

# FEASIBILITY STATEMENTS FOR WATERFOWL GOALS AND OBJECTIVES

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The feasibility, desirability, habitat capability, and possible consequences of the recommended objectives for waterfowl in Maine are presented within. Most objectives are feasible if the proper sets of conditions (i.e. habitat, funding, staffing) are met through 2021. For some species, limiting factors are unknown or occur outside of Maine. In other cases, limiting factors are well known but habitat, funding, and staffing limitations could possibly hinder achieving the objective. Above all, the majority of the population, nuisance, harvest, habitat, access, and outreach objectives are linked. All together, to meet these objectives with success, a balance must be met between production of birds (population objectives) and use of the resource (harvest objectives), where active management of waterfowl habitats and effective waterfowl harvest regulations are used as tools to maintain just such a balance. Given adequate funding and staffing, the following objectives are developed and directed towards maintaining a sustainable waterfowl resource for use by both the hunting and non-hunting public through 2021.

## **POPULATION AND PRODUCTIVITY GOAL: Maintain or increase waterfowl populations in Maine.**

### ***Barrow's Goldeneye***

#### **Barrow's Goldeneye Population Objective: Maintain or increase the wintering population of Barrow's Goldeneyes in Maine at 2006 levels through 2021.**

Desirability: It is estimated that Maine winters ~ 250 – 500 Barrow's Goldeneyes out of a total eastern population of ~4,000 individuals. Barrow's Goldeneyes are currently listed as a Species of Special Concern, are harvested in relatively low numbers by hunters, and are highly sought after by recreational birders throughout coastal Maine. Therefore, stabilizing or increasing the wintering population is desirable.

Feasibility: As ~90% of the eastern population breed and winter solely in Quebec, it is unlikely that Maine has much influence on overall population levels. Furthermore, numbers of birds wintering in Maine can fluctuate greatly on a year-to-year basis for reasons currently unknown. Irrespective of this fact, data indicate that numbers of birds wintering in Maine have been relatively stable since the early 1900's.

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Identifying factors that limit the number of birds using Maine during winter would be needed to ensure that the population objective is achieved. Currently, it appears that hunters harvest very few Barrow's Goldeneyes. However, reducing mortality from hunting via regulatory policy may help reach the population objective. Difficulty in distinguishing Barrow's from Common Goldeneyes may result in the continued harvest of birds, reducing the feasibility of the population objective.

Capability of the Habitat: Factors, including habitat, that currently limit the number of birds using Maine during winter are relatively unknown. However, birds are generally found in areas of large rivers containing riffles and in protected coastal bays where they cohabitate with other diving ducks such as Common Goldeneyes, Common Mergansers, and Buffleheads. Overall, it appears that sufficient habitat exists to meet this objective; it is uncertain if removal of dams on major river systems would increase or decrease the capability of the habitat.

Possible Consequences: Maintaining stable or increasing populations of Barrow's Goldeneyes would ensure this resource was available to recreational birders and hunters.

### ***Black Duck***

#### **Black Duck Population Objective: Increase the breeding population of Black Ducks in Maine by 15% over the 2006 population level by 2021.**

Desirability: As a result of declining populations, harvest restrictions on Black Ducks have been in place since 1983. Concurrent declines in waterfowl hunters in Maine also occurred in the early 1980's. Black ducks are a major component (%) of the waterfowl community in Maine and also generate much interest from wildlife watchers. Therefore, increasing the population of Black Ducks is desirable.

Feasibility: This objective is biologically feasible but currently difficult to achieve given current levels of staffing and funding, especially for active management of state-owned waterfowl production areas. Regulatory policy aimed at reducing harvest of local Black Ducks could help reach the objective but habitat availability and quality can also affect numbers of breeding Black Ducks.

Capability of the Habitat: Given that a large portion of Maine is currently forested habitat with many small wetlands and beaver flowages throughout, Maine appears capable of supporting such an objective. Exceptions to this may be in areas of heavy urban development and beaver control, which favor Mallards over Black Ducks.

