

February 2, 2011

RAMP Steering Committee

Re: Selection of the Technical Reviewers for the RAMP Program Review

Dear Committee Members:

Please find attached a summary of the selection process followed and documented in the May 17, 2010 Letter Report entitled “Selection of the Technical Reviewers for the RAMP Program Review”, ARC Job#8785026 to determine members of the 2010 RAMP Review Panel.

1.0 Introduction

Alberta Innovates Technology Futures is pleased to provide an outline of the selection process for the 2010 RAMP Review Panel. The report summarizes the methods used in selecting the recommended review panel.

2.0 Methods for Selection of the Reviewers

A method for selection of the reviews was developed to be repeatable, to be well documented and to minimize potential bias within the reviewer selection process. The selection process consisted of the following steps:

- Determine the areas of expertise required;
- Compile a list of potential candidates with specialization within the areas of expertise identified;
- Develop a selection matrix to aid in the selection process; and,
- Determine the recommended candidates based on the results in the selection matrix.

A preliminary kick-off meeting was held on March 23, 2010 with representatives of the RAMP Steering Committee and the RAMP Component Managers. The meeting was used to identify the areas of specialization required for the review. It was decided that the reviewers should include experts in the fields of water, sediments, acid sensitive lakes, fish, benthos, climate and hydrology.

The RAMP Steering Committee and RAMP Component Managers came up with an initial list of 20 individuals, primarily from government and academic institutions, who were initially contacted to determine whether they would like to be considered for a review panel position. The number was increased to 22 following discussions with potential reviewers. The potential reviewers were contacted both by telephone (i.e. talked to in person or left a message) and email to determine their level of interest. An email was sent to the individuals explaining the 2010 RAMP Review purpose, structure, schedule, specializations required and a brief explanation of the product required from the

panel. The email, which was sent to the potential reviewers, had a questionnaire attached to help them document their areas of specialization, experience, and identify any conflict of interest.

Of the 22 individuals that were invited to be considered for the review panel, 13 indicated that they would be interested in being included in the selection process. The remaining 9 candidates that did not participate in the selection process either declined to be considered for the position of reviewer, did not reply, or were interested but were not available.

The potential candidates were asked to fill in the questionnaires and the results of the questionnaires were analyzed to determine the most appropriate reviewers in the areas of expertise identified at the preliminary kick-off meeting. It is recognized that most of the candidates have experience and expertise in more than one of the areas of specialization identified as necessary for the 2010 RAMP review. The reviewers were asked to conduct a detailed review in the area of specialization identified below, however, they were also encouraged to draw on their in-depth experience and expertise to examine and comment on the program as a whole.

The recommended candidates were chosen with the end goal of selecting a minimum of two candidate reviewers in each area of specialization. Candidates approached for participation in the review included individuals both with and without previous oil sands experience.

The evaluation encompasses two areas: the first evaluated general experience in working on similar panels, boards and monitoring programs; the second evaluated areas of specialization particular to the needs of the RAMP program. Table A1 and A2 provides the questionnaire and ranking scheme used to evaluate potential candidates general level of applicable experience. Table B1 summarizes screening level indicator parameters for level of applicable experience based on their responses documented in Table A1 and A2 and their individual curriculum vitae. Table B2 identifies specific areas of expertise for each potential reviewer particular to the areas of concentration identified during the kick-off meeting. Table B3 further examines areas of specialization with a detailed set of questions. Note that the potential candidates were asked whether they had experience in the areas summarized in the tables with yes or no answers. The “yes” responses were totaled for final rankings summarized in Table B4.

3.0 Results of the Reviewer Evaluation

The results of reviewer evaluation process identified Dr. George Dixon from the University of Waterloo and Dr. Monique Dubé of the University of Saskatchewan as the selected candidates for review for water quality. Dr. Dubé’s specialization is primarily in the area of integrated aquatic effects monitoring and cumulative effects assessment. Dr. Dixon specializes in environmental toxicology. These two individuals have worked in the oil sands and Dr. Dubé has been involved in a previous study with the RAMP Committee. The individuals also have areas of strength in the fish (Dr. Dubé) and benthos and aquatic invertebrates (Dr. Dubé and Dr. Dixon) and therefore provide for some area of overlap.

