A Strategy for Long-term Habitat Management

Pursuant to P.L. 2011, c. 696 LMF Bond

"An act to Authorize a General Fund Bond Issue to Support Maine's Natural Resource-based Economy"

An Agreement between

Organization Name

&

The Maine Department of Inland Fisheries and Wildlife

Date:

Long-term Habitat Management Agreement between the Organization Name and Maine Department of Inland Fisheries and Wildlife

1. Introduction

This Habitat Management Agreement, hereinafter called "Agreement," is intended to meet the requirements of P.L. 2011. C. 696. The creation of and future amendments of this Agreement will not conflict with the existing conservation easement recorded in the _____ County Registry of Deeds as Book: ____ Page: ____ nor conflict with the Land for Maine's Future Project Agreement recorded in the _____ County Registry of Deeds as Book: ____ Page: ____ Nor conflict with the Easement and LMF Project Agreement take precedence.

P.L. 2011, Chapter 696 of the State of Maine Laws as approved in May 2012, is "An act to Authorize a General Fund Bond Issue to Support Maine's Natural Resource-based Economy". Funds from this bond are to be used by State agencies, municipalities and qualifying non-governmental organizations for "acquisitions of land and interests in land for conservation, water access, outdoor recreation, wildlife or fish habitat, farmland preservation", all in accordance with State laws.

Provision 1. D. of this law states: Because portions of the State have deer populations that are struggling and deer wintering habitat protection is vital to the survival and enhancement of these populations, projects that conserve and protect deer wintering areas are to have special value and must receive preferential consideration during scoring of new applications for support."

Provision 2 of the law directs MDIFW to "include in conservation negotiations under this section provisions for the appropriate management of priority deer wintering areas". Provision 2 also specifies that land and interest in land purchased by the State that contains wildlife or fish habitat must be managed by the Department of Conservation (now DACF) using protocol provided by the Department of Inland Fisheries and Wildlife, and land and interest in land that is subject to a conservation easement that contains wildlife or fish habitat must be managed using protocol provided by the Department of Inland Fisheries and Wildlife."

In an effort to conform to the law as approved by the voters, the Maine Department of Inland Fisheries and Wildlife and Organization Name have developed this Agreement, which serves as the mechanism to ensure land and interest in land acquired with funds authorized from this bond are appropriately managed using protocol developed by the Maine Department of Inland Fisheries and Wildlife.

The Organization Name and the Maine Department of Inland Fisheries and Wildlife (MDIFW) have entered into the following Agreement for the designation and management of Habitat Management Areas on Organization Name managed parcels acquired with funding under this LMF bond. Agreements may be developed for those areas which possess the following:

- winter habitat for white-tailed deer and for other species requiring mature coniferous forest;
- habitat for wildlife and fish species included on State and/or Federal threatened or endangered species lists;
- any freshwater river, stream, brook, lake, or pond that is identified as supporting a native and wild self-sustaining brook trout population <u>or</u> containing a stocked brook trout fishery
- habitats defined and designated as significant habitat that is mapped by MDIFW under 38 MRSA, §480-B(8) and 38 MRSA, §480-B(10) or areas zoned as a P-FW, , P-MA, P-GP, P-WL, P-RT or P-SL by the Land Use Planning Commission

See **Appendix B** for definitions of each of the resources cited above and **Appendix C** for available Best Management Practices.

Agreements for specific areas are to be developed and approved by the Organization Name and MDIFW prior to the release of LMF funds. These will be designated as Habitat Management Areas (HMAs) with descriptions and maps and will be added to the list in Appendix A. No timber harvesting, vegetation management or habitat management activities shall be conducted on the property until HMAs have been identified and plans developed and agreed to by MDIFW.

The development of management and operational plans within each designated HMA is intended to be a collaborative process with MDIFW and should begin with a consultation with the Regional Wildlife and Fisheries Biologists who will provide maps of the wildlife and fisheries resources identified on the property. The designation of the HMAs on the property will be done collaboratively between MDIFW and the Organization Name, with the understanding that the designation and management of the resources within the HMA will take priority over other management objectives on the property. The Agreement is to be provided by MDIFW to LMF if funds from P.L. 2011, c. 696 are used to acquire any interest in land with a DWA.

1.2 List of Acronyms

The following acronyms are used extensively in this document.

