



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

CHANDLER E. WOODCOCK
COMMISSIONER

December 6, 2017

Billie J. MacLean
Permitting & Compliance Regional Supervisor
Department of Agriculture, Conservation, and Forestry
Land Use Planning Commission
45 Radar Road
Ashland, ME 04732

**RE: Proposed Fish River Chain of Lakes Concept Plan
Submitted by Irving Woodlands, LLC, to the Land Use Planning Commission (LUPC)**

Dear Billie,

Per your agency's request, the Maine Department of Inland Fisheries and Wildlife (MDIFW) has reviewed the above referenced proposed Concept Plan and, after consideration of the proposal's probable effects on the environment as related to our agency's programs and responsibilities, offers the following observations and recommendations.

In the Fish River Chain of Lakes Concept Plan Description, *Introduction and Purpose*, it states:

"To ensure that development pursuant to the Concept Plan will not have any undue adverse impact on the Plan area, the Concept Plan:

- a. Preserves and improves public access to the Plan area's recreational resources and maintains and promotes traditional uses, such as forestry, that are intrinsic to the economy and character of the region;*
- b. Protects the forest values, aquatic resource and wetland values, wildlife, plant and natural community values, and scenic values that contribute to the unique character of the Plan area;*
- c. Ensures the sustainability of the working forest economy by protecting large areas of mostly unfragmented, diverse, and substantially natural forestland through sustainable forest management practices; and*
- d. Provides for conservation in perpetuity of a substantial and ecologically valuable area via a conservation easement."*

PHONE: (207) 287-5202

FISH AND WILDLIFE ON THE
WEB:
www.maine.gov/ifw

EMAIL ADDRESS:
ifw.webmaster@maine.gov

In the draft Conservation Easement it states, *“The purpose of this Conservation Easement is to provide a significant public benefit by protecting in perpetuity the Conservation Values of the Protected Property and by allowing, but not requiring, the Protected Property’s continued operation as a Commercial Working Forest.”* (§Purpose, page 1)

Further, *“**WHEREAS**, THE Protected Property is a predominantly forested land area of significant breadth and diversity, with important values including sizeable forests of high quality, productive soils, diverse wildlife and plant habitat, rare and endangered species habitat, extensive bogs, wetlands, streams, lakes, ponds, and other water bodies, and unique natural features, and qualifies as a ‘relatively natural habitat of fish, wildlife, or plants, or similar ecosystem,’ as that phrase is used in P.L. 96-541, Title 26 U.S.C. § 170(h)(4)(A)(ii), and in regulations promulgated thereunder...”* *“...the Parties hereto have established this Conservation Easement affecting the Protected Property...which shall run with and bind the Protected Property in perpetuity.”* (§Recitals, page 1)

Irving Woodlands LLC is an excellent steward of its holdings in Maine and has long been a good partner with MDIFW. Based on the recognition of the importance of the natural resources of the area and the stated values of the Concept Plan and draft Conservation Easement, each as stated above, it is reasonable to expect that the area will be managed well. The comments and recommendations included in this document are intended to help facilitate this outcome.

At LUPC’s request, MDIFW provided preliminary comments on Irving’s proposed Fish River Chain of Lakes Concept Plan on September 22, 2017. Those preliminary comments laid out concerns with the impacts of increased development and public use on natural resources, and recommended establishment of a Fish River Lakes Aquatic Resource Management Fund, a Fish River Lakes Recreational Enhancement Fund, and conveyance of lots on several waterbodies for development of water access sites to be managed by MDIFW, and are included herein. It should be noted that these recommendations are not made based on a desire for more land or funding for the Department, but instead proposes opportunities for cost-sharing efforts in recognition of the importance of these resources, their value to the public, and to ensure appropriate management, enjoyment, and public access in the future, as the development proposed in this concept plan is realized.

In the Fish River Concept Plan, in exchange for rights for residential, recreational, commercial/industrial, and general development during the 30-year strategic plan, Irving proposes to create 14,600 acres of “permanent protected areas” through conservation easements to the Forest Society of Maine, and enact restricted zoning on 34,500 acres of life-of-plan “protected areas”. The proposed Concept Plan encompasses a total of 51,015 acres.

Upon review of the draft conservation easement from Allagash Timberlands LP to Forest Society of Maine, MDIFW has concerns with the level of protection provided for these “Protected Areas”. It states, *“The following land uses are specifically prohibited on the Protected Property unless expressly permitted elsewhere in this Conservation Easement”*. However, beginning in the very next section (§3) the following activities are expressly permitted to the Grantor in these conservation areas:

1. New or expanded temporary or permanent roads, driveways and/or utility structures – including structures required for the administration and collection of fees and tolls. (§3.1b, §4.1, §6.2). This use has the potential to fragment and reduce the value of proposed conservation lands.
2. Construction materials removal activities – i.e., mining, gravel pits, quarrying, rock storage, associated structures (rock crushing, screening?), limited to 5 acres per extraction site and no more than 25 acres at one time (§3.2ai). As areas are reclaimed, these activities are able to expand to new acreage. As above, this use has the potential to fragment and reduce the value of proposed conservation lands.
3. Forest management activities – continued operation as a commercial working forest pursuant to a Forest Management Plan (§3.2bi), as well as Forestry improvements without the easement holder’s consent (§3.2biii). MDIFW recognizes that forest management is commonly used and a valuable tool in wildlife management. But, these areas have been identified as permanent conservation areas containing sensitive natural resources. MDIFW believes that enhanced forest management is warranted for such areas, to allow for maintenance of their important resources and values (including but not limited to species and habitat related recommendations herein). MDIFW would like to work with the grantor to learn about its proposed use of Outcome Based Forestry within conservation areas, the related provisions of this method, and determine whether additional measures should be incorporated. In a November 29, 2017 meeting, Irving offered to provide information on its practices related to Outcome Based Forestry. MDIFW looks forward to receiving and reviewing the information.
4. Management of Non-Commercial Vegetation – cutting, pruning, and planting without the requirement of a management plan (§3.2bii). MDIFW believes that this use needs to be part of an approved management plan to ensure that the activities promote the desired habitats and values.
5. Water extraction activities – for forest management and to serve the needs of authorized development areas, but not for commercial, wholesale, consumer retail, or “bottled water industry” purposes (§3.2ci). It is possible that this land use may be acceptable in conservation areas, however, MDIFW has concerns with the potential extent of associated infrastructure, the footprint of disturbance, the amount of human travel and use, etc., such that it should be clearly limited to minimize adverse impacts and ensure the desired habitats and values are preserved, or it should be prohibited.
6. Development of Recreational facilities – The consent of the easement holder is required for development, construction, or expansion of recreational facilities, but thereafter they may be operated, maintained, repaired, or reconstructed in kind and in place at any time and from time to time, without the consent of the easement holder (§3.2di). This section also allows septic, solar, wind, and hydro facilities “*sized and used solely to serve the Recreational Facilities*” (§3.2dii). Recreational facilities are defined as “*up to 9 Remote Rental Cabins or Campsites*” (§1). MDIFW recommends that only remote camp sites be allowed within permanent conservation areas to ensure consistency with the intent of such areas and preservation of their habitats and values.

7. Construction, maintenance and operation of emergency structures – public fire, safety and emergency structures (§3.2e). MDIFW is concerned that the potential “structures” could vary greatly in size, footprint of disturbance, and associated human activity. As such, this activity should be clearly limited to ensure the desired habitats and values are preserved, or it should be prohibited.

8. Construction, placement, maintenance, and replacement of informational signage (§3.2f). LUPC standards for signage must be observed.

9. The ability to grant permanent or temporary easement rights, rights of way, and/or other interests related to the permitted activities (§4.2a). This use has the potential to fragment and reduce the value of proposed conservation lands. As such, proposals for this use should be reviewed by the easement holder and conveyed only to the extent that it will promote conservation of desired habitats and values. MDIFW assumes that this activity would not include such uses as transmission lines, generator lead lines, gas pipe lines, or other uses related to industrial, commercial, or energy developments.

10. Permanent right of non-motorized public access to, on, and across, and use of the protected property for non-exclusive, low-intensity outdoor recreation, as well as for motorized recreation consistent with a Motorized Recreational Use Plan (§6.1). This use, especially the motorized recreational activity, has the potential to fragment and reduce the value of proposed conservation lands. As such, proposals for this use should be reviewed by the easement holder and allowed only to the extent that it will promote conservation of desired habitats and values.

These are all good uses in the proper settings. But, MDIFW is concerned if allowing these uses on property with important fisheries and wildlife resources, and proposed to be protected in perpetuity by a conservation easement, will be consistent with the stated objectives. Also, it is not clear what this Concept Plan provides to the public that they don't already have under existing Statutes and Rules, aside from a prohibition for residential subdivisions (permanent and life-of-plan, per respective areas), as indicated by LUPC staff.

Further, the Conservation Easement allows that:

11. Irving may divide the Protected Property into not more than 4 separate divisions for conveyance to others (§7.1a). MDIFW recommends that a minimum parcel size of 1,000-acres be specified and that parcels are only conveyed to organizations that are guaranteed to maintain the vision of the plan and promote conservation of desired habitats and values.

12. The grantor (Irving) may claim the conservation areas for credit in the future for mitigation, carbon credit, etc. (§7.2), though the plan is already claimed as mitigation for the development rights proposed (§Recitals, page 2). It is reasonable that the plan should generate an appropriate amount of credit, but only once.

13. Offset for civil penalties - penalties or fines for violations of State, federal or local laws that are also violations of the Conservation Easement, including any amount paid toward supplemental environmental projects (typically used to correct or offset environmental violations) shall be credited toward any corresponding award of monetary damages obtained by the easement holder (§ 8.13).

Violations should be addressed as provided for in whatever independent Statutes, Rules, and Awards may be involved and only offset to the extent specified in the same.

14. Various uses “*shall be conducted in a manner that does not have an unreasonable adverse effect on the conservation values*” (various §§). This is an excellent sentiment that needs to be enforced by all parties involved.

Aquatic Resources and Water Access Related Comments

The Irving Fish River Chain of Lakes Concept Plan being proposed to the Maine LUPC, would rezone 51,015 acres of land on and around four lakes of the Fish River Lakes. The Fish River Chain of Lakes forms a unique and important watershed in northern Maine. The Fish River Chain comprises the largest lakes within the developed portion of Aroostook County and has long been known for its outstanding natural resources and recreational opportunities, including fishing, boating, and other pursuits. The current proposal has no specific development, but rather rezones large tracts of land, paving the way for future development at specific locations on and around Long, Mud, Cross and Square Lakes, the major lakes of the Eastern arm of the watershed.

