



File: 280-30  
Ref: 209415

OCT 9 2014

Tim Ryan  
Chair, Forest Practices Board  
PO Box 9905 Stn Prov Govt  
Victoria, British Columbia  
V8W 9R1

Dear Tim Ryan:

On behalf of the Ministry of Forests, Lands and Natural Resource Operations (FLNR), please accept this letter as government's response to the Forest Practices Board's (Board) recommendations in its investigation report: *Community Watersheds: From Objectives to Results on the Ground (April 2014)*.

Before responding, I would like to express appreciation to the Board for its comprehensive analysis of the issues associated with protecting drinking water in British Columbia's community watersheds.

### **Recommendation 1**

Strengthen FRPA's requirements for the protection of drinking water. Government should undertake a review of FRPA's requirements for the protection of drinking water generally and in community watersheds specifically. The review should include:

- a) revising government's objective for community watersheds with the intent of emphasizing the importance of source water protection;
- b) revising the water quality practice requirement, in all applicable FRPA regulations, to address the inherent risk to human health associated with sediment;
- c) clarifying the meaning and scope of cumulative hydrological effects including whether the assessment and management of these effects is appropriate within the confines of FRPA or should be implemented under a different process; and,
- d) examine the appropriate use of specific water quality objectives under the Government Actions Regulation and provisions under the *Drinking Water Protection Act*, where watershed condition is at risk.

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**Government response**

FLNR supports this recommendation and plans to conduct a comprehensive review of water quality provisions under the *Forest and Range Practices Act* and regulations over the next year. We started this process over the summer and plan to work closely with water quality policy specialists and legal counsel to investigate the issues the Board has identified with a view to clarifying and/or revising FRPA regulations where appropriate. We have consulted the Board's investigator and legal counsel to seek a better understanding of the Board's perspective, and will continue to engage them as our policy analysis evolves.

One of the products we envision as an outcome of our policy analysis is a FRPA administrative bulletin that provides guidance to forest and range practitioners and decision-makers on the water quality provisions of FRPA, as well as related provisions under the *Water Sustainability Act* and *Drinking Water Protection Act*. Although the Board has focussed on opportunities to improve FRPA, all three pieces of legislation govern forest and range operations adjacent to watercourses used for drinking water.

In particular, the bulletin will discuss source water protection, risks to water quality posed by sediment, the meaning and scope of cumulative hydrological effects, and criteria and policy tools to identify at-risk watersheds that require special management.

As part of our water quality policy analysis and bulletin development, we will engage the Association of BC Forest Professionals (ABCFP) and the Association of Professional Engineers and Geoscientists of BC (APEGBC).

As the Board will be aware, FLNR is working to continuously improve FRPA and has received significant input from the Board and other external organizations on recommended improvements to FRPA. Our policy analysis related to water quality will be implemented in the context of this broader evaluation.

**Recommendation 2**

Strengthen the content and approval of Forest Stewardship Plans: Government should provide clear direction to delegated decision-makers that ensures results and strategies in FSPs pertaining to the community watershed objective are measurable or verifiable.

**Government response**

This report, as well as past Board commentaries and feedback from other sources, has reinforced the need for forest stewardship plan (FSP) results and strategies to be measurable, verifiable and enforceable. To this end, FLNR intends to provide general guidance on this to forest and range practitioners and decision-makers as part of our continuous improvement of FRPA. We also plan to include, in the water quality administrative bulletin, specific guidance on preparing FSP results and strategies to meet the Forest Planning and Practices Regulation's community watershed objective.

We are aware that the Board is conducting a broader investigation of FSPs which will likely provide a more in-depth analysis of the issues associated with results and strategies. We look forward to considering this upcoming report, in addition to the community watershed report and other related input, as we develop administrative guidance on how to develop measurable, verifiable and enforceable FSP results and strategies.

### **Recommendation 3**

Ensure the content of professional watershed assessments is meaningful. The ABCFP and APEGBC should develop guidance for their members on the appropriate content of a watershed or hydrological assessment. This should include:

- a) the elements necessary to address government's objective for community watersheds, including where the surface water source has changed to a groundwater source;
- b) procedures for considering cumulative hydrological effects at the watershed scale;
- c) integration of the needs of licensed waterworks; and,
- d) examples of recommendations providing clear direction for implementation.

### **Government response**

Although this recommendation is directed to the ABCFP and APEGBC, we would like the Board to know that FLNR will assist the associations in developing guidance on watershed assessments via the participation of government experts. As noted above, we will also engage the associations in our policy analysis, bulletin development, and any related communications or training.