BDWA	Biological Deer Wintering Area
BPL	Bureau of Parks and Lands
CC	Clearcut harvest as defined by the Maine Forest Practices Act (MFPA)
CDWH	Critical Deer Winter Habitat
DACF	Department of Agriculture, Conservation and Forestry
DBH	Diameter at Breast Height (4.5 feet)
DWA	Deer Wintering Area
HABITAT	Suitable Winter Habitat
HMA	Habitat Management Area
LMF	Land for Maine's Future program
MDIFW	Maine Department of Inland Fisheries and Wildlife
OSR	Overstory removal harvest as defined by MFPA
SDWH	Secondary Deer Winter Habitat

1.3 Habitat Management Area Goals & Objectives for Biological Deer Wintering Areas¹

Organization Name and MDIFW primary goal for identifying and designating HMAs is to develop a mutually agreed upon list of areas containing important fish and wildlife habitat on the protected property, and any Best Management Practices or special management considerations for those areas. HMAs identified on the property are listed in **Appendix A. Sample Best Management Practices are included in Appendix C.**

Through this co-operative management strategy MDIFW and the Organization Name will achieve, in part, one of the Department's deer management goals:

1. <u>Habitat Management</u>: To conserve deer wintering habitat throughout Maine to achieve deer population objectives; and to improve the structural diversity of existing deer wintering habitat by fostering sound silvicultural practices within deer wintering areas.

Organization Name and MDIFW agree that the objectives for BDWA management on the property are to:

- Provide winter habitat in at least 50% of the area of forest stands that are primary softwood sites in each HMA;
- Actively manage HMAs in order to achieve sustainable winter habitat for deer
- Include management considerations for the other species of wildlife that utilize mature coniferous forest habitat (Appendix C) and associated forest habitats;
- Improve forest stand health and quality;
- Ensure that these areas continue to provide a broad range of public values, consistent with maintaining and managing the BDWA;
- Produce a balanced forest age class structure, both within HMAs and outside them that will
 provide stable habitat levels to support a diversity of flora and fauna.
- Meet the requirements of P.L. 2011, c. 696, including all existing DWA and any lands intended to qualify as DWA within 20 years of the effective date of c. 696.

2. Biological Deer Wintering Area Management Guidelines/Principles

White-tailed deer utilize predominantly mature coniferous forest habitat during critical winter conditions. Suitable habitat areas provide relief from wind, more stable temperature and humidity conditions, and lower snow depths. These areas, commonly called deer yards or wintering areas are used for approximately 3 - 5 months in the winter when snow depths are greater than 12 inches. Deer movements are restricted when snow depths reach 16 inches. While shelter is the most important component of deer wintering areas, an interspersion of forest stands providing forage and sunlight is required to provide quality habitat. This Agreement is based on a management system that prioritizes

¹ Goals and Objectives will vary according to the resources present in each HMA, this example is specifically for Biological Deer Wintering Areas

- 1. habitat that is suitable for deer during critical winter conditions (critical deer winter habitat or CDWH)
- 2. habitat that is suitable for deer in winter except during severe winter weather (secondary deer winter habitat or SDWH).
- 3. habitat that could potentially provide CDWH or SDWH if managed appropriately

The overall proportion of softwood dominated stands in individual HMAs will not be reduced by forestry operations.

At least 50% of the composite area of forest stands with the potential to do so will be comprised of CDWH and SDWH as described below.

2.1 Critical Deer Winter Habitat Criteria

Forest stands meeting critical deer winter habitat criteria (CDWH) are essential as they provide shelter for deer during the most severe winter conditions. Softwood dominated stands that are typed as S2A and S2B meet the criteria of CDWH. However, some mixed wood stands, or softwood stands on poor sites may not have the potential to meet CDWH. ORGANIZATION NAME will manage each HMA so that a minimum of 25% of the composite area of forest stands with the potential to do so will meet CDWH criteria as follows:

- Softwood crown closure of ≥70% of trees ≥ 6" DBH; and
- Softwood basal area > than 100 ft^2 of trees \ge 6" DBH; and
- Stand height > 35 feet

2.2 Secondary Deer Winter Habitat Criteria

Areas that meet or have the potential to meet secondary deer winter habitat criteria (SDWH) provide adequate shelter for all but the most severe winter conditions. The balance of required habitat area will meet or exceed SDWH criteria as follows:

- ♦ Softwood crown closure of 50-70% of trees ≥ 6" DBH;
- ◆ Softwood basal area of 80-100 ft² of trees ≥ 6" DBH; and
- Stand height \geq 35 feet.

Example 1: If 25% of the forest stands with potential to provide CDWH and SDWH meets the CDWH criteria then 25% of these stands are required to meet the SDWH criteria. Alternatively, if 25 acres of a 100 acre softwood stand meets CDWH criteria then 25 acres must meet SDWH criteria.

