

## Beaucage, Timothy

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**From:** Stratton, Robert D  
**Sent:** Wednesday, May 02, 2018 10:48 AM  
**To:** MacLean, Billie J; Beaucage, Timothy  
**Cc:** Horn, Samantha; Connolly, James; Perry, John; Frost, Frank; Haskell, Shawn; Circo, Diano; Turner, Rex; Mansius, Donald J.  
**Subject:** MDIFW Fish River Plan Comments 02May2018  
**Attachments:** Irving Fish River MDIFW Comments 02May2018.pdf  
**Importance:** High

Good morning Billie and Tim,

At the request of LUPC, MDIFW has reviewed Irving Woodland LLC's 4/12/18 Amendment to its proposed Fish River Chain of Lakes Concept Plan. Please find attached, our review of these materials and further clarification of our previous agency comments and recommendations that were submitted on 12/6/17. We hope that these recommendations will be of assistance to both LUPC and Irving in bringing a Concept Plan to fruition that will ensure the long-term maintenance and preservation of important habitats and public uses. As discussed previously, MDIFW staff will not be present at the upcoming public hearing, but the attached agency comments and recommendations address the relevant issues pursuant to MDIFW's programs and responsibilities. If you have any questions or concerns, please feel free to contact us. Thank you,

**Bob Stratton**  
**Fisheries and Wildlife Program Support Supervisor**  
Bureau of Resource Management  
Maine Department of Inland Fisheries & Wildlife  
284 State Street; 41 State House Station  
Augusta, Maine 04333-0041  
Tel: (207) 287-5659; Cell: (207) 592-5446  
[mefishwildlife.com](http://mefishwildlife.com)

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

CHANDLER E. WOODCOCK  
COMMISSIONER

May 2, 2018

Billie J. MacLean  
Permitting & Compliance Regional Supervisor  
Maine Land Use Planning Commission  
45 Radar Road  
Ashland, ME 04732

Tim Beaucage  
Senior Planner  
Maine Land Use Planning Commission  
22 State House Station  
Augusta, ME 04332-0022

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

Dear Billie and Tim,

The Maine Department of Inland Fisheries and Wildlife (MDIFW) appreciates the efforts demonstrated by Irving Woodlands and LUPC staff to discuss and work through issues of concern related to the above referenced concept plan. MDIFW further appreciates receiving Irving's March 29, 2018 Outline of Proposed Updates and April 12, 2018 Concept Plan Amendments related to issues brought forward by our agency and others. Per your agency's request and to assist Irving in bringing a plan to fruition that will ensure the long-term maintenance and preservation of important habitats and public uses, MDIFW is providing clarification and further guidance related to our agency's December 6, 2017 comments. As before, after consideration of the proposal's probable effects as related to our agency's programs and responsibilities, MDIFW offers the following observations and recommendations, grouped by the topic designations in LUPC's May 2018 public hearing schedule.

**HEARING TOPIC TWO: Potential Resource Impacts, Impact Minimization Efforts, and Conservation.**

1. Permitted land uses within proposed conservation areas. As noted in MDIFW's December 6, 2017 comments and in our March 6, 2018 meeting with Irving, the proposed concept plan allows for a number of land uses in the proposed conservation areas that appear in conflict with the expressed intent of permanent conservation. The various allowed uses related to construction of roads and utility structures, construction material removal, management as a commercial working forest (absent reference to appropriate buffers for sensitive resources), management of non-commercial vegetation, water extraction, development of recreational facilities, construction and operation of emergency structures, construction and maintenance of informational signage, and motorized and non-motorized recreation are, as previously noted, all generally good uses in the proper setting. However, their inclusion in proposed conservation areas that are intended to serve as mitigation has the real potential to fragment habitat, adversely impact sensitive natural resources, and significantly reduce the value of

PHONE: (207) 287-5202

FISH AND WILDLIFE ON THE  
WEB:  
[www.maine.gov/ifw](http://www.maine.gov/ifw)

