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# WETLAND BANK PROSPECTUS

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**NYSDOT**

**Umbrella Wetland Mitigation Banking**

**For the Adirondack Park**

Updated December 2012



**New York State Department of Transportation**

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## Preamble

The New York State Department of Transportation (NYSDOT) and Adirondack Park Agency (APA) have developed this compensatory mitigation banking Prospectus to introduce a joint effort to develop an agreement that will advance the establishment and use of mitigation banks to compensate for unavoidable impacts to aquatic resources that result from transportation projects in the Adirondack Park. Mitigation banking is the restoration, establishment, enhancement and or preservation of aquatic resources at a site or suite of sites, for the purpose of offsetting unavoidable adverse impacts to aquatic resources concurrently with or in advance of the impacts. One benefit of establishing mitigation banking site in advance of impacts to aquatic resources is the potential to reduce or eliminate temporal loss to the aquatic resource. This document provides an overview describing the proposed service area, potential sites for mitigation bank establishment, how the potential bank sites will be established, and how the established bank sites will then be operated and maintained. Based on the information provided in this document along with comments received from state and federal resource agencies as well as the public, the NYSDOT and the APA will develop a Final Mitigation Banking Instrument (MBI) to be approved jointly by the Adirondack Park Agency and the United States Army Corps of Engineers (USACE) District Engineer's in the New York and Buffalo district offices.

### 1.0 Executive Summary

The Adirondack Park (the Park), is a unique and valuable resource to the people of the state of New York and all who travel through it. The New York State Department of transportation (NYSDOT) is committed to advancing environmental initiatives that provide a way to effectively compensate for unavoidable wetland and aquatic resource impacts from authorized activities, and ensure the provision of essential functions and benefits.

The U.S. Army Corps of Engineers (USACE) 2008 Final Rule, Compensatory Mitigation for Losses of Aquatic Resources has provided guidance for the establishment of mitigation banks in which wetland areas are created or restored in advance of impacts to aquatic resources. NYSDOT in partnership with the Adirondack Park Agency (APA) have identified the use of wetland banks as a preferred mechanism for compensatory mitigation in the Park.

There are over 850,000 acres of wetlands within the Adirondack Park, and over 11,000 associated lakes and ponds. Additionally, there are over 1100 miles of state highway in the Park. The sheer volume of water resources make it inevitable that almost every project undertaken by NYSDOT involves or is adjacent to wetlands or watercourses.

Due to the linear nature of highway work, narrow, linear portions on the edge of wetlands generally comprise the bulk of NYSDOT impacts. Individually, these tend to be small areas, but cumulatively, they become more significant. Combining the mitigation of these small areas reduces the cost per acre to construct and provides a wetland less prone to invasives and of higher function and benefit to the aquatic resources it serves.

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In future transportation projects where wetland or aquatic resource impacts are unavoidable, NYSDOT is proposing to utilize a series of wetland mitigation bank sites to satisfy the compensatory mitigation requirements of the Adirondack Park Agency as well as the compensatory mitigation requirements of the United States Army Corps of Engineers. Bank sites will be selected utilizing a watershed approach and developed at a rate that is commensurate to NYSDOT's anticipated need for mitigation based on the progression and anticipation of projects. Bank sites will be established to secure credits that satisfy all or a portion of the compensatory mitigation requirements.

The number of credits available from each Bank site will be based on various factors, such as the wetland size, the wetland type and the progression of establishment and increased function and benefit within the bank. Credit release from a bank site will be tailored to the specific characteristics of the site, including the site size, wetland type and ability to meet site specific Performance Standards as they are described in the Final Mitigation Banking Instrument (MBI). A representative of the USACE will establish and maintain a credit ledger for each site that will track the number and type of credits available at each site, the number of credits sold from the site and the remaining balance. Monitoring and maintenance plans for each bank site will be tailored to site specific characteristics and will be included for each site in the Final MBI.

## **2.0 Bank Service Area**

Bank sites associated with this agreement will be located within the Adirondack Park. Credits generated from the bank sites will principally serve the NYSDOT's compensatory mitigation requirements for impacts to aquatic resources that are the result of transportation related projects within the park. For transportation related projects that extend both in and outside of the bounds of the Adirondack Park, compensatory mitigation required for any portion of that project may be eligible to utilize credits held by bank sites associated with this agreement. An Interagency Review Team (IRT) will be established to oversee the development, operation and use of this agreement including credit release schedules and criteria. The IRT will have the ability to review on a case-by-case basis the proposed use of any credits outside what it considers the bank's primary or preferred uses. The IRT will consider the appropriateness of the proposed use and make a recommendation to the USACE DE(s) and the APA for their approval.

## **3.0 General Need**

Each year the NYSDOT progresses projects within the Adirondack Park involving work in or around water-bodies and wetlands. NYSDOT is often tasked with providing some form of on-site mitigation to compensate for unavoidable impacts to these sensitive resources. Due to right-of-way constraints the typical mitigation effort involves creation of small wetlands on linear upland sites within the highway corridor. While these small created wetlands usually exhibit wetland characteristics they are very costly on a per acre basis and generally do not produce ecologically superior wetlands, leaving the state with numerous small wetland mitigation sites spread over large areas adding difficulty to the ability to optimally manage and maintain the resources which ultimately decreases their practicability.

