Sea Duck Joint Venture
Strategic Plan 2014 - 2018

Plan Conjoint des Canards de Mer
Plan Stratégique 2014 – 2018

A North American Waterfowl Management Plan
Conservation Partnership

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Cover Photo: Scoters and Long-tailed Ducks, Prince William Sound, Alaska; Tim Bowman

Executive Summary

The vision of the Sea Duck Joint Venture (SDJV) is to maintain sustainable populations of North American sea ducks throughout their ranges. The SDJV promotes the conservation of North American sea ducks through partnerships by providing greater knowledge and understanding for effective management. Its goals are to 1) work with partners to generate and disseminate knowledge that will inform management decisions and sea duck conservation in North America, and 2) increase awareness of sea ducks within the conservation, industrial, and scientific communities through the development and implementation of a strategic communications plan.

The 2014-2018 Strategic Plan summarizes accomplishments of the SDJV since its inception, identifies remaining high priority information gaps, and lays out a strategy for filling those gaps. This strategic plan reflects a significant shift in focus for the SDJV, from a broad-based science program to a more focused program intended to provide information most needed by managers to make informed decisions. The highest priority efforts for the SDJV over the next five years will be to: 1) estimate parameters needed to manage and ensure sustainability of sea duck harvest, 2) better understand habitat use and needs, and 3) ensure that the SDJV maximizes learning from research that has already been done. To address the latter, the SDJV is developing a Communications and Outreach plan to communicate this information to target audiences.

Table of Contents

INTRODUCTION

The fifteen species of sea ducks (Tribe *Mergini*) have long been the most poorly studied group of waterfowl in North America. Sea ducks are difficult to investigate because they inhabit habitats that are remote and not easily accessed (i.e., the arctic and offshore marine waters). Unlike other groups of ducks and geese, sea ducks are relatively difficult to capture and mark in large numbers for studies of demographics, survival, and migration patterns.

In the early 1990s it became apparent that several populations of sea ducks were declining in numbers for unknown reasons. An increased awareness of sea duck issues followed, and the Sea

Duck Joint Venture (SDJV) was proposed as a mechanism to address information gaps needed to improve management and conservation of North American sea ducks. When the North American Waterfowl Management Plan (NAWMP) Plan Committee endorsed the SDJV in 1999, even basic biological information was lacking for most sea duck species. The SDJV partnership set out to address key questions such as the scale at which sea ducks should be considered for management, what the key limiting factors were, what habitats were most important for sea ducks, and whether current harvest was sustainable. Although much has been learned, many knowledge gaps remain including the relative importance of potential limiting factors.

Until 2009, the SDJV science program targeted a broad array of priority information needs (identified in previous strategic plans) and supported research and monitoring projects through a competitive proposal process. In 2010, the SDJV held an internal strategic planning session that identified the highest priority species groups and information gaps, and then followed up with surveys of waterfowl managers and habitat conservationists to confirm that those SDJV priorities would provide information most needed by managers. These efforts helped focus the SDJV science program on a narrower set of high priority initiatives and resulted in a more directed science program. Specifically, the current emphasis is to obtain information that will help ensure that harvest is sustainable and inform habitat conservation actions. The highest priority species are surf scoter, black scoter, white-winged scoter, long-tailed duck, and American common eider.

This Plan summarizes key accomplishments of the SDJV since its inception, identifies highest priority information gaps, and plots a course to fill those gaps through science and communication initiatives. The Plan strives to ensure information will be communicated to audiences that require this information to more effectively manage sea ducks, address or mitigate threats to populations, and protect the most important sea duck habitats. The SDJV Implementation Plan, updated annually, provides a more task-oriented work plan for meeting SDJV goals.

Vision

Sustainable populations of North American sea ducks are maintained throughout their ranges.

Mission

The SDJV promotes the conservation of all North American sea ducks through partnerships by providing greater knowledge and understanding for effective management.

Goals

The SDJV works with partners to generate and disseminate knowledge that will inform management decisions and sea duck conservation in North America.

The SDJV increases awareness of sea ducks within the conservation, industrial, and scientific communities through the development and implementation of a strategic communications and outreach plan.

KEY ACCOMPLISHMENTS OF THE SDJV

Since the inception of the SDJV in 1999, significant progress has been made in filling key information gaps for sea ducks. Accomplishments and progress made relative to major SDJV science initiatives are provided below.