Example 2: If 35% of the forest stands with the potential to provide CDWH and SDWH meets CDWH, then only 15% of the stands must meet SDWH. For example, if 35 acres of the 100 acre stand met CDWH then only 15 acres would need to meet SDWH criteria.

2.3 Potential Deer Wintering Habitat

Stands mapped within a BDWA that do not currently meet CDWH or SDWH definitions provide forage (woody browse) between and adjacent to stands that provide shelter. These stands enhance the value of a DWA, especially when managed to attain CDWH or SDWH criteria.

BDWAs also often include areas such as south facing slopes that enhance solar gain during winter. These areas may not meet CDWH or SDWH criteria, but provide microclimatic benefits that contribute to BDWA functioning.

The objective is to maintain or increase the proportion of softwood dominated stands within a BDWA. The overall proportion of softwood dominated stands in individual HMAs will not be reduced by forestry operations.

Special Considerations

In certain situations, pre-existing conditions may preclude achieving desired habitat levels in HMAs. These include but are not limited to the following:

- a skewed forest age class structure in an HMA that requires extensive forest intervention to develop a more balanced age class distribution; and/or
- natural influences such as insects, disease, fire, or storms.

Note: The above factors will be addressed, if relevant, in management and operational plans for individual HMA's.

3. General Management Guidelines

Deviations from these guidelines may be considered, where conditions warrant, provided that they do not impede achieving the goals and objectives of the overall Agreement. Any changes must be approved by Organization Name and MDIFW on a case by case basis. Changes that affect the purpose of the Habitat Management Agreement must be sent to the LMF Director for review.

3.1 Habitat Modeling

Computer habitat modeling may be used to assist in harvest planning in HMAs. Initially, levels of critical and secondary deer winter habitat will be forecast. Models for other indicator and keystone species (which other species depend on for survival) may also be used as they become available. Until computer modeling is developed by **ORGANIZATION NAME** the current method of reviewing and approving timber harvest prescriptions within HMA's will continue with the understanding that the levels of CDWH and SDWH in the entire HMA will be considered, not just within the area being prescribed for harvest.

3.2 Harvest Timing

Although harvesting within Agreement areas may be allowed throughout the year, harvesting will be encouraged during late fall and winter to avoid disturbance to nesting birds, protect regeneration, provide food and mobility for deer, and to minimize soil disturbance.

3.3 Road Construction

The following guidelines will be utilized to minimize habitat fragmentation and other potential negative affects, while allowing access to the HMA for active forest management:

- Permanent roads will be allowed to enable access for active forest management of the entire area;
- Road right-of-way width will not exceed 50 feet from standing timber to standing timber;-
- Right-of-way width will be reduced to 30 feet on permanent roads within 330' of major deer trail crossings;
- Road systems will be developed as part of a harvest plan with road construction kept at the minimum needed to effectively access the HMA area for forestry operations;
- When road construction is complete, disturbed areas such as road shoulders and ditches, winter roads, and landings, will be seeded with a non-invasive "wildlife mix" of grasses and/or herbaceous plants to stabilize soils and provide forage for wildlife; and
- Winter haul roads within HMAs will be closed to vehicle access at the completion of active harvesting operations except where the road is part of a designated winter recreational trail or summer pedestrian trail. Winter haul roads are defined as a route or travel way that is utilized for forest management activities conducted exclusively during frozen ground conditions. Winter haul roads must have the following characteristics: 1) They are constructed with no significant soil disturbance (excluding tree & rock removal, etc.); 2) They do not make use of fill or surfacing material and; 3) They are substantially revegetated by the end of the following growing season and are maintained in a vegetated condition.

3.4 Herbicide Application

When needed and where there is no feasible alternative to herbicide treatment, ORGANIZATION NAME will use agents and application procedures with the greatest target specificity and lowest toxicity.

3.5 Adjacency Standards

Adjacency standards apply to stands within and abutting HMAs to promote a diversity of distinct age classes in forest stands of moderate size in HMAs.

- In order to promote a diverse age class distribution, a 660-foot special management area surrounding clearcut (CC) or overstory removal (OSR) harvest blocks will be maintained as SDWH for 10 years except under certain conditions. Notwithstanding the standards in Section 4.1, when CC harvest is 20 acres or less or, OSR harvest is 50 acres or less, a buffer is not required.
- Partial cut harvest will be allowed in these buffers; however, post harvest stand conditions must meet SDWH.