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A more effective approach is to construct or rehabilitate wetlands in priority watersheds where NYSDOT anticipates having more construction projects and impacts. These areas will be used as component sites of a wetland bank to offset unavoidable impacts. A series of banks of suitable size and function in high priority watersheds will provide better function, service and overall benefit. A single wetland site that has the ability to satisfy multiple mitigation requirements is easier to address than multiple scattered wetlands.

Within the Adirondack Park there are very distinct differences in the wetland system compared to areas outside of the Park. The biggest difference within the Park is that the direct impacts to wetlands from past human activities are very small compared to the total area of wetlands present. Direct wetland impacts within the Park are likely less than 5% of the total wetlands present compared to estimates upwards of 50% in many other parts of the state. Generally wetland banks look for large wetlands sites to restore that had been previously directly impacted by human activities. The Montezuma area for example was drained for agriculture purposes and is now being restored back to its aquatic form to be utilized for wetland mitigation. These large site opportunities do not exist in the Park as the park has historically had increased conservation and preservation oversight. Smaller impacted areas where small amounts of fill had previously been placed provide the best opportunities for wetland restoration sites within the Park. Examples include old road alignments and facilities with maintenance sites and parking areas.

Although the Park does not provide areas for wetland mitigation bank sites with acreages typically provided by bank sites, impacts to aquatic resources in the Park tends to be smaller. While these impacts do accumulate, the amount which accumulates is predicted to be complimentary to restoration sites available. Furthermore, because the impacts tend to be so small per project, combining them truly may be the best chance to provide meaningful mitigation likely to succeed and become self sustaining.

## 3.1 Justification

The Council on Environmental Quality (CEQ) issued guidance, *Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact* (January 14, 2011). The intent of the guidance is to support the integrity of the NEPA process by encouraging identification of mitigation and monitoring measures earlier in the planning process to incorporate into the NEPA environmental review documents. Earlier planning and identification of mitigation and monitoring measures adds predictability to project planning and development, streamlining implementation of transportation projects and reducing costs.

Given the emphasis on early planning, wetland banks are becoming increasingly desirable. Transportation Authorization Acts both current and in the past have a history of stating that preference shall be given, to the maximum extent practicable, to the use of mitigation banks. Banking as a mitigation strategy is also supported by the *Compensatory Mitigation for Losses of Aquatic Resources; 2008 Final Rule*.

The creation of wetland banks in priority watersheds gives project planners, the Department and regulatory personnel tangible compensatory mitigation to consider and approve when transportation improvements will result in permanent wetland impacts. Within the Adirondack Park, banking sites will offer reliable compensation for impacts to aquatic resources without the temporal loss that occurs between impact to the resources and the creation of the mitigated resource.

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## 3.2 Goals and Objectives

The goal of establishing a multi-site wetland bank is to offer ecological and economic benefits for NYSDOT, regulatory agencies, the Park and the public. Overall character and ecological function are important aspects of the Park as a resource. Economically, establishing several wetlands in areas where impacts are anticipated will reduce cost on a per-acre basis and provide high quality wetlands less prone to invasive species, reducing the need for costly eradication efforts. Wetland banks are established and monitored separately from the transportation project allowing for the bank sponsor to give primary focus to the integrity and continued success of the mitigation. Regulatory agencies will reduce the time spent reviewing applications since the bank sites are preapproved then monitored and maintained based on methodology that has been reviewed by the IRT. NYSDOT will be able to secure mitigation credits, avoid temporal loss of wetlands and streamline completion of the transportation project. In the long term, established bank sites will exist prior to justified impacts where currently this does not occur.

### Objectives include:

1. Consolidation of a series of scattered, fragmented mitigation efforts into larger integrated ecosystems.
2. Upfront establishment of the wetland and a record of long-term success.
3. Eliminate the need to dedicate or acquire land or water for mitigation purposes on a project by project basis. This approach increases efficiency and effectiveness by reducing the number of times NYSDOT functional groups are involved with mitigation proposals and concepts.
4. Provide flexibility for mitigating unavoidable damage by allowing mitigation to occur where a greater ecological benefit can result.
5. Greater ability to efficiently manage risks associated with wetland restoration projects.
6. An overall net gain in wetland since compensatory mitigation would be provided for all transportation projects affecting wetland, even when mitigation is not specifically required by regulation.
7. Eliminate the “double permit” process where permits may be needed for both the transportation project and for the wetland mitigation project.
8. Increased efficiency in permit review, issuance and compliance monitoring.
9. Eliminate temporary loss of wetlands due to the establishment of the bank prior to construction impacts.
10. Increase economy of scale at all project phases (planning, design, construction and operation) making for more efficient use of tax payer dollars.
11. Long-term preservation of the wetland bank.
12. Concentrate efforts in areas where the public will gain significant benefits, including limiting the number of fragmented properties that the department will own indefinitely.