There are four major development areas being proposed:

- a. Residential
 1. 330 new residential housing units are proposed (an increase of 77.6 % over the currently existing 425 licensed or leased lots within the Plan area)
- b. Recreation Facilities
 1. One recreational lodging facility with 67 units is proposed
- c. Commercial Industrial Development
 1. Two areas of 281 and 73 acres respectively, would be rezoned for industrial uses
- d. General Development
 1. Four areas of 167, 11, 6, and 11 acres, respectively for general development
 2. Multi-family dwellings for affordable housing
 3. Remote rental cabins, remote campsites

Conservation Areas

The Plan calls for permanent conservation by easement on 14,600 acres within the Plan area. All of this property would continue as a commercial working forest. This conservation area includes a 6,400-acre wetland complex west of Cross Lake (Cross Lake Twp.) that already greatly reduces or eliminates development potential and thus also reduces the significance of the designation. The Plan’s easement offer does not appear to provide added benefit for resource protection as this area would still be working forest subject to road building, related stream crossings, stand conversion, and associated wetland, stream, and riparian habitat impacts. The second largest easement parcel consists of 4,909 acres within T16R5 WELS and T15R5 WELS; an important parcel as it contains numerous sensitive tributaries to the southern end of Square Lake that are important wild brook trout habitat. However,

as this area is also proposed to remain as working forest, these proposed conservation areas contain no special provisions for the protection of fisheries and aquatic habitat and, in particular, for wild brook trout. Additionally, it is important to note that there are no conservation easement proposals for Long Lake, which consists of one of the best landlocked salmon fisheries in the State of Maine, as well as habitat for wild brook trout.

General Themes

As noted above, in the *Introduction and Purpose* section, the petitioners state:

“To ensure that development pursuant to the Concept Plan will not have any undue adverse impact on the Plan area, the Concept Plan:

- a. Preserves and improves public access to the Plan area’s recreational resources and maintains and promotes traditional uses, such as forestry, that are intrinsic to the economy and character of the region;*
- b. Protects the forest values, aquatic resource and wetland values, wildlife, plant and natural community values, and scenic values that contribute to the unique character of the Plan area;*
- c. Ensures the sustainability of the working forest economy by protecting large areas of mostly unfragmented, diverse, and substantially natural forestland through sustainable forest management practices; and*
- d. Provides for conservation in perpetuity of a substantial and ecologically valuable area via a conservation easement.”*

Regarding Item a, the Plan does not appear to provide substantive improvements for the preservation of public access in the Plan area. It should be noted that the current water access sites are presently under long term lease agreements or already contain designated public access areas. It is our understanding that the stated improvements to public access only refer to the proposed development of a hand carry launch to Mud Lake. MDIFW does not view the hand-carry access trail from Route 162 as appropriate for a lake of this size. The public would have to walk more than 250 feet to hand carry watercraft of a size appropriate for Mud Lake. MDIFW does not view this as an improvement to public access, nor do we anticipate significant use due to the conditions described.

Items b and c above represent historical and current practices in the Plan area of management as a working forest. Thus, the proposed Concept Plan apparently provides little added benefit to natural resources or to the natural character of the Plan area.

Regarding Item d, the conservation areas with proposed perpetual easement contain large areas of inaccessible wetlands that already have inherent regulatory protections, except for State exemptions for forest management practices. As the Plan allows forest management activities to continue, the perpetual conservation easement provides no further level of protection and therefore no further

benefit to natural resources than now exist. Furthermore, some conservation areas contain sensitive, highly important brook trout streams, yet the conservation easement proposes no added protections aside from those that already exist. Thus, it is not apparent to MDIFW that the proposed perpetual conservation easement will preserve wild brook trout and wild brook trout habitat as promised. The Concept Plan needs much more resource protection than is currently proposed to offset potential adverse impacts from the extent of development proposed.

Proposed Items to balance development proposals

MDIFW works to balance public access needs with management of existing and future aquatic resources. This becomes a greater challenge with development as extensive as proposed in the concept plan. MDIFW offers the following recommendations to seek that desired balance.

Public Access

At this time, water access in the plan area is considered adequate for the current level of development and use, but could benefit from some minor improvements. With the proposed 30-year plan of development however, additional facilities will be necessary. MDIFW believes that the general public should have equitable access opportunities to that of the individuals who develop lakefront properties pursuant to the plan, and that is best provided by publicly owned and managed facilities. MDIFW recommends that the Plan specifically prohibit development of private trailer launches. This will help reduce shoreline impacts, eliminate sources of erosion and phosphorous inputs, and limit the potential for unchecked introductions of invasive species by focusing water access to well designed and maintained publicly owned sites. This also provides an important public safety benefit.

MDIFW recommends a regional focus on providing public water access in consideration of the extent of the proposed development plan. As the proposal includes significant development, including in some now sparsely developed areas, it seems appropriate that Irving Woodlands, LLC provide commensurate water access across northern Maine on its holdings. MDIFW believes that the significance of the fisheries resources and related recreational opportunities in this region will drive the desirability of these proposed lots. For this reason, it seems appropriate that MDIFW be the agency partner for new water access sites to ensure that the needs of both the anglers and the resources are being managed over the long term.

MDIFW recommends that the following be considered as a more balanced effort to offset Plan effects on the four Fish River Lakes in regards to public access.

Long Lake: Convert the Van Buren Cove site to permanent easement or fee ownership status by MDIFW.