Population Delineation

Conservation of North American sea ducks is largely dependent on being able to delineate demographically or spatially independent sub-units. This information is a necessary precursor for almost all other information needs. Designing monitoring surveys, interpreting numerical trends, setting harvest rates, assessing the effects of disease, and identification of key habitats must take into account the geographic scale at which populations or sub-populations are independent from each other. Population delineation therefore requires an understanding of how populations of migratory birds are geographically linked throughout the annual cycle, (connectivity among breeding, molting, and wintering areas) as well as individual site-fidelity to those areas. Information on how populations or subpopulations are delineated is fundamental to understanding basic processes such as population structure and regulation as well as where and when conservation measures should be implemented.

Three methods are typically employed to delineate populations: satellite telemetry, stable isotopes, and genetic markers. While all methodologies provide useful information regarding population limits, each technique provides resolution at varying spatial and temporal scales and includes different assumptions and potential biases.

Satellite telemetry data led to an understanding of the importance of wintering and molting areas in Greenland for northern common eiders and eastern harlequin ducks that breed in Canada. The value of herring spawn as a food source for migrating western scoters was highlighted, as were concerns about the expansion of aquaculture in areas used by sea ducks along the Atlantic and Pacific coasts. A project on Pacific Barrow's goldeneyes, in which all age and sex classes were marked, identified a key molting lake in Alberta and has identified demographically independent sub-populations from British Columbia through Alaska. Pacific surf scoters marked on wintering areas from Mexico to British Columbia generated data to describe migration routes, timing, and affiliations between wintering and breeding areas. Telemetry studies of black scoters resulted in the identification of two independent populations in North America – one that breeds and winters in the eastern part of the continent and one in the west. Key habitats used by eastern Black Scoters during spring migration were identified in the Chaleur Bay shared by Quebec and New Brunswick, and the Estuary and Gulf of St. Lawrence, Quebec. Finally, satellite telemetry data determined that king eiders and common eiders breeding in Alaska and the western Canadian Arctic migrate west to winter along coasts of Alaska and Russia, while those breeding in the eastern Canadian Arctic migrate east to winter in western Greenland and Maritime Canada. These studies have also generated a wealth of other information useful for conservation and management. For example, a reconnaissance survey for eastern black scoters is being

undertaken in previously undocumented breeding areas, which were revealed by radio-marked birds. While the value of satellite telemetry for studying sea ducks cannot be understated, the technique has some limitations, most notably, high mortality rates among marked birds, particularly in the days following surgery and release. Researchers and veterinarians are addressing these challenges.

Technological improvements now enable researchers to track birds for more than one annual cycle to address questions about annual variability in movements, seasonal habitat use patterns, and site fidelity. The latter is important for managing hunted species, as high harvest rates in combination with high site fidelity and low natal dispersal can lead to local extirpations. As the database of important habitats grows, and we become better able to describe the habitat features that characterize important areas, we will be in a better position to advise the NAWMP habitat Joint Ventures and other habitat conservation efforts to benefit sea ducks.

In 2010, the SDJV launched an ambitious research project to determine migratory patterns and seasonal affiliations for four species (eastern North American populations of surf, black, and white-winged scoters, and long-tailed ducks) through the Atlantic and Great Lakes Sea Duck Migration Study. This study has made good progress for black scoter and surf scoters, and current efforts are aimed at filling the remaining gaps for white-winged scoters and long-tailed ducks. Data from this study are also being used to better inform siting of offshore wind energy development along the mid-Atlantic coast of the U.S.

Genetic markers, in contrast, reflect past dispersal patterns. Genetic markers provide insight on the level of natal dispersal occurring among areas and can determine the origin of individuals sampled outside of the breeding season. Genetic studies have been conducted at varying spatial scales lending insight on the level of natal dispersal patterns and connectivity among sampled areas (i.e. gene flow). The pattern of genetic structure varies among individual sea duck species; species either exhibit low-to-absent population structure (king eider, Steller's eider, harlequin duck, white-winged scoter, long-tailed duck, hooded merganser, red-breasted merganser, and bufflehead) or population-level differentiation (common eider, spectacled eider, common goldeneye, Barrow's goldeneye, and common merganser)

Stable isotopes can also provide insights in how populations are spatially structured. An example of a stable isotope method was a study of the wintering ground affiliations and effects on vital rates of white-winged scoters at Redberry Lake, Saskatchewan. Feathers from coastal wintering scoters provided reference samples for analyses of δ^{13}C and δ^{15}N and showed that the Redberry Lake breeding population includes birds that winter in both the Atlantic and Pacific coasts.