## 3.3 Qualifications of Sponsor

The New York State Department of Transportation (NYSDOT) is the largest development and maintenance entity in the state and has been implementing wetland mitigation efforts since the inception of laws recognizing the importance of these systems. NYSDOT has built over 100 mitigation sites that range from just over a tenth of an acre to several acres in size, and has been highly successful in meeting or exceeding regulatory performance standards and permit requirements. The Department values and retains many landscape architecture and environmental staff who with their combined years of experience and wealth of knowledge, have consistently

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provided high quality technical/scientific expertise in all project phases involving wetland restoration, creation, enhancement and preservation.

NYSDOT understands the role that wetlands play in natural ecosystems and how they affect the quality of life for all living things. Furthermore, the Department is keenly aware of the importance of delivering successful, highly productive, cost efficient mitigation projects and is accountable for the functional replacement of unavoidable wetland impacts caused by its projects. NYSDOT is dedicated to utilizing the most up-to-date methodologies and cutting edge technology in setting the standards for wetland compensation in the Adirondack Park and across the state, with a full understanding of the challenges and long-term environmental benefits it will provide.

## **4.0 Bank Establishment and Operation**

Upon approval of a Mitigation Banking Instrument, the bank sponsor, NYSDOT, will begin the establishment of mitigation banking site(s) or utilization of existing sites, identified in both the prospectus and instrument, and approved concurrently by the APA and both the New York and Buffalo USACE district engineers.

### **4.1 Interagency Review Team (IRT)**

An Interagency Review Team (IRT) will be established to review documentation for the establishment, operation and management of the banking agreement and associated bank sites. The agencies represented on the IRT aid the USACE District Engineer (DE) in providing appropriate oversight in carrying out the provisions of the bank site(s). Including, but not limited to, review of the prospectus, instrument, and other appropriate documents including any amendments or addendum that add sites or alter the implementation of this agreement and will provide comments to the district engineers.

The IRT is comprised of agencies with direct involvement or regulatory control over the banking project. The IRT will be chaired by the UASCE, New York and Buffalo District Engineers, with the APA serving as the co-chair. The appropriate USACE DE will have final approval authority. However, a concurrence must be reached with the APA before any action approved by either USACE DE is implemented. The MBI will detail how the APA and USACE coordination will take place. The possibility may exist for the utilization of a Memorandum of Agreement between the agencies.

The IRT in its establishment will host several agency partners who will be likely to have direct involvement in some or all of the actions taken through this agreement. A request for involvement will be made by the IRT chair, and/or co-chair based on the specific activity or location of the activity to occur. For example all addendums to the Final MBI that effect the functionality of the agreement will be reviewed by all IRT members, however, for those actions such as an addendum to the MBI that adds a site, may only require review by those partners with approval authority or jurisdiction within the area of the site location. The IRT chair and co-chair will have the flexibility to involve IRT partners as necessary and appropriate. This will allow the IRT to host several partners that may otherwise require outside coordination on a case-by-case basis adding time and complexity to reviews. Roles and responsibilities for each agency will be formalized in the MBI.

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The IRT may conduct compliance inspections, as necessary with advance notice to NYSDOT, to verify credits available in the bank site(s) or to identify corrective measures necessary in order to meet project goals (e.g. fix improperly constructed components, maintenance needed for proper function). Compliance inspections may be performed during the monitoring period or until all credits have been used, whichever is later.

The IRT will consist of the following agencies and individuals and may be amended as the MBI is developed.

- United States Army Corps of Engineers, New York District (USACE NY District)
- United States Army Corps of Engineers, Buffalo District (USACE Buffalo District)
- Adirondack Park Agency (APA)
- New York State Department of Environmental Conservation (NYSDEC)
- United States Environmental Protection Agency, Region 2 (USEPA)
- United States Fish and Wildlife Service, Cortland Field Office (USFWS)
- Federal Highway Administration, New York Division (FHWA)

## **4.2 Mitigation Banking Instrument in Consultation with the Interagency Review Team**

The IRT will oversee development of the Wetland Mitigation Banking Instrument (MBI). The MBI will detail the establishment, use and operation of the bank site(s), and will signify agency agreement with the overall banking project.

NYSDOT will be responsible for preparing a MBI in consultation with the IRT. The MBI will include at a minimum the following:

1. Bank goals and objectives
2. Ownership of Bank lands
3. Permanent Financial Assurances
4. Size and class of wetlands and/or other aquatic resources proposed for inclusion at component bank sites, including site plans and specifications
5. Description of baseline conditions at component bank sites
6. Geographic service area
7. Wetland classes or other aquatic resources suitable for compensation
8. Methods for determining credit and debits
9. Accounting procedures
10. Performance standards for determining credit availability and bank success
11. Reporting protocols and monitoring plan
12. Contingency and remedial actions and responsibilities
13. Financial assurances
14. Compensation ratios
15. Provisions for long-term management and maintenance

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## 4.3 Design of Wetland Mitigation Bank Component Sites

The NYSDOT, using funds provided by NYSDOT and FHWA, will design the bank site(s) and prepare all required engineering plans for approval by the Corps DE(s) and concurrence by the APA, in consultation with the IRT. A site specific feasibility evaluation will be completed and reviewed by the IRT prior to any such site design. Each Bank site is required to have a Mitigation Plan to be included in the Banking Instrument. NYSDOT may seek assistance from members of the IRT or other interested agencies or groups in designing the bank and preparing these plans.