3.6 Travel Corridors

To avoid isolation of habitat within HMAs, softwood or mixed wood travel corridors between softwood shelter areas and along selected waterways will be designated jointly by ORGANIZATION NAME and MDIFW.

- Corridors must be at least 660 feet (10 chains) wide on each side of streams;
- Corridors adjacent to stands meeting SDWH criteria must also meet or exceed SDWH criteria;
- Corridors adjacent to areas that do not meet SDWH criteria due to harvesting operations must meet CDWH criteria if stands within the corridor have the potential to meet these criteria;
- Corridors will be located adjacent to the shore of selected lakes, ponds, or wetlands and along each bank of selected rivers, streams, and large brooks that are located within the HMA; and
- On occasion as necessary, a wider corridor of up to 990 feet (15 chains) may be established through individual agreements between ORGANIZATION NAME and MDIFW staff to provide deer with sheltered access when the travel corridor abuts open, wind-swept areas such as large lakes or flowages, wide rivers, or large clearcuts.

3.7 Gravel Excavation

No commercial gravel sales will be permitted from pits within the HMA. Excavation of new gravel/ledge areas involves the potential removal of shelter stands to access the gravel. Area and cumulative percentage of CDWH and SDWH will decrease when excavation requires the reduction of deer winter habitat. When excavation is completed for a particular area, areas disturbed from excavation will be seeded with a non-invasive "wildlife mix" of grasses and herbaceous plants or planted to native tree seedlings suitable for the site. Existing gravel/ledge pits may exceed one acre in size; however, expansion of these larger gravel/ledge pits can only be made if an equivalent area of the pit is reclaimed and stabilized. Existing open gravel/ledge areas at the time of this Agreement are not considered potential habitat, and thus will not be used in calculating the percent area meeting CDWH and SDWH as explained in Section 2. The excavation guidelines are as follows:

- Each new gravel/ledge pit will be limited to 1 acre of working pit area;
- Expansion of grave/ledge pit excavation beyond 1 acre will be allowed after an equivalent area in the gravel/ledge pit has been reclaimed, stabilized, and revegetated; and
- Development of gravel/ledge pits in travel corridors will be avoided where possible.

3.8 Property Leasing/Recreational Use

While all effort shall be made to exclude leased activity of lands from the areas covered by an Agreement, leases will not be prohibited from inclusion in HMAs. LMF approved conservation easements, deed and Project Agreements shall be the ruling document on the terms of the lease provisions, however, the following guiding principles should be considered for leases within a HMA:

In the case of leased recreational camp lots:

- Leased Lots will be limited to their traditional use and character, allowing for maintenance of existing structures.
- Reconstruction of damaged or destroyed structures in the same location and size, and construction or expansion of new structures and facilities only with the landowner's (ORGANIZATION NAME), easement holder's, Designated State Agency and MDIFW, as applicable, prior written approval and consistent with the existing use and character of the Leased Lots. For purposes of this clause, traditional use and character shall be that in existence as of the date that the property interest was acquired, as documented in the acquisition documents or conservation easement Baseline Documentation.
- Prior to any change in the lease terms, including renewal of existing leases, ORGANIZATION NAME agrees to provide 90 days notice to the Designated State Agency and MDIFW, as applicable. If acquisition terms allow for the sale of leased lots, prior to any sale, ORGANIZATION NAME agrees to provide a minimum 90 days notice to the easement holder, Designated State Agency and LMF Board as applicable.

In order to prevent potential disturbance to wildlife in HMAs, ORGANIZATION NAME will:

- Communicate the sensitive nature of these areas to lessees;
- Request that if occupied from January through March, that the use of the lease and associated recreational activities will not disturb wintering wildlife, especially deer;
- Request that lessees limit winter recreational activities including, snowmobiling, snowshoeing and cross country skiing, within the HMA;
- Advise lessees that it is unlawful for any dog to run at large (7 MRSA, Chapter 719, Section 3911).; and
- Designate winter access routes to the camp and recreational features such as water bodies in HMA's in the lease.

3.9 Other Structures, Uses, or Services

ORGANIZATION NAME and the MDIFW will review any of the following structures, uses, or services prior to their implementation, initiation, or execution within the HMA. If the proposed structure, use, or service is found to be consistent with the Agreement and not detrimental to its objectives, it may be incorporated formally into the body of the plan. Temporary "warming shacks" used during timber harvesting that are removed from the site following completion of harvesting are permitted.

