Association of Professional Biology
Serving British Columbia's Biology Professionals since 1980

APB **MISSION STATEMENT: Our mission is to assist Professional Biologists to:** 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 a public understanding of impacts of human and other activities on natural resources.

APB Submission to the Species at Risk Task Force

In August 2009, Premier Gordon Campbell announced in the speech from the throne that the Province will establish a task force on Species at Risk. The Species at Risk Task Force will provide recommendations to the B.C. government to help it update its vision for the conservation of species and ecosystems at risk and ensure British Columbia remains a leader in environmental sustainability.

Defining Vision, Principles and Outcomes

- Where should our conservation efforts be focused?
- What principles should guide future development of a species at risk program in B.C.?
- What are the measurable outcomes that best address the fundamental threats to biodiversity in B.C. and help us achieve our vision?

This response is being submitted on behalf of BC's Association of Professional Biology (APB). Where the terms "qualified" and or "qualified registered Biology Professional" are used this infers those registered with the BC College of Applied Biology. A component of the APB mission statement relevant to this section states our purpose as being "to…advance the application of sound biological principles in the management and conservation of BC's natural resources…" It is the APB's opinion that for conservation and recovery efforts of species at risk to be successful in BC, guiding principles must include actions that will

ensure the sustainability of ecosystems that support a range of species by maintaining and restoring critical habitats and their key features. Conservation efforts must be based on sound, up to date scientific knowledge; current information available for Species at Risk in BC is dated and information gaps clearly indicate significant research and inventory efforts are needed.

It is not enough to simply identify threats to biodiversity and develop a set of recommendations without any built-in form of accountability as to whether those recommendations were acted upon. To address threats to BC's biodiversity those threats must first be indentified and prioritized using real world understanding of the trade-offs and costs associated with their reduction, mitigation and elimination. These costs must be equally valued between those that will be incurred to tackle the problems (direct economic costs) as well as the costs associated with lack of action both to human society and the species and ecosystems concerned (e.g. costs to ecological goods and services provided or cost of extinction or extirpation). Actions to address threats must have the necessary commitment and planning in place, supported by all levels of government. The metrics and measurable outcomes that best address threats to BC's biodiversity must include effectiveness and compliance monitoring of restoration and recovery plans and action plans as they are implemented. This is best accomplished through use of qualified, registered Biology Professionals who have a demonstrated capability and level of expertise in the species and ecosystems being recovered. Periodic audits should be conducted by other independent, qualified, registered Biology Professionals to ensure that actions taken are showing beneficial and or desired outcomes. If threats are not being adequately addressed, resources must be in place that will allow for integration of new science, knowledge and actions needed to evolve and adapt activities to ensure beneficial outcomes.

Environmental Management

- In light of climate change and multiple development demands, what management methods need to be advanced to meet our conservation targets?

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development and application of sound biological principles in the management and conservation of BC's natural resources, and foster a public understanding of impacts of human and other activities on natural resources…" It is the APB's opinion that effective management must include the involvement and consultation of qualified, registered Biology Professionals with the necessary skills and expertise to adequately assess risks to:

1) individual species at risk, their current habitats and ranges, survival and occupation sites, and potential range contraction or expansion from land use activities and climate change,
2) existing restoration and recovery plans and requisite habitat features identified for long-term population persistence and,
3) present ecosystem conditions overall, viewed from an ecoregional perspective and perceived changes to those conditions over time.

Currently, decision making on effects of recovery actions for species and ecosystems at risk are often done on an individual species or site by site level. Little is taken into account from a much needed multi-species perspective or from looking at cumulative effects of climate change or multiple development demands across multiple ecosystems. The outcome of not employing this approach will result in an inability to address long-term impacts.

Of further concern is the fact that the extent of information available for many species at risk in BC is not only dated, but does not even include potential climate change impacts, exacerbating risks of ineffective conservation efforts made without afore-mentioned expertise in specific species, groups of species, and ecosystems.

Regulatory Framework

- What changes are required to the existing regulatory framework to ensure we balance ecological and socio-economic considerations and best achieve our conservation targets?

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mission statement relevant to this section states our purpose as being "to… 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…" It is the APB's opinion that the necessary changes to existing regulatory frameworks must include greater reliance upon, and mandatory requirement for, assessments to be conducted by qualified, registered Biology Professionals. Furthermore to ensure species at risk and their habitats are sustainably managed, recovery and action planning must include mechanisms that will ensure and protect ecosystem integrity and critical habitats and key features at the landscape or ecoregional level. In addition, information gaps that abound in current available species at risk information need to be addressed through research and inventory to support ongoing and future regulatory frameworks and decision making. Finally, regulatory frameworks must include approaches that integrate and assess a broad range of cumulative effects for multiple species including those provincially red and blue listed whether they are federally listed or not.

Private Land Stewardship

- How do we advance private land stewardship and conserve species and ecosystems at risk on private land in B.C. while respecting the interests of taxpayers?

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functioning ecosystems provides more tangible long-term benefits to individuals and human society overall versus the cost of protection in the first place. In order to advance this understanding, decision makers need to develop and commit to providing a combination of long-term incentive measures as well as more proactive regulatory mechanisms to protect habitat. Existing models such as the Riparian Area Regulation (RAR) under BC's Fish Protection Act may offer a starting point. The RAR in itself is insufficient to protect overall biodiversity at the landscape level or the needs of many terrestrially dependent species. However the RAR as an approach requires the determination of the extent of protection to be assessed by qualified, registered professionals, many of whom are often Biology Professionals. By employing the expertise of qualified, registered Biology Professionals who are not only governed by a responsibility to the public interest but have a demonstrated proficiency in the management, conservation and recovery of species at risk, decision makers and landowners can be assured that the costs and investments being made for conservation will be robust and effective for the long-term.

Effective First Nation and Stakeholder Communications and Engagement

What are the key elements of a communications and engagement strategy to ensure communities, First Nations, private landowners, and all other stakeholders who operate on the province's land and water base understand and value the benefits of the benefits of species at risk conservation?

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behalf of the public interest and the natural resource. Consultation therefore should include the necessary range of expertise from this professional perspective as well as that of decision makers and the public. Furthermore such approaches must be done with the understanding and respect of a First Nations world view and expectations. One of the key factors to informed decision making is the sharing of knowledge and information. Registered Biology Professionals in BC are accountable to the public to disclose and provide information that will ensure outcomes are based on the best available science for a given species or its habitat. Therefore public availability of up to date scientific information regarding Species at Risk and their habitats, with clear identification of information gaps and a transparent strategy to address those needs, will provide ongoing management support and add credence to government concern for species at risk.

Respectfully submitted November 15th, 2010.

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Association of Professional Biology