



ASSOCIATION OF
PROFESSIONAL BIOLOGY

Serving Biology Professionals since 1980

300-1095 McKenzie Ave., Victoria, B.C. V8P 2L5
Phone: (250) 483-4283 Fax: (250) 483-3439 Email: info@professionalbiology.com

Date: May 15 2012

House of Commons Standing Committee on Environment and Sustainable Development
41st Parliament, Government of Canada

**RE: Association of Professional Biology Recommendations on the Development of a
"National Conservation Plan".**

Honourable members of the Standing Committee,

On behalf of the Association of Professional Biology ("APB"), I would like to express our appreciation at being invited to provide input on this important national endeavour. Before I begin I would like to provide a brief background on the Association so that you may have a better understanding of the important role we and our members play in the development of conservation policy at all levels.

The APB has formally represented the interests of Biology Professionals in British Columbia since 1980. The Association was originally formed by academic, government and private sector interests to collectively bring recognition, credibility and legislative accountability to the professional practice of applied biology. Our members represent and adhere to the highest standards and expertise in application of science and professional ethical conduct across a broad range of disciplines including: conservation biology, environmental toxicology, land and resource management and impact assessment.

The perspectives from our members on what is required to ensure a successful National Conservation Plan in Canada are as diverse as our areas of expertise. However the following attributes or "must haves" represent a sampling of what is deemed essential as a starting point for this process to be effective. Main components must include the following:

- ◆ Recognize that habitat loss and degradation is the primary, present threat to species and ecosystems in Canada.
- ◆ Protect the habitat species need to carry out their life processes, and to survive and recover if they're at risk, whether this habitat is inside a park or in the areas between.
- ◆ Locate and acquire parks, buffers and connective areas where species at risk primary habitat exists.
- ◆ Manage and design parks, and the areas between parks, with climate change adaptation and mitigation in mind.



A More Detailed Vision for a National Conservation Plan:

- 1. Think Like a Landscape:** Aldo Leopold said "To keep every cog and wheel is the first precaution of intelligent tinkering". The foundation of effective conservation planning must include the identification and protection of a diverse range of ecological communities, with a focus on those of high conservation importance. Such communities typically support key survival habitat for a range of common and at risk species and maintain biodiversity across multiple scales. Their connectedness must be maximized and conversely this means fragmentation must be minimized with areas in between included in the landscape equation.

One of many tools to maximize on the challenges of maintaining landscape connectivity when faced with protected areas that are "habitat islands" is to invest in creative conservation financing such as funding compensatory land acquisition and incentives for stewardship on private land (e.g. the Federal Habitat Stewardship Program).

- 2. Maintain Natural Processes:** To remain resilient in the face of long-term **natural shifts** in native species population dynamics, inter-species relationships, ecological succession and energy flow must be allowed to occur in as complete and unimpeded state as possible. Admittedly the notion of what is a truly a "natural process" versus those which are the result of centuries if not eons of human intervention are debatable. A significant amount of scientific, defensible and quantifiable research on thresholds and tipping points for these processes has and continues to be made available to guide planning and decision making. Examples of such natural processes are: predator-prey relationships (e.g. wolves and caribou), managing the effects of invading non-native species and allowing for natural hydrological and geomorphological changes in flowing water systems. This includes the natural movement and shifts of highly productive areas like floodplains and deltas. While there will always be situations that will need careful consideration in this regard, the interventionist approach of the past to force natural processes to meet human needs has only served to exact costly and irreversible effects on our natural assets.
- 3. Water is Essential:** Linking surface, groundwater and marine resource protection is fundamental, whether working at the local watershed level or nationally. Water, in particular freshwater, is not only essential for all life but directly and indirectly tied to the maintenance of our economies. A national conservation plan should reflect this and embody undertakings to maintain the highest values in water quality, reduce competition and conflict over water rights between human and non-human interests and ensure that conserving water resources continues to be supported across all sectors.
- 4. Identify Common Ground:** The APB recommends that a National Conservation Plan be inclusive across geo-political, sectoral and cultural boundaries. Ensuring effective collaboration while identifying conflicts to be resolved before they stall or undermine the



process will be essential to achieving this plan. Science-based interests and industry must be integrated with traditional ecological knowledge resources (i.e. First Nations), as well as the vast public infrastructure of "citizen science" and environmental non-government resources. Bringing together this mosaic of interests has in the past distinguished Canada as an international leader in environmental protection and conservation.

- 5. Plan for the Future – Now:** Given present growth trajectories and resource development pressures, conservation planning must incorporate the potential for land use activities to occur that impact the landscape in the future. While the public, resource managers and decision makers may be at odds over where, how and to what degree this should occur, it is prudent to identify sooner rather than later areas of potential conflict where resource development overlaps with areas of conservation importance. This will assist with both conservation and resource development planning for the future. As well cumulative environmental impacts will be avoided if high priority conservation areas can be legislatively protected now and therefore be avoided during activities in the future. Greater certainty can also then be provided to industry by identifying where development may occur or require greater mitigation measures before activities are even planned.

From a global context, the scientific consensus and recognition of the present and long-term effects of climate change and biodiversity loss must not be ignored. It is important that the public and decision makers be committing to scientifically informed choices. Do we wish to see ongoing conservation planning that is focused solely on a "last chance to see" approach around species and ecosystem protection? Or be proactively supporting the necessary research and adaptation actions that will address present and future impacts and protect as high a level of biodiversity and ecosystem goods and services as possible?

- 6. Best Science and Informed Decision Making is not Optional:** Recent proposed legislative changes suggest the federal government is on a path contrary to a commitment to sound conservation principles. This is especially relevant in respect to conservation and impact mitigation and includes: changes to the Federal Fisheries Act; limits placed on government scientists to directly communicate with the public [which include Registered Biology Professionals]; utilizing changes to tax legislation to limit activities of environmental organizations [again a number of which employ Registered Biology Professionals]; publically stated support by federally elected decision makers for major infrastructure projects before environmental and cumulative impact assessments are even developed, much less completed; changing standards for environmental assessments including timeline restrictions; and recent significant cuts to Parks Canada and other natural resource ministry staff involved in species conservation and protected areas establishment. All the while happening with no visible support for the environmental science and resource management



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professionals who will be expected to provide the expertise to address the outcomes of these changes.

In Closing:

A robust National Conservation Plan must be based on best science, inclusive collaboration and strong precautionary laws and policies that effectively protect species and habitat across multiple scales and jurisdictions.

However the Association of Professional Biology is faced with a conundrum. How do we continue to further support something fundamentally essential as a National Conservation Plan, when we feel it is only being done through a façade of federal commitment to protecting and sustaining Canada's biodiversity?

The APB would be happy to provide its extensive expertise in the evolution of a National Conservation Plan. However this must be based on a mutual recognition that conservation science and protecting Canada's rich ecological capital are as integral to the federal government's decision making process as components like the country's economy. We look forward to working with you further when we can be confident that this is the case.

On behalf of our Board of Directors and our membership, thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Pamela Zevit', written in a cursive style.

**Pamela Zevit, R.P. Bio., Past President/Chair Practice Advisory and Professional Ethics
Association of Professional Biology**

The Association of Professional Biology represents approximately 1,000 Registered Professional Biologists (RPBio) and Registered Biology Technologists (RBTech) employed by industry, government and non-government organizations in all aspects of biology. We help members maintain competence and achieve high professional standards; advance the development and application of sound biological principles in the management and conservation of BC's natural resources; and foster public understanding of impacts of human and other activities on natural resources.