- The erection of buildings and other structures as may be allowed subject to the terms of the LMF acquisition;
- Any other structures, uses, or services that could substantially affect or diminish the values protected by the Agreement.

4. Forestry Guidelines

Objectives for overall levels of habitat as stated in individual HMA plans will be met when implementing the following forestry guidelines for coniferous and deciduous stands. Any exceptions, as endorsed by MDIFW and ORGANIZATION NAME, will be duly documented and adjustments made as necessary. The timber harvesting guidelines that follow are contingent on meeting the habitat objectives outlined in Sections 1.3 and 2.

4.1 Forestry Guidelines for Predominantly Coniferous Stands (SW, SW/HW) in HMAs

4.1.1 Priority Order

Considering shelter and food value to deer and relative longevity of tree species, the following priority tree removal guidelines will be employed on a stand-by-stand basis during forestry operations.

- 1. (First priority) Intolerant Hardwoods (IH) Note: a component of IH species will be retained in partial cuts in predominantly SW stands to maintain habitat diversity.
- 2. Overmature Fir
- 3. Overmature Spruce
- 4. Tolerant Hardwoods (except Beech) Note: a component of tolerant hardwood species will be retained in partial cuts in predominantly SW stands to maintain habitat diversity.
- 5. Other fir
- 6. Other spruce
- 7. Pine Note: A component of pine will be left to provide landscape diversity and habitat, especially near water bodies
- 8. Cedar (single tree or group selection only)
- 9. Hemlock

Where warranted, this order of tree removal may be modified for specific HMAs as agreed to by ORGANIZATION NAME and MDIFW.

4.1.2 Selection and Partial Harvesting

Follow priority removal order guidelines listed above:

- Where possible, maintain a minimum post-cut softwood basal area that meets SDWH criteria (80 to 100 ft²/acre SW <u>></u> 6 inches DBH) to ensure stand stability and to maintain crown closure; and
- Trails for harvesting equipment will be 8 15 feet wide and spaced no closer than 100 feet from edge to edge, unless restricted by terrain.

4.1.3 Overstory Removal

After Shelterwood Harvest

An overstory removal of up to 125 acres will be allowed after a shelterwood harvest if both of the following conditions are met:

- The area is adequately stocked (60%) with softwood regeneration \geq 5 feet in height, and
- No clearcut or overstory removal has been performed in adjacent stands in the last 10 years unless the combined area of both harvests does not exceed harvest block size restriction.

Overstory Removal with No Previous Shelterwood Harvest

An overstory removal of up to 125 acres can be performed even though no shelterwood harvest was performed in the stand if all of the following conditions are met.

- The pre-harvest softwood basal area is \leq 70 ft² /acre (SW \geq 6 inches DBH);
- The softwood crown closure is < 45%;
- The area is adequately stocked (60%) with softwood regeneration \geq 5 feet in height;
- No clearcut or overstory removal has been performed in adjacent stands in the last 10 years, or if a harvest has occurred, then the combined area of both harvests does not exceed 125 acres.

4.1.4 Clearcut Harvesting

A clearcut harvest of up to 35 acres may be allowed providing no CC or OSR has been conducted adjacent to the block in the last 10 years, unless harvest block size restrictions are not exceeded as described below:

- The combined area of both harvests does not exceed 35 acres; or
- Regeneration in the adjacent harvest block is adequately stocked (60% SW) and <u>></u> 5 feet in height and the combined area of harvest blocks does not exceed 125 acres.
- MDIFW and ORGANIZATION NAME may agree to additional clearcutting as deemed beneficial to supporting habitat needs within the BDWAs.

4.2 Forestry Guidelines for Predominantly Deciduous Stands (HW, HW/SW) in HMAs

4.2.1 Intolerant Hardwood Management

- Harvesting that will provide browse for deer and moose and perpetuate these areas will be allowed; however, at least 10% of the residual basal area should be left in stems ≥ 16 inches dbh, where present, to provide habitat diversity. Of particular importance to pileated woodpeckers, ruffed grouse and other wildlife is trembling aspen (poplar); and
- Planting of softwoods, will be allowed on softwood sites, presently occupied by hardwood, to maintain habitat diversity and shorten the natural succession process consistent with MDIFW Beech Management Guidelines.

4.2.2 Tolerant Hardwood Management

Within Softwood Typed Stands

Tolerant hardwoods may be harvested; however, no more than 80% of these trees should be removed to provide habitat diversity and long lasting cavity trees. Beech trees provide a very important food source to bear, deer, and other species. Hardwood management will maintain beech as a viable landscape component using MDIFW's *Beech Management Guidelines*.