## 4.4 Establishment of Wetland Mitigation Bank Component Sites

Site establishment activities generally include:

- Site preparation – includes delineation of existing wetlands, construction limits, access points, survey, pre-and post-construction groundwater monitoring, etc.
- Stormwater management and erosion control – includes maintenance of erosion control devices during construction and post-construction removal.
- Excavation – Grading activities.
- Waste disposal – Possible wasting of unneeded soil.
- Soil importation – Possible introduction of additional soil materials.
- Plant selection, site preparation and plant installation – A balance of natives and non-invasive non-natives that are commercially available.
- Equipment sanitation

Each site, once established, will be evaluated for exact acreage, baseline performance standards etc. .Each site will have a set of site specific performance standards that will be outlined in the MBI. As new component sites are added initial site evaluation information and accompanying performance standard information will be incorporated into the MBI for each new component site. Additional Sites/Expansion of existing sites:

Modification of an approved instrument, including the addition and approval of additional mitigation bank sites or expansions of previously approved mitigation bank sites, can be submitted by NYSDOT to the IRT for review. Information to be submitted for review includes:-xxx

-xxx

-xxx etc.

## 4.5 Bank Use

The authority to approve use of the bank to mitigate any particular impact, both inside and outside Primary Watersheds, resides with the IRT, and ultimately APA, NYSDEC, and USACE. Application of the bank in watersheds adjacent to the Primary Watershed adds flexibility, and thus will result in successful mitigation of some impacts that would otherwise be ineffectively mitigated.

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Any NYSDOT, and/or other state/local government agency transportation project may be eligible to use the bank to satisfy compensatory mitigation requirements, but only after appropriate avoidance and minimization efforts have occurred.

For transportation related projects that extend in and outside of the bounds of the Adirondack Park, compensatory mitigation required for any portion of that project, may be eligible to utilize the bank site(s) created through the approval of the Final Instrument associated with this Prospectus.

The Bank will be primarily used for conservation, limited passive recreation and research, and educational outreach. NYSDOT will not grant easements, rights-of-way, or any other property interest in or to the bank without written consent of the IRT, through the Chair and/or co-Chair.

## **4.6 Force Majeure**

After all performance standards are fully achieved and all credits have been used by NYSDOT or sold to other parties, the NYSDOT will not be held responsible for failure of the bank attributed to natural catastrophes (e.g. flood, drought, disease, regional pest infestations) if the DE determines that it is beyond the reasonable control of the NYSDOT to prevent or mitigate. The NYSDOT shall bear the burden of demonstrating that the Force Majeure event was caused by circumstances beyond the control of the NYSDOT and the damage is irreparable by any practical or reasonable mean. The DE has the sole responsibility with consultation from the IRT to determine whether an event is a Force Majeure.

## **5.0 Credits**

The number of credits available in the bank will be determined by the difference between the baseline conditions of the mitigation site prior to restoration, creation, or enhancement activities, and the increased wetland functions that result from those activities. The number of credits required to satisfy the mitigation needs of a permit action will be decided by USACE, NYSDEC and/or APA based on a comparison between existing wetland quality, functions and services to be impacted and those that have been established at the associated bank site. The ratio of acre-credits “withdrawn” from the bank for each acre of wetland impact from a particular project (Credit Ratio) will be determined on a case-by-case basis. The Credit Ratios used to establish bank credits do not always determine the number of credits needed to satisfy permit requirements. The same credit would be used for an activity which requires approval by more than one agency. The use of fractional acre-credits would be allowed.

Credit tracking will be the responsibility of the IRT Chair, New York and Buffalo USACE DE’s. A system will be utilized which can reliably track and keep current total available credits for each site, credits used from each site to date, and the remaining credits available to date for each site. Other information is likely to be included such as which agency the credits had been secured to satisfy the requirements of.

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## 5.1 Credit Release

The IRT will establish credit release criteria for each bank site described in the Mitigation Banking Instrument. This will ensure that credits released from each site are complementary to its size, wetland type and individual Performance Standards. The Mitigation Banking Instrument will establish either individual credit release criteria for each bank site identified in the Mitigation Banking Instrument or establish a methodology that will be utilized to calculate the credit release criteria for each site as well as any that may be added as addendum in the future.

Prior to any credits being released, NYSDOT will be required to show record of a conservation easement for the site. The holder of the easement will be identified as each site is proposed and the IRT will grant an approval that the holder is acceptable and capable of managing the long-term protection requirements for the site. NYSDOT will also establish a fund which will hold a portion of each credit sale amount to be transferred to the easement holder post-bank closure.