EMAIL ADDRESS:  
[ifw.webmaster@maine.gov](mailto:ifw.webmaster@maine.gov)

these conservation areas, and thus potentially be inconsistent with the nature of mitigation and with the Proposed Concept Plan's stated conservation objectives. 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...*" (§Purpose, page 1). The permanent and life-of-project ( $\leq 30$  years) conservation areas are intended as mitigation for permanent impacts that will result from the extensive development plan proposed. As such, the mitigation parcels need to be managed in a manner that will preserve their resource values. Irving's 3/29/18 Outline and 4/12/18 Plan Amendment describe eliminating the potential for transmission lines, restricting the size of gravel pits, eliminating the potential for water extraction to serve development areas, restricting the location of emergency structures at Square Lake West, and requiring that gravel pits, roads, and utility structures within conservation areas demonstrate minimization of undue adverse effects to the easement holder. The Department appreciates these steps; however, the uses that remain still appear in conflict with permanent conservation and appropriate mitigation to offset the permanent impacts from the development proposed. MDIFW recommends that allowable land uses in areas designated for conservation should be limited to those that are complementary to conservation values. If such uses must continue, they need to be located so as to avoid natural resources and designated buffer areas. As an example, MDIFW recommends that the Public Fire, Safety, and Emergency Structures proposed to serve Square Lake West be sited within the Proposed Residential Development Area itself, instead of in the Permanent Conservation Area "...within one (1) mile of the development area". This would better ensure maintenance of two important values: public safety and conservation. As this Concept Plan moves forward, the permitted land uses and actions in the Conservation Areas should be guided by the resources valued in the proposed Conservation Easement 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;"*

2. Recommended buffers to protect aquatic habitats and ensure long term persistence of brook trout and forage species. Perennial and intermittent streams are valuable natural resources that also provide critical linkages to downstream resources for many species, including brook trout. Movements by instream migrants, as well as exports such as emerging and drifting insects, link headwaters with downstream aquatic and terrestrial ecosystems. Evidence suggests that headwater streams are critically important to downstream ecosystems and that small streams, including intermittent ones, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids and other fishes on a seasonal basis and therefore should be protected. Habitat degradation is widely viewed as the most significant impact to fish and other forms of aquatic life. Maintaining and, where possible, enhancing buffers along coldwater streams 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 brook trout and other fish

species. Consistent with recommendations provided for development proposals including, but not limited to, energy development projects, transmission corridors, etc., MDIFW recommends 100-foot undisturbed vegetated buffers be maintained along all streams. Vegetated buffers should be measured from the edge of the stream or the upland edge of any associated fringe or floodplain wetlands.

In Plan Amendment Section 14, Page 14-5, Section 5f (Sustainable Forestry Principals; Biodiversity; Riparian Zones), it states, *“Within the Plan area riparian zones will be maintained to provide shade and protection for lakes and streams. Riparian zones shall be a minimum width of 100’ on either side of permanent streams and 25’ in width on either side of intermittent streams. This large area of interconnected riparian zones also creates corridors for many different species to utilize for travel and foraging.”*. MDIFW appreciates and acknowledges Irving’s inclusion of 100-foot riparian zones for permanent streams but, reiterates the recommendation above that 100-foot undisturbed vegetated buffers should be maintained along all streams – perennial and intermittent. It is our Agency’s recommendation that this standard be applied in both development areas, based on consistency of policy noted above, and Conservation Areas, based on the conservation values and objectives proposed for these resource areas, and that mitigation should be provided to offset any impacts that result in reduced riparian buffers below that described.

Some relevant examples involve several important tributaries to Square Lake. The proposed Square Lake West development overlaps a small, coldwater spring that is mapped but unnamed. This tributary is an important brook trout habitat that lies within an area called “The Carry”, a low area between Square and Eagle Lakes that represents the shortest carry between the two waters. It also appears that Square Lake West will be located in the upper reaches of the Barstow Brook watershed, another cold, spring brook that supports brook trout. Further, the proposed Square Lake East development and “lodging area” overlap Black Brook, a critical brook trout habitat and tributary to Square Lake. MDIFW recommends that the 100-foot undisturbed vegetative buffers should be applied for protection of these habitats within the development areas or that the footprint of development be moved to avoid these critical habitats.

3. Recommended buffers to protect wildlife resources. As noted in our December 6, 2017 comments, MDIFW recognizes that forest management is a valuable tool in wildlife management and recommends enhanced forest management for permanent conservation areas containing sensitive natural resources to allow for maintenance of these important resources and values. MDIFW values the cooperative management agreement process for Deer Wintering Areas, when well designed and responsibly managed. Additionally, please refer to MDIFW’s December 6, 2017 comments related to recommended:

- a. 250-foot critical terrestrial habitat buffers/forest management areas for documented and field-confirmed Significant Vernal Pools;
- b. 250-foot buffers/forest management areas surrounding Inland Waterfowls and Wading Bird Habitat wetlands;
- c. 660-foot buffers/forest management areas surrounding intact great blue heron nests;

- d. ecologically responsible riparian zone management around Square Lake and other area waterbodies for the benefit of the Bigmouth Pondsail, a State Species of Special Concern; and
- e. consultation with MDIFW for collaborative development of species-specific management practices for any documented Rare, Threatened, or Endangered Species.