Within Tolerant Hardwood Typed Stands

Selection harvesting will be practiced in these stands.

5. Terms of Agreement

5.1 It is the intent of both parties to enter into a fifteen-year Agreement. The parties will meet annually, to review the Agreement, planned management activities for the upcoming year and to review management activities undertaken in the previous year. The annual meeting is intended to be an opportunity to provide notice of planned timber harvests in the upcoming year. The plan will be reviewed again at the end of the 15 year period and renewed for an additional 15 years. Renewal of the Agreement will continue every 15 years in perpetuity. The Agreement may not be discontinued without prior approval from the LMF Board or its successors or assigns.

5.2 ORGANIZATION NAME will develop a written HMA management plan for each HMA within 1 year of the closing date of the acquisition. Both ORGANIZATION NAME and MDIFW must approve deviations from this Agreement in individual HMA plan development in writing.

5.3 While this Agreement remains in effect, it will serve as the basis for all management activities within the HMA and the following conditions will apply.

- 1. MDIFW will continue to conduct aerial and ground surveys to monitor deer use. ORGANIZATION NAME will have access to the survey results.
- 2. ORGANIZATION NAME will consult with MDIFW in the development of any Operational Forest Management Plans (FMP) within the HMA and will submit the FMP to MDIFW for their review and approval, MDIFW shall have 60 days to provide its review and approval.
- Management activities within the HMA will be agreed to by MDIFW and ORGANIZATION NAME. Zoned P-FWs within the HMA will be treated as an HMA for the duration of the Agreement. The Agreement will serve as the basis for the LUPC Plan agreement for P-FWs located on ORGANIZATION NAME land.
- 4. At least 60 days prior to initiating any activity not listed in a management plan, ORGANIZATION NAME will provide written notice to MDIFW of these new activities, to include but not limited to, timber harvesting, road and bridge building, vegetation management and gravel extraction.

6. Resolution of Disagreements – Review & Update

ORGANIZATION NAME and MDIFW agree to employ the following protocol in an attempt to resolve any disagreements that may arise from the implementation of this Agreement.

An attempt will be made to resolve disagreements at the level of the ORGANIZATION NAME Land Manager and Regional Wildlife Biologist and Wildlife Management Section Supervisor. In resolving disagreements, the parties will be guided by the specific language contained in the plan that outlines the principal management concerns, goals, and specifications. In the event that the area of disagreement is not specifically addressed, parties should be guided by the Agreement's objectives.

In the event that the disagreement cannot be resolved at the regional level, representatives of the ORGANIZATION NAME will meet with the MDIFW Wildlife Management Section Supervisor, Wildlife Division Director, and Director of the Bureau of Resource Management to present an explanation of how their proposed actions are consistent with the objectives of the Agreement. A decision to approve or deny approval of the plan will be provided within 30 days of the meeting date.

7. Amendments

The ORGANIZATION NAME and the Maine Department of Inland Fisheries and Wildlife shall make amendments to this Agreement jointly in writing with notice to LMF prior to adopting any amendment that conflicts with the purposes of the Agreement, LMF Project Agreement, or conservation easement.

Adopted ____ /___ by

NAME, POSITION ORGANIZATION NAME James M. Connolly Director Bureau of Resource Management Dept. of Inland Fisheries and Wildlife

Appendix A

Organization Name Habitat Management Area Summary The areas listed below are to be managed under the terms of this long-term Habitat Management Agreement

Date of Agreement:

Renewal Date:

Township(s):

HMA Name:

BDWA/Resource Acres:

HMA Acres:

Total Acres:

Digitized map and property description approved by MDIFW that adequately depicts the area HMA(s):

Appendix B

Significant Resources Appropriate for Habitat Management Agreements

Maine Endangered, Threatened

(http://www.maine.gov/ifw/wildlife/endangered/listed species me.htm)

Birds - Endangered

American Pipit (Anthus rubescens) (breeding population only) (species plan) Black Tern (Chlidonias niger) Golden Eagle (Aquila chrysaetos) (species plan) Grasshopper Sparrow (Ammodramus savannarum) Least Bittern (Ixobrychus exilis) (species plan) Least Tern (Sterna antillarum) (species plan) Peregrine Falcon (Falco peregrinus) (breeding population only) Piping Plover (Charadrius melodus) (species plan)** Roseate Tern (Sterna dougallii) (species plan)* Sedge Wren (Cistothorus platensis) (species plan)