## 5.2 Bank Credits

The debit process for transportation projects requiring individual permits; programmatic permits requiring submission of an application; or nationwide permits requiring pre-construction notification will be as follows:

- The NYSDOT will submit a permit application to the appropriate regulatory agencies documenting wetland avoidance and minimization efforts and compensatory mitigation plan (e.g. on-site mitigation, use of banked credits, or a combination of credits and on-site mitigation).
- If credits are to be utilized, regulatory approval of the permit application would signify permission to use the bank for compensatory mitigation. The appropriate number of acre-credits will then be deducted from the bank. The NYSDOT will internally document its wetland avoidance and minimization efforts and its compensatory mitigation plan (e.g. on-site mitigation, use of banked credits, or a combination of credits and on-site mitigation).
- If credits will be used, the NYSDOT will issue a Wetland Mitigation Bank Debit Certificate to the appropriate regulatory agencies, certifying use of the bank and compliance with all compensatory mitigation requirements. No additional approval from, or action by, the regulatory agencies would be required. The appropriate number of acre-credits will then be deducted from the bank.

Note that, credits will be tracked and categorized based on whether the APA and/or USACE released credits for mitigation required within their jurisdiction. A detailed record keeping plan for credits associated with each bank site will be included as part of the site specific plans detailed in the MBI for that site.

## 6.0 Monitoring/Maintenance

Monitoring and maintenance requirements associated with this agreement do not supersede, replace, or otherwise satisfy those that may require NYSDOT compliance through existing regulations.

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A site specific Monitoring and Maintenance Plan will be included in the MBI for each bank site and will be tailored to compliment the size of the site, the wetland type and the performance standards associated with the particular site.

## 6.1 Annual Monitoring Reports

NYSDOT will monitor and evaluate bank sites once they have been established, and during the designated monitoring period, generally a five year minimum, using established protocols and NYSDOT funding. NYSDOT will also complete any remedial or corrective actions that may be necessary during the minimum five year monitoring period. In addition to the five-year monitoring period, NYSDOT will oversee the site for the life of the bank. Regional NYSDOT staff will conduct as-needed water level monitoring.

The NYSDOT must prepare and submit annual monitoring reports to each agency represented on the IRT. The reports will describe the conditions of the Bank as compared to Performance Criteria. The report will be prepared and submitted by October 31st of each monitoring year and will generally contain the following information:

- A narrative summarizing the condition of the bank. This will include qualitative and quantitative data that indicates whether or not the proposed wetland conditions have been established.
- An overview of the assessment methodology.
- An overview of non-plant species observed at the site. This will be obtained through field screenings designed to record evidence of insects, fish, and other wildlife using and/or inhabiting the site (as listed under the Performance Criteria).
- Complete an official wetland delineation sheet for each covertime, listing dominant plant species with estimated frequencies and percent areal coverage for each vegetative stratum.
- Site photographs of representative areas of applicable covertime types taken between June 1 and August 15. Each photo will be associated with a geographic coordinate and have a compass attached.
- A vegetative cover map outlining the areal extent of each observed covertime at a scale of 1"= 50' or finer.
- Water level monitoring data will be recorded twice per month in the period from April through September, along with a site plan depicting the location of each monitoring well. The number and placement of wells should be decided after review by and discussion with a hydro geologist.
- Changes in habitat characteristics.
- Changes in marsh bird and amphibian species composition and abundance over the monitoring period.
- Inventory invasive plant species and provide a map showing their location.
- Make a determination as to whether performance standards have or have not been achieved.
- A Remedial Plan will be included if Performance Criteria have not been met during a given monitoring year.

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## **6.2 Post Construction Monitoring**

If the DE(s), in consultation with the IRT determines a bank site has met all Performance Standards described in the MBI before the end of the standard minimum 5 year annual monitoring period, as it is established in the EPA/USACE 2008 Final Rule, NYSDOT may submit an annual monitoring short-form for the remainder of the 5 year monitoring period. The monitoring short form will be included in the Final MBI and will require a reduced amount of information while still requiring some form of annual site monitoring. Conversely, the DE(s), in consultation with the IRT, may require an extension to the 5 year monitoring period if a site is known to require a lengthier monitoring period, such as a forested wetland, or if the site has been unable to meet the Performance Standards described in the MBI.

## **6.3 Long Term Management**

NYSDOT will own bank parcels, and continue to manage them after wetland construction activities are complete. Banks will be designed to be self-sustaining and require little long-term maintenance or extensive management activities.

## **6.4 Remedial Actions within the Wetland Mitigation Bank**

The NYSDOT will perform all remedial actions that may be necessary during the monitoring period to ensure bank success using NYSDOT funds. Examples of remedial actions include, but are not limited to: invasive species control, water level adjustments, additional excavation and re-grading, transplanting and restoration of plant material per supplemental landscape development specifications (SLDS), repair of dikes, and erosion and sediment control.

## **7.0 Administration**

The administration, tracking and reporting of wetland credit usage will be the responsibility of the USACE DE(s) as the IRT chair, and will be monitored by the IRT members. IRT chair will submit a Wetland Mitigation Bank Annual Credit Usage Statement for each component site to the members of the IRT by October 31 of each calendar year the bank is active. This statement will include such information as, an itemized list of wetland bank credits used during the calendar year and the remaining credits available.

## **7.1 Permits and Authorizations**

The NYSDOT will obtain all appropriate environmental documentation, permits, certifications, or other authorizations needed to establish and maintain the bank and its component sites. This Prospectus and the Mitigation Banking Instrument will not fulfill or substitute for such authorizations.