As with aquatic species, habitat degradation is widely considered as the most significant impact to at-risk wildlife populations. Of note, Plan Amendment Section 13, Conservation Easement, Pages 13 to 14, Section 4 (Roads, Utility Structures, and Easements on Protected Property), provides for specified uses “...so long as said roads, driveways, and/or Utility Structures are located, designed, placed, and constructed in a manner so as to (A) minimize the amount of Protected Property utilized, and (B) minimize unreasonable adverse effects on the Conservation Values”. MDIFW appreciates this sentiment and reiterates recommendations for appropriate protective buffers in both the conservation and development areas. An additional recommendation relates to Plan Amendment Section 3, Page 3-3, Section N.3.b.2(2) (Yexas/Square Lake E Development; Land Uses Allowed Without a Permit Subject to Standards) which includes, “*Constructed ponds: Creation, alteration or maintenance of constructed ponds of less than 4,300 square feet in size which are not fed or drained by flowing waters provided they are constructed and maintained in conformance with the vegetative buffer strip requirements...*”. MDIFW recommends clarification that such ponds should only be constructed in accordance with the provisions of the Natural Resources Protection Act (38 M.R.S., §§480-A Et seq.). If, at any time, Irving has questions or seeks guidance on recommended protective measures for the benefit of wildlife, fisheries, and their critical habitat resources, MDIFW staff will be happy to assist.

4. Stream crossing recommendations. 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. As noted above, 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 and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bank-full width (BFW) 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. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fish and fisheries habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1 to minimize impacts to valuable coldwater fisheries and aquatic resources. In Plan Amendment Section 14, Page 14-3, Section B.1 (Sustainable Forestry Principals; Goals and Outcomes of Forest Sustainability; Water Quality, Wetlands, and Riparian Zones) it notes, “*Design of required crossings and for replacement culverts or bridges shall incorporate a 15% increase in flow calculations over the standard design requirements to anticipate the effects of potential climatic changes in the Plan area*”. MDIFW recommends that Irving compare design calculations for the two standards referenced and ensure that its practices meet or exceed the recommended 1.2 BFW standard.

**HEARING TOPIC THREE: Anticipated Use of Lakes and Lake Character.**

5. Public access opportunities for public resources. A significant portion of MDIFW's December 6, 2017 comments related to concerns for preserving opportunities for public access. Commercially managed forest land has historically been very compatible with public access but, without adequate planning and mitigative measures, subsequent private development places this important public use at risk. MDIFW's experience is that increased development tends to lead to increased restrictions in public access to public resources. As noted in our earlier comments, 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 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 manages 144 public water access facilities from Maine's southern border to the St. John River, ranging in size depending on specific needs. Our Department has observed that, despite the best of intentions, private road associations sometimes have difficulty maintaining public infrastructure through private ownership due to such issues as shortages of necessary funds for maintenance, participation of camp owners, and/or lack of technical road maintenance and building expertise. Further, private road associations often do not have the financial resources to work through the legal system when necessary to ensure compliance by members. And, as road associations are typically managed by a board comprised of members, vacancies or changes in board positions potentially lead to significant changes in policy and procedures. These issues have the potential to become more significant when maintaining public infrastructure for use beyond association member interests, to serve the general public.

Central to MDIFW's concern is that public water access facilities are designed to the highest standard, maintained to that standard in perpetuity, and that the public has equal opportunity to access the water body. Maine's Great Ponds are owned by the people of Maine and it is critically important that the public have the ability enjoy these resources.

To illustrate some of the complexities involved, if a private entity were to own, build, and maintain public water access facilities as part of the Fish River Concept Plan, MDIFW would recommend that the following issues be addressed:

- a. **Design**—Trailer launches should be designed to provide long-term safe public access. When MDIFW designs a launch facility we engage with professional engineering companies to provide technical design specifications to ensure that the facility will be built to modern engineering standards that ensure safety, water quality protection, longevity, and compliance with

Americans with Disability Act (ADA) standards. Given the size of the water bodies that would be served pursuant to this Plan and the amount of potential development, the facilities serving Square, Cross, Mud, and Long Lakes should consider multiple design components including:

- i. Launch surface—Pre-cast concrete planks are typically necessary to ensure safe use. The Department has had mixed results with certain plank designs. Planks utilized in this region should be specifically engineered to resist ice damage.
  - ii. Float system—size and quantity would need to be determined, but the floats need to be designed to standards that ensure safety, longevity and ADA compatibility. At a minimum, the floats should be built to the standard of those provided by the Bureau of Parks and Lands' Boating Facility Program.
  - iii. Low-boy concrete bulkhead for attaching float system—Floats need to be secured to the shore for stability, but also to provided smooth transitions from the shore to floats for ADA compatibility.
  - iv. ADA compliant parking—Parking spaces must meet ADA standards and ADA reserved spaces should be provided.
  - v. Parking areas need to be designed to accommodate projected use by shorefront property owners and the public. Additional areas for potential expansion should be included to ensure future suitability.
- b. **Maintenance**—Adequate perpetual maintenance funds must be available to ensure safe infrastructure. Details must be provided as to who will be responsible for maintenance and how compliance with that responsibility will be enforced.
  - c. **Private Partner Structure/Dissolution**— Plans need to be provided to ensure that the public's interests are protected in cases where the private partner is sold, dissolves, falls into bankruptcy or, in the case of a board structure, lacks a quorum for participation.
  - d. **Enforcement**—A substantial perpetual fund should be created to ensure the public's interests can be legally enforced. If a public access facility is owned by a state agency, the public has a reasonable expectation that any private encroachment upon the public's interests would be addressed through enforcement. A similar guarantee should be provided if the facility will be privately owned and managed.

6. Specific Public Access Needs. In our December 6, 2017 comments, MDIFW provided recommendations toward a more balanced and regional effort in consideration of the extent of the proposed development plan. Our recommendations included provisions for each of the four major affected waterbodies: Long Lake (Van Buren Cove permanent access provisions), Cross Lake (permanent access provisions), Mud Lake (new trailered public access site), and Square Lake (1-2 new trailered public access sites). In its 3/29/18 Outline, Irving indicated that the Plan will be modified to guarantee public access to the existing Long Lake Van Buren Cove site for the life of the Plan ( $\leq 30$  years) and for the existing leased Cross Lake boat launch (long-term access, not further defined), but did not offer to convert either site to permanent easement or fee ownership status by MDIFW as recommended. In Plan Amendment Section 1 (Plan Area – Inclusion of Shoreline), Page 1-2 and Plan Amendment Section 9 (Assurance of Public Benefits), Page 9-1, Irving described its intentions to “*guarantee and improve public access*”, but provided little in plan details or enforceability. In the former section, “*The Cross Lake boat launch, picnic area, parking lot, and beach will become a*

*permanent public access point via a deed restriction or other suitable mechanism within 14 months of the effective date. Access will be from Route 161 via Disy Road and Landing Road. In addition, Petitioners will, either on their own initiative or cause by lease or other suitable instrument a third party to take the following steps:*

- 1. Improve the public restrooms on site within 1 year of the effective date;*
- 2. Develop a maintenance plan for the license holder or, in the absence of a license holder, maintenance commitments from Petitioner; and*
- 3. Within 1 year of the effective date, renew and/or potentially revise the license agreement with a qualified holder and/or seek a qualified entity for fee ownership of the property."*

Based on these amendments, it is not clear who will actually own the launch facility, what design standards will be in place (ADA?), the extent of available maintenance funds, who will manage them, how funds will be guaranteed in perpetuity, how maintenance priorities will be determined, and what recourse will be available to the public if these metrics are not met. Further, does the use of the term "license holder" suggest that the petitioner may view public access sites as opportunities for private vendors to operate, with potential costs or other limitations for public access? If this is the intent, MDIFW would be opposed to fees for public access and to use-limitations that are more restrictive than standard guidelines at Department facilities.

Additionally, in the March 2, 2018 Terrence J. DeWan & Associates report, Cross Lake: Potential Residential Development, included in Plan Amendment Attachment 2, it states, *"Most of the sites have a Common Area, generally near the water, that would provide a place for a hand-carry boat launch, temporary dock, picnic tables, and other common amenities to serve the residential community"* (underlining added). DeWan report pages 3 through 6 and subsequent site sketches include recommended sites for hand-carry boat launches and common areas at Cross Lake A, Cross Lake B, Cross Lake C, Cross Lake D, and Cross Lake E. In Plan Amendment Section 17 (Allowed Uses), Page 17-3, it references *"Public hand-carry launches"*, notably not reserved for the residential community only.