In particular, we will help the associations by clarifying expectations associated with government's objective for community watersheds, the meaning and scope of *cumulative hydrological effects* and criteria for watershed conditions that should trigger a watershed assessment.

Collaboration between FLNR and the associations will be important to ensuring our respective guidance to practitioners and decision-makers is consistent, integrated and effectively communicated.

### **Recommendation 4**

Monitor the protection of drinking water. Government should expand its monitoring of the effectiveness of forest and range practices in protecting water quality to include water used for drinking both within and outside of community watersheds.

### **Government response**

FLNR will implement this recommendation under the Forest and Range Evaluation Program (FREP). FREP is in the process of reviewing site selection criteria for all resource values; in the context of this review, we will ensure the revised sampling population for water quality includes sites both within and outside of community watersheds.

**Recommendation 5**

Update the status of community watersheds. Government should undertake a comprehensive review of the status of community watersheds and determine which watersheds warrant designation and require special management.

**Government response**

This is an important recommendation that will take some time to implement. As a first step, FLNR plans to undertake an internal review of community watershed administration and status to help us determine next steps for assessing which community watersheds warrant designation and require special management.

Our internal review will use a variety of source materials (e.g. Source-to-Tap assessments, this and other Forest Practices Board reports and Auditor General reports) to help us update the status of community watersheds. In establishing the objectives and approach for this review, and in determining next steps after the review is completed, we will seek the input of water policy specialists, the Board's investigator, and the ABCFP and APEGBC.

As indicated throughout this response, FLNR's actions to address the Board's recommendations will take some time to implement. To a large extent, our progress will depend on availability of staff resources and competing priorities. We recognize the importance of managing community watersheds to protect drinking water in B.C. and will make every effort to execute the actions outlined in this response in a timely manner.

With that in mind, we commit to giving informal progress reports to the Board via our lead forest water policy specialist, Dave Maloney, who will stay in touch with the Board's investigator, Doug Wahl.

If the Board has any questions regarding this response, please contact Dave Maloney, Forest Water Management Officer, Resource Practices Branch, at [david.maloney@gov.bc.ca](mailto:david.maloney@gov.bc.ca) or via phone at 250-828-4173.

Sincerely,



for T.R. (Tim) Sheldan  
Deputy Minister

pc: Tom Ethier, Assistant Deputy Minister, Resource Stewardship Division  
Lorne Bedford, Acting Director, Resource Practices Branch  
Ian Miller, Manager, Sustainable Resource Management Section,  
Resource Practices Branch  
Dave Maloney, Forest Water Management Officer, Resource Practices Branch  
Mike Larock, Director of Professional Practice and Forest Stewardship,  
Association of BC Forest Professionals  
Peter Mitchell, Director, Professional Practice, Standards and Development,  
Association of Professional Engineers and Geoscientists of BC



File: 97325-20/2011-01

November 4, 2014

Tim Sheldon, Deputy Minister  
Ministry of Forests, Lands and  
Natural Resource Operations  
PO Box 9352 Stn Prov Govt  
Victoria, BC V8W 9E2

Dear Tim Sheldon:

**Re: FLNR Response to the Board's Special Investigation Report FPB/SIR/40,  
*Community Watersheds: From Objectives to Results on the Ground***

Thank you for your letter of October 9, 2014, responding to the Board's recommendations made in the above report. The Board is encouraged that government supports the investigation findings and has endorsed each of the Board's five recommendations.

The Board understands that FLNR will begin the process of collecting baseline information in community watersheds as a fundamental first step to implementing the Board's recommendations. As part of that process, we would be pleased to provide FLNR staff with relevant data and documents collected during the course of the investigation. Board staff will also be made available to work in an advisory capacity as solutions to address the recommendations are being developed.

The Board recognizes that full implementation of the recommendations will take time. In that regard, it is the Board's intention to monitor implementation of the recommendations and requests FLNR to submit an update on progress made by October 1, 2015.

Yours Sincerely,

A handwritten signature in blue ink, reading "Timothy Ryan".

Timothy S. Ryan, RPF  
Chair



Reference: 210208

NOV 18 2015

Timothy S. Ryan, Chair  
Forest Practices Board  
P.O. Box 9905 Stn Prov Govt  
Victoria, British Columbia  
V8W 9R1

Dear Timothy Ryan:

On behalf of the Ministry of Forests, Lands and Natural Resource Operations, please accept this letter as government's response on our progress in implementing planned actions to address recommendations in the Forest Practices Board's report: *Community Watersheds: From Objectives to Results on the Ground* (April 2014).

***Recommendation One***

Strengthen FRPA's requirements for the protection of drinking water. Government should undertake a review of FRPA's requirements for the protection of drinking water generally and in community watersheds specifically.