Population Distribution, Size, and Trends in Abundance

Collection of data on sea duck population size and trends has been hampered by the lack of effective and feasible survey techniques. The Waterfowl Breeding Population and Habitat Survey (WBPHS), flown in spring and used as a basis for setting population goals for many North American waterfowl, does not cover the core breeding ranges of about half the sea duck species and is not optimally timed to capture peak counts of breeding sea ducks, which generally

nest later than dabbling ducks. Additionally, some groups of sea ducks have not been differentiated to species during this, and other surveys (e.g., scoters, goldeneyes, mergansers). Consequently, for most populations of sea ducks, we cannot accurately estimate abundance, relative densities, or population trends. Such information is needed to track trends in population size, manage harvest, and to help identify priority conservation efforts. Information on seasonal habitat use obtained during monitoring surveys is also helpful in identifying areas in need of protection, documenting effects of disturbance, and documenting effects of climate change.

In 2005, a Sea Duck Monitoring Working Group was formed at the request of the SDJV Management Board to identify and prioritize monitoring needs for North American sea ducks. In 2007, the working group published a report that summarized these needs and: 1) identified populations or stocks that should be considered independent management units; 2) determined relative conservation priorities among stocks; 3) identified alternative monitoring methods for those stocks; and 4) prioritized among surveys or tasks. In addition, the working group identified other information needs required to design, evaluate the feasibility, or enable interpretation of specific surveys.

The SDJV Management Board recognized the deficiencies in sea duck monitoring programs and recommended in 2007 that a substantial portion of SDJV funds be devoted to assist in development of monitoring programs for sea duck populations. The types of activities that were considered were: 1) exploratory surveys to fill gaps in our knowledge of sea duck distributions and relative abundance, 2) development or testing of methodologies that could be used in the design of surveys, and 3) scaling of surveys to operational levels.

Overall, the SDJV has supported 20 monitoring projects, either directly by providing funds or through endorsement. Given the lack of information on sea ducks it is not surprising that about 40% of the projects have focused on exploratory surveys. About 60% of these exploratory surveys have focused on wintering populations distributed from northern Labrador to Florida in the Atlantic, the Canadian coast of Lake Ontario in the Great lakes, and from California to Alaska in the Pacific. The SDJV has also made significant investments in developing surveys of molting scoters in James and Hudson's Bays, and for breeding scoters in Alaska. Another 40% of projects have focused on development of survey methodologies. These have included the use of imagery to evaluate observer error in flock size estimation and species identification, use of double-counting procedures and distance sampling to estimate detection probabilities during breeding surveys, and assessments of fixed-wing and rotary aircraft for use in breeding surveys. As a result of these SDJV-supported efforts, the Pacific black scoter breeding survey is now considered an operational monitoring survey that is conducted at regular intervals and provides estimates of population size and trend. Similarly, the Atlantic Winter Sea Duck Survey has been developed to the point where it could meet several objectives if funding is made available. Although much progress has been made to improve monitoring of North American sea ducks, few populations are currently adequately monitored. Lack of robust information on distribution, abundance, and trends in abundance continue to hamper efforts to improve harvest management and habitat conservation for sea ducks. New surveys will be required in many instances, which poses a challenge because funds are becoming increasingly limited.

Accurate information on population size and trends is also required to set continental or regional population objectives, as noted in the NAWMP (NAWMP 2012b). Although population objectives were recently established for several populations of sea ducks in North America, the basis for some of those objectives is fairly weak due to high uncertainty in abundance estimates, and the lack of ongoing monitoring surveys. Population objectives will need to be revisited as new information becomes available on sea duck abundance and distribution.