Mud Lake: Identify an appropriate site for a new trailered launch access facility, in conjunction with MDIFW, and develop as such, with permanent easement or fee ownership by MDIFW.

Cross Lake: Convert the current public access facility leased to Sportsmen Inc. to a permanent easement or fee ownership parcel by MDIFW.

Square Lake: Identify at least one and likely two appropriate sites for new trailered launch access facilities (east and west sides) in conjunction with MDIFW, and develop as such, with permanent easement or fee ownership by MDIFW. We reiterate previous concerns with the development of private boat launch facilities in the proposed recreational lodging facility development and the residential development zones for Square Lake. MDIFW recommends the development of common access for public and private interests with the ownership as outlined above, and that the Plan specifically prohibit development of private trailer launches.

Other waters in the Plan area: Within the Plan area the following locations have been identified as having future potential development of either remote campsites or remote rental cabins. Each of the following water bodies should have identified permanent public access facilities with associated easement for public access. In most cases there are already trails and/or roads used by the public for access. In each case, these should be formalized to provide for perpetual public access with appropriate facilities provided (i.e., foot paths, unimproved gravel boat launches).

1. Carry Pond, T16R4 WELS
2. Little California Pond, Cross Lake Twp.; and
3. Dickey Pond, Cross Lake Twp.

Public Access to Waters outside the Plan Area: Given the scope of the proposed development in the Plan, MDIFW expects a significant amount of new activity on all waters within the Plan area. Consequently, anglers and boaters will seek out other recreational opportunities on waters outside the Plan area. We expect this shift in use based on numerous scientifically conducted surveys of what anglers seek out for good experiences when recreating on water. Therefore, the petitioners should address public access on the following waters with the aim of absorbing new attention across northern Maine in response to the significant development plans now proposed in the Plan.

Beau Lake, T19R11 WELS: provide permanent easements for road access and permanent easement or fee ownership for a parcel to MDIFW to provide facilities for a trailered boat launch and parking area for up to 10 trailered rigs. The petitioners should develop the parcel access road and parking area adjoining existing forest management roads; with future installation of the boat ramp and other necessary facilities to be carried out by MDIFW through funding mechanisms described later in this document.

Madawaska Lake, T16R4 WELS: provide permanent easements for road access and permanent easement or fee ownership for a parcel to MDIFW to provide facilities for a trailered boat launch and parking area for up to 15 trailered rigs. This parcel should be located on the west side of Madawaska Lake and would only be developed should there be loss of public access at the former Stan's Grocery site off Route 161.

Third Sly Brook Lake, New Canada: provide permanent easements for road access and permanent easement or fee ownership to MDIFW for the parcel that currently serves as public access. The petitioners should improve the current parcel such that the current environmental impacts are eliminated (erosion on the steep access road). No further improvements to the current site are necessary.

First and Second Wallagrass Lakes, St. John Plt.: provide permanent easements for road access and permanent easement or fee ownership to MDIFW for the parcel that currently serves as public access. No further improvements to the current site are necessary.

Third Wallagrass Lake, St. John Plt.: provide permanent easements for road access and permanent easement or fee ownership to MDIFW for the parcel that currently serves as public access. No further improvements to the current site are necessary.

Hunnewell Lake, St. John Plt.: Convert the current MDIFW-leased public access/barrier dam site to permanent easement or fee ownership and provide associated easements for road access.

Wheelock Lake, St. John Plt.: provide permanent easements for road access and permanent easement or fee ownership to MDIFW for the parcel that currently serves as public access. No further improvements to the current site are necessary.

All other waters on Irving Woodlands holdings: maintain current public access policies for all water bodies including rivers, brooks, and streams (i.e., no loss of public access to any water where public access is currently afforded).

Resource Protection/Enhancement

MDIFW is concerned that the level of development proposed in the Plan has the potential for negative effects on aquatic resources in the region if not otherwise addressed. Increased use of fisheries resources and degradation to habitat in the Plan area could have severe consequences for maintaining wild brook trout populations and quality landlocked salmon fisheries, some of which are of statewide significance. The factors for such declines are two-fold: first, increased angling pressure will lead to increased harvest of wild and hatchery stocks. Of particular concerns are the effects on wild brook trout populations and how well they will be maintained in the face of increased fishing pressure. Second, based on past observations, increased human development has the potential to result in aquatic habitat degradation from shoreline development, construction of roads in riparian areas, increased water temperatures and increased nutrient levels (e.g. phosphorus) in receiving waters, etc. These adverse effects on coldwater fisheries will result in reduced production in wild stocks which further compounds the issues of increased fishing pressure. Consequently, the current sportfish regulation structure may not be adequate to maintain fisheries at current levels.

Though it may seem contradictory that MDIFW expresses these concerns while also recommending increased public access, the agency's recommendations seek to balance the resource management and

recreational responsibilities, related needs, and public expectations by proposing mechanisms for funding additional aquatic resource management and recreational enhancement, as well as other measures noted below.

MDIFW recommends that the impacts of the Plan should be viewed as a regional issue, with far-reaching effects, and thus the following measures should be considered as necessary mitigative measures:

Carry Pond, T16R4 WELS: the site of a proposed remote cabin rental, this shallow pond currently supports a small wild trout population that supports a low level of local angling pressure. Additional use on this fishery would be counter to providing a wild brook trout fishery. In other words, additional use, development, and harvest of wild trout would result in a much lower trout population.