Dr. John Gibson of Alberta Innovates Technology Futures (formerly Alberta Research Council) and Dr. Donald Burn of the University of Waterloo were the selected candidates for the hydrology review. Dr. John Gibson's specialization is primarily in the areas of hydrology, groundwater and acid sensitive lakes whereas Dr. Burn's area of concentration is specific to hydrology and climate. Dr. Gibson has worked in the oil sands whereas Dr. Burn has not. Dr. Gibson also has areas of strength in water quality and sediment quality issues as well as acid sensitive lakes.

Dr. John Post of the University of Calgary and Dr. William Franzin of the Department of Fisheries and Oceans in Winnipeg were the selected candidates for involvement in the review of the fish section. Dr. Post specializes primarily in the areas of fish and aquatic ecology. Dr. Franzin has specialization in fish ecology and hydrology. Both individuals have oil sands experience. Both individuals also have indicated skills in the area of benthos and aquatic invertebrates and therefore provide an area of overlapping skills.

Dr. Kelly Munkittrick of the Canadian River's Institute of the University of New Brunswick and Dr. Joseph Flotemersch, Acting Chief, Ecological Research Branch of the United States Environmental Protection Agency were the selected candidates for involvement in the benthos area of the review. Dr. Munkittrick has oil sands experience whereas Dr. Flotemersch does not. Dr. Munkittrick also specializes in environmental effects monitoring, cumulative effects monitoring, fish study design and monitoring. Dr. Flotemersch's specialization includes bioassessment, monitoring of aquatic ecosystems, large river ecology and indicator development for aquatic ecosystems.

Dr. Shaun Watmough of Trent University, Dr. Dixon of University of Waterloo and Dr. John Gibson of Alberta Innovates Technology Futures were the selected candidates to be involved in the acid sensitive lakes review. All the selected reviewers have experience in acid sensitive lakes studies. Dr. Watmough also has experience in the areas of ecosystem environmental stress, environmental modeling and acid deposition studies on terrestrial and aquatic environments in the Athabasca oil sands area.

4.0 Closure

We trust that the selection process is transparent and meets with the needs of the 2010 RAMP Review Process.

Sincerely,



Catherine Main, M.Sc., MCIP, RPP., P.Geol., P.Geo.
Program Leader
Integrated Water Management Program

Table A1
Questionnaire For Reviewers

Criteria for Selection of the Technical Reviewers

Name and Title:

Interview Questions

1) Would they be Willing to be Considered for a Position on the Review Panel?	Yes	No
2) Oil Sands Experience	Yes	No
3) Availability to work in timeframe required	Yes	No
4) Confirmation of Areas of Specialization <hr/> <hr/>		
5) Potential Conflicts of Interest (Oil sands work, government work, existing committee involvement in oil sands, professional affiliations, etc...) <hr/> <hr/> <hr/>		
6) Willing to work with one other individual with a similar area of specialization to reach consensus regarding the results of a review in the area of your specialization. <hr/> <hr/> <hr/>		
7) Expectations Regarding Remuneration <hr/> <hr/>		

Table A2
Questionnaire For Reviewers

Criteria for Selection of the Technical Reviewers

Name and Title:

Resume Questions	1	POINTS 3	5
1) Experience working on committees, panels, review boards	none	1 - 2	>2
2) Years experience	"1 - 4	" 5 - 10	> 10
3) Involvement in workshops/ committees where consensus - based decision making was required	none	1 - 2	>2
4) Experience in writing technical guidance documents/manuals.	none	1 - 2	>2
5) Areas of specialization - multidisciplinary.	one	> 1	N/A
6) Areas of experience includes both stressors (temp, chemicals, water flow, nutrients, food availability, biological competition)/indicators of stress on ecosystem.	no	one	both
7) Experience in predisturbance, disturbance and post-disturbance programs.	no	one	both
8) Experience in large-scale monitoring programs.	no	1 - 2	>2
9) Complexity of programs/studies involving monitoring (number of parameters considered)	one parameter	two parameters	multiple parameters
10) Locations of experience and recognition	Alberta	national	international
11) Publications and papers in related area to study scope	none	1 - 2	>2
12) Experience in northern Canadian river systems and water basins.	none	3 studies	> 3 studies
13) Experience in long-term trend analysis, regional issues, cumulative effects.	none	3 studies	> 3 studies

