

# Fish and Wildlife Program

Follow-up on VFM Section 3.06, 2007 Annual Report

## Background

The Ministry of Natural Resources (Ministry) promotes the sustainable use and development of Ontario's natural resources so that nature can renew itself and be available for the use and enjoyment of future generations. The Ministry estimates that each year, 6.7 million Ontarians enjoy recreational fishing, hunting, and wildlife viewing, and that these activities are worth nearly \$6.3 billion annually to the provincial economy. Funding for the Ministry's Fish and Wildlife Program for the 2008/09 fiscal year was \$95.8 million (\$74.2 million in 2006/07).

In our *2007 Annual Report*, we concluded that although the Ministry gathered data and carried out assessments on fish and wildlife resources, the information was neither sufficient nor current enough to provide assurance that the Ministry was effectively managing resources for sustainability. Although the Ministry had taken some steps to address biodiversity and sustainability issues with a formal biodiversity strategy and the enactment of the *Endangered Species Act, 2007*, we noted a number of plant, fish, and wildlife species whose sustainability was of increasing concern. Our observations included the following:

- Although the Ministry had issued guidelines and frameworks to protect fish and wildlife habitats, it had no comprehensive inventory

of the critical habitats key to the recovery or sustainability of fish and wildlife resources. Identifying these habitats would help the Ministry develop strategies to protect them from further degradation.

- In 2002, we recommended that the Ministry develop an overall strategy for the conservation, protection, restoration, and propagation of species at risk. In 2007, we noted that such a strategy had subsequently been drafted but had not yet been approved or implemented.
- Of the 120 recovery strategies in various stages of development for endangered and threatened species, only two of the approved strategies related to species deemed most at risk. For example, the golden eagle had declined to six nesting pairs in Ontario, yet no recovery strategy was in place.
- The Ministry lacked complete and current data on moose populations, which led to the issuing of more hunting tags than recommended by harvest guidelines. For example, 41 of the 66 geographic areas that calculate moose-harvest quotas and allocate hunting tags reported a huntable population greater than the estimated total population.
- Although the Ministry had developed a draft recovery strategy for the forest-dwelling woodland caribou, a threatened species in Ontario, it had been slow to finalize and implement it.

- The Ministry's management of commercial fisheries had been largely successful in promoting the sustainability of commercial fish stocks, but there was a need for better monitoring and enforcement. In a number of cases, commercial and aboriginal operators on Lake Superior and Lake Huron exceeded their catch quotas by more than 200%.
- A reduction in deterrent patrols by conservation officers and gaps in enforcement coverage may have put added pressure on the province's fish and wildlife resources. For example, we noted that when a two-week enforcement blitz was carried out in 2006, officers seized 57 moose that had been hunted illegally—almost double the 29 animals seized during a similar blitz in 2005.
- *develop a comprehensive plan for implementing its biodiversity strategy, along with appropriate time frames;*
- *review the adequacy of resources devoted to biodiversity;*
- *clearly define biodiversity outcomes and performance indicators to measure progress; and*
- *prepare a comprehensive report on the overall state of biodiversity in the province.*

### Status

The Ministry informed us that although it had not developed a comprehensive plan for implementing its biodiversity strategy, a biodiversity implementation team was established to address the 37 actions in the Ontario Biodiversity Strategy. This will help the Ministry achieve the overall goals and objectives of the strategy. The Ministry allocated an additional \$850,000 during the 2008/09 fiscal year to support the development of biodiversity reporting activities and to hire project staff.

The Ministry has completed a draft Biodiversity Outcomes Framework to measure progress towards meeting its commitments under the Canadian Biodiversity Strategy. The Framework will define the strategic outcomes for biodiversity and how the Ministry will work to meet its commitment. Pending approval, the Ministry plans to implement the Framework in the 2009/10 fiscal year. In May 2008, the Ontario Biodiversity Council released an interim report on Ontario's biodiversity as a first step toward preparing a comprehensive report on the state of Ontario's biodiversity. The Ministry plans to release a comprehensive report in 2010 to meet its commitment under the Canadian Biodiversity Strategy.

## Status of Recommendations

According to information received from the Ministry, we noted that some action has been taken on all of the recommendations in our *2007 Annual Report*. The Ministry has made policy changes, launched a number of initiatives, and committed significant additional funding to address most of these recommendations. In a number of areas, several years may be required to fully address the recommendations. The status of action taken on each of our recommendations is as follows.