Carry Pond was chemically reclaimed in the early 1960s. The treatment was unsuccessful due to an improperly placed barrier dam, leaving competing populations of brown bullhead, white sucker, fall fish, and sunfish. There is a road crossing on the outlet today that could be used as a suitable barrier. With appropriate regulatory approvals, and in conjunction with MDIFW Fisheries Division biologists, the petitioners should seek to construct a new barrier and provide the means for a chemical reclamation of Carry Pond. The result would be a much more productive trout population that would be capable of providing some of the increased demand expected with execution of the Plan.

Beavertail Pond, T14R10 WELS: provide permanent easements for road access and permanent easement or fee ownership to MDIFW for a parcel at the junction of the St. Francis Road on the outlet of Beavertail Pond that would serve as a site for a future fish migration barrier.

Chase Lakes, T14R9 WELS: convert the present Chase Lakes Cooperative Agreement with MDIFW to a permanent, conservation easement that mirrors LUPC Remote Pond zoning.

Little Falls Pond, Allagash: provide permanent easements for road access and permanent easement or fee ownership to MDIFW for a parcel at the outlet of Little Falls Pond that would serve as a water control structure to improve fish habitat.

Brook Trout Conservation

To properly conserve brook trout throughout the 30-year Plan period and beyond, there must be increased habitat protection in the tributaries of the affected lakes. MDIFW proposes to select key tributaries in each lake and implement habitat protection according to MDIFW's "Forest Management Recommendations for Brook Trout". This special management would cover the entire tributary system from confluence with the lake to the headwater springs. These measures would help guarantee the long-term persistence of wild brook trout and forage species (e.g. rainbow smelt) in the watershed. In contrast, the current conservation easement proposal will achieve little additional habitat protection for wild brook trout.

Stream Crossing Standards

Maintaining and enhancing buffers along rivers, streams, and brooks is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by coldwater fish and other aquatic species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis. Undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e. natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms.

Riparian Management Zones

Riparian areas provide valuable terrestrial, wetland, and aquatic ecosystems that greatly benefit wildlife and fisheries resources. Healthy riparian areas are promoted and maintained through appropriate buffers, harvesting standards, and resource management. MDIFW believes that special riparian management zone standards are warranted in conservation areas to allow for maintenance of their important resources and values. MDIFW would like to work with the grantor to learn about its proposed use of Outcome Based Forestry within conservation areas, the related provisions of this method, and determine whether additional measures should be incorporated. In a November 29, 2017 meeting, Irving offered to provide information on its practices related to Outcome Based Forestry. MDIFW looks forward to receiving and reviewing the information.

Creation of Aquatic Resource Management and Recreational Enhancement Funds

The proposed Fish River Lakes Concept Plan is expected to result in increased pressure on existing aquatic resources and recreational facilities as well as greater demand for new opportunities. In order to continue to meet agency responsibilities for aquatic resource management and public recreational demands, MDIFW recommends establishment of the following Grantor-funded programs.

Fish River Lakes Aquatic Resource Management Fund

The increased human development of the Plan area and resulting angling pressures will necessitate the need for increased fisheries management attention on the four lakes and flowing waters in the Plan area, as well as lakes, ponds, and flowing waters in the region outside the Plan area. With the likelihood of increased human development, the demand to maintain current wild brook trout and wild/hatchery landlocked salmon fisheries will place an increasing burden on the State and its resources.

To compensate for this, and provide for necessary increased attention to fisheries management, MDIFW recommends the petitioners establish a Fish River Lakes Aquatic Resource Management Fund such that an increased management focus can be accomplished over the 30-year term. This fund would be administered by MDIFW.

Fish River Lakes Recreational Enhancement Fund

In addition, MDIFW believes it is appropriate for the petitioners to provide financial resources for water access construction and maintenance by establishing a Fish River Lakes Recreational Enhancement Fund, to be administered by MDIFW. These monies would be used to pay for some of the infrastructure that will be needed to accommodate new use and development pressures. For example, some of the access facilities would need to be significant in size and capacity given the development proposed. Precedent for the establishment of this fund was provided in the Moosehead Lake Concept Plan, in which Plum Creek was required to provide \$1,000,000 for a recreation and trails fund that is reportedly now being managed and utilized by the Bureau of Public Lands (BPL).

Further, under the Moosehead Lake Concept Plan, Plum Creek donated 50 acres to BPL for recreational infrastructure, specifically referencing water access sites (boat launches) during the public process and in their campaign materials, and 120 acres (in easements) for trails and trailhead parking areas. Additionally, the Moosehead Lake Concept Plan created a permanent stewardship fee on sales of property in the development zones to fund recreational infrastructure. Our understanding is that as each lot is sold (or resold), a percentage of that sale goes into the fund. Again, this is in addition to the \$1M Moosehead Lake Concept Plan Recreation Enhancement fund. MDIFW envisions a similar scenario for Irving's Fish River Chain of Lakes Concept Plan.

In summary, Plum Creek was required to establish a number of funds as part of the Moosehead Lake Concept Plan approval, including:

- Moosehead Region Conservation Easement Stewardship Fund
- Roaches Pond Tract Conservation Easement Stewardship Fund
- Moosehead Hiking Trails Funding Agreement: \$1M to BPL
- Affordable Housing Fund: 25 acres donated to CEI along with \$1.75M in low interest loans
- Moosehead Recreation Fund (different than BPL fund)
- Wildlife and Invasive Species Fund to financially support projects focused on addressing (1) wildlife mitigation projects and (2) invasive species prevention / botanical communities protection needs in the Moosehead Lake region.

