An Audit of Biodiversity in B.C.: Assessing the Effectiveness of Key Tools. Released February 2013

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[18/11/13]	Prepared by: Alec Dale, Ministry of Environment	Reviewed by: Wes Shoemaker, Deputy Minister
[06/14]	Prepared by: Alec Dale, Ministry of Environment	Reviewed by: Wes Shoemaker, Deputy Minister
[10/15]	Prepared by: Alec Dale, Ministry of Environment	Reviewed by: Wes Shoemaker, Deputy Minister
[11/16]	Prepared by: Alec Dale, Ministry of Environment	Reviewed by: Wes Shoemaker, Deputy Minister
[11/17]	Prepared by: Alec Dale, Ministry of Environment & Climate Change Strategy	Reviewed by: Mark Zacharias, Deputy Minister
[26/02/2019]	Prepared by: Alec Dale, Ministry of Environment & Climate Change Strategy	Reviewed by: Mark Zacharias, Deputy Minister
[12/19]	Prepared by: Anthony Danks, Ministry of Environment & Climate Change Strategy	Reviewed by: Mark Zacharias, Deputy Minister
[03/21]	Prepared by: Alec Dale, Ministry of Environment & Climate Change Strategy	Reviewed by: Kevin Jardine, Deputy Minister
	[06/14] [10/15] [11/16] [11/17] [26/02/2019] [12/19]	[06/14] Prepared by: Alec Dale, Ministry of Environment [10/15] Prepared by: Alec Dale, Ministry of Environment [11/16] Prepared by: Alec Dale, Ministry of Environment [11/17] Prepared by: Alec Dale, Ministry of Environment & Climate Change Strategy [26/02/2019] Prepared by: Alec Dale, Ministry of Environment & Climate Change Strategy [12/19] Prepared by: Anthony Danks, Ministry of Environment & Climate Change Strategy [03/21] Prepared by: Alec Dale, Ministry of Environment & Climate

Abbreviations used:

ENV Ministry of Environment & Climate Change Strategy

FLNRORD Ministry of Forests, Lands, Natural Resource Operations and Rural Development

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¹ The audited organization will be required to present their initial action plan at this meeting (i.e. First three columns completed for each OAG recommendation included in the audit report)

Please provide your email response to:

Rec. # OAG Accepted? Yes / No ² Recommendations	Actions Planned & Target Date(s) ³	Assessment of Progress to date ⁴ and Actions Taken ⁵ (APPA update)
#1. YES 1. Make a long-term commitment to collect sufficient and reliable information about the status of biodiversity in B.C. and apply this information to make informed decisions about the conservation of biodiversity.	NEW 2017: Develop a new intactness indicator linked to Cumulative Effects that will support answering the question: how is biodiversity doing in B.C.? Target Date: Spring 2018	Actions Taken & Discussion: Since the audit, the Province has initiated several actions to improve our understanding of the state of biodiversity in B.C. including species and ecosystems at risk. ENV has completed a project, Living Resource Assessment and Coordination (LRAC) Biodiversity Assessment, using the International Union of the Conservation of Nature (IUCN) categories of threats to biodiversity ⁶ and refinement provided by the Canadian Council of Resource Ministers ⁷ . The project focused on the threat category of Habitat Degradation and Fragmentation and published an indicator on Environmental Reporting BC (http://www.env.gov.bc.ca/soe/indicators/land/roads.html), using roads and roadless areas as a surrogate for reporting on ecologically intact areas (that are not impacted by specific IUCN threats; e.g. residential and commercial development, agriculture, mining, transportation and service corridors). In these areas, it is assumed that ecosystem structure, function, and processes are in a natural state, suggesting that biodiversity in these areas is performing optimally - although may still be impacted by other threats, such as climate change. A coarse-filter assessment of ecologically intact areas provides a key building block for reporting on the state of biodiversity and is useful for other ENV programs. In addition to the Intact Areas Indicator, the Province has developed, and regularly updates, a suite of State of Environment (SoE) indicators to report on biodiversity and key biodiversity indicator species, as follows: • Land designations – new update expected end of June 2021: http://www.env.gov.bc.ca/soe/indicators/land/land-designations.html continued next page

² For each recommendation, the audited organization should state whether or not they have accepted the recommendation and plan to implement it fully by typing either "Yes" or "No" under the number of the recommendation.