***Ministry's Action Plan – October 2014***

- 1) Carry out a comprehensive review of the following water quality provisions under the *Forest and Range Practices Act* (FRPA), as well as related provisions under the *Water Sustainability Act* and the *Drinking Water Protection Act*:
  - a) source water protection;
  - b) risks to water quality posed by sediment;
  - c) the meaning and scope of cumulative hydrological effects; and
  - d) criteria and policy tools to identify and specify actions to address at-risk watersheds that require special management.
- 2) Based on this review, propose amendments to clarify FRPA regulations where appropriate and provide administrative guidance on interpretation of the regulations to resource professionals and decision makers.

***Ministry Progress – October 2015***

Preliminary policy analysis of FRPA's source water protection and sedimentation provisions has been completed with input from legal counsel and board staff. However, additional work on all four elements of our planned policy analysis is planned. The additional work, as well



as follow-up drafting of (potential) amendments and administrative guidance, will be initiated in early 2016, after we have completed our provincial review of community watershed administration and status (discussed under Recommendation Five).

In carrying out this policy analysis, we will work with drinking water policy specialists from the Ministry of Environment and the Ministry of Health.

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### ***Recommendation Two***

Strengthen the content and approval of Forest Stewardship Plans: Government should provide clear direction to delegated decision makers that ensures results and strategies in FSPs pertaining to the community watershed objective are measurable or verifiable.

### ***Ministry's Action Plan – October 2014***

- 1) Prepare guidance for resource professionals and decision makers on the preparation and approval of Forest Stewardship Plans (FSPs) with a view to strengthening the enforceability of results, strategies and measures.
- 2) To support improvements to FSP results and strategies for the community watersheds objective, clarify in community watersheds administrative guidance (noted above) how the Forest Planning and Practices Regulation (FPPR), section 8.2 should be interpreted by resource professionals and government decision-makers for the purposes of preparing and approving FSPs.

### ***Ministry Progress – October 2015***

As the board is aware, the ministry is developing new provincial training and renewing administrative guidance on preparation and approval of FSPs, with a view to starting training delivery in early 2016. In doing so, we are considering the detailed results of several recent board investigations (FPRA: A Decade in Review, Community Watersheds, Natural Range Barriers, and Forest Stewardship Plans). We are also working with the Association of BC Forest Professionals (ABCFP) to ensure the resource professionals' needs are incorporated, and that training is useful and effective for their members.

The main objective of this training will be to clearly convey government's expectations for FSP content, while also having collaborative conversations among resource practitioners to explore further ways to use the flexibility in FRPA to support practice improvements and innovation. Characteristics and examples of suitable results, strategies and measures will be highlighted during the training. This training will be available to resource professionals that prepare FSPs and government decision makers who approve plans. Renewed administrative guidance on FSP preparation and approval will be prepared to support the training initiative.

The community watershed's administrative guidance referred to under Recommendation One will clarify how FPPR section 8.2 should be interpreted by resource professionals and government decision-makers for the purposes of preparing and approving FSP results and strategies for this objective. In particular, the guidance will specify criteria for sensitive watersheds that require special management, as well as information and considerations that should inform results or strategies for these watersheds.

***Recommendation Three***

Ensure the content of professional watershed assessments is meaningful. The ABCFP and APEGBC should develop guidance for their members on the appropriate content of a watershed or hydrological assessment. This should include:

- a) the elements necessary to address government's objective for community watersheds, including where the surface water source has changed to a groundwater source;
- b) procedures for considering cumulative hydrological effects at the watershed scale;
- c) integration of the needs of licensed waterworks; and
- d) examples of recommendations providing clear direction for implementation.

***Ministry's Action Plan – October 2014***

- 1) Support the efforts of the ABCFP and the Association of Professional Engineers and Geoscientists (APEGBC) to develop guidance for professionals on watershed or hydrological assessments by providing guidance regarding 'the meaning and scope of cumulative hydrological effects' and 'criteria for watershed conditions that should trigger a watershed assessment.'
- 2) Engage the associations in all aspects of our community watersheds action plan to ensure our respective guidance to resource professionals is consistent, integrated and effectively communicated.

***Ministry progress in supporting the efforts of the ABCFP and APEGBC – October 2015***

It is our understanding that the Joint Practices Board of the ABCFP and the APEGBC are working to develop professional guidance on watershed or hydrological assessments. The ministry's regional hydrologists are supporting these efforts and we look forward to learning the outcomes. Where appropriate, these outcomes will inform other elements of our action plan.