The Department recognizes that the Moosehead Lake Concept Plan included a larger development than does the Fish River Chain of Lakes Concept Plan. However, the Moosehead Lake region also included a much greater amount of existing development and use. Considering the rich, natural resources of the Fish River Chain of Lakes and the efforts provided by Plum Creek in the Moosehead Lake Concept Plan, MDIFW believes that the funding scenarios and water access sites described above are reasonable requests for the scale and magnitude of the Fish River Chain of Lakes Concept Plan.

Wildlife Related Comments

Conservation Areas

As stated earlier, the Plan calls for permanent conservation by easement on 14,600 acres within the Plan area. MDIFW notes the removal of development projects as allowable activities from the original 2014 description of conservation lands to the most current 2017 draft. As our Agency previously stated, large-scale development activities, such as industrial, commercial, energy development, transmission corridors, etc., are not viewed as compatible for lands being proposed as conservation areas.

MDIFW recognizes and appreciates the designation of permanent conservation areas for those areas known to include important wildlife resources. However, it is also noted that all of the proposed conservation areas would continue as commercial working forest, without the protective measures that are typically included in conservation easements. As noted previously, MDIFW recognizes that forest management is commonly used and a valuable tool in wildlife management. But, these areas have been identified as permanent conservation areas containing sensitive natural resources. MDIFW believes that enhanced forest management is warranted for such areas, to allow for maintenance of their important resources and values (including but not limited to species and habitat related recommendations herein). MDIFW would like to work with the grantor to learn about its proposed use of Outcome Based Forestry within conservation areas, the related provisions of this method, and determine whether additional measures should be incorporated. Other than the proposed cooperative agreement for deer wintering areas, ([A Strategy for the Management of Deer Wintering Habitat Areas in Maine](#)), the Plan's easement offer does not appear to provide added benefits for resource protection for other habitats and species of concern. The Department considers the Concept Plan as unique from other proposals and is particularly concerned if it is interpreted that permanent conservation areas that are intended as working forests are provided exemptions for forest management activities in Significant Wildlife Habitats as are provided in the Natural Resources Protection Act.

MDIFW is also concerned with the plan to include "remote rental cabins" in the permanent conservation areas, as the term and description suggests the potential for significantly greater impact than does the also proposed "remote campsites". As such, MDIFW recommends that only remote campsites be allowed in the permanent conservation areas.

Important Habitat Resources

In Irving's Petition for Rezoning, Volume 1, Plant and Animal Habitat Resources, it includes the following policy from LUPC's Comprehensive Land Use Plan, "*Coordinate with and support agencies in the identification and protection of a variety of high-value wildlife habitats, including but not limited to: habitat for rare, threatened, or endangered species; rare or exemplary natural community and ecosystem types; native salmonid fish species; riparian areas; deer wintering areas; waterfowl and wading bird habitats; and significant vernal pools.*"

MDIFW recognizes and appreciates that the Draft Fish River Chain of Lakes Conservation Easement contains “Conservation Values” including, but not limited to,

“Aquatic Resources and Wetland Values. The Protected Property’s diverse and extensive bogs, fens, throughfares, wetlands, streams, lakes, ponds, and other aquatic habitats, including fisheries habitats, their water quality, undeveloped shorelines and riparian areas, and the ecological values of these areas;”

“Wildlife, Plant, and Natural Community Values. The Protected Property’s diverse and extensive wildlife, plant, forest and other terrestrial habitats, habitats of rare, threatened and endangered flora and fauna, including natural communities, and the ecological values of these areas;”

MDIFW offers the following recommendations for protection of wildlife resources of concern identified to date:

Rare, Threatened, or Endangered Species

Proposed conservation efforts in the Draft Concept Plan are based on currently mapped resources. However, statewide comprehensive inventories of sensitive species and habitats have largely not been conducted thus; the presence and locations of some important resources are currently undocumented. Accordingly, the Concept Plan should include appropriate protections for such species and habitats to be enacted upon future discovery. It is recommended that the Grantor consult with MDIFW to collaboratively develop programmatic management practices for state rare, threatened, and endangered species that are documented and mapped.

Significant Vernal Pools

Surveys for important natural resources, such as Significant Vernal Pools (SVPs), are typically conducted as part of project planning and preparation for permitting. Because of this, there is no pre-existing comprehensive statewide inventory of SVPs and, at this time, MDIFW Significant Wildlife Habitat maps do not contain information on SVPs in the areas identified for development in the proposed Concept Plan. Therefore, we recommend that surveys for vernal pools be conducted within the Residential and Commercial development area boundaries by qualified wetland scientists prior to development to determine whether there are SVPs present in the area. These surveys should extend out to a distance of 250 feet beyond the anticipated project footprint because of potential performance standard requirements for off-site Significant Vernal Pools, assuming such pools are located on land owned or controlled by the applicant. Once surveys are completed, our Department will need to review and verify any vernal pool data prior to final determination of significance. Any vernal pools identified should be avoided during the development phase of the Plan, including their associated 250-foot critical terrestrial habitat buffer.