In the 3/29/18 Outline, Plan Amendment Section 1 (Plan Area – Inclusion of Shoreline), Page 1-2 and Plan Amendment Section 9 (Assurance of Public Benefits), Page 9-1, Irving eliminated the previously proposed hand-carry site for Mud Lake, but made no reference to a new trailered launch, which was recommended by MDIFW. Irving also offered a triggering mechanism for development of a long-range conceptual plan for a future public access point and reserved parking area at the proposed Square Lake East/Yexas recreational lodging facility and development area to service both the east and west sides of Square Lake though, as above, did not offer to convert the site to permanent easement or fee ownership status by MDIFW as recommended. In Plan Amendment Section 3 (Yexas/Square Lake Development), Page 3-1, Irving references future requirements to develop Schematic Design Plans prior to development and a rezoning that *"...is intended to encourage, but does not require...a public or commercial trailered ramp to provide public access into Square Lake."* On Page 3-7 (Contents of Schematic Design Plan), the Plan Amendment indicates, *"The following items are required to be submitted with any Schematic Design Plan application"* and includes *"The timing for development of a a) public or commercial trailered boat ramp and mechanisms for assuring public access to Square Lake and b) parking that may be required for development at the Square Lake W development area"*. On Page 3-8 (Criteria for the Approval of a Schematic Design Plan), the Plan Amendment indicates, *"The*



*criteria for approval of a Schematic Design Plan” includes “Establishes the location, size and timing of construction of a publicly accessible trailered ramp and water access site and the mechanism for assuring it will be publicly accessible” and “Incorporates a parking area and access point to facilitate parking and access by boat for future development at the Square Lake W development area if necessary”*. This conflicting language of whether water access is encouraged or required, public or commercial, and under what timeframe, creates uncertainty of public water access to Square Lake in this Concept Plan, nonetheless the 1-2 facilities recommended by MDIFW for Square Lake. Further, it is typical with resource mitigation plans as well as prior concept plans that compensation is to be put in place prior to impacts to ensure continuity of functions and values.

As previously stated, MDIFW believes that the Concept Plan should provide equitable access opportunities for the general public. It is noted that the Concept Plan includes references to commercial facilities in Plan Amendment Section 3 as noted above, Section 17 (Allowed Uses), Page 17-3; and Section 18 (Recreational Boating Numbers), Page 18-3. This Concept Plan does not appear to provide substantive improvements for the preservation of public access in the Plan areas. MDIFW’s December 6, 2017 recommendations were intended to provide a remedy to this and, for this reason, we recommend that they be further considered.

MDIFW’s comments also included recommendations for permanent public access facilities for three other waters in the plan area that were identified in the plan as having future potential development of either remote campsites or remote rental cabins: Carry Pond, Little California Pond, and Dickey Pond. Irving has made no reference to these recommendations as yet.

Further, MDIFW’s comments included site-specific recommendations for addressing permanent public access to waters outside the plan area, as the scope of the proposed development is expected to encourage a significant amount of new activity on all waters within the Plan area. Those waters were: Beau Lake, Madawaska Lake, Third Sly Brook Lake, First, Second, and Third Wallagrass Lakes, Hunnewell Lake, Wheelock Lake, and to maintain current public access policies for all other waters on Irving Woodlands holdings. Irving has made no reference to these recommendations as yet.

MDIFW also recommended Resource Protection/Enhancement Mitigative measures at: Carry Pond (barrier to promote wild brook trout management), Beavertail Pond (site for fish migration barrier), Chase Lakes (protective measures), and Little Falls Pond (site for water control structure). Irving has made no reference to these recommendations as yet.

7. Anticipated Use of Lakes and Lake Character. Plan Amendment Section 18 (Recreational Boating Numbers; Appendix C: Evaluation of Recreational Resources, Supplement) provides clarification of the methodology used by Irving to predict recreational impacts on lakes in the Proposed Concept Plan area. In response to LUPC’s request, MDIFW provides the following related to its data collection efforts on Square Lake.

It is MDIFW’s view, based on the results of numerous surveys, that angler satisfaction at Square Lake is directly linked to the remote character of the waterbody. Square Lake provides a remote experience due to the lake’s large size, relatively limited access at present, and low use. Based on hundreds of

interviews conducted by biologists over the past 30 years, anglers confirm this experience at Square Lake. In Appendix C, it was assumed the WALROS classification of Square Lake is “rural developed” in the north half of the lake and the south half of the lake is “rural natural”. It is unclear to MIF&W how these assumptions were made. Current use (provided in table form) suggests that the entire lake should be considered “primitive”.