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## 7.2 Financial Assurances

NYSDOT spends a significant amount of funds each year on compensatory mitigation. Most of this funding has Federal Highway Administration participation. The financial abilities of the NYSDOT to meet the mandated compensatory mitigation obligations have always been a top priority when obtaining and meeting the requirements of a project permit. The NYSDOT will continue to provide successful planning, implementation and monitoring to meet the required performance standards for each banked mitigation site.

To ensure that sites are adequately funded for perpetual monitoring and maintenance, NYSDOT will utilize a fund that places a portion of the amount paid for each credit aside to be transferred to the easement holder for activities that preserve the integrity of the site in perpetuity.

## 8.0 Potential Sites

This section includes current site specific information for potential bank sites including ecological suitability, physical, chemical, and biological characteristics of the potential site to support the planned types of aquatic resource functions and assurance of sufficient water rights. Information related to these and other potential sites will be expanded in more detail in the MBI.

### 8.1 ADK Wetland Bank Candidate Site: Flansburg Wetland

Location: {NYSDOT Region 2} East Bank of West Canada Creek, Between Routes 8 & 365, Town of Ohio, Herkimer County, 74E57'25"W 43E22'0.1"N

Size of Site: 0.768 ac. of wetland within 6.0 ac. parcel {0.66 ac. available after credit taken for culvert replacement PIN 2804.82 at Loon Brook per APA order 2009-64 condition 4.e}; Upland buffer area=?

Type of Wetlands on site: Emergent, Shallow-emergent, Scrub-shrub

Property Ownership: Publicly held under the People of the State of NY, Department of Transportation

Watershed (HUC): Upper Hudson 0202-Upper Hudson 020200-Mohawk River 02020004-Middle West Canada Creek 02020004120

#### **Background:**

NYSDOT Region 2 replaced bridges carrying Route 8 over West Canada Creek in the Town of Ohio, Herkimer County in 1998 (under PIN 2056.61). NYSDOT representatives held a site meeting with staff members from the Adirondack Park Agency (APA) and the United States Army Corps of Engineers (USACE) to discuss the site potential prior to the wetland site work being conducted. All parties agreed that the effort would be a good environmental initiative that could be considered in the future for banking if it was undertaken. The APA issued Permit 96-320 authorizing this project, and it includes a number of "Findings of Fact" relevant to discussion of the wetland created/restored at the Flansburg site.

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## Prior conditions at the Flansburg Wetland Creation/Restoration area:

Prior to the project, the site of wetland was an old reload area on a six-acre site east of West Canada Creek and north of Route 8 (Route Marker 8-2308-1143, see location map). The reload site historically had wetlands within the parcel prior to being filled for use (pre-1970s). Some soils with wetland characteristics were found when the fill overburden was excavated. Wetland conditions existed along the periphery of the six-acre parcel beside the West Canada Creek and associated with a low-gradient channel, but did not exist over the entirety of the interior of the parcel. The existing conditions are described well under Project Site Description in the APA Permit 96-320.

## Existing Conditions:

The site has been functioning for twelve years since the work in 1999. The attached orthophoto image circa 2003 shows a definite change in conditions of the six-acre Flansburg site, with the outline of the current wetland clearly visible. NYSDOT staff visited the site in July of 2008 to document existing conditions and delineated wetland boundaries. John Hallock of NYSDOT's Region 2 Environmental Unit met with Tom Saehrig and Mark Rooks of APA on August 5, 2008 to evaluate the site and confirm the boundaries of the wetlands. The APA staff agreed with the wetland boundaries delineated by NYSDOT staff around the created wetland (shown in green on the 1:2000 scale 2003 orthophoto).

Covertypes	Typical Species	Area  Acres (and square feet)
Emergent	spotted joe pye weed ( <i>Eupatoradelphus maculatus</i> ), sensitive fern ( <i>Onoclea sensibilis</i> ), soft rush ( <i>Juncus effusus</i> ), wool grass ( <i>Scirpus cyperinus</i> ), green bullrush ( <i>Scirpus atrovirens</i> ), horsetail sp. ( <i>Equisetum</i> sp.), lurid sedge ( <i>Carex lurida</i> ), fox sedge ( <i>Carex vulpinoidea</i> ), field mint ( <i>Mentha arvensis</i> ), cardinal flower ( <i>Lobelia cardinalis</i> )	0.154 (6,696)  { Available 0.148 }
Shallow-emergent  (1 to 6+ inches of water depth on July 29, 2008)	Cattails ( <i>Typhus</i> sp.), red top grass ( <i>Agrostis alba</i> ), fowl manna grass ( <i>Glyceria striata</i> ), willow shrubs ( <i>Salix</i> sp.)	0.377 (16,426)  { Available 0.34 }
Scrub-shrub	Willow shrubs ( <i>Salix</i> sp.), dogwood species ( <i>Cornus</i> spp.), sensitive fern ( <i>Onoclea sensibilis</i> ), soft rush ( <i>Juncus effusus</i> ), wool grass ( <i>Scirpus cyperinus</i> ), green bullrush ( <i>Scirpus atrovirens</i> ), horsetail sp. ( <i>Equisetum</i> sp.),	0.237 (10,317)  { Available 0.226 }
	Total area:	0.768 (33,439)

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**Area of Wetland Created/Restored:** The geographical position of wetland boundaries, as well as different covertypes for the created wetlands were recorded with a Trimble GeoXT handheld GPS unit. A total of 0.768 acres of wetland were created or restored. The areas under different covertypes in the wetland are shown in the preceding/following table.