Once we have completed our provincial review of community watershed administration and status (discussed under Recommendation Five), we will engage the ABCFP and APEGBC in our policy analysis and development of administrative guidance associated with FPPR section 8.2. This will help ensure our respective guidance to resource professionals is consistent, integrated and effectively communicated.

***Recommendation Four***

Monitor the protection of drinking water. Government should expand its monitoring of the effectiveness of forest and range practices in protecting water quality to include water used for drinking both within and outside of community watersheds.

***Ministry's Action Plan – October 2014***

Revise the sampling population for water quality under the Forest and Range Evaluation Program (FREP) to include sites both within and outside community watersheds.



### ***Ministry Progress – October 2015***

The ministry is exploring opportunities to strengthen the FREP sampling protocol for assessing water quality in watersheds that have domestic intakes. In particular, we are looking at options for a new watershed risk assessment procedure to help identify monitoring sites, and are evaluating resourcing needs associated with those options.

#### ***Recommendation Five***

Update the status of community watersheds. Government should undertake a comprehensive review of the status of community watersheds and determine which watersheds warrant designation and require special management.

### ***Ministry's Action Plan – October 2014***

Carry out an internal review of community watershed administration and status as a foundation of information to enable the ministry to determine which community watersheds (a) warrant designation, and (b) require special management.

### ***Ministry Progress – October 2015***

In early 2015, the ministry hired a consultant to conduct a review of community watersheds across British Columbia to

- determine the status of drinking water use and risks in 466 currently designated community watersheds in British Columbia;
- provide the necessary information to enable decisions about which watersheds warrant continued designation; and
- assess the potential for greater water user involvement in land-use planning decisions within community watersheds.

Two main elements of this work have been completed:

- an administrative review of community watersheds (including attributes and metrics for intakes with permitted water systems); and
- a review of all relevant government audit and monitoring results on water quality in community watersheds to identify concerns, impacts and risks to water quality and their relative priority.

The following elements are still underway and will be completed by December 31, 2015:

- a cross-jurisdictional review (limited to Canada) of approaches taken by provincial governments to involve communities in land-use decision making in community watersheds; and
- identification of modern criteria for selecting, establishing and maintaining a list of community watersheds, including watershed conditions that should trigger the review and de-listing of community watersheds.

The information we gain from this project will be analyzed and used to inform all aspects of our action plan including policy analysis, policy guidance, monitoring protocols, and future administration of community watersheds under FRPA and/or other statutes. The intent from

Timothy Ryan, Chair

the outset was to complete this work first, before moving onto the remaining action plan elements.

The future management of community watersheds, including administration of community watersheds and land-use decision making in sensitive watersheds with multiple users, is an important strategic consideration for government. An analysis of options for streamlining the policy framework for administering and managing community watersheds will be considered as an outcome of this project.

### ***Conclusion***

In closing, the board will be pleased to know that Resource Practices Branch staff are keeping the board's investigator, Doug Wahl, informed of the ministry's progress in implementing the action plan, and are actively considering his advice as we move forward. I look forward to giving the board another update on our progress in mid-to-late 2016.

In the meantime, if the board has any questions or would like more information or a formal briefing on progress to date, please contact Dave Maloney, Forest Water Management Officer, Resource Practices Branch, by phone at 250 828-4173 or by email at [david.maloney@gov.bc.ca](mailto:david.maloney@gov.bc.ca).

Yours truly,



Tom Ethier  
Assistant Deputy Minister

pc: Tim Sheldan, Deputy Minister of Forests, Lands and Natural Resource Operations  
Jennifer Davis, Director, Resource Practices Branch  
Dave Maloney, Forest Water Management Officer, Resource Practices Branch  
Norah White, Sustainable Forest Management Policy Officer, Resource Practices Branch  
Doug Wahl, Manager, Audits and Investigations, Forest Practices Board

File: File: 97325-20/2011 01

November 25, 2015

Tom Ethier  
Assistant Deputy Minister  
Ministry of Forests, Lands and Natural Resource Operations  
PO Box 9352, Stn Prov Govt  
Victoria, BC V8W 9E2

Dear Tom Ethier:

**Re: Response to the Board's Special Investigation Report FPB/SIR/40,  
*Community Watersheds: From Objectives to Results on the Ground***

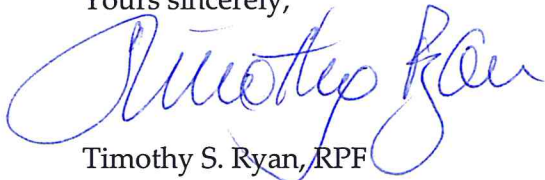
Thank you for your letter of November 18, 2015, which provides an update on FLNR's progress in implementing recommendations made by the Board in its investigation of community watersheds.