In addition, MDIFW recommends that SVPs be identified in areas proposed to be altered within Conservation Areas and that the pools and their associated 250-foot critical terrestrial habitat buffers be protected. Habitat Management for documented and field-confirmed Significant Vernal Pools, as defined under the State of Maine Natural Resources Protection Act (Chapter 335, Section 9) is to be

based on the *Forestry Habitat Management Guidelines for Vernal Pool Wildlife* (Calhoun and DeMaynadier 2004), and in particular the “Summary of Recommended Guidelines for conserving vernal pool wildlife during forest harvest operations,” found on p.22 therein. As previously noted, MDIFW would like to work with the grantor to learn about its proposed use of Outcome Based Forestry within conservation areas, the related provisions of this method, and determine whether additional measures should be incorporated.

The “significance” of vernal pools and their associated buffers is dependent upon several factors, including the presence or use by state Rare, Threatened, or Endangered Species, or the presence and reproductive success of certain pool-breeding amphibians. The optimal time for assessing the latter criteria coincides with a 2-3-week spring breeding period that varies slightly with geography, elevation, and weather. Vernal Pools are designated as “Potentially Significant” until such time that a seasonally valid survey is conducted and the true value determined. Because of the limited survey period, some developers choose to initially consider their pools as Significant and reassess them in the future under viable conditions. Alternatively, a developer may choose to consider them as Significant Vernal Pools (SVPs), not formally survey them, and design the proposed project accordingly to avoid (recommended), minimize, and mitigate for any impacts to these resources. This option is also available to Irving.

Inland Waterfowl and Wading Bird Habitats

Inland Waterfowl and Wading Bird Habitats (IWWHs) provide important breeding, feeding, migration, staging, and wintering habitat for waterfowl and wading bird species. High and moderate value IWWHs within the study area include both the wetland complex and a 250-foot upland zone. To protect the integrity of IWWHs in the proposed conservation areas, MDIFW recommends that forest management activities in the IWWHs, including their upland zones, be restricted. And that, a forest management plan be developed in conjunction with and approved by MDIFW Regional Wildlife Biologists for areas beyond the IWWHs and their upland zones prior to any future forestry activities.

In general, for development proposals, MDIFW recommends that the IWWH and its associated 250-ft adjacent upland habitat be protected and maintained intact, though MDIFW would be open to consultation on an individual site basis. For forest management operations, MDIFW recommends that no permanent clearings, roads, or other structures or impacts be allowed within the IWWH or 250-foot upland habitat. For forest harvest operations within the 250-foot upland habitat, uneven-aged forest management should be used, volume removal should not exceed 30% in a 15-year period, and a well-distributed overstory should be maintained. MDIFW recommends that no trees be cut within 75 feet of the wetland edge.

MDIFW recommends that these provisions also encompass IWWH sites that subsequently may be determined and located by MDIFW to exist on the Protected Property in the future.

Deer Wintering Areas

It appears that the proposed cooperative agreement for deer wintering areas--A Strategy for the Management of Deer Wintering Habitat Areas in Maine--is an early draft version of Irving's cooperative agreement (originally from 2003), while incorporating the then MDIFW Wildlife Management Supervisor's comments dated 1 Feb 2010. As stated in the cooperative agreement, "*The Properties were selected by Irving in consultation with MDIF&W...and special consideration was given to areas with traditional winter use by white-tailed deer as documented by MDIF&W surveys.*" As such, the cooperative plan appears to satisfy MDIFW's concerns for mapped Deer Wintering Areas.

Wildlife Species of Concern

Bats

Of the eight species of bats that occur in Maine, the three *Myotis* species are protected under Maine's Endangered Species Act (MESA) and are afforded special protection under 12 M.R.S §12801 - §12810. The three *Myotis* species include little brown bat (*M. lucifugus*, State Endangered); northern long-eared bat (*M. septentrionalis*, State Endangered); and eastern small-footed bat (*M. leibii*, State Threatened). The five remaining bat species are listed as Special Concern: big brown bat (*Eptesicus fuscus*); red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), and tri-colored bat (*Perimyotis subflavus*).

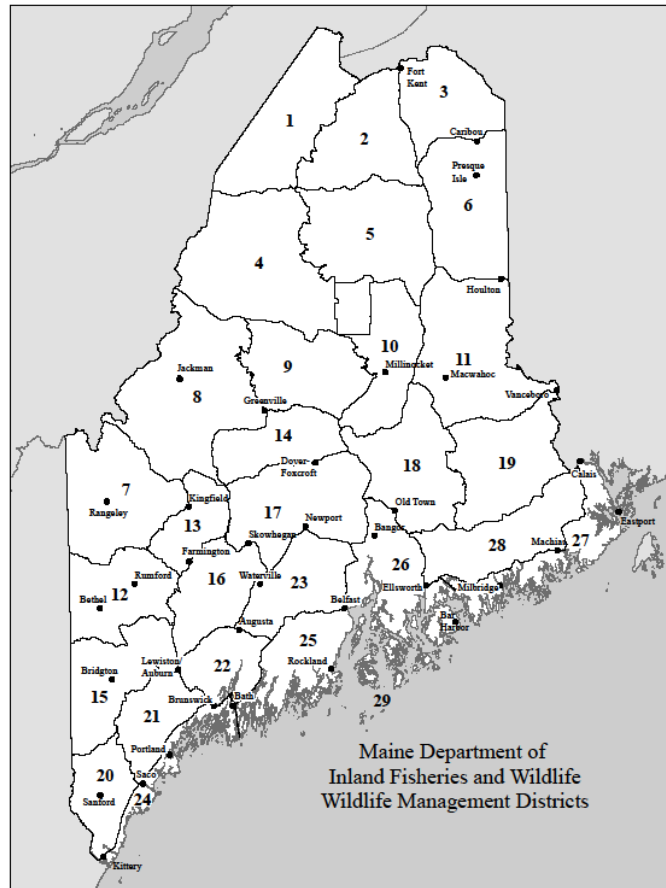
While a comprehensive statewide inventory for bats has not been completed, based on historical evidence and area specific research, it is likely that several of these species occur within the project area during migration and/or the breeding season. We recommend that you contact the U.S. Fish and Wildlife Service--Maine Fish and Wildlife Complex for further guidance, as the northern long-eared bat is also listed as a Threatened Species under the Federal Endangered Species Act. Otherwise, our Agency does not anticipate significant impacts to any of the bat species as a result of this Plan.

