Deal Lake
COMMISSION

Mr. Marty McHugh
Field Representative, Hurricane Sandy Program
National Fish and Wildlife Foundation
1133 Fifteenth St., N.W., Suite 1100
Washington, D.C. 20005

Deal Lake Commission NFWF Grant Application

Dear Mr. McHugh:

The Deal Lake Commission (DLC) is pleased to submit to the National Fish and Wildlife Foundation (NFWF) our proposal to conduct a comprehensive Planning and Design Project of the Deal Lake Watershed. This is a much needed project that when completed will generate detailed construction and permit ready plans, construction specifications, and draft permits for three to four priority project sites located within the Deal Lake watershed. The NFWF Hurricane Sandy Resiliency Grant program offers us a very unique opportunity to obtain grant money for the preparation of such detailed plans. Although we have promoted the need for the comprehensive watershed-based management of stormwater runoff, we have lacked a funding mechanism by which the required detailed plans could be developed in support of such efforts.

As you area aware, Deal Lake suffered extensive ecological, water quality and resource impacts as a result of Hurricane Sandy. However, that was not the first time the lake incurred storm-related damages. In fact, due to the lack of compressive watershed-wide stormwater management the lake has a long history of pollutant loading, habitat degradation, sediment infilling and stream bank erosion and instability directly linked to storm events. Some of these impacts have been acute (Hurricane Irene, Hurricane Sandy, and the October storm of 2005), while others are chronic as evidenced by the massive infilling at the mouth of Harvey Brook and within the Hollow Brook, Lolipop, and Colonial Terrace arms of the lake.

One of the major problems facing the long term restoration of the lake is the condition of the tributaries' riparian corridors. The tributaries' bed and banks are extensively incised due to storm induced erosion events, and the tributaries are largely disconnected from their respective floodplains. This has reduced the storm resiliency of the tributaries and has eliminated or compromised critical riparian habitat. Sediment infilling is rampant throughout the lake, especially where the tributaries enter the lake's mainbody. This infilling has further compromised valuable fish and wildlife habitat and the resulting deltas have become largely colonized by invasive, non-native species. The deltas also impede flow and contribute to back water flooding conditions. The proper management of the lake's tributaries and the lake's watershed are therefore key elements of Deal Lake's overall restoration and long-term management.

The flooding and damage caused by the inadequately controlled influx of runoff to the lake from the surrounding watershed is worsened when such events coincide with exceptionally high tides or coastal storms. During coastal storms or when high tides are sustained or particularly elevated, the increased tidal surge into the lake impedes the proper operation of the lake's outlet flume to the ocean. Essentially the tidal surge prevents the watershed influx of runoff to be properly discharged. When this occurs flooding is inevitable. Restoring the connectivity of the tributaries to their riparian and floodplain elements will better manage the watershed influx of runoff by better attenuating the total volume of runoff and the rate at which that runoff is discharged into the lake's mainbody. This will reduce the flooding of the properties and habitats surrounding the lake's mainbody. We expect the frequency of such coastal storm exacerbated flooding events to increase due to climate change and predicted rises in sea level.

As discussed in our Project Narrative, the plans developed through this grant will benefit the Deal Lake watershed's overall storm resiliency and help protect properties and habitats that have been impacted with increasing frequency by flooding events. The plans will also incorporate elements that restore riparian habitat, improve water quality and decease sediment loading to the lake. Equally important, as detailed in the Project Narrative, the proposed NFWF funded project will build on the DLC's previous restoration efforts and help protect sections of the lake's shoreline restored through our recently completed 319(h), NJDEP supported project. We have an extensive amount of youth involvement incorporated in our project, and as always our project will actively engage the public, our stakeholders, and other project partners.

In closing the Deal Lake Commission is truly excited about the benefits that can be gained through our NFWF proposal. The funding will put us closer to meeting our long-term goals of improving the storm resiliency of Deal Lake and restoring the ecological quality, functions and services of the Deal Lake ecosystem. We hope that NFWF and the Department of the Interior look favorably on our application. Please feel free to contact us with any comments or questions and please visit our web site.

1/30/2014

Sincerely,
Donald Brockel, Chairman Deal Lake Commission
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