Birds - Threatened

Arctic Tern (Sterna paradisaea) (species plan) Atlantic Puffin (Fratercula arctica) (species plan) Barrow's Goldeneye (Bucephala islandica) (species plan) Black-crowned Night Heron (Nycticorax nycticorax) Common Moorhen (Gallinula chloropus) Great Cormorant (Phalacrocorax carbo) (Breeding population only) Harlequin Duck (PDF) (Histrionicus histrionicus) (species plan) Razorbill (PDF) (Alca torda) (species plan) Upland Sandpiper (PDF) (Bartramia longicauda) (species plan) Short-eared Owl (Asio flammeus) (Breeding population only)

Fish - Endangered

Redfin Pickerel (Esox americanus americanus)

Fish - Threatened

Swamp Darter (Etheostoma fusiforme)

Invertebrates - Endangered

Butterflies and Skippers Clayton's Copper (Lycaena dorcas claytoni) (species plan) Edwards' Hairstreak (Satyrium edwardsii) Hessel's Hairstreak (Callophrys hesseli) Juniper Hairstreak (Callophrys gryneus) Katahdin Arctic (Oenis polixenes katahdin)

Dragonflies and Damselflies Rapids Clubtail (Gomphus quadricolor) <u>Mayflies</u> Flat-headed mayfly (Roaring Brook mayfly) (PDF) (Epeorus frisoni)

Invertebrates - Threatened

<u>Butterflies and Skippers</u> Purple Lesser Fritillary (Boloria chariclea grandis) Sleepy Duskywing (Erynnis brizo)

<u>Moths</u>

Pine Barrens Zanclognatha (Zanclognatha martha) Twilight Moth (Lucia rachelae)

Dragonflies and Damselflies Boreal Snaketail (Ophiogomphus colubrinus) Ringed Boghaunter (Williamsonia lintneri)

<u>Freshwater Mussels</u> Brook Floater (Alasmidonta varicosa) Tidewater Mucket (Leptodea ochracea) Yellow Lampmussel (Lampsilis cariosa)

<u>Mayflies</u> Tomah Mayfly (Siphlonisca aerodromia) (species plan)

Mammals - Endangered

New England Cottontail (Sylvilagus transitionalis) (species plan)

Mammals - Threatened

Northern Bog Lemming (Synaptomys borealis)

Reptiles - Endangered

<u>Snakes</u> Black Racer (Coluber constrictor) (species plan)

<u>Turtles</u> Blanding's Turtle (Emydoidea blandingii) (species plan) Box Turtle (Terrapene carolina) (species plan)

Reptiles - Threatened

<u>Turtles</u> Spotted Turtle (Clemmys guttata) (species plan)

Reptiles <u>Snakes</u> Eastern/Northern Ribbon Snake (Thamnophis sauritus) Northern Brown Snake (Storeria d. dekayi)

<u>Turtles</u> Wood Turtle (Glyptemys insculpta)

Brook Trout Habitat

Any freshwater river, stream, brook, lake, or pond that is identified by MDIFW as supporting a native and wild self-sustaining brook trout population or containing a stocked brook trout fishery

Natural Resource Protection Act definitions - Habitats defined and designated as significant habitat as mapped by MDIFW under 38 MRSA, §480-B(8) and 38 MRSA, §480-B(10)

38 MRSA, §480-B(8)

Protected natural resource. "Protected natural resource" means coastal sand dune systems, coastal wetlands, significant wildlife habitat, fragile mountain areas, freshwater wetlands, community public water system primary protection areas, great ponds or rivers, streams or brooks, as these terms are defined in this article.

38 MRSA, §480-B(10)

Significant wildlife habitat. "Significant wildlife habitat" means:

A. The following areas to the extent that they have been mapped by the Department of Inland Fisheries and Wildlife or are within any other protected natural resource: habitat, as defined by the Department of Inland Fisheries and Wildlife, for species appearing on the official state or federal list of endangered or threatened animal species; high and moderate value deer wintering areas and travel corridors as defined by the Department of Inland Fisheries and Wildlife; seabird nesting islands as defined by the Department of Inland Fisheries and Wildlife; and critical spawning and nursery areas for Atlantic salmon as defined by the Department of Marine Resources; and [2009, c. 561, §37 (AMD).]