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³ Target date is the date that audited organization expects to have "fully or substantially implemented" the recommendation. If several actions are planned to implement one recommendation, indicate target dates for each if they are different.

4The Select Standing Committee on Public Accounts (PAC) will request that the audited organization provide a yearly update (i.e completed "Assessment of Progress and Actions Taken" column) until all recommendations are fully implemented or otherwise

⁴The Select Standing Committee on Public Accounts (PAC) will request that the audited organization provide a yearly update (i.e completed "Assessment of Progress and Actions Taken" column) until all recommendations are fully implemented or otherwis addressed to the satisfaction of the PAC. This is for the APPA update.

⁵ This action plan and the subsequent updates have not been audited by the OAG. However, at a future date that Office may undertake work to determine whether the entity has implemented the recommendations. The results of that work will be reported in a separate report prepared by the OAG.

 $^{^{6}\} http://www.iucnredlist.org/technical-documents/classification-schemes/threats-classification-scheme$

Wong, C. 2011. Guidance for the preparation of ESTR products – classifying threats to biodiversity. Canadian Biodiversity: Ecosystem Status and Trends 2010. Technical Thematic Report No. 2. Canadian Councils of Resource Ministers. Ottawa, ON. iii + 30 p. http://www.biodivcanada.ca/default.asp?lang=En&n=137E1147-1

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Yes / No ²	Recommendations		
			As noted in government's response, it is impossible to track all species present within the province; however, these course-filter measures, in conjunction with the Conservation Data Centre's information on more than 22,087 plants, animals, and ecological communities and potential and active mapping of 1,976 species and 114 ecological communities of conservation concern, provide a more comprehensive view of biodiversity status than previously existed.

Rec. # Accepted? Yes / No ²	OAG Recommendations	Actions Planned & Target Date(s) ³	Assessment of Progress to date ⁴ and Actions Taken ⁵ (APPA update)
		New 2017: Complete and implement a Forest Biodiversity Assessment Protocol as part of the Cumulative Effects Framework. Target Date: Spring 2019	Actions Taken & Discussion: The Cumulative Effects Framework (CEF) is a set of policies, procedures, and decision support tools to assess and track the current condition and trend of values to ensure they stay within government's existing objectives ⁸ . The goal of the CEF Forest Biodiversity Assessment Protocol is to provide a GIS indicator-based assessment procedure that will help evaluate the combined effects of multiple land uses and activities, resource sector development and natural disturbances on forest biodiversity. The CEF assessment protocol is being designed to support natural resource decision-making by: 1) providing current condition and trend information on land use and natural disturbance factors that represent potential hazards to forest biodiversity in support of strategic planning and decision-making (e.g., land use planning, AAC determinations; 2) providing landscape-level summary information (e.g. seral stage distribution) and mapped products to support tactical-level (e.g. Landscape Unit) planning; and by 3) providing broader landscape-level information context for individual project-level authorization decisions to help understand the incremental effects of individual projects or transactions relative to other land –use and/or natural disturbance related factors that affect forest biodiversity in the broader landscape. The Cumulative Effects Forest Biodiversity protocol has been approved and posted to the Cumulative Effects Framework website. Significant work has been conducted to align this protocol with the Forest and Range Evaluation Program (FREP) protocol for Forest Biodiversity, so there is now just the one protocol supporting both programs. The Forest biodiversity assessment has now been run using that protocol. Review and validation of the results is beginning in regions across the province. Post-review and validation, assessment reports will be produced to report out on value condition and trend in regions across the province.

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⁸ http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/cumulative-effects-framework

