

**A Strategy for Long-term Habitat
Management**

Gulf Hugas-Whitecap Fisheries Habitat

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

The Maine Department of Agriculture, Conservation and Forestry

&

**The Maine Department of
Inland Fisheries and Wildlife**

Date: June 28, 2017

Long-term Habitat Management Agreement between the Maine Department of Agriculture, Conservation and Forestry and the Maine Department of Inland Fisheries and Wildlife

1. Introduction

This Habitat Management Agreement, hereinafter called "Agreement," is developed to meet the requirements of P.L. 2011. C. 696.

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 the Maine Department of Agriculture, Conservation and Forestry 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 Maine Department of Agriculture, Conservation and Forestry (DACF) 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 Maine Department of Agriculture, Conservation and Forestry managed parcels acquired with funding under this LMF bond. Habitat Management Agreements may be developed for those areas that 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 or 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

The designation of the HMAs on the property will be done collaboratively between MDIFW and DACF, 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.

1.2 List of Acronyms

The following acronyms are used extensively in this document.

DACF	Maine Department of Agriculture, Conservation and Forestry
BPL	Bureau of Parks and Lands
MDIFW	Maine Department of Inland Fisheries and Wildlife

1.3 Habitat Management Area Goals & Objectives for Wild Brook Trout

The 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 identified in **Appendix A**. Sample Best Management Practices are included in **Appendix C**.

Introduction

The West Branch of the Pleasant River is a high-value resource supporting a robust resident population of wild brook trout that provides outstanding recreational sport fisheries. Excellent water quality, cold water temperatures, and limited competing species provide suitable habitat for all life stages of brook trout. In addition, the Pleasant River watershed has been identified by the USDA NRCS as a focus area of habitat restoration for federally endangered salmon fisheries.

Riparian management practices in the Gulf Hagas – Whitecap HMAs should therefore emphasize providing special protections to these outstanding wild brook trout habitats, with riparian management standards employed in the HMAs exceeding statewide minimum standards.

DACF and MDIFW agree that the objectives for fisheries habitat management within the HMAs are to:

- Maintain shading, water quality, water temperature, and biotic community integrity.
- Assure the natural recruitment of large woody material and organic matter into streams.
- Minimize siltation associated with management practices.

2. Guidelines for Management of Fisheries Resources in the Gulf Hagas – Whitecap Forest

Note: These Guidelines are specific to the Gulf Hagas – Whitecap property and are not intended to be applied to other existing BPL units or on BPL lands that may be created in the future.

Management/Harvest Strategies in Riparian Corridors

A. Introduction

The term “riparian” applies to that 330-foot margin of habitat adjacent to streams, ponds, bog and other “wet” areas, where wildlife use and travel is most abundant. The key to understanding the value of this environment and managing it effectively is to realize how efficiently it combines elements of “edge” and “strata” to produce a wide range of habitat conditions for wildlife species of all types. It is also important to realize that riparian areas comprise only 15 percent of Maine’s total land base. For this reason, they are among the most critical of the several habitat zones; and their management must reflect a careful balance between the natural, life-sustaining requirements of ecosystems and other activities more clearly related to human needs and preferences.

B. Application

On the Gulf Hagas-Whitecap fee acquired parcel, riparian management practices will be applied within 330 feet of lakes, ponds and non-forested wetlands (40 acres per mile) and along both sides (660 feet) of the West Branch of the Pleasant River (80 acres per mile) and 75 feet either side of all other permanent streams. The intent of the application of management practices is to be consistent with current BPL standards while enhancing riparian management adjacent to the West Branch of the Pleasant River, ponds and wetlands within the parcel. A schematic is attached depicting management strategies to be employed (Appendix D). Application of this standard to all water resources, although it may not be necessary for wildlife purposes in all situations, is designed to (1) acknowledge the general propriety of broad ecosystem management, (2) simplify and standardize decision-making, and (3) eliminate the need to distinguish between special management zones.

C. Management Objectives

- 1) Protect aquatic environments from degradation.
- 2) Promote and/or maintain diversity as defined by vertically stratified plant communities and a variety of vegetative types.
- 3) Promote and maintain continuity of travel cover throughout the watershed and adjoining ecosystems.

D. General Management/Harvest Strategies

1) There are two categories of riparian zone present on streams or water bodies. The first is 75 feet wide (150 feet along a stream) and will be managed using individual tree selection permitting light removals while maintaining shading and travel opportunities and reducing siltation.

2) The second category or riparian zone consists of the remaining 225 feet (76 feet to 330 feet from the stream or pond) which will be managed by single tree and/or group selection methods to:

- a. Retain all den trees and snags that do not pose a hazard to operators or to public safety.
- b. Maintain continuity of travel corridors throughout the watershed by extending the riparian zone downstream from the uppermost point of permanent water or operable slope.