Table B1
Criteria for Selection of the Technical Reviewers
Curriculum Vitae Criteria

Name and Title	Experience Based on Curriculum Vitae													
	Working on committees, panels, review boards	Years	Involvement in workshops/ committees where consensus based decision making was required	Writing technical guidance documents/manuals	Multidisciplinary Specialization	Stressors and indicators of stress on ecosystem	Predisturbance, disturbance and post-disturbance programs	Large-scale monitoring programs	Complexity of programs & studies (multiple parameters)	Recognition and experience	Publications and papers in related area to study scope	Northern Canadian river systems and water basins	Experience in long-term trend analysis, regional issues, cumulative effects	Resume Totals
Water Quality														
Hydrology														
Fish														
Benthos														

Selected Candidates for Area of Discipline

 Water Quality	 Benthos
 Hydrology	 Fish

Table B2
Criteria for Selection of the Technical Reviewers
Areas of Specialization

Name and Title	Field of Specilization Classification for Study	Water, sediment, AcidLake Sensitivity	Fish	Benthos and Aquatic Invertebrates	Hydrology and Climate	Detailed Description on Areas of Specialization
Water Quality						
Hydrology						
Fish						
Benthos						

Selected Candidates for Area of Discipline

- Water Quality
- Benthos
- Hydrology
- Fish

Table B3
Criteria for Selection of the Technical Reviewers
Considerations by Areas of Specialization

Areas of Specialization	Water Quality			Hydrology	
Water/sediments/acid sensitive lakes					
• periodicity of chemistry in natural systems					
• organic environmental chemistry					
• inorganic environmental chemistry					
• water quality issues					
• sediment quality issues					
• evaluation of acid sensitive lakes					
• Nox - Sox					
Subtotal					
Fish					
• toxicology					
• northern Alberta Fish species identification					
• fish counts					
• habitat identification					
• migratory fish species experience					
• bioaccumulation studies and fish health					
Subtotal					
Benthos and Aquatic Invertebrates					
• benthos and aquatic invertebrates counts					
• habitat identification					
• toxicology					
• indicator species					
• Boreal Region					
Subtotal					
Hydrology and Climate					
• surface water physical flow and trends					
• hydrology and ice formation					
• groundwater surface water interactions - flow and chemistry					
• climate change trends and projected impact on hydrology					
• water balance					
Subtotal					
TOTAL					

Selected Candidates for Area of Discipline

 Water Quality  Water Quality

Table B3
Criteria for Selection of the Technical Reviewers
Considerations by Areas of Specialization

Areas of Specialization	Fish				Benthos			
Water/sediments/acid sensitive lakes								
• periodicity of chemistry in natural systems								
• organic environmental chemistry								
• inorganic environmental chemistry								
• water quality issues								
• sediment quality issues								
• evaluation of acid sensitive lakes								
• Nox - Sox								
Subtotal								
Fish								
• toxicology								
• northern Alberta fish species identification								
• fish counts								
• habitat identification								
• migratory fish species experience								
• bioaccumulation studies and fish health								
Subtotal								
Benthos and Aquatic Invertebrates								
• benthos and aquatic invertebrates counts								
• habitat identification								
• toxicology								
• indicator species								
• Boreal Region								
Subtotal								
Hydrology and Climate								
• surface water physical flow and trends								
• hydrology and ice formation								
• groundwater surface water interactions - flow and chemistry								
• climate change trends and projected impact on hydrology								
• Water Balance								
Subtotal								
TOTAL								

Selected Candidates for Area of Discipline

Benthos
 Fish