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Possible Consequences: Meeting this objective should contribute favorably to retaining (or recruiting) numbers of waterfowl hunters if liberal harvest framework can be balanced with maintaining stable or increasing Black Duck breeding populations.

### ***Canada Goose (Resident)***

**Resident Canada Goose Population Objective – North Zone: Maintain Maine’s resident goose population in the North Zone at the 2006 level until 2021.**

Desirability: Resident Canada Geese often become a nuisance at elevated population levels. Conversely, too few Resident Canada geese reduces opportunity for waterfowl hunters and wildlife watchers. Current numbers of Resident Canada Geese in the North Zone (as described in the Migratory Game Bird Hunting Schedule 2005) provide ample hunting and wildlife watching opportunity but do not appear to have increased to a socially unacceptable level. Resident Canada Geese can cause crop damage, defecate in public parks, and cause other nuisance problems. Maintaining the 2006 population should ensure that increases in such nuisance complaints does not occur. Therefore, an objective of maintaining the current population level that appears both acceptable to the hunting and non-hunting public is desirable.

Feasibility: To maintain Resident Canada Geese populations at the current level, mortality (harvest and non-harvest) must equal yearly production. Therefore, by simultaneously monitoring production (brood surveys) and harvest rates (banding), regulatory policy (bag limits & season lengths) can be adjusted in an attempt to maintain populations. However, hunter numbers and effort change, thus increasing uncertainty in harvest dynamics.

Capability of the Habitat: Sufficient habitat exists to meet this objective; reduction in or changes to wetland and agricultural lands could influence the capability of the habitat through 2021.

Possible Consequences: Maintaining the current population should continue to provide opportunity for hunters and wildlife watchers in the North Zone, but may not decrease nuisance issues for people currently affected by Resident Canada Geese.

**Resident Canada Goose Nuisance Objective – South Zone: Develop and implement specific strategies that reduce Canada Geese nuisance complaints in the South Zone to at least 50% below 2005 levels by 2011.**

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Desirability: Urban and suburban areas with populations of Resident Canada Geese are fairly common in the South Zone (as described in the Migratory Game Bird Hunting Schedule 2005). This results in a resource that is often not usable to waterfowl hunters because birds may not leave urban areas where discharge of firearms is illegal. Geese in urban areas also generally cause increases in nuisance complaints, often resulting in devaluation of wildlife by the public. Therefore, developing and implementing specific strategies to decrease nuisance complaints should be desirable to both the hunting and non-hunting public.

Feasibility: Resident Canada Goose populations are difficult to control in human populated areas because hunting, as a management tool, is either unacceptable and/or discharge of firearms is illegal. Therefore, urban and suburban centers function like refuges for birds, which most often results in increasing nuisance complaints as goose populations increase. Geese often leave urban centers for short periods to feed in agricultural areas, where increased hunting opportunity may help attain the nuisance objective via population control. Other than reducing numbers of birds through liberalized hunting, other management tools, which increase the feasibility of the nuisance objective, including egg addling, using habitat manipulation to make sights undesirable, trap and transfer, trap and euthanasia, and hazing birds away from urban refuge areas.

Capability of the Habitat: In many locations, reducing the desirability of habitat in urban areas will help reach the nuisance objective by dispersing geese away from human populated areas. Retaining large tracts of agricultural lands within areas with no-firearms discharge laws (i.e. city limits) will decrease the utility of hunting as a management tool.

Possible Consequences: Changing habitat in urban centers and dispersing large populations of Resident Canada Geese could cause an increase in nuisance complaints in more rural agricultural communities. Also, aggressive management actions aimed at significantly decreasing the Resident Canada Goose population to meet the objective could cause a social devaluation of wildlife. Careful planning should be undertaken when trying to attain the nuisance objective because a large percentage of complaints could be resulting from a small population of or area used by Resident Canada Geese. In this case, aggressively decreasing the population could reduce future opportunity for waterfowl hunters but not result in attainment of the nuisance objective.