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		New 2017: Revise provincial status assessment, web-based metrics and maps, and associated reporting pages for grizzly bears on Environmental Reporting BC Target Date: Fall 2019	Actions Taken & Discussion: As noted in the 2017 B.C. OAG: Independent Audit of Grizzly Bear Management, grizzly bears are an important "umbrella" species, as landscapes that support healthy grizzly bear populations will be able to sustain many other species and thus are an indicator of biodiversity. As part of that audit, ENV and FLNRORD are working together to update grizzly bear status information which will contribute to reporting on the overall state of biodiversity in B.C. This includes the following actions per recommendations in the 2017 Grizzly Bear Audit: Producing a full report on Conservation Ranking of Grizzly Bear Population Units Status: Fully implemented in 2020. Posted with other updated materials to website: https://www2.gov.bc.ca/gov/content/environment/plants-animals- ecosystems/wildlife/wildlife-conservation/grizzly-bear Updating the Environmental Reporting BC indicator on Grizzly Bear Population Status Status: Fully implemented in 2020: http://www.env.gov.bc.ca/soe/indicators/plants-and-animals/grizzly-bears.html Drafting a Provincial Grizzly Bear Management Plan and Viewing Strategy in coordination with federal Environment and Climate Change Canada (ECCC) and which will inform the mulit- jurisdiction Federal Grizzly Bear Management Plan. Status: Substantially implemented. Indigenous engagement on initial draft started Dec 2020, and public engagement on final draft anticipated for Spring 2022.

Rec. # Accepted? Yes / No ²	OAG Recommendations	Actions Planned & Target Date(s) ³	Assessment of Progress to date ⁴ and Actions Taken ⁵ (APPA update)
		Streamline policies for data collection to further improve data submissions in support of conservation status assessments and legal listing decisions; Target Date: End of 2014	Progress Assessment: Fully or Substantially Implemented Actions Taken & Discussion: The provincial Species and Ecosystem Secure Data and Information Policy and Procedures have been signed off and implemented. These provide greater clarity to data submitters and facilitate submissions of data and information from a wide range of clients, essentially representing a new source of data. They will ensure that data remains secure where necessary but will be available for the assessment of biodiversity status and trends. The Policy and Procedures are posted externally http://www2.gov.bc.ca/gov/topic.page?id=24C3179F7D764A8F906DB352B98253D2
			ENV continues to work on both business processes and data systems to improve how all types of species and ecosystem information are collected by the Ministry. ENV is currently in the first year of a multi-year \$6M capital investment to modernize its species and ecosystems information systems. This project aims to restructure current data sets and systems to create a comprehensive and cohesive data management solution, with common business processes, either by retiring and replacing systems, or by creating linkages between related systems. This new data management solution will support improved acquisition, storage, organization and accessibility of species and ecosystems information to help inform natural resource decision-making.

Rec. # Accepted? Yes / No ²	OAG Recommendations	Actions Planned & Target Date(s) ³	Assessment of Progress to date ⁴ and Actions Taken ⁵ (APPA update)
		Develop options to secure long-term funding for species and habitat inventory, monitoring, and related reporting. Target Date: By 2017	Actions Taken & Discussion: Securing long-term funding for species and habitat inventory, monitoring, and related reporting will allow B.C. to collect sufficient and reliable information about the status of species and ecosystems in B.C. Early analyses into securing long-term funding for collection of information on species, ecosystems and biodiversity has included a survey of current funding and governance approaches to environmental monitoring, as well as various third-party partnerships. The Species at Risk Public Engagement web site allowed the public, local governments, First Nations, industry, and stakeholders to provide input and ideas on long-term funding solutions for species and habitat inventory, monitoring, and related reporting. This information is being used to support the development of funding options for government to consider. Investments continue to be made to conduct inventory, map, and assess conservation status of species and ecological communities (habitat) in British Columbia and to provide open access to these data publicly. Funding for these efforts are from a combination of provincial and federal sources, including funding from Environment and Climate Change Canada (ECCC) and Parks Canada (through the NatureServe Canada network). The Together for Wildlife (T4W) strategy was developed in 2019 to improve wildlife management and habitat conservation in B.C. The ten-year strategy has a total budget uplift of \$10M, starting in 2020, and mechanisms to leverage funding from provincial and federal partners. The strategy includes allocations for wildlife monitoring and inventory, developing wildlife population and habitat supply models, and making reliable data and reporting accessible to everyone. FLNRORD signed an agreement with ECCC in January 2020 to implement the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada in two priority places – Southwest B.C. and Dry Interior. The objective of the Pan-Canadian Approach is to shift from a single-species approach to one