B. Except for solely forest management activities, for which "significant wildlife habitat" is as defined and mapped in accordance with section 480-I by the Department of Inland Fisheries and Wildlife, the following areas that are defined by the Department of Inland Fisheries and Wildlife and are in conformance with criteria adopted by the Department of Environmental Protection or are within any other protected natural resource:

(1) Significant vernal pool habitat;

(2) High and moderate value waterfowl and wading bird habitat, including nesting and feeding areas; and

(3) Shorebird nesting, feeding and staging areas. [2005, c. 116, §2 (NEW).]

Land Use Planning Commission– Land Use Districts and Standards - Chapter 10 (http://www.maine.gov/dacf/lupc/laws_rules/ch10.html)

MOUNTAIN AREA PROTECTION SUBDISTRICT (P-MA)

The purpose of the P-MA subdistrict is to regulate certain land use activities in mountain areas in order to preserve the natural equilibrium of vegetation, geology, slope, soil and climate in order to reduce danger to public health and safety posed by unstable mountain areas, to protect water quality, and to preserve mountain areas for their scenic values and recreational opportunities.

FISH AND WILDLIFE PROTECTION SUBDISTRICT (P-FW)

The purpose of the P-FW subdistrict is to conserve important fish and wildlife habitats essential to the citizens of Maine because of their economic, recreational, aesthetic, educational or scientific value.

GREAT POND PROTECTION SUBDISTRICT (P-GP)

The purpose of the P-GP subdistrict is to regulate residential and recreational development on Great Ponds to protect water quality, recreation potential, fishery habitat, and scenic character.

SHORELAND PROTECTION SUBDISTRICT (P-SL)

The purpose of the P-SL subdistrict is to regulate certain land use activities in certain shoreland areas in order to maintain water quality, plant, fish and wildlife habitat and in order to protect and enhance scenic and recreational opportunities.

P-SL1: Areas within 250 feet of the normal high water mark, measured as horizontal distance landward of such high water mark, of (a) tidal waters, and (b) flowing waters downstream from the point where such waters drain 50 square miles or more.

P-SL2: Areas within 75 feet, measured as a horizontal distance landward, of (a) the normal high water mark of stream channels upstream from the point where such channels drain 50 square miles; (b) the upland edge of those coastal and inland wetlands identified in Section 10.23,N,2,a,(1)(b) and (c) and (2) and (3); and (c) the normal high water mark of bodies of standing water less than 10 acres in size, but excluding bodies of standing water which are less than three acres in size and which are not fed or drained by a flowing water.

WETLAND PROTECTION SUBDISTRICT (P-WL)

The purpose of the P-WL subdistrict is to conserve coastal and freshwater wetlands in essentially their natural state because of the indispensable biologic, hydrologic and environmental functions which they perform.

Insofar as this protection subdistrict also includes the area enclosed by the normal high water mark of surface water bodies within the Commission's jurisdiction, the purpose of this subdistrict shall also be to help insure compatible surface water uses on those water bodies where there is the potential for conflict with other uses and values of such water bodies.

a. Surface water bodies and areas meeting the definition of coastal or freshwater wetlands shall be included in P-WL subdistricts as described below:

P-WL1: Wetlands of special significance:

(a) Areas enclosed by the normal high water mark of flowing waters, stream channels, and bodies of standing water, except for constructed ponds less than 10 acres in size which are not fed or drained by flowing waters;

(b) Coastal wetlands, together with areas below the high water mark of tidal waters and extending seaward to the limits of the State's jurisdiction; or

(c) Freshwater wetlands, as follows:

(i) Within 250' of a coastal wetland or of the normal high water mark of any body of standing water greater than 10 acres;

(ii) Containing at least 20,000 square feet in total of the following: aquatic vegetation, emergent marsh vegetation, or open water, unless the wetlands are the result of constructed ponds less than 10 acres in size which are not fed or drained by flowing waters;

(iii) That are inundated with floodwater during a 100 year flood event;

(iv) Containing significant wildlife habitat;

(v) Consisting of, or containing, peatlands, except that the Commission may determine that a previously mined peatland, or portion thereof, is not a wetland of special significance; or

(vi) Within 25' of a stream channel.

P-WL2:

(a) Scrub shrub and other nonforested freshwater wetlands, excluding those covered under P-WL1; and

(b) Constructed ponds less than 10 acres in size which are not fed or drained by flowing waters.

P-WL3: Forested freshwater wetlands, excluding those covered under P-WL1 and PWL2.

Appendix C Best Management Practices

Contact MDIFW for BMPs for avoiding impacts to the following habitats and species:

- Inland Waterfowl and Wadingbird Habitats (IWWHs)
- Tidal Waterfowl and Wadingbird Habitats (TWWH)
- State and federally listed species