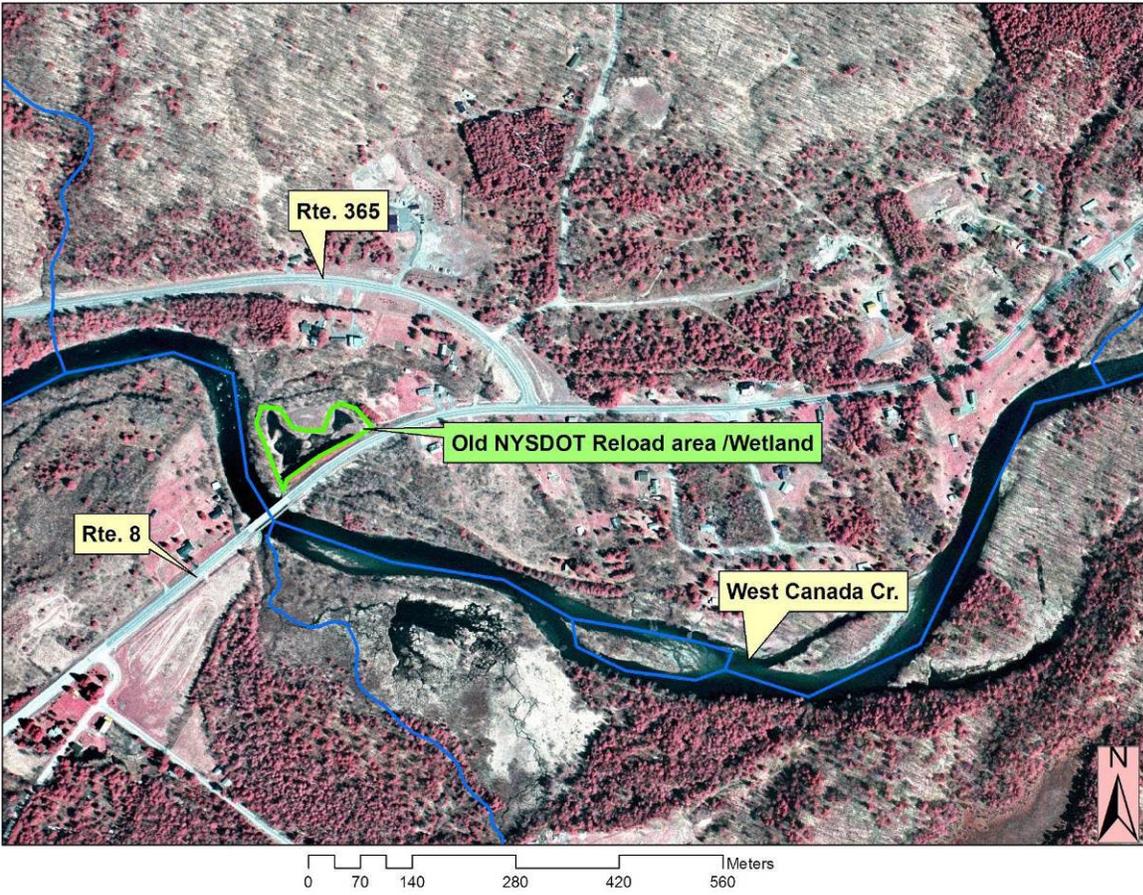
No invasive wetland species were identified in the created wetland. The central upland area has extensive coverage of spotted knapweed (*Centaurea maculosa*), however.

**Adjacent areas:** The 0.768 acre wetland occupies only a portion of the six-acre NYSDOT property. The total site serves to protect a variety of upland and wetland habitat between West Canada Creek and State Routes 8 and 365. The created/restored wetland is surrounded immediately by 20 to 100 feet of upland forest and meadow habitat that separate it from the previously existing wetland channel (NWI wetland). This area as well as a mounded island within the wetland should be considered for upland buffer crediting. According to the GIS data, all of the existing NWI wetland is contained within the larger six-acre NYSDOT parcel. A comprehensive assessment of plant species in this wetland has not been performed, but trees bordering the channel include American elm (*Ulmus Americana*), green ash (*Fraxinus Pennsylvanica*), and speckled alder (*Alnus rugosa*).

It should be noted that this site has the potential for additional development for public use. It could become a wetland interpretation/education site with a small fishing access area component due to its location on the bank of the West Canada Creek, a class A(T) stream. The highest and best usage of an A(T) classified stream is for a source of drinking water, swimming and other recreation, and fishing (in this case particularly for trout species).