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		Develop a process for using ecosystems and ecological communities as a coarse-filter approach to manage for species such as non-vascular plants and invertebrates. Target Date: End of 2014	Actions Taken & Discussion: The species habitat tool was partially developed until 2013. Instead of completing this tool, key data fields of this tool were incorporated into the Conservation Data Centre (CDC) data systems and information and are now publicly available through the BC Species and Ecosystems Explorer. Public engagement on developing a process for using ecosystems and ecological communities as a course-filter approach to manage for species was conducted in 2018 as part of broader engagement on provincial species at risk management. ENV developed an approach to improve the process for identifying species and ecosystems for legal listing and protection through the Conservation Priorities and Species Listing (CPSL) project. Ecosystems and ecological communities are not currently eligible for listing under existing statutes. However, amendments to the Forest and Range Practices Act (FRPA), led by FLNRORD, include listing of ecological communities. In preparation for this and other additional amendments, the CPSL project team developed a Species and Ecosystems Management Stream Framework that includes consideration of threats and status of ecological communities.

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#2. YES	2. Review its legislative framework to ensure that any significant gaps, inconsistencies or barriers to achieving conservation of biodiversity are identified and addressed.	 Initiate a review of the natural resource sector legal framework to identify and address significant gaps, duplications, or inconsistencies Target Date: By 2017 	Actions Taken & Discussion: ENV focus has been on species and ecosystems at risk, which is an area of priority with respect to conservation of biodiversity. ENV has made substantial progress on several policy initiatives designed to create better outcomes for species and ecosystems at risk and, as a result, biodiversity conservation. A review of the current legal framework to protect species and ecosystems at risk has been completed. A background analysis of the existing gaps in protection for species at risk is complete. In 2016 and 2018 engagement was undertaken to gather further input from the public on ways we can improve the current provincial policy and legislative framework to provide protection for at-risk species and ecosystems. A comprehensive review of the natural resource sector legislation was completed for both the Environmental Mitigation Policy and the Cumulative Effects Framework Interim Policy. Together these policies (and their associated procedures) have improved the governance framework for considering value assessments in decision support under multiple natural resource statutes. A policy review has been completed for each environmental value to identify and assess both broad and specific objectives for the value within existing government policy and legislation. Additional opportunities for aligning natural resource legislation are being explored through ongoing amendments to legislation such as the Environmental Assessment Act and Forest and Range Practices Act, and through other cross-ministry initiatives. FLNRORD's Together for Wildlife (T4W) Strategy includes specific actions to be completed over the next several years including: • a comprehensive review of land designations under the Land Act, Oil and Gas Activities Act, and Forest and Range Practices Act that contribute to the conservation of biodiversity; and • a review of the Wildlife Act to make recommendations to address priority issues.

Rec. # Accepted? Yes / No ²	OAG Recommendations	Actions Planned & Target Date(s) ³	Assessment of Progress to date ⁴ and Actions Taken ⁵ (APPA update)
		 Develop and implement policy, procedures, and guidelines for mitigating impacts to priority environmental values; 	Progress Assessment: Fully or Substantially Implemented
			Actions Taken & Discussion: The Environmental Mitigation Policy and Procedures (EMP) were endorsed by
		Target Date: End of 2013	the Natural Resources Board in April 2014 for voluntary implementation across the natural resources sector. The Policy and Procedures are posted externally
			(http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/policy-
			legislation/environmental-mitigation-policy).
			The EMP provides a consistent approach to mitigation of environmental impacts and helps ensure that any residual impacts from major resource developments are avoided, mitigated, restored, or offset to help conserve environmental values.
			Note: The wording of this action was changed from the original: <i>Develop and implement policy, procedures, and guidelines for mitigating impacts to priority biodiversity values. The word biodiversity was replaced by environmental because the mitigation policy is applicable to a broader set of environmental values that includes biodiversity.</i>