### ***Mallard***

**Mallard Population Objective: Maintain the Maine breeding population of Mallards at the 2006 level to 2021.**

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Desirability: Meeting this objective is favorable because the Mallard daily bag limits have been liberal, allowing for greater opportunity for waterfowl hunters. Furthermore, if Mallards have a negative affect on Black Duck populations, as some research suggests, maintaining Mallards at current levels is desirable.

Feasibility: Recent liberal daily bag limits for Mallards has not resulted in a stable breeding population. Further liberalization of Mallard harvest including higher bag limits and no hen restrictions should help us achieve the population objective. Exceptions include urban areas where Mallards are less susceptible to harvest. High survival and reproduction in urban areas may serve as a source for future population growth of Mallards, reducing our ability to achieve the population objective.

Capability of the Habitat: Given the large area of wetlands in Maine the habitat is capable of sustaining this objective.

Possible Consequences: Meeting this objective may help increase waterfowl hunting opportunity that was lost because of restrictive harvest regulations on Black Ducks. Meeting this objective may also help slow declines in populations of Black Ducks in Maine if, in fact, Mallards have a negative affect on Black Duck populations.

### **Mallard Harvest Objective: Manage Mallards at MSY to 2021.**

Desirability: Managing Mallards at Maximum Sustained Yield (MSY) is desirable. Managing Mallards at MSY will produce the greatest harvest on a year-to-year basis without endangering the future of the resource. This should also stabilize Mallard populations at current levels.

Feasibility: Harvesting a large enough number of Mallards and effectively managing towards MSY is feasible if the numbers of waterfowl hunters do not decline, hunter effort does not decline through 2021 in Maine, and harvest is further liberalized (e.g. higher bag limit, no hen restrictions).

Capability of the Habitat: Given the large area of wetlands in Maine the habitat is capable of sustaining this objective.

Possible Consequences: Managing at MSY may produce a breeding population of Mallards below it's potential, but will provide maximum opportunity for waterfowl hunters. Meeting this objective may also help slow declines in populations of Black Ducks in the Maine if, in fact, Mallards have a negative affect on Black Duck populations.

**Wood Duck**

**Wood Duck Population Objective: Maintain or increase the breeding population of Wood Ducks in Maine at 2006 levels through 2021.**

Desirability: Wood Ducks constitute a substantial portion of the harvest of waterfowl during the first few weeks of duck season in Maine. Wood ducks are also highly valued by bird watchers because of their colorful plumage. Therefore, maintaining or increasing the Wood Duck population is desirable.

Feasibility: This objective is feasible if the productivity of the forested wetland is maintained. Wood Ducks are cavity-nesting birds that require either natural cavities near water or man-made nest boxes. Because female Wood Ducks produced in an area often return the following spring to the same wetland or a nearby location, maintaining quality habitat is required for this objective to be feasible. Feasibility is further affected by harvest of Maine produced Wood Ducks. Over-harvest of Wood Ducks would reduce the feasibility of the population objective.

Capability of the Habitat: Currently forested wetlands are common in Maine and thus it appears that the habitat is capable of meeting this goal. Exceptions would include loss of large diameter cavity trees in riparian and inland freshwater habitats.

Possible Consequences: Maintaining or increasing the Wood Duck population would positively influence waterfowl harvest opportunity and recreational birding activity in Maine. If nest cavity availability limits the number of cavity nesting waterfowl in Maine (i.e. Common Goldeneyes, Hooded Mergansers), increasing the number of Wood Ducks may cause a concurrent decline in other cavity-nesting waterfowl.

**Wood Duck Harvest Objective: Manage Maine's Wood Duck population at MSY to 2021.**

Desirability: The majority of Wood Ducks that are produced in Maine are harvested in the southern Atlantic Flyway (i.e. South Carolina). By restricting harvest in Maine, more Wood Ducks should be available for harvest farther south. Therefore, managing harvest of Maine produced Wood Ducks at a level that allows for maximum take prior to their departure for locations south of Maine is desirable.