We appreciate the initiatives government has underway to respond to the report. In particular, we recognize that the ministry's assessment of current water use in all 466 designated watersheds was a significant undertaking.

The Board acknowledges that the issues raised in this investigation are complex and will take time to fully address.

We will ensure our staff continue to be available to Ministry staff to provide advice and clarification as needed. We will also monitor progress in implementing the actions described in your letter and we look forward to an update in mid-to-late 2016.

Yours sincerely,



Timothy S. Ryan, RPF  
Chair

cc: Tim Sheldan, Deputy Minister, Forests, Lands and Natural Resource Operations  
Jennifer Davis, Director, Resource Stewardship Division  
Dave Maloney, Forest Water Management Officer  
Norah White, Sustainable Forest Management Policy Officer  
Doug Wahl, Audit and Investigation Manager, Forest Practices Board





File: 97325-20/2011-01

May 31, 2017

Tim Sheldon, Deputy Minister  
Ministry of Forests, Lands and Natural Resource  
Operations PO Box 9352 Stn Prov Govt  
Victoria, BC V8W 9E2

Dear Tim Sheldon:

**Re: *Community Watersheds: From Objectives to Results on the Ground, Special Investigation, FPB/SIR/40, April 2014***

I am writing regarding FLNRO's progress towards implementing recommendations made by the Forest Practices Board in its investigation, [Community Watersheds: From Objectives to Results on the Ground](#), published in April 2014.

In that report, we made the following recommendations to address key findings in the investigation:

1. **Strengthening FRPA's requirements for the protection of drinking water.** Government should undertake a review of FRPA's requirements for the protection of drinking water generally, and in community watersheds specifically.
2. **Strengthening the content and approval of forest stewardship plans.** Government should provide clear direction to delegated decision-makers that ensures results and strategies in FSPs pertaining to the community watershed objective are measurable or verifiable.
3. **Ensuring the content of professional assessments is meaningful.** The Association of BC Forest Professionals and the Association of Professional Engineers and Geoscientists of BC should develop guidance for their members on the appropriate content of a watershed or hydrological assessment.
4. **Monitoring the protection of drinking water.** Government should expand its monitoring of the effectiveness of forest and range practices in protecting water quality to include water used for drinking both within and outside of community watersheds.



5. **Updating the status of community watersheds.** Government should undertake a comprehensive review of the status of community watersheds and determine which watersheds warrant designation and require special management.

The Board requested that government advise it of progress made and the timelines for implementing the recommendations, which FLNRO did in October 2014. In its response, the Ministry endorsed the Board's recommendations, but indicated an apprehension with how to implement the recommendations. In July 2015 and November 2016, we received progress updates outlining the status of implementing our recommendations.

After three years, many meetings, document reviews and conversations focused on helping FLNRO review our findings and assess ways to implement the recommendations, we have concluded that:

*Recommendation #1:*

There is no action planned while a community watershed policy analysis continues over the next year to determine if FRPA changes are warranted.

*Recommendation #2:*

The Ministry issued a guidance letter from the chief forester, expectation letters from district managers and an interpretation bulletin from Resource Practices Branch to strengthen content and approval of FSP's. The effectiveness of this direction will be evaluated through the measurability and verifiability of results and strategies in future FSPs pertaining to the community watershed objective.

*Recommendation #3:*

At this time, there is no guidance document for professionals on the appropriate content of a watershed or hydrological assessment, from the Association of BC Forest Professionals and the Association of Professional Engineers and Geoscientists of BC, it is still in development.

*Recommendation #4:*

In 2017, government will implement a FREP draft plan to monitor "sensitive" community watersheds. There is no plan to monitor other watersheds that provide surface water for human consumption.

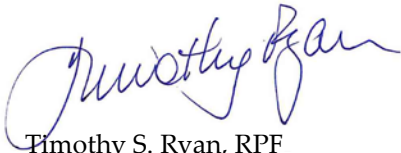
*#5:*

In 2016, government completed a comprehensive report on the status of community watersheds. Government has not utilized this information to determine if the classification of community watershed is valid for all designated watersheds.

Tim Sheldon  
May 31, 2017  
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We conclude that government has partially implemented our recommendations. We encourage government to continue working to address the key findings of our investigation to assure a safe supply of drinking water from lands managed under FRPA.

Yours sincerely,

A handwritten signature in blue ink, reading "Timothy Ryan". The signature is fluid and cursive, with the first name "Timothy" being more prominent than the last name "Ryan".

Timothy S. Ryan, RPF  
Chair