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		 Improve understanding and application of the Environmental Mitigation Policy (EMP), particularly around offsets. Target Date: by 2020 	Actions Taken & Discussion: In 2016, a draft habitat offset decision support tool was developed, accompanied by a technical guidance manual to support the Environmental Mitigation Policy (EMP). The draft tool has been trialed with a range of relevant users (government, First Nations, proponents, and consultants). We are in the process of looking at this feedback to assess next steps and will continue to make the draft tool available for users in the interim. A preliminary study of EMP implementation in Environmental Assessment Office projects was completed in the fall of 2018. Results were compiled in a report to ENV and revealed an uptake of the EMP at around 50% of EAO projects, with a higher uptake by proponents than by government staff. In 2020 an inter-agency working group was struck between six agencies with the aim to improve understanding of key challenges related to application of the EMP, particularly around offsets. Over the course of the year the working group researched, analysed, and documented findings, and made recommendations for both long-term strategic solutions and near-term tangible solutions. Development of near-term solutions has been initiated and includes updates to clarify, streamline and align provincial guidance on mitigation and offsetting into the EMP and Procedures, and to add clarity on guidance for inlieu payments, offsetting, and mitigation guidance for caribou. ENV provides on-going policy support and advice to government staff applying the EMP and provides advice on consideration and integration of EMP principles and concepts in related concurrent policy initiatives.

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		Assess and recommend new methods, including incentives, to promote voluntary protection of species at risk and biodiversity on private land. Target Date: By 2015	Actions Taken & Discussion: One of the key challenges facing government is the conservation of species and ecosystems at risk (SEAR) and biodiversity on private lands. The Province believes that a voluntary stewardship approach, which uses incentives where feasible, is the best approach to conserving species and ecosystems at risk and biodiversity on private lands. An inter-ministry project team was struck in 2013 and developed recommendations for practical and effective approaches (including incentives) to encourage private landowners and local governments to protect species and ecosystems at risk on their lands. The SEAR Charter Project Team and Advisory Committee have developed recommended wording for a potential SEAR Charter that would set up voluntary agreements between the provincial government and local governments. The SEAR Local Government Working Group is implementing actions consistent with recommendations in the discussion paper to enhance SEAR and biodiversity protection on private and local government lands. Enhancing SEAR priorities on private agricultural lands through the Environmental Farm Plan and Beneficial Management Practices Programs and other existing initiatives is also enhancing biodiversity of private farmland. A cross-agency (ENV, FLNRORD, AGRI) Stewardship Community of Practice was formed in 2020. This group is currently developing a Stewardship Framework to take a more strategic approach to stewardship in B.C. This includes coordination of existing initiatives, prioritising existing and new approaches, and identifying gaps such as bringing forward various types of incentives.

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#3. YES	3. Assign responsibilities and timelines for its conservation actions and demonstrate how the prioritization of these actions is conserving biodiversity.	 Refine the priority-setting process of the Conservation Framework to be more efficient and further integrate the delivery and tracking of these priorities into provincial programs; and Target Date: By 2018 	Progress Assessment: Alternative Action Taken: Fully or Substantially Implemented Actions Taken & Discussion: ENV recognizes the importance of the Conservation Framework, however it has been several years since the framework has been updated. Building off the Conservation Framework, ENV developed an updated approach to identifying and prioritizing conservation actions through the Conservation Priorities and Species Listing (CPSL) project. The CPSL project team developed a Species and Ecosystems Management Stream Framework, which outlines the process and criteria for filtering species and ecosystems into different management streams (e.g., legal listing, information gathering, and working in partnerships). This framework builds on the Conservation Framework and learnings over the years and proposes new ways to address challenges identified with the Conservation Framework.
		 Update the content of the Ecosystems Program Plan and integrate the strategies and actions within the plan into natural resource sector planning. Target Date: By 2014 	 Progress Assessment: Alternative Action Taken: Fully or Substantially Implemented Actions Taken & Discussion: The Ecosystems Program Plan has been superseded by other initiatives and plans, including program renewal for Ecosystems Branch and development of policies and programs to address species and ecosystems at risk. The Ecosystems Program Plan has been removed from the external website. Actions under different initiatives that advance the components that formed part of the Plan include: implementing recommendations of the Old Growth Strategic Review; developing a new provincial coastal strategy to better protect coastal habitat while growing coastal economies; investing in new strategies aimed at better protecting our shared wildlife and habitat corridors, including work to implement the Together for Wildlife Strategy; developing and implementing land use policies that support B.C.'s goals for economic activity, environmental sustainability and reconciliation with Indigenous Peoples; continuing to modernize land-use planning for B.C.'s ecosystems, rivers, lakes, forests, and provincial public land and waters.

