



ASSOCIATION OF
PROFESSIONAL BIOLOGY

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By email: CitizenEngagement@gov.bc.ca
Cc: ENV.minister@gov.bc.ca
The Honourable George Heyman
Minister of Environment and Climate Change
PO Box 9047 Stn Prov Govt
Room 112, Legislature Buildings
Victoria, BC V8W 9E2

Dear Minister Heyman,

RE: Professional Reliance Review

We appreciate the opportunity to provide comments for consideration in your review of the Professional Reliance Model in British Columbia (BC).

The Association of Professional Biology (APB) represents over 600 biology professionals in British Columbia. Our membership is comprised of knowledgeable, experienced and accredited scientists who, through the College of Applied Biology Act (2002), have formally stipulated professional accountability for stewardship of aquatic and terrestrial ecosystems and biological resources, within a framework made up of Registered Biology Professionals.

While the College of Applied Biology (CAB) regulates professional practice and serves in the public interest, the APB serves to promote and support our members and profession. Our members are primarily CAB-accredited Registered Professional Biologists (R.P.Bio.); the majority (80%) work as self-employed and private sector biologists. These professionals are a key component of professional reliance in BC and meet the definition of Qualified Environmental Professional (QEP) specified for this review (i.e., "Qualified Professionals who are not provincial government employees").

Respondents to our January 2018 internal member's survey on Professional Reliance expressed a range of views, summarized as support for the current professional reliance model (39%), support for improvements to the current model (32%), and rejection of professional reliance as a resource management framework (29%).

The polarity in perspectives among our membership highlights fundamental divides in perceptions of professional practice roles and responsibilities; the opportunities, responsibility, accountability, and risk placed on QEPs in a professional reliance framework; and public misconceptions related to scientific advice, due diligence, decision-making processes and professional credibility. We suspect this is because individual experiences with professional reliance in BC vary, depending on the sector in which the professional works and the regulatory requirements their work is subject to.

Please find enclosed detailed responses from our members to the questions asked in your review.

The APB's position is that the professional reliance model has merit, in principle, if fundamental challenges with the current system can be addressed effectively and cooperatively.

Current challenges in professional reliance:

1. Mistrust in government, science, and competency of QEPs.
2. Real and perceived biases and conflict of interest in professional practice and statutory decision-making.
3. Vague regulatory guidelines and inconsistent implementation of regulatory requirements.
4. Lack of mechanisms to ensure accountability and transparency in decision-making.
5. Lack of mechanisms for peer-review performance audits.
6. Adversarial relationship between government and non-government professionals.
7. Government professionals are limited in their abilities to provide regulatory support through comprehensive assessment of project applications, compliance reviews, performance audits, and enforcement.
8. QEPs (as defined for this review) are only one component of an effective professional reliance system, but carry the most responsibility, risk, and accountability.

Key recommendations:

1. Reframing roles and responsibilities in professional reliance – apply a systems approach, rather than delegated approach, with a focus on collaboration to serve public interest in natural resource management.
2. A blended approach to professional reliance improvements: more regulatory clarity, accountability, transparency, and capacity for regulatory support in government, combined with increased recognition of, reliance on, and independence for QEPs.
3. Separate advisory roles from regulatory approval and statutory decision-making roles by establishing mechanisms for arms-length decision making.
4. Grant Registered Professional Biologists Right-to-Practice, rather than the current Right-to-Title.
5. Improve public awareness of the role of professionals in natural resource management.
6. Establish peer-reviewed performance audits, for both regulatory processes and professional practice.
7. Establish data management systems that can support integrated environmental monitoring data, compliance reviews, enforcement, and cumulative impacts assessments.

8. Review professional reliance within the context of other proposed changes and concurrent reviews (e.g., review of the Conservation Officer Service, development of proposed Wildlife Management Agency, etc.).
9. Involve QEPs pro-actively in current and future review and discussions around professional reliance.
10. Give professional reliance the tools, resources, and power to bring progressive, pro-active, peer-reviewed science into daily practice for government and non-government professionals.