### BIODIVERSITY

#### Ontario's Biodiversity Strategy

##### Recommendation 1

*To better ensure that Ontario can meet its commitments under the Canadian Biodiversity Strategy, which was adopted by the province in 1996, the Ministry of Natural Resources should:*

### Habitat Protection

##### Recommendation 2

*To help protect fish and wildlife habitats from further loss, alteration, and fragmentation and to preserve biodiversity, the Ministry of Natural Resources should identify the key habitats that are critical to*

*the continued sustainability of native species and prepare timelines for the development of management plans to protect those habitats.*

### Status

The Ministry informed us that habitat protection and conservation is being achieved through several activities, including management plans for parks and protected areas, input into municipal official plans, implementation of policies and legislation, and input into resource management planning. These actions are being accomplished through the *Endangered Species Act, 2007*, through management plans for forestry and fisheries, and through management frameworks for key wildlife species. In addition, the Ministry is developing a legislative regulation that will define the areas of habitat to be protected for nine of the top 10 endangered and threatened species. The habitat protection regulations for all nine species were expected to be in place by the end of 2009.

## Species at Risk of Extinction in Ontario

### Recommendation 3

*To more proactively manage species at risk and help sustain and increase endangered populations, the Ministry of Natural Resources should:*

- *finalize and put into place its Species at Risk Strategy for Ontario; and*
- *prepare and implement a recovery plan with related time frames for necessary actions for each of the species listed in Ontario as endangered or threatened.*

### Status

The Ministry informed us that its Species at Risk Strategy for Ontario has been finalized and incorporated into Ontario's Biodiversity Strategy. The *Endangered Species Act, 2007* (Act) requires the development of recovery strategies for all current and future endangered and threatened species. Consequently, recovery strategies are required for 130 endangered and threatened species. Of these, one is complete, 116 are in development, and

13 have not yet been initiated. The one recovery strategy completed was done in August 2008 for forest-dwelling woodland caribou. In addition, draft recovery strategies for eight of the top 10 endangered species were posted on Ontario's Environmental Registry for public comment in the spring of 2009 and, at the time of our follow-up, were targeted for completion later in the year.

## Invasive Species

### Recommendation 4

*To help protect Ontario's native fish and wildlife populations, habitats, and overall biodiversity, the Ministry of Natural Resources should:*

- *address knowledge gaps regarding the long-term effects of existing invasive species on biodiversity;*
- *develop action plans that set priorities for the prevention, monitoring, and eradication of invasive species based on assessments of the risks posed by invasive species;*
- *evaluate and report on the effectiveness of measures taken through these action plans; and*
- *continue to work with the federal government to enact more stringent regulations with respect to flushing ballast tanks of ocean-going vessels before they enter Canadian waters to prevent the introduction of destructive invasive species.*

### Status

The Ministry informed us that it was carrying out research, which it expected to complete by 2010, into the long-term impacts of existing invasive species on Ontario's biodiversity. To help prevent, monitor, and eradicate invasive species, the Ministry has worked with stakeholders to implement public-awareness campaigns, including an Invading Species Hotline and a website where the public can obtain information about invasive species and report new sightings. In addition, Ontario has prohibited the live possession of nine invasive fish species, implemented a mandatory training program for bait dealers and harvesters, and was

implementing an improved inland-lake monitoring program for aquatic invasive species. In an effort to assess the effectiveness of its action plans for invasive species, the Ministry will carry out an Invading Species Angler Awareness survey during 2009. The Ministry expects to publish the results of the survey, which will examine angler behaviour for washing boats, dumping of bait buckets, and the use of live bait, in 2010.

In order to close one path to invasive species, the Ministry has continued to work with the federal government to enact regulations in 2006 and 2008 requiring ocean-going vessels to flush their ballast tanks with salt water before entering the St. Lawrence Seaway and the Great Lakes. All vessels entering the Seaway now are checked through a joint Canada/United States inspection program to ensure that contaminated ballast water is not released in the Great Lakes.