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#4. YES	4. Establish goals, objectives, targets and timelines to fully implement its habitat designation tools and determine whether other tools are necessary to achieve its objective of conserving biodiversity.	 Initiate a review of the Identified Wildlife Management Strategy (Forest and Range Practices Act; Oil & Gas Activities Act), and assess options to improve implementation efficiency and better align with both landscapelevel biodiversity initiatives and the coordinated natural resource sector approach; and Target Date: End of 2013 	Actions Taken & Discussion: FLNRORD initiated a Lean project to improve the review and approval process for habitat designations (e.g., Wildlife Habitat Areas). The goals of this Lean project were to ensure that habitat designations are coordinated, administratively consistent, and well documented to support clear and informed decisions. The Lean project is complete and being implemented across the Province. A review of the Province's Identified Wildlife Management Strategy (IWMS) was completed in 2013. The review contained several recommendations for government which have been approved by executive. These recommendations are being used by regional staff to integrate IWMS implementation with other tools intended to conserve wildlife and their habitat. In addition, the 2017 Review of Government Actions Regulation (GAR) Implementation (2017) provides further direction and reports on implementation. Since 2014, the Province has designated 559,927 hectares (ha) of habitat protections for species at risk under GAR on provincial crown land. This brings the area of habitat management under GAR to 3.83 million ha for 53 species at risk and five ecological communities at risk. In 2020, 10,526 ha were designated as habitat for species at risk including grizzly bear (6,995 ha), northern goshawk (3,009 ha) and the Quatsino cave amphipod (512 ha). A key recommendation related to this audit was to develop a monitoring and reporting framework to report on IWMS implementation and to assess whether the program is meeting its ecological objectives. The Resource Stewardship Division (FLNRORD) is conducting a spatial analysis of habitat designations to calculate the amount of natural and anthropogenic disturbance to Wildlife Habitat Areas and other categories of habitat protection (Ungulate Winter Range, Old-growth Management areas). This work has been undertaken as part of the actions identified in the Together For Wildlife Strategy (Action 10), "a comprehensive review of land designations under the Land Act, Wildlife Act, Oil

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		Develop a plan to fully implement existing habitat designation tools in conjunction with an assessment of the need for additional tools. Target Date: End of 2014	Actions Taken & Discussion: Recently, an assessment of Government Actions Regulation (GAR) designation implementation process was completed. The GAR working group was officially re-established in 2017. GAR designations are designed to protect ecological values, including biodiversity, from undue impacts from forestry activities. The assessment examined whether these management tools were being deployed appropriately. Factors considered included whether: designation adopted the principle of co-location to help limit impacts to Timber Harvesting Land Base (THLB); the targets or budgets identified for species designations was being met or exceeded; and the test necessary to support approval of designations were met. A number of regional Cumulative Effects Assessments are underway for individual species for example, Ungulate Winter Ranges (UWRs) for mule deer in southern B.C. These projects are intended to inform decision makers and improve outcomes for a number of species. Wildlife Habitat Features are another habitat designation under the Government Actions Regulation (GAR) and the Environmental Protection and Management Regulation (EPMR). In 2016, a cross-agency project was initiated between ENV and FLNRORD Kootenay Boundary Region to pilot consultation and implementation of a Wildlife Habitat Features order in that region. On May 29, 2018 the Minister of Environment & Climate Change Strategy signed the Order identifying 14 wildlife habitat features in the Kootenay Boundary region. https://www.agov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/legislation-regulation/forest-range-practices-act/government-actions-regulation/wildlife-habitat-features/kootenay-boundary-wildlife-habitat-features-order The 2017 government mandate commitment to improve wildlife management and habitat conservation in B.C. also contributes to this by undertaking a comprehensive review of the wildlife management and habitat conservation objectives while being mindful of impacts to other val

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#5. YES

5. Complete sufficient monitoring to assess the effectiveness of its actions in the conservation of biodiversity.

 Investigate options for expanding the current FREP program to develop a more integrated and comprehensive approach to natural resource monitoring; and

Target Date: By 2014

Progress Assessment: Fully or Substantially Implemented

Actions Taken & Discussion: Since the audit was conducted several actions have been undertaken to support the development of a more integrated and comprehensive approach to natural resource monitoring.

In 2017 the Forest and Range Evaluation Program (FREP) completed a landscape-level biodiversity monitoring tool (uses landscape units, seral stage, and amount of protected area, to assess if government objectives have been met). Output from this tool has been reported in Natural Resource Stewardship Monitoring and Assessment Reports (MRVA 2). In 2018 work was undertaken to align the Cumulative Effects (CE) and FREP biodiversity protocols to create one protocol and dataset for further assessments of biodiversity across the Province to support FREP, CE and a broader range of uses.

A stand-level wildlife protocol developed by the FREP program in 2018 is currently being reviewed for increased alignment and integration with CE assessments for wildlife, to support a more comprehensive and integrated approach to monitoring wildlife at different spatial scales. This protocol has now been finalized.

The Tier 1 Watershed Evaluation Protocol was updated in 2019 and posted to the FREP website for monitoring protocols (https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/integrated-resource-monitoring/forest-range-evaluation-program/frep-monitoring-protocols). 71 watersheds have been evaluated using this protocol, along with field data collection and draft reports for three Fisheries Sensitive Watersheds, – one of which has been published to the FREP website (https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/integrated-monitoring/190430 wse memekay final v164.pdf).

The FREP Wetland Protocol (Field Supplement to Evaluating the Health of Wetlands: Wetland Management Routine Effectiveness Evaluation) version 1.4 was published in February 2019. This is a coarse-level filter for assessing the health of wetlands and the assessment form is intended to be completed mainly in the field, to promote consistency among users, to gather pertinent data to inform the health of the wetland, and to be cost effective as a Tier 2 approach for monitoring.

The FREP program was reorganized in Spring 2018 and now sits as part of a combined Cumulative Effects and Integrated Monitoring (CE&IM) section within the Resource Planning and Assessment Branch (RPAB) in FLNRORD.

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			A vision, framework and action plan for Integrated Monitoring and Assessment) were completed in 2019/20 with substantive support, direction and input from ENV. The CE&IM section is actively implementing short-term actions from this plan, including a continued priority for delivering Integrated Monitoring and Assessment Reports (formerly MRVA2 / NRS Monitoring and Assessment Reports) that summarize condition and trend of values from a broad array of monitoring and assessment data.
			Two new Integrated Monitoring and Assessment reports were released in FY 18/19: a report done in partnership with the province and the Office of the Wet'suwet'en, and a report for the Merritt natural resource District. In 2019/20 a report for the Peace Natural Resource District was released. These reports are collations of cross agency monitoring and assessment information with statutory decision maker commentary and in the case of the Office of the Wet'suwet'en report, also includes First Nations Stewardship commentary.

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		Continually seek new opportunities for cost-sharing and/or information sharing with industry and other partners to support monitoring efforts. Target Date: Ongoing	Actions Taken & Discussion: ENV continues to seek creative opportunities to share resources and information with external partners on an on-going basis. Examples of ENV initiatives supporting biodiversity and monitoring include: • The Invasive Mussel Defence Program is largely supported by \$2M/year contributed through industry and other partners (BC Hydro, Fortis BC, Columbia Power Corp, Columbia Basin Trust). The program aims to prevent the introduction of invasive freshwater mussels into B.C. In addition, the Habitat Conservation Trust Foundation distributes funding for early detection lake monitoring for zebra and quagga mussels in lakes across B.C. • The Fisher Habitat Extension Program leverages ENV expertise in partnership with FLNRORD and external funding organizations. Fisher habitat is associated with late-successional forest attributes, and this program encourages voluntary forest stewardship practices by forest licensees and other industry partners, including conservation measures and monitoring. • The BC Bat Action Plan has been implemented to address the spread of White-nose syndrome (WNS), an introduced fungal disease affecting all 15 of B.C.'s resident bat species. In 2019 the Province's investment of \$190K (including \$30K from the BC Parks licence plate fund) leveraged an additional \$800K through strong partnerships with Canada, BC Parks, and the Wildlife Conservation Society of Canada. Key projects under the BC Bat Action Plan include population research and monitoring, such as the North American Bat Monitoring Program. New techniques to monitor biodiversity continue to be developed. Environmental DNA (eDNA) is an emerging technology that has the potential for cost effective, broad scale coverage in monitoring aquatic environments for the presence of species including the identification of invasive alien species which are a significant threat to biodiversity. The Province has been working with government, industry and academic partners across Canada and the United States to ensure collabora

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#6. YES	6. Not included as per instructions since 'substantially completed' as of 2014 self-assessment.		