In addition to the above management/harvest strategies, the following shall apply:

- Riparian operations will occur on dry ground or winter conditions only.
- Proposed stream crossings will be pre-inspected by MDIFW.
- Harvest inspections done by BPL will heavily focus on activities in the riparian zones.
- Additions of woody material ("Chop and Drop") can be employed using existing protocol of MDIFW.
- Avoid forest management actions that lead to semi-permanent or permanent conversion of the natural vegetation within riparian management zones including placement of log landings, and logging roads.
- Use streams as stand boundaries to reduce the need for stream crossings. When stream crossings are unavoidable, conform to Maine Forest Service's BMP's for erosion control.
- Bridges and culverts should be large enough to pass peak flows without damage to the structure and should not constrict the stream channel. Culverts, preferably with flat bottoms, should be installed at the level of the original streambed to provide passage for fish, amphibian, and invertebrate at all flows.
- Avoid using fertilizers, pesticides, and chemicals within riparian management zones and, if applied aerially, institute wide spray buffers (>1/4 mile) to prevent drift unless agreed upon by MDIFW in writing.

Deviations from these guidelines in the case of insect, disease, fire or other outstanding management concerns can be employed if agreed upon by DACF and MDIFW in writing.

Public Access to Gulf Hagas-Whitecap Waters:

Management of public access should emphasize maintaining the remote, wilderness character of the HMA riparian corridors.

- Existing use opportunities on all waters of the unit should be maintained, including maintaining restricted motorized vehicle access on zoned Remote Ponds (inaccessible to two-wheel-drive vehicles within one-half mile and restrict shoreline developments).
- Revisions of existing access portals will be identified by IFW Regional Biologists as the need arises.
- New walking/hiking trails will only be developed at the behest of MDIFW.
- Maintain or enhance other existing recreational opportunities, including remote campsites, per existing management policies for Public Reserved Lands.

3. Terms of Agreement

3.1 It is the intent of both parties to enter into a five-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 Agreement will be reviewed again at the end of the 5-year period and renewed for an additional term. Renewal of the Agreement will continue every 5 years in perpetuity. The Agreement may not be discontinued without the prior approval of the LMF Board or its successors or assigns.

3.2 DACF will include the Gulf Hagas-Whitecap parcel in the Moosehead Region planning process and schedule. Both DACF and MDIFW must approve deviations from this Agreement in individual HMA plan development in writing.

3.3 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 may conduct studies on the fisheries associated with the Gulf Hagas-Whitecap parcel. DACF will have access to the survey results.
2. DACF 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.
3. Management activities within the HMA will be agreed to by MDIFW and DACF.
4. At least 60 days prior to initiating any activity not listed in a management plan, DACF 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.

4. Resolution of Disagreements – Review & Update

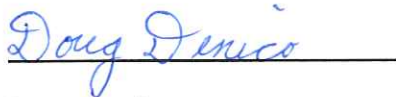
DACF and MDIFW agree to employ the following protocol in an attempt to resolve any disagreements that may arise from the implementation of this Agreement. In resolving disagreements, the parties will be guided by the specific language contained in the plan that outlines the principal management concerns, 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 DACF will meet with the MDIFW Fisheries Section Supervisor, Fisheries 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 HMA. A decision to approve or deny approval of the plan will be provided within 30 days of the meeting date.

5. Amendments

DACF 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.

Adopted 06/28/2017 by



Doug Denico
Director, Maine Forest Service
Dept. of Agriculture, Conservation and Forestry