Identification of Key Habitats

SDJV-supported surveys and research studies have greatly increased our understanding of the location and relative importance of sea duck habitats throughout North America. Some of the most important areas for sea ducks have been included in the NAWMP map of Areas of Greatest Continental Significance for North American Ducks, Geese, and Swans (NAWMP 2012a; Appendix B). For example, in 2010 the Atlantic and Great Lakes Sea Duck Migration Study was initiated and has yielded a wealth of information on seasonal sea duck habitat use from wintering and staging areas in the Atlantic Flyway, to breeding habitats in the boreal forests of eastern and north-central Canada. Key habitats that support large numbers and high proportions of several populations of sea ducks have been identified, including staging areas in the St. Lawrence Estuary and Gulf in Quebec, Chaleur Bay along the New Brunswick and Quebec border, molting and staging areas in James Bay, wintering areas in Nantucket Sound and Shoals, Chesapeake Bay, and previously undocumented breeding areas for eastern black scoters in Manitoba and Northwest Territories. These data and other SDJV-supported surveys and studies are also providing information on flyway scales to better inform and evaluate potential effects from near-shore and offshore energy and resource development.

While the SDJV partnership has made progress in understanding where important sea duck habitats are, what times of the year they are used and for how long, and what proportion of certain populations use those areas, information on seasonal habitat use has not yet been consolidated into a centralized database that is easily accessible to waterfowl managers, habitat conservationists, and industries that need this information to prioritize sea duck habitat management. In 2013, a Sea Duck Habitat Management and Protection Subcommittee was formed to lay out a strategy to better address habitat needs and identify priority actions for North American sea ducks.

SCIENCE AND INFORMATION NEEDS: PRIORITIES FOR SEA DUCK MANAGEMENT AND CONSERVATION

The approach of the SDJV for 2014-2018 is to:

Focus – address the gaps that represent the biggest impediments to conservation.

Be flexible and adaptive – take advantage of opportunities presented by others, and maximize the application of knowledge gained through SDJV accomplishments.

Focus

The SDJV reviewed its program through both internal and external assessments in 2010-2012 to ensure that the work it has supported or is currently supporting, informs decision-makers who must balance trade-offs and make choices that influence conservation. Decision-makers identified gaps in the following three areas that represented the greatest obstacles to achieving conservation objectives: **harvest management, identifying and protecting important habitats, and addressing human dimensions**.

Through the review process, five species (**long-tailed duck, American common eider, black scoter, surf scoter and white-winged scoter**) were identified as high priority because of historical or current population declines, or concerns about harvest potential or habitat limitations. The SDJV will focus on this suite of high priority species. In addition, species status summaries for all sea duck species will be revised in 2014 and included as an on-line Appendix to this Strategic Plan available at www.seaduckjv.org.

This new focused approach differs from the previous approach where the SDJV identified the highest priority information needs for each of the fifteen species (SDJV Strategic Plan 2008-2012) and addressed those through a competitive proposal process. That approach was appropriate because so little was known about sea ducks; however, given its successes to date, the SDJV is now poised to address the more critical information gaps.

Figure 1 provides the strategic approach the SDJV will use to identify, prioritize and implement studies. The matrix will be populated and included as an element of the SDJV Implementation Plan, and revised on an annual basis. Monitoring and population delineation are activities that may be fundamental across all themes. Over the next five years, the SDJV will complete projects currently underway to test or develop survey methodologies, and to complete population delineation assessments for the suite of five high priority species. Additional efforts toward monitoring sea ducks will be driven in large part by the need to better inform harvest management and habitat conservation, and to document the trajectory of populations where such information is lacking but needed to evaluate status or to monitor the effectiveness of management actions.

Identify and prioritize parameters needed to manage *harvest*

The size of the harvest and the harvest potential of sea ducks are poorly understood relative to other North American waterfowl. In general, for species characterized by high adult survival, delayed maturation and low rates of production – like most sea ducks – populations can be expected to be affected most by factors that influence adult survival, including aboriginal subsistence and sport harvest.

To address this gap, the SDJV Harvest Management Subcommittee (with diverse representation from waterfowl managers in all four flyways) will engage the harvest management community (sport and subsistence) to estimate the harvest potential of priority sea duck populations and/or identify the missing population parameters that must be measured or estimated to enable assessment of the harvest potential. Estimation of those parameters will be incorporated as priority tasks in the annual Implementation Plan.

Improve understanding of habitat needs to ensure availability of high-quality *habitat*

Sea ducks occupy a broad range of habitats over the course of the year. Species of sea ducks breed across vast expanses of arctic and subarctic tundra, throughout the boreal forest and in coastal areas. During the non-breeding season, sea ducks congregate on traditional coastal wintering areas that provide reliable food resources and stable environments, sometimes for up to eight months of the year. However, compared to knowledge of other waterfowl, information on seasonal distribution and habitat associations for sea ducks is sparse. Further, it remains unknown whether sea duck habitats are limiting at certain times or places. This lack of knowledge prevents development and implementation of effective strategies for protecting essential habitats now and in the future.

