database Manager
Finance Manager
Communications Coordinator
Administrative Assistant

---

8 Structure and position titles portray a fictional organization with a flat structure, and do not refer to a particular organization. Titles may vary according to the focus of the organization.
Intermediate Structure

9 Structure and position titles portray a fictional organization with an intermediate structure, and do not refer to a particular organization. Titles may vary according to the focus of the organization.
Structure and position titles portray a fictional organization with a grouped structure, and do not refer to a particular organization. Titles may vary according to the focus of the organization.