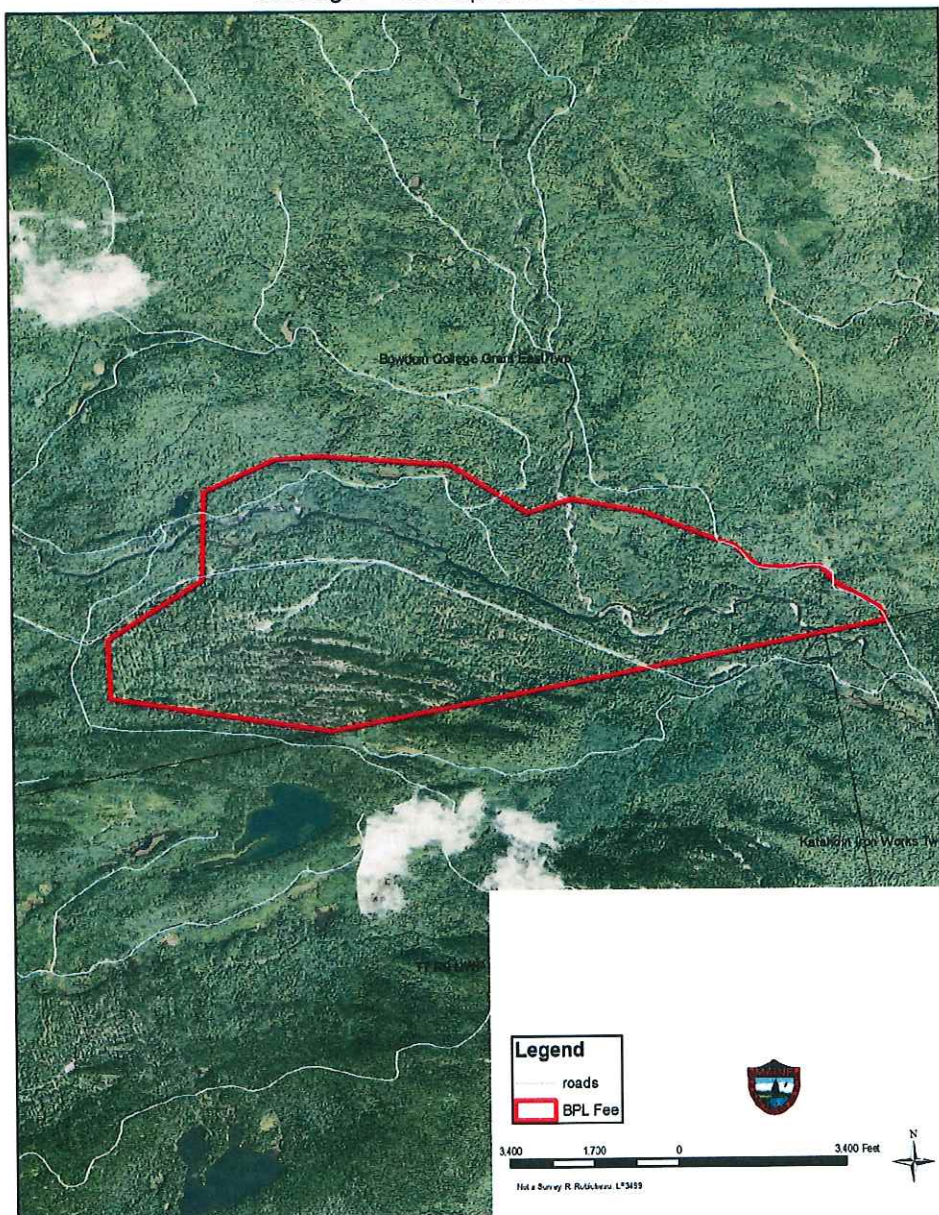
James M. Connolly
Director, Bureau of Resource Management
Dept. of Inland Fisheries and Wildlife

Appendix A

DACF Habitat Management Area Summary

The entire Gulf Hagas - Whitecap fee parcel as indicated on the map below will be managed under the terms of this long-term habitat management agreement

HMA Agreement
Gulf Hagas - Whitecap DACF Fee Parcel



Date of agreement: 06/28/2017

Renewal Date: 06/28/2022

Township(s): Bowdoin College Grant East TWP
County of Piscataquis, State of Maine

HMA Name: Gulf Hagas – Whitecap HMA

Resource Acres: 1,214

HMA Acres: 1,214

Total Acres: 1,214

Appendix B
Significant Resources Appropriate for Habitat Management Agreements

Maine Endangered, Threatened

Please see the current list of Threatened and Endangered species at:

(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) (*Bartamia 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*)

Mayflies

Flat-headed mayfly (Roaring Brook mayfly) (PDF) (*Epeorus frisoni*)

Invertebrates - Threatened

Butterflies and Skippers

Purple Lesser Fritillary (*Boloria chariclea grandis*)

Sleepy Duskywing (*Erynnis brizo*)

Moths

Pine Barrens Zanclognatha (*Zanclognatha martha*)

Twilight Moth (*Lucia rachelae*)

Dragonflies and Damselflies

Boreal Snaketail (*Ophiogomphus colubrinus*)

Ringed Boghaunter (*Williamsonia lintneri*)

Freshwater Mussels

Brook Floater (*Alasmodonta varicosa*)

Tidewater Mucket (*Leptodea ochracea*)

Yellow Lampmussel (*Lampsilis cariosa*)

Mayflies

Tomah Mayfly (*Siphonisca aerodromia*) (species plan)

Mammals - Endangered

New England Cottontail (*Sylvilagus transitionalis*) (species plan)

Mammals - Threatened

Northern Bog Lemming (*Synaptomys borealis*)

Reptiles - Endangered

Snakes

Black Racer (*Coluber constrictor*) (species plan)

Turtles

Blanding's Turtle (*Emydoidea blandingii*) (species plan)

Box Turtle (*Terrapene carolina*) (species plan)

Reptiles - Threatened

Turtles

Spotted Turtle (*Clemmys guttata*) (species plan)

Reptiles

Snakes

Eastern/Northern Ribbon Snake (*Thamnophis sauritus*)

Northern Brown Snake (*Storeria d. dekayi*)

Turtles

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/dDACF/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

Appendix D

SCHEMATIC REPRESENTATION OF RIPARIAN ZONES