Ultimately what is needed is greater acceptance of and reliance on biology professionals for decision-making advice in all sectors of society. This would be in conjunction with regulatory processes and mechanisms that facilitate: transparency in decision-making, clarity in goals and objectives, consistent application of regulatory guidelines, third-party peer-review performance audits, data management for compliance monitoring and cumulative impacts assessments across projects, and arms-length decision making.

The Association of Professional Biology is eager to discuss how we can move these recommendations forward, and would appreciate the opportunity to participate in further discussions about Professional Reliance in BC, during the course of this review and beyond.

Sincerely,

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Summary of Member's Responses to APB Survey on Professional Reliance

January 2018

QUESTION 1A. Please tell us what you think is working well with the current Professional Reliance Model used in BC

Improved recognition and credibility for professional designations

- Professional reliance has improved recognition of the valuable role that professionals play in natural resource management.
- To some extent, it has also strengthened public recognition of applied biology as a practice of professionals, and added credibility to the advice of practicing biologists.
- It has raised the importance of obtaining the professional designation "Registered Professional Biologist" (R.P.Bio.) for biologists-in-training (students and new employees).
- Professional reliance provides incentive for individuals to pursue professional designation as an R.P.Bio. (through higher education, experience, publications, etc.), and to maintain this designation (continuing professional development, adhering to professional codes of conduct and ethics, etc.).

Professional accountability

- Members of professional associations are held to high standards by their peers and their ethical responsibilities to their association, both when their initial application for membership is considered and throughout their membership.

Cost-effective, pro-active, innovative approaches that are scientifically-sound

- The professional reliance model is an efficient and cost-effective method to ensure industry is able to incorporate scientifically-sound practices during development in BC.
- Less interference from the government allows for new ideas and innovations, especially in remediation technologies.
- The professional reliance model helps to foster a more dedicated and collaborative approach to environmental protection during project development, construction and operation phases.
- Projects employing professional biologists have environmental protection and stewardship built into the project delivery. The goals of economic and environmental viability are championed by the professional biologist, and these goals are very much in-line with successful and sustainable development, which are also the goals of all provincial environmental regulatory bodies.

QUESTION 1B. What is not working?

Public mistrust of government, science, and professionals

- The biggest criticism of professional reliance is the perception that industry and lobby groups have undue influence on professionals and decision-making processes.
- QEPS (non-government professionals, as defined in this review) are perceived as charlatans, paid to provide clients with the results they desire and doing little more than meeting minimal bureaucratic needs for permitting and compliance.
- Government is perceived to be making resource management decisions based on politics, personal biases, and out-of-date legislation, without scientific evidence, peer review, due diligence, consideration of cumulative impacts, and public accountability.
- These perceptions undermine our profession and capacity of the professional reliance model to work effectively for public interest in natural resources management

The professional reliance model currently subordinates QEPs (non-government professionals), rather than empowering them to contribute to the full capacity of the model's intent.

- Advice (assessments, recommendations and judgements) from QEPs can be rejected or dismissed by employers, regulators and statutory decision makers, despite sound professional practice and scientific validation. In many cases, the QEP is treated as a proponent, reinforcing the perception of implied conflict of interest, where this is not appropriate.
- Vague regulatory guidelines are difficult to apply, subject to interpretation (by regulators, professionals, clients, and public), and not applied consistently across the province. This creates unnecessary liability and risk for QEPs, and makes it difficult to implement regulatory requirements consistently with clients.
- Professional reliance has downloaded responsibility from regulators (government) to proponents, with risk and accountability ultimately carried by QEPs.
- Environmental management remains very prescriptive and rigid with regards to development projects (i.e., follow Best Management Practices [BMP]s and Environmental Protection Plans [EPPs]) and the process for amending such management recommendations with newer, science-based, site-specific prescriptions is prohibitively onerous.
- A true Professional Reliance Model would rely on QEPs and support professionals willing to be innovative when the outcome is likely be beneficial relative to conventional recommendations.

Likewise, government professionals are not currently empowered to support effective professional reliance in a way that engenders public trust.

- Government professionals are limited in their abilities to provide comprehensive assessment of project applications, compliance reviews, performance audits, and enforcement.
- Lack of consistent and objective support from government for regulatory processes when guidelines, policies and regulations and permitting requirements are open to interpretation, not applied by provincial staff consistently over time, and not applied uniformly across the province (e.g., Riparian Areas Regulation [RAR] is an oft-cited example).