## WILDLIFE MANAGEMENT

### Moose Management

#### Recommendation 5

*To assist in maintaining the proper balance between keeping moose population levels sustainable and providing a reasonable level of hunting opportunities, the Ministry of Natural Resources should:*

- *develop and implement a moose management policy designed to achieve the overall target moose population;*
- *carry out population inventory assessments more frequently to more accurately determine the current moose population;*
- *ensure that the huntable moose population used to determine the number of hunting tags issued does not exceed the estimated actual population;*
- *more severely restrict hunting in management units where the actual number of moose is significantly below target population levels; and*
- *implement tighter requirements for calf tags in all management units with low calf populations.*

#### Status

The Ministry informed us that it drafted a new policy direction for moose management and has undertaken a broad consultation on the moose-tag draw system. The Ministry prepared several draft documents for public consultation, including the Cervid Ecological Framework (cervid species include deer, moose, caribou, and elk), the Moose Management Policy, the Moose Population Objective Setting Guidelines, and the Moose Harvest Management Guidelines. At the time of our follow-up, the public consultation had been completed, and the Ministry was reviewing the revised documents for final approval.

During the 2007/08 fiscal year, the Ministry increased the frequency of its aerial surveys to more accurately determine the moose population. These surveys follow the Ministry's Standards and Guidelines for Moose Population Inventory in Ontario, which gives the Ministry important data to prepare annual moose-harvest plans, assess habitat suitability, and evaluate management strategies. The aerial survey results contribute significantly to the Ministry's determination of allowable moose-harvest levels and tag quotas. As such, the Ministry has attempted to review all available population information to ensure that all management units have a sustainable moose population, and that the tags issued do not exceed the estimated population or target population levels. As noted above, the Ministry has drafted new guidelines for population-setting and harvest management. These two documents are intended to enhance the way that moose-population objectives are established and to help meet ecologically based moose-population goals and objectives to ensure a sustainable moose resource.

The Moose Population Objectives Setting Guidelines outline a number of factors that impact on moose populations, such as disease, predators, and illegal hunting, which ministry staff at each management unit will monitor. Staff will also track the overall moose population at each unit and take

immediate action to address any significant population decline.

The Moose Harvest Management Guidelines provide a number of management strategies to be employed to restrict the number of moose calves harvested in areas with low calf-population densities. These strategies include limiting the harvest of calves and shortening the calf-hunting season.

## Deer Management

### Recommendation 6

*To assist in maintaining a healthy deer population and controlling the spread of disease to more vulnerable animals, such as moose, the Ministry of Natural Resources should:*

- *complete a deer management policy to provide strategic direction for managing the increasing deer populations;*
- *review its Ontario Deer Harvest Decision Support System to ensure that it provides biologists with appropriate, complete, and current information to set hunting quotas; and*
- *work with other jurisdictions to develop better detection and monitoring strategies for infectious diseases.*

### Status

The Ministry informed us that it continuously updates its deer-management policies to help integrate the management of all cervid species (deer, moose, caribou and elk) as their ranges continue to expand in the province. This has been done through the Ministry's draft Cervid Ecological Framework that strategically addresses cervid management at the broad landscape and ecological level. It consolidates and integrates Ontario's approach to managing cervid species in relation to each other with consideration of the broader ecosystems they share. The Ministry also informed us that it has reviewed its Ontario Deer Harvest Decision Support System, a planning tool used to determine appropriate deer-harvest levels to help maintain a healthy and balanced deer population. The Ministry will

continue to update this system as priorities and resources permit.

The Ministry also indicated that it continues to monitor wildlife disease outbreaks in other jurisdictions, examines the potential actions it can take against emerging diseases not yet detected in Ontario, and participates in international and inter-agency co-ordination discussions. To enhance wildlife-disease monitoring and awareness, the Ministry is part of the wildlife disease surveillance and response network maintained by the Canadian Cooperative Wildlife Health Centre.

## Black Bear Management

### Recommendation 7

*To ensure that black bear populations are maintained at sustainable levels in all areas of the province, the Ministry of Natural Resources should:*

- *consider sanctions against bear hunters who fail to respond to the mandatory provincial mail-in surveys, which are needed to obtain accurate data to use in setting sustainability guidelines; and*
- *take corrective action against tourist outfitters who continually exceed the sustainability guidelines for the maximum bear harvest.*

### Status

The Ministry informed us that it has chosen to promote and educate bear hunters on the importance of reporting rather than take sanctions against those who fail to report. In this regard, the Ministry is educating bear hunters about the importance of resource stewardship and the responsibility and importance of responding to provincial mail-in surveys. In addition, the Ministry prepared a draft Framework for Enhanced Black Bear Management in Ontario that provides enhanced public awareness and understanding of bear management and of the importance of hunter reporting for sustainable bear-population management.

At the time of our follow-up, the Ministry was developing a new guideline for population

objectives and harvest management that will include appropriate and consistent measures to deal with outfitters who continually exceed the harvest of black bears as noted in the sustainability guidelines.

## Forest-dwelling Woodland Caribou

### Recommendation 8

*To help protect the threatened forest-dwelling woodland caribou from further deterioration, the Ministry of Natural Resources should gather the necessary information to finalize and implement its recovery strategy on a timely basis.*

#### Status

In March 2008, the Ministry established an independent Woodland Caribou Science Panel to review the scientific basis for its recovery strategy. This resulted in the Ministry completing a recovery strategy for forest-dwelling woodland caribou in August 2008. The recovery strategy forms the scientific basis for the Caribou Conservation Plan (to be released in the near future), which provides broad policy direction for the conservation and recovery of the forest-dwelling woodland caribou in Ontario and outlines the actions the Ministry intends to take to protect this species. At the time of our follow-up, the Ministry was developing regulations—expected to be in place by the end of 2009—to protect the woodland caribou habitat under the *Endangered Species Act, 2007*.

## FISHERIES MANAGEMENT

### Commercial Fisheries Management

#### Recommendation 9

*To further protect commercial fisheries and fish stocks, the Ministry of Natural Resources should:*

- *take appropriate enforcement action when the number of fish harvested is above the quotas set for sustainability; and*
- *consider developing a bycatch policy to help reduce the ecological impact on aquatic*

*ecosystems and sustainability of the bycatch species.*

#### Status

The Ministry informed us that over-quota harvest by commercial fishers is being strictly enforced through monitoring, inspections, and the laying of charges as appropriate. However, with regards to aboriginal communities involved in a commercial fishery, the Ministry has negotiated consensus agreements with First Nation communities that it believes will ensure the sustainability of the fisheries resource.

With respect to the disposition of bycatch species—the unintended harvest of certain species of fish and other aquatic life—the Ministry has conducted a review of commercial fishing bycatch strategies in other jurisdictions. Accordingly, the Ministry plans to develop a provincial bycatch policy by March 2010.

### Recreational Fisheries Management

#### Recommendation 10

*To help ensure that recreational fisheries continue to be managed in a sustainable manner, the Ministry of Natural Resources should develop formal fisheries-management plans, along with appropriate time frames for implementation.*

#### Status

Under the new Ecological Framework for Fisheries Management, the Ministry created 20 new Fisheries Management Zones (FMZs), which will be managed to ensure a sustainable recreational fishery. Pursuant to the Framework, fisheries regulations have been streamlined where appropriate, and a scientifically based monitoring program will be implemented. To date, the Ministry has developed draft fisheries management plans for three FMZs and has posted them on Ontario's Environmental Registry for public consultation. According to the Ministry, all fishery management plans will be in place by the 2013/14 fiscal year. In addition, the Ministry has implemented an initial five-year

fisheries-monitoring program under the new framework for recreational fisheries management, to be completed by the 2012/13 fiscal year. By that time, the Ministry plans to have completed assessments on more than 1,500 inland lakes to determine fish abundance, biodiversity, water quality, and the presence of invasive species.

## Fish Stocking Program

### Recommendation 11

*To ensure that the fish-stocking program is effective in rehabilitating fish populations and providing enhanced recreational angling opportunities, the Ministry of Natural Resources should:*

- *perform regular lake surveys and post-stocking evaluations to determine whether the stocking objectives are being met; and*
- *establish a monitoring program for testing the health and quality of fish stocked by its community partners.*

### Status

To help determine whether its fish-stocking program is effective and meets stocking objectives, the Ministry indicated that it will obtain and analyze information through its fisheries monitoring program for both stocked and non-stocked inland lakes. According to the Ministry, there is no regulatory authority for a mandatory fish-health monitoring program of community hatcheries. However, the Ministry participates in a federal-provincial initiative led by the Canadian Food Inspection Agency to establish a science-based regulatory program for disease management called the National Aquatic Animal Health Program. This program incorporates surveillance and control measures for high-risk diseases and will be applied to a broad range of sectors, including the Ministry and community hatcheries. In addition, the Ministry developed technical bulletins of best practices for fish-health management and egg disinfection for the use of community hatcheries to reduce the spread of disease in stocked fish.

## ENFORCING COMPLIANCE WITH LEGISLATION

### Enforcement Activity

#### Recommendation 12

*To help sustain fish and wildlife resources and ensure compliance with legislation, the Ministry of Natural Resources should determine whether the enforcement resources allocated are sufficient to achieve the enforcement goals established in its risk-based plans.*

### Status

The Ministry implemented a Risk Based Compliance Framework for the 2008/09 fiscal year to guide its enforcement activities. The Framework helps to achieve enforcement goals by balancing enforcement priorities against fiscal and human resources to ensure that enforcement efforts are focused on those activities that pose the most risk to selected fish and wildlife resources. These include the risk to public health and safety, natural resources, the economy, and social and cultural values. The Ministry indicated that when it identifies and sets provincial compliance and enforcement priorities, it will review the enforcement resources needed to carry out its plans.

## Deployment of Conservation Officers

### Recommendation 13

*To further strengthen its risk-based enforcement plan and ensure that fish and wildlife resources are adequately protected, the Ministry of Natural Resources should review its deployment strategy to determine whether conservation officer staffing is sufficient in each area to carry out effective deterrent patrols and meet local service requirements while recognizing current funding pressures.*

### Status

As noted in the status of Recommendation 12, the Risk Based Compliance Framework is the guiding document for enforcement activities in the province. We were informed that, at the time of our follow-up, the deployment of conservation officers

was being made on the basis of the risk-based plans and the Framework, taking into consideration high-risk enforcement areas and workload data. The goal of the Ministry's deployment strategy is to deter illegal activity and protect resource sustainability. During the 2008/09 fiscal year, the Ministry allocated an additional \$2 million to:

- add five conservation officers to address officer-deployment gaps; and
- fund a multi-year technology project to improve mobile enforcement operations.

## Hunting and Fishing Licence Suspensions

### Recommendation 14

*To prevent suspended individuals from obtaining hunting and fishing licences or entering the deer and moose tag draws while under suspension, the Ministry of Natural Resources should improve procedures and controls to ensure that its information systems are more complete and that suspended hunters are not allowed to get moose and deer hunting tags.*

### Status

The Ministry indicated that it made improvements to its procedures and information-management-system controls to prevent suspended individuals from entering deer and moose tag draws or obtaining hunting and fishing licences. In addition, the Ministry is developing a new automated licensing system, to be operational in 2010, that will improve its ability to prevent individuals under suspension from obtaining a fishing licence or hunting tag.

## FISH AND WILDLIFE FUNDING

### Recommendation 15

*Given the decline over the last 20 years in real dollar funding for Fish and Wildlife Program activities, the Ministry of Natural Resources should formally prioritize its responsibilities for maintaining biodiversity and safeguarding Ontario's fish and wildlife and allocate available funding accordingly.*

### Status

Since our audit in 2007, funding for the Fish and Wildlife Program has increased by more than \$21 million to help maintain the province's biodiversity and to safeguard fish and wildlife resources. During the 2008/09 fiscal year, the Ministry allocated approximately \$25 million in additional funding over a number of years for programs such as:

- species at risk;
- high-priority fish and wildlife activities;
- ecosystem monitoring and assessment for lake protection strategies;
- stewardship programs;
- partnership funding for the Great Lakes basin ecosystems;
- monitoring programs for endangered species; and
- the enforcement program.

## MEASURING AND REPORTING ON EFFECTIVENESS

### Recommendation 16

*The Ministry of Natural Resources should develop more comprehensive indicators for measuring and reporting on the Fish and Wildlife Program's effectiveness in ensuring that Ontario's fish and wildlife resources are healthy, diverse, and sustainable for the use and enjoyment of the people of Ontario.*

### Status

According to the Ministry, some progress has been made to develop more comprehensive indicators for the effectiveness of the Fish and Wildlife Program. Through its involvement with the Ontario Biodiversity Council's effort to prepare Ontario's first biodiversity report in 2010, the Ministry is also to report on the success of its programs to ensure that fish and wildlife resources are healthy and sustainable. At the time of our follow-up, the Ministry was also in the process of establishing outcome-based performance measures for Great Lakes sustainability, to be in place for the 2010/11 fiscal year.