Canada lynx

Canada lynx are listed as a Species of Special Concern in Maine and are known to be in the Plan area. Impacts to Canada lynx can be in the form of habitat alteration detrimental to lynx themselves or to their preferred prey species, the snowshoe hare. As Canada lynx are listed as a Threatened species under the Federal Endangered Species Act, MDIFW recommends that Irving contact the U.S. Fish and Wildlife Service.

However, to facilitate potential obligations in federal permitting related to siting in critical habitat for lynx, MDIFW offers the following. Lynx are associated with young (10-40 yrs.) softwood/mixed stands or older softwood/mixed stands with dense understories, as these stands support high densities of snowshoe hare. Forest management is beneficial in softwood stands and can ensure a continued supply of habitat for lynx by providing a shifting mosaic of softwood forest (i.e., a proportion of early, mid, and late successional forest). However, permanent loss of these stands could be detrimental to lynx, especially at large spatial scales. Development projects that may occur in spruce/fir forests of northern, western and eastern Maine (Wildlife Management Districts 1-11, 14, 18, 19) should limit the permanent loss of potential lynx habitat. As noted by the map below, the Fish River Lake Concept Plan area is entirely contained within the Wildlife Management Districts noted. If an applicant wishes to

determine if lynx are currently present, MDIFW recommends conducting two or more snow track surveys on the project area each winter following MDIFW guidelines.



Great Blue Heron

The great blue heron is categorized as a State Species of Special Concern due to a 64% decline in the coastal breeding population observed from 1983 to 2009. Since 2009, MDIFW has been monitoring the statewide population to determine if the decline observed along the coast is also occurring statewide. Great blue herons nest in groups and generally occupy colonies from April 1st thru August 15th (known as the Sensitive Nesting Period). During this time the birds can be extremely sensitive to disturbances caused by human intrusion, noise, and predators, and may even abandon a colony as a result. There is no pre-existing, comprehensive statewide inventory or map of great blue heron colonies in Maine; therefore, we recommend that the proposed development areas, as well as portions of the Conservation Areas proposed to be altered, be surveyed for heron colonies. MDIFW further recommends that land clearing, road construction, construction materials removal activities, building of permanent structures, creation of motorized recreational trails, or removal of overstory trees should not occur within 660-feet of intact heron nests at any time. Forest timber stand improvement may be conducted in the area adjacent (within 660 feet) to heron colonies as long as it occurs outside of the Sensitive Nesting Period.

Big Mouth Pond Snail

The Big Mouth Pond Snail, a State Species of Special Concern aquatic snail, is present in Square Lake (and Eagle Lake just outside the Plan area) and potentially present in the other lakes within the project area. This species is known from only approximately ten sites statewide. This species requires pristine water quality. For the benefit of this and other sensitive species and habitats, the Department recommends ecologically responsible lakeshore development, including appropriate setbacks, maintenance of riparian vegetation, control of runoff, and a prohibition on private boat ramps for reasons previously stated.

Bald Eagle

Bald eagles have gone through a remarkable recovery in Maine and, as such, the formal status of the population has changed. Until recently, bald eagles were classified as Species of Special Concern, but no longer. They continue to be protected under the federal Bald Eagle and Golden Eagle Protection Act (Eagle Act), as well as other federal laws. Therefore, we recommend that you contact the U.S. Fish and Wildlife Service--Maine Fish and Wildlife Complex for further guidance if any proposed development is within 660 feet of eagle nests.

As cited earlier, *"The purpose of this Conservation Easement is to provide a significant public benefit by protecting in perpetuity the Conservation Values of the Protected Property..."* (§Purpose, page 1). MDIFW is confident that the applicant wishes to see this come to fruition, but has concerns about the Plan, as currently written, being able to meet the stated purposes. Accordingly, MDIFW would welcome the opportunity to work with the applicant and easement holder to better ensure attainment of the stated objectives.

Sincerely,



Robert D. Stratton
Bureau of Resource Management
Maine Department of Inland Fisheries and Wildlife

Cc: Samantha Horn, Division Manager, LUPC
Tim Beaucage, Senior Planner, LUPC
Jim Connolly, Director, Bureau of Resource Management, MDIFW
John Perry, Environmental Coordinator, MDIFW
Frank Frost, Regional Fisheries Biologist, MDIFW
Shawn Haskell, Regional Wildlife Biologist, MDIFW
Diano Circo, Chief Planner, Water Access Coordinator, MDIFW