To address this gap, the SDJV Habitat Management and Protection Subcommittee will look at ways to compile and make existing information on sea duck distribution available to stakeholders, building on projects (e.g., satellite telemetry and surveys) previously supported by the SDJV and others. The SDJV will engage the habitat management community to identify the most important habitat parameters that must be measured to enable recommendations for a habitat protection strategy. Studies addressing those parameters will be incorporated into the annual Implementation Plan as priorities.

Address human dimensions considerations

The SDJV's communication strategy (see below) is intended to help build a strong awareness of sea duck science and conservation programs and to ensure scientific information is made readily accessible to key constituents. The SDJV intends to emphasize review and analysis of previous SDJV-supported studies to ensure learning is maximized from research, and that sea duck managers are able to take advantage of existing information, as well as new information as it becomes available.

Be flexible and adaptive

Important gaps remain in our understanding of sea duck population size and trend, population delineation, population dynamics and ecology, habitat requirements, and estimates of harvest.

From 2014-2018, the SDJV will seek opportunities to partner with governments, academia, industry, and non-government organizations to continue addressing work important to sea duck conservation. Of particular interest to the SDJV is to better understand specific threats and potential limiting factors to sea ducks. As new information becomes available, the SDJV will review progress and re-evaluate science priorities.

COMMUNICATIONS, OUTREACH, AND EDUCATION

Following a strategic communications planning approach, the SDJV is developing a Strategic Communications Plan for 2015-2019. This plan will guide the communications efforts of the SDJV; a collaborative effort among the SDJV Continental Technical Team, Management Board, other partners, and contractors.

The plan was informed by a **discovery phase**, assessing the state of SDJV communications; a **needs assessment**, where the Management Board, Technical Team members, and staff brainstormed opportunities for communications; and an **audience assessment**, which involved interviews with 15 key informants for the JV's audiences.

Based on the information gathered (which will be summarized in the Strategic Communications Plan), **communications campaigns** are being designed. For each goal, audiences, communications objectives, messages, tactics, and tools were defined. Finally, evaluation metrics will be determined for each of the primary tools, as well as an implementation timeline and budget.

Four goals for the SDJV form the basis for communications campaigns:
Goal 1. Scientific information about sea ducks and their habitats is readily available and used by stakeholders
Goal 2. Partners collaborate on research and monitoring to address gaps in sea duck conservation
Goal 3. Priority actions are implemented that advance sea duck conservation
Goal 4. A strong and informed constituency for sea ducks

Audiences were identified as those whose actions will influence achievement of a goal. These audiences are primarily partner groups and require two-way communication efforts. Thirty-three audiences were identified. Then twelve were prioritized for communications efforts, including the Management Board, Flyway Council, bird habitat Joint Ventures, Landscape Conservation Cooperatives, sea duck researchers, state and provincial wildlife agencies, federal wildlife agencies (i.e., USFWS and CWS), coastal environmental agencies, conservation NGOs, Bureau of Ocean Energy Management, and industry.

Communications objectives were created for each of the goals with the emphasis on behavioral objectives that would advance the communications goals. In order to achieve behavioral objectives, knowledge, attitudes, and skills objectives must be identified and achieved. Based on the objectives, several primary messages have been designed to inform constituents and influence their behaviors to help achieve each goal (see table below; more details will be included in final Communications Plan).

Goals	Primary Messages to Audiences
Goal 1. Scientific information about sea ducks and their habitats is readily available and used by stakeholders	• Sea duck researchers have made great strides in filling essential knowledge gaps on sea ducks, particularly in the last two decades. • The SDJV will facilitate information exchange by serving as a central repository for this information. • When sea duck information is made readily accessible, it can help facilitate better decision-making affecting research, habitat conservation, and harvest management.
Goal 2. Partners collaborate on research and monitoring to address gaps in sea duck conservation	• Despite advances in knowledge, sea ducks remain the most poorly known group of waterfowl. • Fundamental information gaps about sea ducks limit our ability to make good decisions about conservation and management. • The SDJV partnership annually helps identify priorities for research and