Feasibility: Feasibility of this objective will be based on the Federal framework for season length and daily bag limits for migratory game birds. Increases in bag limits in Maine, allowed by the Federal framework, should enable us to attain this objective. Both managing the Wood Duck

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harvest at MSY and attaining the Wood Duck population objective (stated above) will take a great degree of planning to be feasible.

Capability of the Habitat: Currently forested wetlands are common in Maine and thus it appears that the habitat is capable of meeting this goal. Exceptions would include loss of large diameter cavity trees in riparian and inland freshwater habitats.

Possible Consequences: Managing the Wood Duck harvest at MSY could compromise the Wood Duck population objective of maintaining or increasing the population through 2021 (stated above).

### ***Ring-necked Duck***

**Ring-necked Duck Population Objective: Maintain at the 2006 level or increase Maine's breeding population of Ring-necked Ducks until 2021.**

Desirability: Ring-necked Ducks can constitute a substantial portion of the harvest of waterfowl during the first few weeks of duck season in some locations in Maine. Recreational bird watchers also value Ring-necked Ducks. Therefore, maintaining or increasing the Ring-necked Duck population is desirable.

Feasibility: This objective is feasible if the quantity and productivity (quality) of the wetlands is maintained. Ring-necked Ducks are over-water nesting birds that require floating vegetation. Maintaining high productivity wetlands for nesting and brood rearing is essential for meeting this objective.

Capability of the Habitat: Currently a large portion of Maine is in wetland habitat and thus it appears that the habitat is capable of meeting this objective. Exceptions to this would include drainage and loss of large wetlands, especially in forested areas.

Possible Consequences: Maintaining or increasing Ring-necked Ducks would result in a stable to increasing resource for hunters and non-hunters.

**Ring-necked Duck Harvest Objective: Maintain Maine's Ring-necked Duck harvest at 2006 levels.**

Desirability: The harvest restriction on Black Ducks has generally resulted in decreased harvest opportunity for waterfowl hunters. Therefore, maintaining Maine's Ring-necked Duck harvest at current levels is

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desirable as it maintains harvest opportunity for species without declining populations.

Feasibility: Maintaining Maine's Ring-necked Duck harvest at current levels will depend on the number of duck hunters, hunter effort, and Ring-necked Duck population levels. If the Ring-necked Duck population objective (stated above) is met then the Ring-necked Duck harvest objective should be feasible.

Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: If yearly mortality (including harvest) of Maine's Ring-necked Duck population is greater than yearly production then maintaining Ring-necked Duck harvest may not be compatible with maintaining or increasing the Ring-necked Duck population.

### ***Hooded Mergansers***

**Hooded Merganser Population Objective: Decrease Maine's breeding population of Hooded Mergansers by 10% below 2006 levels by 2021<sup>1</sup>.**

Desirability: Wood Ducks are favored as table fare by waterfowl hunters over Hooded Mergansers. Hooded Mergansers can compete with Wood Ducks for nesting cavities. Recent reduced productivity (ducklings/hen) of Wood Ducks coupled with increasing productivity of Hooded Mergansers indicates that Hooded Mergansers may be competing with Wood Ducks for prime nesting sites. A decline in Hooded Mergansers of 10% would still make them available for wildlife viewing on most wetland systems. Therefore, slightly decreasing Maine's breeding population of Hooded Mergansers is desirable.

Feasibility: As Hooded Mergansers are generally poor as table fare, attempting to decrease the population via liberal harvest regulations may not produce a measurable change in actual harvest. Also, current Federal framework allows a bag of only 1 Hooded Merganser per day. Therefore, feasibility of the objective relies on a more liberal daily bag limit for Hooded Mergansers.

Capability of the Habitat: The habitat is capable of sustaining the objective.

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<sup>1</sup> To increase nesting opportunity for Wood Ducks and other cavity nesters

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Possible Consequences: Declines in the number of breeding Hooded Mergansers may provide more nest cavities for Wood Ducks and other more desirable cavity nesters. However, decreasing the breeding population could result in slightly fewer Hooded Mergansers for recreational bird watchers during spring and summer.

### **Hooded Merganser Harvest Objective: Increase Maine's harvest of Hooded Mergansers by 20% above 2006 levels.**

Desirability: Wood Ducks are favored as table fare by waterfowl hunters over Hooded Mergansers. Hooded Mergansers can compete with Wood Ducks for nesting cavities. Recent reduced productivity (ducklings/hen) of Wood Ducks coupled with increasing productivity of Hooded Mergansers indicates that Hooded Mergansers may be competing with Wood Ducks for prime nesting sites. Therefore, increasing Maine's harvest of Hooded Mergansers is desirable.

Feasibility: As Hooded Mergansers are generally poor as table fare, attempting to decrease the population via liberal harvest regulations may not produce a measurable change in actual harvest. Also, current Federal framework allows a bag of only 1 Hooded Merganser per day. Therefore, feasibility of the objective relies on a more liberal Federal framework for Hooded Mergansers.

Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: Increasing the harvest of Hooded Mergansers may cause declines in breeding Hooded Mergansers and provide more nest cavities for Wood Ducks. However, increasing harvest may result in fewer Hooded Mergansers for recreational bird watchers.

### ***Other Dabblers***

#### **Population Objective for Other Dabblers: Until 2021, maintain at 2006 levels or increase Maine's breeding populations of other dabblers.**

Desirability: Maintaining or increasing breeding populations of other dabblers is both desirable for hunters and other wildlife users.

Feasibility: This objective is feasible if the quantity and quality of waterfowl nesting and brood rearing habitat is maintained or increased in Maine through 2021.

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Capability of the Habitat: Given that a large portion of Maine is currently wetlands and beaver flowages, Maine appears capable of supporting such an objective. Exceptions to this may be in areas of heavy urban and shoreline development, wetland drainage, and beaver control.

Possible Consequences: Maintaining or increasing breeding Dabbling Ducks would result in a stable to increasing resource for hunters and non-hunters.

### ***Other Divers***

#### **Population Objective 1 for Other Divers: Until 2021, maintain at 2006 levels or increase Maine's breeding populations of other divers.**

Desirability: Maintaining or increasing breeding populations of other Diving Ducks is both desirable for hunters and other wildlife users.

Feasibility: This objective is feasible if the quantity and quality of waterfowl nesting and brood rearing habitat is maintained or increased in Maine through 2021.

Capability of the Habitat: Given that a large portion of Maine is currently wetlands and beaver flowages, Maine appears capable of supporting such an objective. Exceptions to this may be in areas of heavy urban and shoreline development, wetland drainage, and beaver control.

Possible Consequences: Maintaining or increasing breeding Diving Ducks would result in a stable to increasing resource for hunters and other wildlife users.

#### **Population Objective 2 for Other Divers: Until 2021, maintain at 2006 levels or increase Maine's wintering populations of divers.**

Desirability: Maintaining or increasing wintering populations of other Diving Ducks is both desirable for hunters and other wildlife users.

Feasibility: Few management options exist to manage Diving Ducks during winter in Maine. However, as most wintering Diving Ducks use coastal areas, monitoring shoreline development and exploitation of food resources (i.e. mussels) may increase the feasibility of such an objective.

Capability of the Habitat: Factors, including habitat, that currently limit the number of Diving Ducks using Maine during winter are relatively unknown. However, birds are generally found in protected coastal bays near large

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blue mussel and aquatic vegetation beds. Maintaining these habitats for foraging will affect the capability of the habitat.

Possible Consequences: Maintaining or increasing wintering Diving Ducks would result in a stable to increasing resource for hunters and non-hunters. However, increasing Diving Ducks that winter in Maine could have a small economic impact on shellfish industries that harvest animals that are forage for Diving Ducks.