- Current Best Management Practice (BMP) and regulatory guidelines for environmental protection have too many grey areas and are not addressing the key issues of concern to society and of threat to our environment.
- Some major projects or industries operate outside of what would be normal processes for any other project (e.g. BC Oil & Gas Commission reviews and issues Water Act authorizations).
- Inability to conduct cumulative impact assessments - i.e. the need for a "landscape level" perspective which needs a knowledge of proposed and imminent projects which only a regulatory reviewer would know.
- Lack of accountability and transparency in regulatory decision-making.
- The current process of permitting appears to be conducted behind "closed doors" from which the general public are excluded.
- Lack of an appeal or disagreement resolution process when a private sector QEP and government reviewer disagree.

QUESTION 2. What changes, if any, are needed to maintain or improve public trust in the professional reliance model?

Clear regulatory guidelines that set out expectations and authority of QEPs

- Clarity in poorly written regulations and policies. Similar to engineers, have environmental schedules and methods.
- Consistent interpretation and application of regulatory guidelines and processes across projects and across the province.
- Where there are clear responsibilities for the QEP, such as the Riparian Areas Regulation (like it or not), there are defined parameters for the QEP to use and upon which the QEP can be assessed (i.e. compliance and enforcement).
- Explore the potential to set risk-based limits to practice authority of individual QEPs, for example in conducting environmental assessments and riparian areas regulation assessments, providing a mechanism for peer review on riskier projects.
- Regulators should have the opportunity to refuse Riparian Areas Regulation QEP reports, with some specific criteria described for when that is possible.
- Identify mandatory content for local governments in Official Community Plans, so that they cannot decide not to regulate species at risk or require protection for critical habitat.
- We need to consider ecosystem engineering, functions, and services as part of the economic infrastructure and this needs to be factored into project design and true science-based management.
- Peer-reviewed science needs to take precedence over government BMPs that are out of date under the right-to-practice model.

Mechanisms for arms-length decision making

- Public trust hinges on perceptions around conflict of interest, which could be addressed via mechanisms that support decision making at arms-length (i.e. third-party) to those who have a vested interest in the outcome.



- In some cases, the proponent's professional team provides an analysis but ultimate decision-making authority rests with statutory decision-makers within government (e.g., change approvals for in-stream works under the Water Sustainability Act).
- In situations where proponents are required to engage monitoring services (e.g., Independent Environmental Monitors (IEM) mandated under water licenses for hydroelectric developments), one possibility would be to have the financing for the IEM provided to an arms-length body responsible for tendering contracts for the IEM service.
- Like it or not, there is a lot of subjectivity in our field. Professionals should not be placed in positions where they are in a conflict of interest. Either provide clear regulatory guidance for what is to be done (prescriptive) or put professionals in the position of providing information and opinions but not making decisions.

Data and data management systems that support compliance, enforcement, and cumulative impact assessments

- Establish data management systems that promote transparency and accountability in decision-making. For example, in the RAR process, the QEP files a report on the RAR notification system, which only that QEP can search. A GIS map based system would allow any QEP or the public for that matter, to see where RARs are being filed, and possibly be able to look at recommendations. A similar system could be used for other regulations, such as notifications and approvals under the Water Sustainability Act.
- The provincial government should have a system similar to federal Department of Fisheries and Oceans where there is a system to review the QEPs findings.
- Make all environmental information collected by environmental monitors available to the public in an integrated database.
- These data and management systems would support compliance, enforcement, and cumulative impact assessments by making permit application data available all in one place.

Peer-review performance audits for regulatory processes and professional practice

- A formalized peer-review process is necessary to keep professional reliance consistent with scientific standards, for government and non-government professionals). In many cases, this second level of review is already implemented, but it should be formalized to improve public confidence in the professional reliance model.
- Currently, government doesn't have enough resources to review all materials important for evaluation of project effects (e.g., monitoring reports) let alone conduct audits for QP product quality, qualifications of QP, or potential for conflict of interest or other biases. This oversight could come from province directly (with dedicated funding) or through another organization that conducts audits on behalf of government.
- Convene 'expert panels' of government, private sector, and academic professionals to support regulatory review of project applications, and performance audits.