	management, and contributes funding to address these priorities. • Addressing these priorities will improve conservation decision-making about sea ducks for agencies, industries, bird habitat joint ventures, nonprofit conservation organizations, and others.
Goal 3. Priority actions are implemented that advance sea duck conservation	• Because sea ducks are closely tied to near-shore environments, understanding and monitoring sea duck populations provide insights into the overall health of the marine ecosystem over multiple scales. • SDJV has developed strategic and short-term implementation plans that identify and promote priority actions for sea duck conservation. • Implementation of these priority actions will reduce risks, decrease negative impacts of development, and help prevent future listing of sea duck species as endangered, threatened, or species at risk.
Goal 4. A strong and informed constituency for sea ducks	• Sea ducks comprise a third of all North America waterfowl species. • People appreciate sea ducks for many reasons, including hunting, subsistence harvest in northern communities, viewing and photography, and their beauty. • Many populations of sea ducks remain below historic levels, largely for unknown reasons. In fact, four species of sea ducks are federally listed as endangered or threatened species/species at risk in the U.S. or Canada. • We hope you will join us to positively affect sea duck conservation by elevating awareness of sea ducks and developing partnerships with the SDJV. .

Tactics and tools are recommended for each of the goals and their associated communications objectives and audiences. The tactics and tools span a variety of approaches to engaging audiences, including educational (workshops/trainings, one-on-one), informational (revising website, e-newsletter, elevator talk about SDJV, talking points about specific topics, factsheets, year-end report), organizational (committees, web/video conferences), and scientific (participation in conferences and meetings, atlas of habitat use). Recommendations for how to design and deliver each of these prioritized communications tools will be included in an online appendix to this Strategic Plan available at www.seaduckjv.org .

JOINT VENTURE EVALUATION PROCESSES

The SDJV began producing an annual Implementation Plan in 2010. The Implementation Plan documents progress toward meeting SDJV goals as outlined in the Strategic Plan, identifies deliverables, sets out timelines for completing tasks, and identifies the individual(s) responsible for implementing actions. Adaptive management associated with this plan requires regular and periodic reviews. As a result, the 3-year Implementation Plan is revised on an annual basis to and incorporate new information as it becomes available and to reflect changing SDJV priorities and mandates. The annual revision reports the accomplishments of the previous year and helps ensure that progress is being made toward achieving SDJV goals.

The NAWMP is revised at approximately 10-year intervals. Between those revisions, NAWMP JVs will deliver progress reports to the Plan Committee triennially to address recommendations and concerns noted during the comprehensive assessments. Feedback from the Plan Committee provides direction to the SDJV and helps ensure that the SDJV contributes effectively to meeting goals of NAWMP. The SDJV reported to the Plan Committee in April 2014, and will likely report to the Plan Committee again in about five years.

LITERATURE CITED

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Figure 1. Conceptual matrix for identifying Sea Duck Joint Venture priorities, 2014-2018.

COLUMN HEADINGS ARE PLACEHOLDERS	Harvest Management[1]							Habitat/Landscape Conservation[2]				Other Potential Limiting Factors, Threats, or Issues[3]	Human Dimensions and Communications[4]			
	population delineation (spatial structuring)	population estimate (N) or trend	Harvest Potential					Variable 1	Variable 2	Variable 3	Variable 4	Examples: disease, contaminants, specific development activities, disturbance, climate change	Variable 1	Variable 2	Variable 3	Variable 4
			increasing complexity / accuracy of model -->													
Species (in priority blocks)			harvest rate	Variable 2	Variable 3	Variable 4	Variable 5									
High Priority Species/Populations																
Common Eider - American																
Black Scoter - Eastern																
Black Scoter - Western																
White-winged Scoter																
Surf Scoter																
Long-tailed Duck																
All Other Species/Populations																
Common Eider - Northern																
Common Eider - Hudson's Bay																
Common Eider - Pacific																
King Eider - Eastern																
King Eider - Western																
Spectacled Eider																
Steller's Eider																
Common Goldeneye																
Barrow's Goldeneye - Eastern																
Barrow's Goldeneye - Western																
Bufflehead																
Harlequin Duck - Eastern																
Harlequin Duck - Western																
Common Merganser																
Redbreasted Merganser																
Hooded Merganser																

Values of HIGH, MED, or LOW will indicate relative priority for the next 3 years; to be revised annually in Implementation Plan

1 To be identified by Harvest Management working group

2 To be identified by Habitat subcommittee

3 To be identified via CTT review

4 To be defined through work with Communications consultant