**HABITAT GOAL: Maintain or increase the quantity and quality of breeding, staging, and wintering habitat for waterfowl in Maine.**

**Habitat Objective 1: Based on 2006 levels, maintain or increase the quantity and quality of breeding, staging, and wintering habitat for waterfowl in Maine by 2021.**

Desirability: Meeting this objective is highly desirable. Retaining or increasing the quantity and quality of waterfowl habitat in Maine will help attain individual species population and harvest objectives outlined above and provide multi-purpose habitat for recreation such as hunting, fishing, hiking, bird watching, canoeing, kayaking, etc.

Feasibility: Maine's Significant Wildlife Habitat Laws now affords a large degree of protection for many areas used by breeding, staging, and wintering waterfowl. However, increased urbanization and other activities leading to large-scale landscape change could deem this objective less feasible.

Capability of the Habitat: Maine's Significant Wildlife Habitat Laws now affords a large degree of protection for many areas used by breeding, staging, and wintering waterfowl. Exceptions to this may be increased urbanization and other activities leading to large-scale landscape change.

Possible Consequences: Retaining or increasing the quantity and quality of waterfowl habitat in Maine will help achieve individual species population and harvest objectives outlined above and provide multi-purpose habitat for recreation such as hunting, fishing, hiking, bird watching, canoeing, kayaking, etc.

**Habitat Objective 2: By 2010, develop and maintain a list of the top ten waterfowl habitats for conservation in urban and coastal areas that are at risk of being compromised by development.**

Desirability: Currently, relatively large sums of money are appropriated each year by federal, state, and non-profit organizations aimed at

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purchasing or otherwise protecting wildlife habitats in Maine. Maintaining a list of key, at risk, waterfowl habitats would be useful during grant and proposal writing aimed at obtaining such appropriations and, hence, is desirable.

Feasibility: This objective is feasible with the combined efforts of the Land Acquisition Committee and Wildlife Division, including species specialists, habitat specialists, and regional biologists.

Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: Development and maintenance of a top ten list for waterfowl habitats should result in increasing efficiency and effectiveness of conservation partnerships and programs, as well as, acquisition of grants and financial appropriations. This objective should help Maine to achieve species-specific population goals outlined above and may prove to be an effective tool for providing urban and coastal habitats used for recreational purposes.

### **Habitat Objective 3: Increase, by 10%, the number of private landowners that actively manage or maintain their lands for waterfowl by 2021.**

Desirability: Meeting this objective is desirable and should help Maine to achieve species-specific population goals outlined above. Furthermore, such an objective is likely favorable for a multitude of wetland obligate species.

Feasibility: The objective is only feasible with a substantial outreach effort by the Division of Public Information and Education, as well as, additional personnel time and funding. This effort must include introducing partnerships and conservation programs (i.e. Partners for Wildlife) to landowners. The level of landowner incentive further influences feasibility. Declining interest in waterfowl hunting and wildlife activities could decrease the feasibility of the objective. Financial incentive may be required to meet the objective.

Capability of the Habitat: Although the majority of landowners likely do not currently manage their lands for waterfowl, the habitat is capable of sustaining the objective.

Possible Consequences: Meeting this objective should help Maine to achieve species-specific population and habitat goals outlined above. This objective would also likely provide habitat for a multitude of wetland obligate species. Furthermore, actively managing private lands for

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waterfowl could provide increased recreational opportunity for wildlife resource users.

### **Habitat Objective 4: By 2021, increase active management of all appropriate MDIFW lands for breeding, staging, and wintering waterfowl by developing 15 major projects.**

Desirability: Meeting this objective is desirable because current management of waterfowl habitat is primarily restricted to nest box maintenance and limited water level manipulation on MDIFW waterfowl production areas. Active waterfowl management on MDIFW lands should help meet individual species population and harvest objectives.

Feasibility: This objective is not feasible without prioritization given current levels of staffing and additional funding for active management of MDIFW lands for this purpose.

Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: Properly applied waterfowl management on MDIFW lands should help meet individual species population and harvest objectives. Active management may also increase locations available for recreational activity by hunters and other wildlife users.

### **ACCESS GOAL: Increase access to waterfowl habitats for hunters and other waterfowl resource users.**

#### **Access Objective 1: By 2011, increase boat and other types of access to waterfowl sites by 10%.**

Desirability: A lack of places to hunt and hunter interference are often cited as two major impediments to a quality waterfowl hunting experience. Therefore, increased access to waterfowl sites is desirable.

Feasibility: Meeting this objective in conjunction with the habitat objectives outlined above is feasible given that partnerships aimed at access issues are formed between federal, state, and non-profit organizations.

Capability of the Habitat: The habitat can support such an objective given that shoreline development does not progress at a rate greater than our ability to preserve access to historical waterfowl hunting and viewing areas.

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Possible Consequences: Increased access to waterfowl sites should help meet individual species harvest objectives. This objective should also increase locations available for recreational activity by waterfowl hunters and other waterfowl resource users.

### **Access Objective 2: By 2008, develop an effective landowner and sportsman relations program by county.**

Desirability: As the majority of land in Maine is held in private ownership and access continues to be an ever-increasing issue, an effective landowner/sportsman relations program is highly desirable.

Feasibility: Meeting this goal is primarily a function of cooperation between the Division of Public Information and Education, county planning boards, the Warden Service, and private landowners. The level of commitment and cooperation, as well as staffing and funding, will greatly influence the feasibility of this objective.

Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: Developing an effective landowner/sportsman relations program would be beneficial to both landowners and sportsman. Landowners would benefit by having a more educated, ethical community of sportsman using their lands and sportsman would benefit from the cooperation of landowners regarding access for hunting.

### **OUTREACH GOAL: Reverse the astounding decline in the number of waterfowl hunters in Maine.**

#### **Outreach Objective 1: By 2010, increase the number of waterfowl hunters in Maine by 10% over 2005 levels.**

Desirability: Meeting this objective is highly desirable as money generated from the sale of hunting licenses, duck stamps, and hunting equipment helps fund the continued management of Maine's waterfowl resource.

Feasibility: Declines in waterfowl hunters in Maine has been associated with declines in hunting opportunity, primarily harvest restrictions on Black Ducks. Conversely, increases in waterfowl license sales have been associated with increased opportunity associated with more liberal bag limits (excluding Black Ducks) and long seasons. The feasibility of this objective will largely be based on our ability to balance opportunity (liberal bag limits and long season) with population objectives for individual species and outreach programs to attract youth hunters.

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Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: Considering that access to hunting locations and interference from other hunters has increasingly become an issue affecting the quality of waterfowl hunting in Maine, increasing the number of waterfowl hunters could intensify this situation. Increased revenue generated by a larger waterfowl hunting community would benefit local economies and provide greater funding for MDIFW for deliver of habitat and landowner outreach programs outlined above.

**Outreach Objective 2: By 2010, in cooperation with the Maine Office of Tourism and other partners, develop an effective marketing effort for waterfowl viewing and hunting.**

Desirability: In relation to many New England states, access to hunting locations in Maine is relatively easy. Development and implementation of an effective marketing tool to promote waterfowl viewing and hunting in Maine would benefit local economies and provide greater funding for MDIFW for deliver of habitat and landowner outreach programs outlined above.

Feasibility: This objective is feasible considering that the Maine Office of Tourism currently does little to actively promote waterfowl hunting in Maine. However, staffing and funding constraints may compromise the ability to meet the objective. Furthermore, many partners exist for publishing and promotion of Maine's waterfowl resources.

Capability of the Habitat: The habitat is capable of sustaining the objective.

Possible Consequences: Increased tourism during late-Fall would draw on an additional resource to help infuse local rural economies with out-of-state dollars. Promotion and increased use of waterfowl resources for viewing and hunting could cause increases in interference between users of Maine's rich waterfowl resources.