Table 1. MDIFW count data May 9, 2015 – September 27, 2015. Counts were conducted by aircraft generally between 10 AM and 2 PM on days selected randomly and stratified by weekday and weekend/holiday<sup>1</sup>. Total counts conducted: 52.

Month	May	June	July	August	September
No. of counts	8	9	14	10	11
Mean count (# of boats)	6	7	3.4	1.2	0.72
Acres/boat	1,358	1,164	2,397	6,792	8,150 (lake size)
WALROS Class	Primitive	Primitive	Primitive	exceeds Primitive	exceeds Primitive
Potential increase <sup>2</sup>	20 (X3.3)	21 (X3)	17 (X5.1)	15 (X12.7)	15 (X20.4)

<sup>1</sup> MIF&W uses a stratified random design to estimate total use for water bodies in each season.

<sup>2</sup> Potential increase determined by adding current mean use and expected use from new development (14).

The most recent data for Square Lake obtained by Maine Warden Service pilots, while counting parties present on the water, is far lower than the assumed level of use in the Concept Plan analysis. This data indicates that the mean number of boats on the water never exceeded 10 even in June, the month most popular for salmon and trout fishing in northern Maine. The warmer months of July and August at Square Lake see very low use, with “acres per boat” ranging from 2,397 to 6,792, the latter exceeding the range of “primitive” in the analysis.

Using the data provided in the Concept Plan analysis, MDIFW estimates that use on Square Lake could be dramatically higher after the proposed development occurs. Nineteen (19) boats are estimated from the 130 new development units and 15 boats are estimated for lease (assumed to originate from the proposed 50 slip marina), totaling 34 boats. Assuming less than half the estimated use from the proposed new trailered facility is actually new use (7 boats), and not use shifting from the Cross Lake or Muscovic landings, the total additional number of boats on Square Lake could be 41 (19+15+7). If just one-third of these boats (14) are present on the water between 10 AM and 2 PM, use at Square Lake is expected to triple in the month of June. During other months of the open water season, anglers could see from 3.3 – 20.4X more boats, a significant increase that will change the character of Square Lake. Thus, MDIFW’s analysis appears in contrast with the statement in Plan Amendment Section 18, Page 18-5, “*additional boating pressure from the Concept Plan is not expected to have an unreasonable effect on the recreational experience on the Fish River Chain of Lakes in the Plan area*”.

MDIFW works to balance public recreational needs with management of existing and future aquatic resources. MDIFW is very 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 and adequately mitigated. 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. To continue to meet agency responsibilities for aquatic resource management and public recreational demands, MDIFW recommends establishment of the following Grantor-funded programs as a means to compensate for anticipated impacts.

8. 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. Irving has made no reference to these recommendations as yet.

9. 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. The precedent and possible funding mechanism for such a fund is described in the December 6, 2017 comments, with reference to stewardship funds established as part of another concept plan. Irving has made no reference to these recommendations as yet.

MDIFW believes that the need for considering the potential impacts of additional future development in this area and the applicability of the aforementioned funds are reinforced by the Terrence J. DeWan & Associates report on Potential House Lot Locations (TJD&A) April 10, 2018 included in Plan Amendment Attachment 6, in which it states, *"While the Petitioners have no plans to sell parcels of land outside of the designated residential development areas, TJD&A identified several locations on existing roads that are either within 0.5 mile of the lake, on the thoroughfare, or in other desirable*

*locations, and thus are a reasonable prediction of future development potential".* The Petitioner's team is clearly thinking about additional future development, which will further increase the pressure on natural resources in the area.

It is MDIFW's view that mitigation proposals for offsetting permanent losses typically include more structured plans to benefit natural resources and public uses than are provided in this proposed Concept Plan. Further, mitigation conservation areas should provide greater levels of resource protection than are commonly afforded by standard practices, to ensure their presence and quality into the future. MDIFW appreciates the opportunity to comment on this proposed plan, hopes that our recommendations will be incorporated for the good of the area, and offers to continue discussions to better ensure that the stated conservation values come to fruition. For specific detail, please refer to MDIFW's December 6, 2017 comments.

Sincerely,

Handwritten signature of Bob Stratton in cursive, with a small "RFW" monogram at the end.

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

Cc: Samantha Horn, Division Manager, 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  
Rex Turner, Outdoor Recreation Planner, Bureau of Parks and Lands, MDACF  
Donald Mansius, Director, Forest Policy and Management, Maine Forest Service, MDACF