Public education and awareness campaigns

- Professional bodies should do more public awareness campaigning to demonstrate that services are being provided ethically and highlight the successes of relying on professionals to complete economically and environmentally successful projects. E.g., public recognition events at the commissioning/delivery phase of successful projects could help attract media and increase awareness.
- Help different sectors understand the challenges professionals, government, landowners, and land use proponents are each facing.
- Emphasize to the public the value of professional opinions, decisions and recommendations made by R.P.Bios.
- Educate the public regarding requirements to maintain R.P.Bio. status. Upholding professional ethics and maintaining competency are generally understood or assumed for other sectors such as engineering and medicine.

Professional designation, standards, and discipline

- Perception that self-regulation of professionals is limited or ineffective under right-to-title legislation.
- Right-to-title means that not all practicing biologists are registered professionals and therefore cannot be held accountable to the profession's code of conduct and ethics (this includes some senior resource managers in government who are not R.P.Bios).
- Granting right-to-practice would put biologists on equal footing with other professionals.
- In the current system, once the applicant has received R.P.Bio. certification, professional oversight by the association is restricted to professional development activities, which are currently the only aspect of professional activity subject to audit. Audits on professional development activities do little to ensure high quality work products, and provide no indication at all that the QEP has the necessary expertise or experience for a particular task that they may be undertaking or that their product is not affected by conflict of interest.
- There need to be repercussions for professionals that produce guidance or recommendations that are not supported by science or the vast majority of other professionals. To this end, there needs to be an avenue for objective critical analysis of other professionals' work when it does not meet the standard expected by other professionals. E.g., a performance audit.
- There could be a random process by which professionals are asked to defend specific actions, advice, recommendations, etc. A panel, similar to that used for processing complaints through the CAB, could determine whether or not the professional service was applied according to our ethical obligations.

3. Do you have other observations or recommendations you would like to make about this review?

Critics suggest that the Professional Reliance Model is fundamentally flawed because professional advice can be bought, further asserting that professional independence cannot be achieved without financial independence, and regulatory functions (permitting, reviews, audits) must be done by "unbiased" government professionals. The reality is that every professional, regardless of which sector they are



employed in, are obligated to an employer. Governments are no less biased as an employer than a non-government corporation, advocacy group, or landowner. Ultimately, every registered professional is equal in their obligations to their professional code of conduct and ethics, regardless of which sector they are in. In this light, it is imperative that we move toward making the system less adversarial and more cooperative among professionals, so that professionals across sectors can support a more effective, robust, and transparent professional reliance model.

The working definition of QEP in this review itself highlights a fundamental divide in the professional reliance model (government vs non-government), but QEPs are only one component of an effective professional reliance framework.

An effective professional reliance model has 4 components:

1. Professionals define and review standards (regulators);
2. Professional practice is regulated through accreditation, standards of practice, and disciplinary actions (professional associations);
3. Professionals audit the compliance and enforcement of professional practice (peer-review, compliance and enforcement professionals);
4. Professionals provide capacity for meeting and exceeding minimum regulatory requirements in natural resources management and development projects (QEPs).

There is an expectation that respected, competent professionals lead in each quadrant.

- QEPs should be considered as an asset by the Province as they are responsible for upholding environmental protection and stewardship as part of their code of professional ethics.
- QEPs are able to dedicate more time to project-specific concerns than is possible by regulatory bodies currently (due to budget constraints, staffing constraints, staffing turn-over, and a frequent lack of field/project construction experience by regulators).
- Government agencies do not have the necessary culture of mentorship, training and base level technical experiences where an applied/technical professional can grow and practice. The cost to shift this function from the private sector to the public sector would never be tolerated by the taxpayer.
- QEPs that have extensive experience in research, physical works, and other applied projects can help government professionals shape regulations and improve project management efficiencies.
- Opportunities for collaboration, such as workshops for regulators and QEPs to work together, should be promoted. This could significantly improve clarity of communications around regulatory changes, permit application procedures, terms of reference etc.