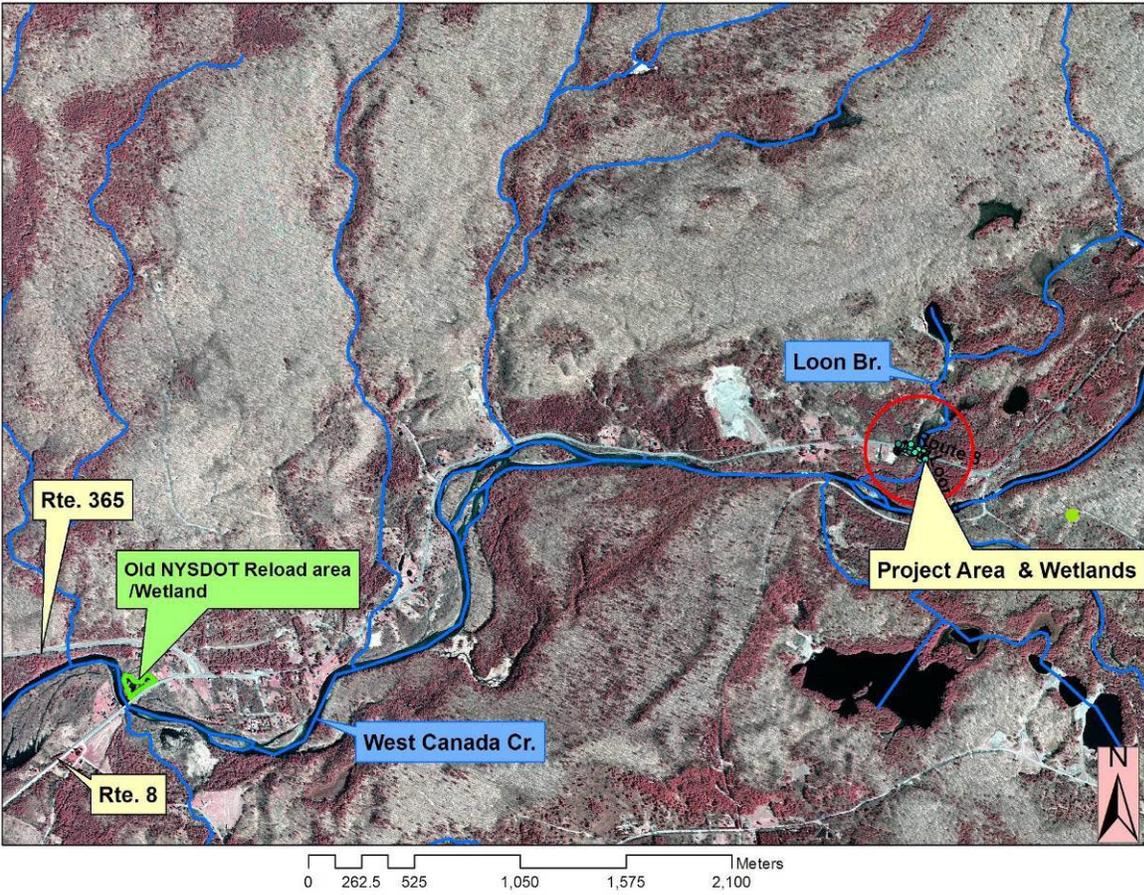
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PIN 280482 Culvert 8: Old NYSDOT Reload Site Wetland, 1:6000 scale



# Draft

PIN 280482 Culvert 8: Loon Brook and Old Reload Site Wetland, 1:22,000 scale



# Draft

## 8.2 ADK Wetland Bank Candidate Site: Bald Mountain Pond vicinity Wetland

Location: {NYS DOT Region 2} South of Bald Mountain Pond, west side of Route 28 south of Rondaxe Rd., Town of Webb, Herkimer County 74E55'39.73"W 43E43'45.48"N

Size of Site: 0.18 ac. of wetland within (176.12 ac. parcel or 3.8 ac parcel) two adjoining parcels in Town ownership

Type of Wetlands on site: Emergent, Shallow-emergent

Property Ownership: Publicly held under the Town of Webb, Herkimer County government

Watershed (HUC): NE Lake Ontario -St Lawrence 0415- Northeast Lake Ontario 041501-Black River 04150101-Middle Branch Moose River 04150101060

### Background:

Prior conditions at the Bald Mountain Pond Wetland Restoration area: Approximately 20 feet of fill was placed over the wetland at the southern end of the pond.

### Existing Conditions:

Covertypes	Typical Species	Area  Acres (and square feet)
Emergent	spotted joe pye weed ( <i>Eupatoradelphus maculatus</i> ), sensitive fern ( <i>Onoclea sensibilis</i> ), soft rush ( <i>Juncus effusus</i> ), wool grass ( <i>Scirpus cyperinus</i> ), green bullrush ( <i>Scirpus atrovirens</i> ), horsetail sp. ( <i>Equisetum</i> sp.), lurid sedge ( <i>Carex lurida</i> ), fox sedge ( <i>Carex vulpinoidea</i> ), field mint ( <i>Mentha arvensis</i> ), cardinal flower ( <i>Lobelia cardinalis</i> )	**** (**)
	Total area:	0.18 (7841)

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## Adjacent areas:

