

**ENHANCEMENT OF BIRD HABITAT, ENVIRONMENTAL EDUCATION AND
INTERPRETATION, AND ECOTOURISM AT JOSEPH DAVIS STATE PARK
TOWN OF LEWISTON, NY; PHASE I**

Prepared for:



NIAGARA RIVER GREENWAY COMMISSION

Prepared by:

**Buffalo Audubon Society, Inc.
Audubon New York
Ecology and Environment, Inc.**

Project Registration Number _____

*Niagara River Greenway Commission
Consultation and Review Form*

Type of Review Required:

Mandatory Consultation
 Voluntary Review and/or Endorsement

PROJECT SPONSOR INFORMATION

Name: Buffalo Audubon Society
Mailing Address: 1610 Welch Rd, North Java
State: New York
Zip Code: 14113
Federal Id# 16-6088768 Charities Registration # 05-51-96

PROJECT TYPE

Check all that apply: Environmental Cultural/Heritage Land or Water Public Access
 Cultural Trail Educational/Interpretive Waterfront or Land Based Development
 Signage Recreational Other

Project Name: Enhancement of Bird Habitat, Environmental Education and Interpretation, and Ecotourism at Joseph Davis State Park, Town of Lewiston, NY; Phase I
Location: Joseph Davis State Park
Site Address: 4143 Lower River Road, Lewiston
State: New York, 14092
Minor Civil Division(s): Town of Lewiston
County: Niagara
Project Proponent Property Interest (own, lease, easement or other): other – State Parks Land

AUTHORIZED OFFICIAL

Name: William Hudson Title: Executive Director, Buffalo Audubon Society
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E-Mail Address: Hudson@BuffaloAudubon.org

PROJECT POINT OF CONTACT

Name: Same as Above Title: _____
Organization/Firm: _____
Business Address: _____
State: _____ Zip Code: _____
Telephone Number: _____ Cell Number: _____
Fax Number: _____
E-Mail Address: _____

PROJECT NARRATIVE

Enhancement of Bird Habitat, Environmental Education and Interpretation, and Ecotourism at Joseph Davis State Park, Town of Lewiston, NY; Phase I

1. *In a brief paragraph, describe the project and its purpose, how and when it will be accomplished, and why it is important.*

PROJECT AND PURPOSE

In collaboration with Audubon New York (ANY) and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), the Buffalo Audubon Society (BAS) proposes a project for funding under the Niagara River Greenway Fund to evaluate and improve both avian habitat and interpretive facilities in order to accommodate bird watching and avitourism at Joseph Davis State Park (JDSP) in Lewiston, New York. OPRHP will be an active participant in this project and will be regularly consulted for advice and support into all evaluation, planning, and implementation activities. This proposal is designed to satisfy many of the goals identified in the Niagara River Important Bird Area (IBA) Plan, the Joseph Davis Bird Conservation Area (BCA) Management Guidance Summary, and the JDSP Master Plan and the Niagara River Greenway Plan; and to clearly brand and improve this beautiful but underutilized park as a destination for both local bird enthusiasts and birding tourists. This project is consistent with the spirit and intent of the Niagara River Greenway Plan and Generic EIS in that it enhances and protects critical bird habitat along the upper Niagara River Corridor, provides for restoration of sensitive bird habitat that will further enhance the ability of the Corridor to attract migratory bird populations, and also will allow for improved public enjoyment of this important resource. The project will also enhance and complement existing recreational uses of the Park.

GENERAL SITE INFORMATION

The designated BCA at JDSP is a 230-acre tract that includes the undeveloped eastern area of the park as well as 1,400 feet of frontage on the Niagara River (see map 1 in attachments). Nearly two-thirds of the BCA is successional shrubland. Mature second growth forests are found in the eastern portion of the BCA and along the Niagara River shoreline. Other ecological communities represented in the BCA are old fields, an oak regeneration area, open water, and wetlands.

In December of 1996, the Niagara River Greenway Corridor was formally dedicated by ANY as the first globally significant IBA to be jointly identified by cooperating organizations in both Canada and the United States. Although quality bird habitat is in short supply along the Niagara River Greenway Corridor, many identify JDSP as an area with tremendous value and potential for improvement as bird habitat. In 2005, portions of JDSP were officially designated by the State of New York as a BCA, with the following Vision Statement:

Recreational/interpretive opportunities and access will continue in a manner consistent with conservation of the diverse assemblage of bird species using the area for breeding or during migration.

In 2004, a Master Plan for JDSP (Environmental Design and Research and OPRHP, 2004) described the existing habitats. The Master Plan identified much of the Park as a BCA. The Management Guidance Summary for the BCA recommended additional studies of habitats and the development of a specific habitat management plan in concert with the Department of Environmental Conservation (DEC), Audubon and other interest groups. Natural succession processes have been identified as a threat to the continuation of the successional shrubland habitat so important to meeting the criteria upon which the BAC was designated. OPRHP has initiated a pilot project on two 5-acre plots to assess the feasibility of maintaining the successional shrub habitat area (Janis, 2008).

PROJECT GOALS

Specific project goals, which are consistent with the OPRHP Master Plan for JDSP, the Joseph Davis State Park Shrubland Management Pilot Project (OPRHP, 2008) the OPRHP BCA Management Guidance Summary, and the Niagara Greenway Plan include:

- Enhance and perpetuate the site as a BCA by providing habitats for the breeding, shelter, migration, and sustenance of resident and neotropical migratory wild bird populations;
- Maintain and enhance an agreed upon mix of forest, shrubland, wetlands and other habitats in as nearly natural condition as possible and consistent with the more specific goals above;
- Develop an invasive species control and management plan based on site surveys and mapping;
- In consultation with OPRHP, write a habitat management plan that addresses the maintenance of the full spectrum of early-successional habitats, in particular successional shrubland for the BCA portion of JDSP. The habitat management plan should include guidelines for vegetation management that limit mowing or other disturbances within the BCA until after birds have fledged their broods, preferably after August 15th of each year;
- Identify key agencies and non-governmental organizations to collaborate in plan development and implementation, as appropriate;
- Evaluate and identify management options for the shoreline to benefit birds that utilize the shoreline habitats and provide continuation of recreation activities;
- Use lessons learned from the 2009-2010 pilot project to inform the early-successional habitat management plan for the park;
- Consistent with the habitat management plan, remove invasive species and plant appropriate native species;
- Enhance educational and passive use opportunities by integrating habitat management plans with plans for a trail system that OPRHP is already addressing. Plans for trails shall undergo consultation with OPRHP; Improvements to the trail system and its operation will be subject to environmental review;
- Focus new educational efforts on the importance of diverse habitats including successional fields and shrublands. These important habitats will be interpreted at a regional level showing how the Niagara River Greenway Corridor serves to funnel migratory birds between Lake Ontario and Lake Erie;
- Provide opportunities for research on habitat selection and utilization by birds through the habitat management plan;

- Conduct research and monitoring to assist in the development of a long-term management plan for shrublands in the park;
- Identify opportunities to engage public and private sector stakeholders in resource stewardship activities; and
- Make JDSP a destination point for birding interest groups on a regional and statewide basis.

SPECIFIC PROJECT TASKS

In order to effectively provide the appropriate landscape layout and habitat niche elements for this habitat restoration project within the Niagara River Greenway Corridor, BAS proposes to complete this project in two phases. The first phase (Phase I), for which funding is currently requested, includes the site assessment, habitat restoration plan, and initial on-site habitat management (e.g., invasive species identification and removal) tasks. The second phase includes the implementation, monitoring, and adaptive management tasks. Funding for Phase II is not requested at this time, since the cost of these tasks cannot be determined until Phase I is largely complete. The technical approach for Phase I consists of the following tasks:

Phase I

Task 1: Site Assessment and Field Investigations

This task will provide the background information necessary for subsequent planning and implementation. This task is intended to utilize the planning work already reported in the Joseph Davis State Park Master Plan (Environmental Design and Research and OPRHP, 2004) and more recent work summarized in the Joseph Davis State Park Shrubland Management Pilot Project (OPRHP, 2008). These studies identified existing habitats and recommended management of the natural areas to provide additional successional shrubland and other transitional habitats. This task will collect existing habitat mapping, topographic mapping, wetland delineations, bird surveys, and other wildlife data to confirm data collected in 2004 as part of the Management Plan. Additional field surveys will be conducted to make note of the specific habitat types that are utilized by birds. During these habitat surveys, bird observations will be made but it is not the intent of this task to replicate ongoing bird survey work. Species currently found at JDSP, including American Woodcock, Black-billed Cuckoo, Willow Flycatcher, Brown Thrasher, and Blue-winged Warbler, are known to prefer open shrub habitats in early successional stages leading to a young forest. Birding will be conducted to confirm common migrants, breeding birds, and nesting birds but an exhaustive list of birds at JDSP is not required to guide the development of the habitat management plan. The diverse habitats are becoming overgrown at JDSP and as a result, a management goal for Task 1 is to identify areas where overgrowth may be removed or altered in order to maintain an early successional habitat for these important bird species. This site assessment task will guide the subsequent planning. Plant surveys will be conducted to identify the types and extent of invasive plants, as well as preferred food and habitat plants and any rare plants. The site is known to harbor several invasive species, including Purple Loosestrife, Common Reed, Bush Honeysuckle, and Wild Multiflora Rose. These species are of low value to local wildlife and can easily crowd out more valuable fruiting plants that provide food and shelter to birds.

Task 1: Deliverables

A site report will be produced under Task 1 and include the following components:

- Habitat Maps;
- Bird and Wildlife Habitat Utilizations;
- Bird Inventories;
- Invasive Species Map;
- Invasive Species Control and Habitat Improvement Plan; and
- Rare Plant Survey.

Task 2: Habitat Planning and Initial On-site Management

Task 2 will utilize the results of Task 1 to support the development of the site plan for the landscape restoration and habitat improvements at JDSP. Planning activities will include recommendations for modifying habitats, short-term and long-term control of invasive plants, a Management Plan (Plan) for the park habitat, improvements and (if recommended) plans for new trails, and text and locations along the trails for educational materials or kiosks. This planning task will rely heavily on the planning already conducted by OPRHP and reported in the Joseph Davis State Park Shrubland Management Pilot Project proposal (OPRHP, 2008), as well as on the lessons learned from the pilot project. OPRHP will be an active participant in this project and intends to provide advice and support during the planning and implementation.

As the Plan is being developed, meetings will be held with OPRHP and other stakeholders to review data and develop a consensus. Part of the Plan will include the description of success criteria so that the effectiveness of the project can be measured in Task 4 and modifications can be adopted to improve effectiveness after implementation. Cost estimates for the implementation of the Plan will be included. Since the Plan requires the removal of invasive species, on-site activities will occur to implement initial habitat management as part of this task to begin the removal of invasive species. Options include mechanical, biological, habitat modification or a combination of these options, which will be identified as part of the Invasive Species Control and Management Plan. Invasive species planning will be coordinated with the OPRHP statewide invasive species control unit.

Task 2: Deliverables

- Management Plan, including Site Plan with proposed trail and educational signage locations; and
- Report on Initial Invasive Species Control Habitat Restoration.

Phase II

Please note that this proposal requests funding only for Phase I, Tasks 1 and 2, above. Because Costs for Phase II will depend on results and planning conducted during Phase I, the following is provided for reference only.

Task 3: Implementation

The implementation of the Management Plan will be conducted under this task. It is expected that clearing and grubbing of some invasive plants will be required since many invasive plants cannot be successfully uprooted. It may be necessary to add a subcontractor to the BAS team

during this phase in order to provide heavy equipment for active site restoration efforts. Planting of preferred species, if required, will be conducted and on-site observation by an ecologist will take place during any required implementation. The layout and construction of trails will be completed in consultation with the OPRHP. This task will include all the permitting and meeting costs associated with implementation of the Management Plan.

Task 3: Deliverable

- Site Plans Showing Conditions Following Management Plan implementation.

Task 4: Monitoring and Adaptive Management

Subsequent to the implementation, monitoring of the project will be conducted to measure the success criteria described in the Management Plan. If the monitoring uncovers failures or problems such as re-growth of invasive plants, this task will include resources for additional implementation activities. It is expected that this task will continue for three years after implementation. Longer term monitoring will continue with volunteer support from the non-governmental agencies that partner with this project.

Task 4: Deliverable

- Annual Monitoring and Adaptive Management Report (3 years)

SCHEDULE

Activities to be performed under Task I will be initiated within two weeks of a Notice to Proceed. It is hoped that funding will be available so that field assessments can be initiated in June 2010. A summary of the schedule follows:

Phase I

Task 1

Field surveys	June, 2010 – September, 2010
Site Report	November 2010

Task 2

Management Plan	June 2011
Invasive Species Report	June 2011

Phase II

Task 3 Estimate

Implementation	Summer-Fall 2011
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Task 4 Estimate

Annual Monitoring Reports	December 2012
	December 2013
	December 2014

Upon award, the pre-design field investigations will begin in spring 2010, and will continue through the year in order to observe and evaluate seasonal variations in features such as site hydrology, groundwater levels, and avian and other wildlife use. BAS will coordinate with OPRHP to avoid duplicating efforts. OPRHP expects to conduct habitat and bird surveys in early spring 2010 and the intent of BAS is to expand and complement the surveys to be completed by OPRHP. Additional data are available from the USFWS on hydrology and groundwater, and all these sources will be collected to develop a more complete understanding of the habitats at JDSP. BAS expects that site management goals and concepts will be developed by September 2010.

2. Referring to the Niagara River Greenway Plan, clearly document and describe how the proposed project will advance the Niagara River Greenway vision, including the goals, principles, and criteria that define that vision.

PROJECT'S ADVANCEMENT OF NIAGARA RIVER GREENWAY VISION

Located in the Niagara River Greenway Corridor, the proposed project is consistent with the Niagara River Greenway Plan's vision, goals, principles, and criteria for the evaluation of proposed resource restoration projects within the defined area. Specifically, the proposed project will further the vision of the Niagara River Greenway Plan by developing a key link in a sustainable world-class ecological corridor through the re-establishment of ecological functions, increasing ecological integrity, providing connections to other parks and conservation areas, advancing the goal of public interaction with ecological and biological systems, increasing awareness of the interrelationships between landscape elements and environmental and social well-being, and restoring habitats to a higher level of functionality.

PROJECT'S ADVANCEMENT OF NIAGARA RIVER GREENWAY GOALS AND PRINCIPLES

The foundation for developing this project lies in the JDSP's vision of environmental stewardship, public recreation, and education opportunities. This project is also strongly aligned with the principles and goals outlined in the Niagara River Greenway Plan. Specifically, and as described throughout this application, the project adheres to the following Greenway Plan principles:

- Excellence;
- Sustainability;
- Ecological Integrity;
- Public Well-Being;
- Connectivity;
- Restoration; and
- Authenticity (see text below for more detail).

The proposed project will support the Niagara River Greenway vision by meeting the following goals:

- Protecting and restoring environmental systems;
- Improving opportunities for conservation and restoration education, passive recreation, hiking, and fishing;
- Promoting long-term sustainability; and
- Creating partnerships between conservation groups, the OPHRP, and DEC to share the responsibility for environmental stewardship.

The ecological importance of the Niagara River Greenway was described in Niagara River Corridor Important Bird Area Conservation Plan that was produced in 2002 by a bi-national group of non-governmental agencies and government agencies from Ontario and New York.

With its extensive, natural shoreline along the river and diverse terrestrial habitats, JDSP is an integral part of the IBA of international significance. JDSP provides a mixture of habitats for a wide diversity of bird species, and its location between Lake Ontario and Lake Erie offers an inviting rest stop for birds that move between the Great Lakes and their adjacent shoreline areas. JDSP fits the requirements for an ideal stopover location, of which Bonter, et al. (2009) recently addressed the importance of such habitats, as it represents an important area of natural habitat that is surrounded largely by urban and agricultural landscapes offering few opportunities for birds. ANY and the Nature Conservancy of Central and Western New York are collaborating on a Lake Ontario Stopover Habitat Project to further characterize and identify these critical habitat areas.

The preservation of this IBA and restoration of habitats at JDSP is consistent with the principles of the Niagara River Greenway Plan. In addition, restoration and maintenance of bird habitat at JDSP is critical in providing food and shelter for neotropical migratory species within the Niagara River IBA in the spring and fall of each year.

CRITERIA THAT DEFINE THE VISION

Consistency with Principles

The proposed project goals, products, and activities are consistent with the guiding principles of the Niagara River Greenway Plan and specifically address the following principles:

- **Ecological Integrity.** The project is consistent with this principle because it will focus on the maintenance and improvement of the health, vitality, and integrity of natural and wildlife habitats;
- **Restoration.** The project will restore an ecological significant habitat in accordance with the Niagara River Greenway principles;
- **Connectivity.** The project will provide ecological connections in several important ways. It will enhance the breeding area for terrestrial birds and a portion of the Niagara River shoreline for aquatic birds. It will also enhance the resting habitat for migrants and a habitat for other types of plants and animals that can live in the Greenway. It will further establish a string of parks and refuges that constitute the Greenway;

- ***Partnerships, Sustainability, and Community Involvement.*** The project team will consist of the BAS, ANY, OPRHP, and Ecology and Environment, Inc (E & E). These team members will work closely with government agencies including: OPHRP, the host of the project; NYSDEC; and other non-governmental agencies and regional experts in wildlife biology and habitat restoration. Opportunities to partner with the several universities and colleges as well as not for profit groups and resource agencies will be explored.

Priority Status

The project will meet the following elements of the Niagara Greenway priority listing:

- ***Improved access to waterfront resources.*** JDSP trails will be improved, and the nature interpretive trails will become a gateway destination in their own right by providing scenic overlooks, educational signage, and trail access to wetlands for education and bird observation;
- ***Development of an integrated trail and park system.*** JDSP is located in the Niagara River Greenway Corridor. The proposed nature trails will provide the spurs and loops that the Greenway Plan recommends as a high priority;
- ***Restoration of Niagara River Ecosystem.*** This priority is the primary goal of the proposed project.
- ***Interpretation and education about the region’s cultural, natural and historic resources.*** The proposed project will meet this priority area through the development of signage to complement the existing educational kiosks. These signs will inform visitors about the geological history and the importance of the natural resources, as well as provide more bird- and habitat-specific information.

Focus Area

The focus area of the Niagara River Greenway Plan is the corridor immediately along the Niagara River. This proposed project includes habitat enhancement along the Niagara River and in the natural areas immediately adjacent to the River frontage.

Environmental Soundness

Project planning and design will address ecological functions and habitat connectivity through a design process that will promote naturally functioning ecosystems that support a diversity of species.

Implementability

This is state parkland and OPRHP controls all land use activities within the project area. This project is consistent with the Park Master Plan and the Pilot Project already initiated by OPRHP with ongoing follow-up studies underway. OPRHP has reviewed and contributed to this proposal and agrees to cooperate with the project partners if funding becomes available in accordance with this proposal. OPRHP has expressed interest in the management plan that would result from this collaborative effort. The management plan and its implementation are subject to environmental review and adoption by the OPRHP.

Economic Viability

The proposed project will not require long-term commitments of significant resources, and the short term requirements will be met by the request. Monitoring beyond the performance period of the proposed project is expected to be provided through bird counts that are conducted by State Parks biologists and volunteers from BAS and ANY. Limited habitat maintenance can also be conducted by volunteers. A “brush hog” or similar tractor-drawn implement may be required to maintain the desired habitat within the BCA. This small cost would be provided either by OPRHP or through private fundraising efforts.

Local Sponsor or Partners

Team members responsible for the implementation of the project, if funded, include the Buffalo Audubon Society (BAS) and the BAS team that includes, in addition to OPRHP, ANY, and E & E.

Consideration of Other Planning Efforts

The project is consistent with the Niagara River Greenway Plan, the Niagara River Corridor IBA Conservation Plan, and is complimentary to Niagara River Greenway Habitat Improvement projects. This project will specifically provide desirable habitat features as described within the Niagara River IBA habitat characterization and meets the objectives of the OPRHP Joseph Davis State Park Bird Conservation Area Management Guidance Summary (OPRHP, 2005).

Clear Benefits

The proposed project will significantly improve the biotic environment by enhancing critical ecological functions to a complex mixture of habitats. The project, in accordance with the management plan will maintain a habitat condition consistent with plan goals and objectives and will control and manage invasive plants.

ADDITIONAL PROJECT ELEMENTS SUPPORTING THE NIAGARA RIVER GREENWAY VISION, PRINCIPLES, GOALS, AND CRITERIA

This project is consistent with the goals and missions of the Niagara Greenway Commission and the OPRHP. The long-term vision for the Niagara River Corridor IBA Working Group is as follows:

The Niagara River Corridor, being an Important Bird Area, will be conserved because of its importance to the international conservation of migratory and resident bird species that provide enjoyment to people worldwide, and economic, ecological and educational benefits to the people and governments of the United States and Canada.

The mission of the OPRHP integrates the following objectives: to provide safe and enjoyable recreational and interpretive opportunities for all New York State residents and visitors; and to be responsible stewards of our valuable natural, historic and cultural resources. The agency is responsible for conserving, protecting and enhancing these resources for public enjoyment in the present and in the future. Additional project elements that support the Niagara River Greenway vision, principles, goals, and criteria are as follows:

Ecological and Biological Integrity

The goal of this project is to restore, enhance, and increase ecological and biological integrity within the Niagara River Corridor as well as functional uplift of existing biological systems. Diversification of the project site will increase habitat structure and complexity, which will result in beneficial effects on regional ecological and biological integrity and will increase wildlife values for a greater variety of floral and faunal species. Site evaluations will be conducted to guide the development of strategies for ecological and biological integrity; mapping of habitat features, including vegetation communities; selection of appropriate ecological community trajectories; mapping of targeted wildlife species habitat; invasive species control and management; and adaptive management and ecological monitoring to quantify biological uplift.

Resource and Habitat Connectivity

The planning, design, and implementation of this project will promote natural resource and habitat connectivity between the various elements located within the local and regional landscape. For the site investigations, the BAS team will assess the appropriate combination of site features in order to maximize resource and habitat connectivity while emphasizing sustainability. Relevant elements of interest include items such as habitat features for targeted floral and faunal species of concern, including rare and threatened and endangered species; resident and migratory avian species; wildlife passage and travel corridors; and transition between habitat types. Removal of invasive species will expedite the habitat improvements.

Biotic System Sustainability

The team anticipates managing the biotic system in a manner that provides increased habitat and wildlife values for various species assemblages, and to create connections between JDSP and surrounding land within the Niagara River Greenway Corridor. Key elements of the site investigation will involve the removal of invasive species and replanting with native species. This proposal will support connectivity by design between project site, watershed, and system-wide processes.

Natural Form and Functional Authenticity

The current state of the bird habitat at JDSP indicates that there is potential for the site to function at a higher level and to provide greater benefits to the environment and the region. The site investigation and design process will be based upon creating conditions to emphasize natural form and function. Functional authenticity is at the center of sustainable restoration design and will be adhered to throughout the project in order to design and construct habitat structure and complexity that is not over-engineered.

Community Partnerships

Collaborative partnerships will be solicited throughout the planning, design, implementation, and management phases of the site development, with the Niagara County Soil and Water Conservation District (NCSWCD), the NYSDEC, the US Army Corps of Engineers (USACE, Buffalo District), Niagara University, the State University of New York College of Environmental Science and Forestry (SUNY-ESF), State University of New York at Buffalo (SUNY-Buffalo), Cornell University, Buffalo Ornithological Society, and local K-12 schools that will use the Park during Audubon programs and other environmental education programs.

Environmental Education and Stewardship

The existing educational kiosk and proposed educational signage will heighten awareness and provide an in-depth understanding of ecology, ecosystem based management, habitat diversity, invasive species management, native plant species introduction, and human connectivity with the natural world. Trails will be provided with signage that will include innovative views of the wildlife at both a larger- and local-scale.

Cultural History

The educational signage that is proposed provides an opportunity to show how the cultural heritage of the site and of the Niagara River Greenway influences wildlife. Some of the signs and educational material will discuss Native American use of the corridor, impacts from settlement, and subsequent impacts from industrial development. The history of the area is reflected in changes in wildlife populations, and this project provides an opportunity to show how wildlife first attracted people to the area and provides enrichment to our lives.

3. Define the budget for the proposed project and include costs for the following:

Phase I

Planning	<u>\$ 89,800</u>
Habitat Management and Implementation	<u>\$ 75,750</u>
Acquisition	<u>\$ 0</u>
Administration	<u>\$ 30,000</u>
Operation and Maintenance / Year	<u>\$ 0</u>
TOTAL PROJECT COST	<u>\$ 195,550</u>

Identify all sources of funding and the amount of funding expected from each source. Identify and quantify funds that are already on hand or have been allocated for the proposed project. Explain how the project will be operated and maintained.

4. Describe the measures taken at the local level to gain community and government support for this project (hearings, petitions, public surveys, resolutions of support or other methods). If this project has been cited or described in a local planning document or some equivalent thereof, attach copies of that documentation highlighting the sections that are relevant to the proposed project. Describe the role of municipal agencies, stakeholder groups, consultants, volunteers, or others who will be involved in the proposed project.

Elements of the proposed project have been addressed within the master plan for Joseph Davis State Park which was subject to several public meetings and a public hearing. The project is also consistent with an OPRHP State Parks Natural Resource Project proposal. The OPRHP is very supportive of this project (see attached letter of support), and recognizes the value of the habitats at JDSP. BAS and ANY have held in depth discussions with staff from the OPRHP Environmental Management Bureau and solicited comments that have been incorporated into this proposal, and any work will complement and build on the work already completed by OPRHP in 2009. The proposal has also been incorporated into planning efforts by the BAS and the ANY. BAS proposes to enlist volunteer support from local botanical and bird watching groups, and from Ecology and Environment, Inc., which has offered support in the development of this application.

5. Describe and document the environmental setting and existing conditions at the proposed project site. If you are not the owner of the property include a letter(s) or resolution(s) evidencing support for the project by the owner. Provide photographs, conceptual plans, and drawings that show the site as it presently exists and how the site will change with the addition of the proposed project. Describe how your project will comply with the State Environmental Quality Review Act (SEQR). The existence of wetlands, significant upland and aquatic habitats, and plant or animal species that are classified as rare, threatened, or endangered should be noted. Explain how such natural resources will be protected and/or enhanced. Cite any relevant project-related studies.

The environmental setting and existing conditions and resources at JDSP are well documented in planning documents (ED&R and OPRHP, 2004; Niagara River Corridor IBA Working Group, 2002; OPRHP, 2005). The upland areas are utilized by Savannah Sparrow, Bobolink, Eastern Bluebird, and Eastern Meadowlark. Also present at JDSP are the state-threatened Pied-billed Grebe, Bald Eagle, Northern Harrier, and Common Tern; and state species of special concern may stop over including Osprey, Sharp-shinned and Cooper's Hawk, Common Nighthawk, Whip-poor-will, Horned Lark and Yellow-breasted Chat. The Niagara River Corridor is home to large flocks of Bonaparte's Gull, Herring Gull, Ring-billed Gull, and Common Merganser. In total, 19 species of gull have been identified in the corridor.

JDSP has remarkably diverse habitats, and includes the Niagara River shoreline with open river habitat, inland wetlands, grassy meadows, early successional shrub and forest land, and mature forests. Shrublands are particularly important habitats, as they are in a transient stage in the natural succession of former agricultural fields and orchards. Although there were 152 acres of successional shrubland in 1996 at JDSP, almost half of this community has been lost over the past 10 years with only 85 acres remaining (ED&R and OPRHP, 2004) Scattered apple and pear trees are the remnants of the previous orchard. The altered area includes areas of invasive species of multiflora rose and honeysuckle, which provide poor food and habitat. The eastern area of the shrubland is now dominated by gray dogwood, silky dogwood, sumac, cottonwood, green ash, silver maple, and pin oak. .

This project will comply with the State Environmental Quality Review Act (SEQRA). The proposal to conduct work requires public notification and the submission of a Long Form Environmental Impact Assessment Form.

Available references on the habitats and wildlife found at JDSP include:

Bonter, D.N., S.A. Gauthreaux Jr., and T.M. Donovan. 2009. Characteristics of Important Stopover Locations for Migrating Birds: Remote Sensing with Radar in the Great Lakes Basin. *Conservation Biology*, Volume 23, No. 2, 440–448.

Environmental Design and Research and NYSOPRHP. 2004. Final Master Plan and Final Environmental Impact Statement for Joseph Davis State Park. February 4, 2004.

Evans, D.J., P.G. Novak, and T.W. Weldy, 2001. Rare Species and Ecological Communities of Joseph Davis State Park. NY Natural Heritage Program.

Evans, D.J., P.G. Novak, and T.W. Weldy. 2001. Rare Species and Ecological Communities of Joseph Davis State Park,. NY Natural Heritage Program.

Lukan, James O. and D.T. Mattimiro. 1991. Habitat-Specific Resilience of the Invasive Shrub Amur Honeysuckle (*Lonicera maackii*) During Repeated Clipping. *Ecological Applications*, Vol. I, No. I (Feb., 1991), pp. 104-109.

Niagara River Corridor IBA Working Group. 2002. Niagara River Corridor Important Bird Area Conservation Plan.

Niagara River Greenway Commission. 2007. Preliminary Final Niagara River Greenway Plan and Environmental Impact Statement. Niagara River Greenway Commission

New York State Office of Parks, Recreation and Historic Preservation. 2008. Joseph Davis State Park Shrubland Management Pilot Project

Oehler, J.D., D.F. Covell, S. Capel, and B. Long. 2006 Managing Grasslands, Shrublands, and Young Forest Habitats for Wildlife, A Guide for the Northeast. MA Division of Fisheries and Wildlife.

Sauer, J.R., J.E. Hines, and J. Fallon. 2007. The North American Breeding Bird Survey, Results and Analysis 1966-2004, Version 2005.2. USGS Patuxent Wildlife Research Center, Laurel, MD.

Sauer, J.R., J.E. Hines, and J. Fallon. 2007 The North American Breeding Bird Survey, Results and Analysis 1966-2004. Version 2005.2 USGS Patuxent Wildlife Research Center, Laurel, MD.

**HABITAT RESTORATION AND BIRD HABITAT ENHANCEMENT,
JOSEPH DAVIS STATE PARK, LEWISTON, NY**

Attachments

Project location maps and aerial photographs

Curricula Vitae

- William Hudson, Buffalo Audubon Society
- Michael Burger, Audubon New York
- Mike Morgante, Ecology & Environment
- Kris Erickson, Ecology & Environment
- Paul Fuhrmann, Ecology & Environment

Buffalo Audubon Society 501(c)3 determination letter

Partnering Letters

- Audubon New York
- Ecology & Environment

Letter of Support: New York State Office of Parks, Recreation and Historic Preservation

Planning Documents

- Joseph Davis State Park Bird Conservation Area Management Guidance Summary
- Niagara River Corridor IBA Conservation Plan (cover and selected pages)
- Joseph Davis State Park Master Plan

Figure 1 – Proposed Project Site

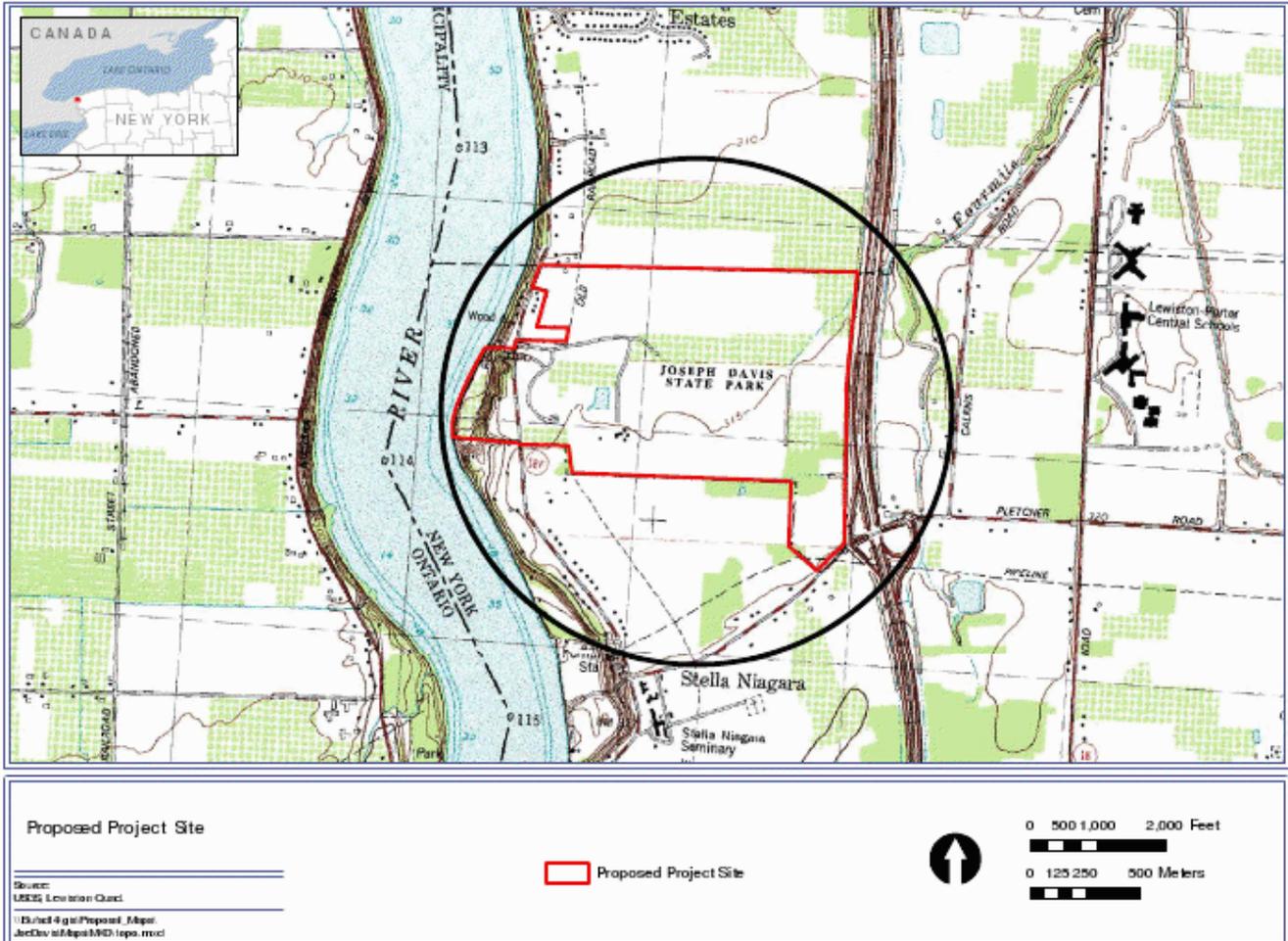


Figure 2



JOSEPH DAVIS STATE PARK, LEWISTON, NY

Figure 3



William L. Hudson



Qualifications

More than twenty years of varied, full time experience in conservation including wildlife, parks, and natural areas management, conservation funding initiatives, planning and administration, biological research, nature interpretation, education and public outreach, facilities construction and maintenance, and law enforcement. Extensive knowledge of ecology and natural history. Demonstrated skill in verbal and written communication, strategic planning, public and private fundraising, negotiation for the purchase or donation of land or easements, contract oversight, and in generating public support for conservation purposes. Extensive experience in interagency coordination and public speaking. Proficient in the use of Microsoft Office Suite, and ESRI- GIS programs.

Education

Teacher Education Licensure Program, Life Sciences, Adolescent to Young Adult (7-12); Notre Dame College, South Euclid, Ohio: 2003-2004: GPA 4.0/4.0

Master of Science, Wildlife Ecology and Management; West Virginia University, Morgantown; 1993; GPA 4.0/4.0

Bachelor of Science, Wildlife Management; The Ohio State University, Columbus; 1980;

Graduate Summa Cum Laude, OSU Top Scholar Award, Gamma Sigma Delta and Phi Kappa Phi honor societies.

Experience

Executive Director (Buffalo Audubon Society): 2005-present.

Chief executive for the oldest and largest conservation organization in Western New York. Duties include management of Beaver Meadow Audubon Center, a very large and active environmental education facility which serves more than 25,000 students and hosts 5 festivals each year, and regional programs in a 7 county area, management of 6 preserves totaling 1,000 acres, fundraising and development, management of 7 staff and 120 volunteers, public relations, advertising and publications, educational program development, research, and general administration.

Science Instructor (Ashtabula County joint Vocational School) 2003-2004. Served as a full-time Instructor for 5 Senior Integrated Science classes and 1 Sophomore General Science class for “at risk”, academically challenged, and exceptional learners.

Substitute Teacher 2002-2003. Worked in a number of Elementary to Senior High Schools in Lake and Ashtabula Counties, Ohio while completing a teaching licensure program at Notre Dame.

Director of Land Protection/Staff Ecologist (Chagrin River Land Conservancy) 1999-2002.

Responsible for the identification, prioritization, and conservation of private lands for a non-profit land trust. Led and participated in over 30 land conservation projects including conservation easements, public agency pre-acquisitions, and wetland and stream restoration and preservation projects. Assisted in the development and use of a watershed wide GIS mapping and land analysis system. Wrote grant proposals and management plans, journal and newsletter articles, news releases, and led public programs. Performed biological surveys of potential conservation properties. Received extensive formal training and gained experience in conservation tax law, fundraising, negotiation and drafting of contracts, purchase and sale agreements, conservation easements, environmental permits, and related documents.

Director (Geauga Park District): 1998-1999.

Responsible for the operation of a 5,000-acre county park system with 40 full-time employees. Duties included contract administration, fundraising, community and media relations, policy development and planning, staff development and supervision, and serving as chief fiscal officer. Coordinated the development of two new parks, dedication of two state nature preserves, and the protection of Ohio's last native brook trout stream.

William L. Hudson

Adjunct Professor of Biology (Lake Erie College); 1995-1996.

Created and taught a course in wetlands biology, including the history, ecology, regulation, and importance of wetland systems.

Regional Field Administrator (ODNR Natural Areas and Preserves/Natural Heritage program); 1988-1998.

Managed 6 State Nature Preserves in Ohio's eastern lakeshore counties; included administration and personnel supervision, rare species habitat identification and management, biological monitoring, nature interpretation, land acquisition, grant writing and fund raising, public relations, facilities design and construction, and routine maintenance. Illustrated Division publications and designed Ohio's Scenic Rivers license plate.

Quality Assurance Officer/Biological Surveyor (Environmental Labs, Inc.); 1988.

Participated in the design and implementation of a study to determine effects of insecticides on wild birds in Oklahoma and Texas. Surveyed plant and animal populations, developed mortality estimates and protocols.

Graduate Research Assistant (West Virginia University, Morgantown); 1986-1988.

Project Leader of a 2-year study of red and gray fox populations in Central West Virginia including population estimation and trends, reproduction, and dispersal. Developed research designs, supervised and coordinated survey crews, organized and analyzed data. Assisted in gypsy moth and river otter research. Taught undergraduate classes and participated in professional seminars and conferences. Wrote, illustrated and published articles in books, bulletins and newsletters.

Wildlife Conservation Aide/Information Specialist (West Virginia Department of Natural Resources); 1982-1986.

Management and development of Public Hunting Areas including the supervision of conservation workers, habitat manipulation including control burns, wildlife and plant surveying and cover mapping; wildlife trapping, transplanting and stocking; compiling harvest statistics, developing long term management plans; rehabilitating injured and orphaned wildlife, operating a mobile wildlife exhibit; presenting educational programs for adults and children, and responding to public inquiries; illustrated Division publications.

Conservation Aide (US Army Corps of Engineers, Stonewall Jackson Lake Project); 1983-1984.

Acted as a liaison and recreation/land use planner for the Department of Natural Resources during construction of a 9,000-acre reservoir and recreational area in central West Virginia. Patrol, environmental review, sensitive area and cover mapping, recreational market studies, road and public use planning.

Camp Director/Crew Supervisor (Tennessee Valley Authority) 1978-1981.

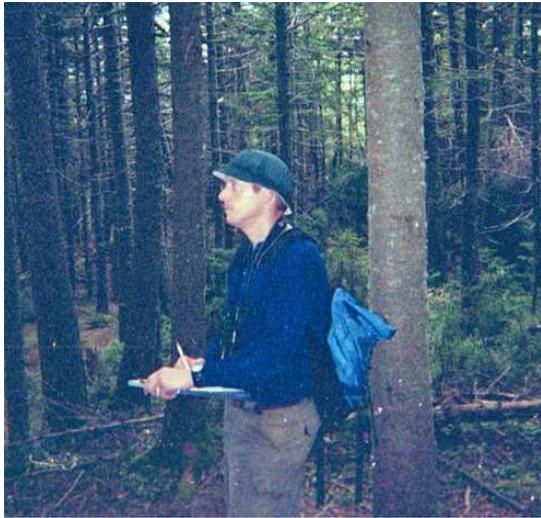
Various summer and full-time positions in the administration of Young Adult Conservation Corps residential camps in Tennessee and Mississippi. Received extensive, formal training in personnel management through team building and effective communication. Built and operated camps in remote locations. Responsible for budgeting, payroll, scheduling, counseling and personnel development. Developed and taught environmental education programs.

Naturalist Intern (National Audubon Society, Corkscrew Swamp Sanctuary); 1979-1980.

Environmental Education and interpretation for individuals and groups in an 11,000-acre virgin bald cypress sanctuary. Operation of Visitors Center and miscellaneous duties.

Professional Affiliations and References on request

Michael Burger



Title:

Director of Conservation & Science
Audubon New York

Education:

B.A. in Biology from Wittenberg University in
Springfield, Ohio, 1987

M.S. in Natural Resources from University of
Michigan in Ann Arbor, 1994

Ph.D. in Natural Resources from University of
Michigan in Ann Arbor, 1998

Experience:

As the Director of Conservation & Science for Audubon New York, Michael Burger oversees planning and implementation of all bird conservation programs, including the Important Bird Areas (IBA) Program, the Forest Biodiversity Stewardship Program, and the Grassland Conservation Program. He is currently studying use of stopover habitats by migrating land birds in the Lake Ontario Basin. He works closely with diverse stakeholders, including private landowners and New York State agency personnel, to promote protection and proper management of important bird and wildlife habitats across the state. In addition, he represents Audubon New York in various state, national, and international conservation initiatives, such as the New York State Bird Conservation Area Program, Partners In Flight, and the North American Bird Conservation Initiative.

Michael began working for Audubon in the spring of 1999 as a forest ecologist, conducting research in the Adirondacks on the effects of various forest management practices on breeding birds, amphibians, and carrion beetles.

Michael has experience as an educator at several levels, from leading programs about birds for kindergarten and older children, to substitute teaching sciences at the high school level, to designing and teaching an undergraduate course in environmental studies at the University of Michigan. In addition, he has published and presented numerous technical and non-technical papers on subjects ranging from specific statistical analyses to general bird ecology to conservation ethics.

Michael is stationed at the Cornell Lab of Ornithology in Ithaca, NY.

Mike Morgante —Project Manager/Avian Specialist



Coordinated and provided ornithological support for E & E's avian field studies, avian risk assessments, and related environmental studies throughout North America.

- Since 2002, he has been involved with avian studies and the evaluation of potential impacts at approximately 50 proposed and existing wind projects in the United States, and most prominently in New York State.
- Prepared the avian studies SOW and field protocol for numerous bird surveys; led and participated in the various surveys for raptors, T/E species, migratory birds, and breeding birds; coordinated the activities of nocturnal radar studies, prepared avian risk assessments, developed protocols for and implemented avian and bat mortality studies, and made numerous presentations before meetings with governmental authorities, regulatory agencies, and the general public.
- Project manager for the preparation of environmental impact statements for two proposed wind projects in New York.
- Assisted world-renowned bridge

designers Figg Engineering and Christian Menn in developing designs for a new signature bridge over the Niagara River between Buffalo and Fort Erie (adjacent to Peace Bridge). He prepared a comparative evaluation of potential avian risks for various design concepts along with another avian expert.

- E & E project manager for stream restoration planning and design projects at Gooseberry Creek and Allen Brook in the New York City watersheds in the Catskill Mountains region.
- E & E contract manager for State Superfund Standby Consultant contracts with NYSDEC to investigate, remediate, and maintain state superfund sites.
- Conducted and managed a variety of avian and engineering projects for nearly 16 years at E & E.
- An avid and lifelong birder, he is an active member of several state and local organizations, including:
 - Buffalo Ornithological Society (BOS), currently serving as Vice President and Avian Records Statistician,
 - New York State Ornithological Association (NYSOA), serving as the Region 1 (Niagara Frontier) editor of NYSOA's quarterly journal, *The Kingbird* since 2000,
 - Audubon New York, volunteer position on Stewardship Council,
 - Hamburg Natural History Society, leading educational nature cruises on the Niagara River aboard the *Miss Buffalo*,
 - Roger Tory Peterson Institute, birding festival field trip leader, and
 - eBird, regional sightings reviewer for western New York.
- Has conducted avian surveys in Western New York and adjacent Ontario for 30+ years, including Audubon Christmas Bird Counts, New York State Breeding Bird Atlas, USGS Breeding Bird Surveys, BOS seasonal counts, Niagara River Bonaparte's Gull surveys, and New York State Winter Waterfowl and Bald Eagle surveys, among other surveys.

Specializes in avian field study design, implementation, and evaluation of results; avian and bat risk assessments; site assessment; stream restoration; and project management.

Kris Erickson—Restoration Ecologist



- Project manager/lead biologist on seven projects for the restoration and remediation of Eighteenmile Creek, an AOC listed in the Great Lakes Coastal Restoration Program, including the award-winning habitat restoration project near Burt Dam and the AOC/Watershed and GIS ARC IMS database development project.
- Managed Seneca Bluffs Habitat Restoration Project, involving preparation of an invasive plant species management plan and site-wide landscape restoration plan.
- Co-author of the E&D QCP and is currently managing a Section 204 project for the development of adaptive management planning, invasive species control, and vegetation community design for island creation for the USACE Buffalo District in Maumee, OH.
- Managed baseline conditions determination for hydraulic, channel, stream bank, and riparian functions for over 17,000 feet of stream and associated riparian corridor and development of preliminary restoration design at Mansfield Creek.
- E & E project manager for Tuscarora Nation Habitat Restoration project.
- E & E project ecologist for the McKinstry Creek stream restoration planning and design project.
- Under separate contracts with EPA Region 2 and the EPA GLNPO, assisted stakeholders in the New York State Great Lakes AOCs with developing final delisting criteria for BUI, and is currently managing the effort for preparing five BUI delisting recommendation reports.
- E & E project manager for habitat restoration under Section 204 along the Buffalo River, Outer Harbor, and Niagara River and development of the Great Lakes Fishery and Ecosystem Restoration (GLFER) Preliminary Restoration Plans for the USACE Buffalo District.
- Conducted and managed a variety of ecological investigations within the midwestern US (MO, IL, KS, AK, WI, IN) for over 14 years, prior to locating in Buffalo, New York

Specializes in ecological restoration planning and design, watershed analysis and planning, habitat and species protection strategies, and invasive species management and control planning. Mr. Erickson has been a lead project biologist, principal investigator, and project manager on USACE projects since the mid-1990s.

Paul Fuhrmann—Natural Resources/Invasive Species Specialist



- Developed native plant community restoration plan and invasive plant management plan for the Seneca Bluffs Project, located along the Buffalo River.
- Natural resources specialist for the McKinstry Creek channel realignment and riparian restoration project and the Eighteenmile Mile Creek AOC habitat restoration project, performing biological surveys and developing the technical design components to restore native plant communities.
- Technical advisor to the Buffalo River Fish and Wildlife Habitat Restoration Demonstration Project,

collaborating with GLNPO, USFWS, USACE, NYSDEC, and others.

- Conducted ecological field surveys to support the development of a strategy to restore wildlife habitat areas within the Great Miami River riparian corridor, OH.
- Contributor to the Invasive Species Council and Invasive Species Task Force and acting coordinator of the Western New York PRISM.

Specializes in T/E species surveys, hydrological assessments, invasive plant species management, sustainable management planning, and community stewardship. Certified Pesticide Applicator (NYSDEC).



Department of the Treasury
Internal Revenue Service

P.O. Box 2508, Room 4010
Cincinnati OH 45201

In reply refer to: 4077563594
May 27, 2008 LTR 4168C 0
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BODC: TE

BUFFALO AUDUBON SOCIETY INC
1610 WELCH RD
NORTH JAVA NY 14113-9772104



026261

Employer Identification Number: 16-6088768
Person to Contact: Roger Meyer
Toll Free Telephone Number: 1-877-829-5500

Dear Taxpayer:

This is in response to your request of Apr. 11, 2008, regarding your tax-exempt status.

Our records indicate that a determination letter was issued in October 1971, that recognized you as exempt from Federal income tax, and discloses that you are currently exempt under section 501(c)(3) of the Internal Revenue Code.

Our records also indicate you are not a private foundation within the meaning of section 509(a) of the Code because you are described in section 509(a)(2).

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

If you have any questions, please call us at the telephone number shown in the heading of this letter.

Sincerely yours,

Cindy Westcott
Manager, EO Determinations



200 Trillium Lane
Albany, NY 12203
Tel: 518-869-9731
Fax: 518-869-0737
nasnys@audubon.org
<http://ny.audubon.org>

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Executive Director

8 January 2010

Niagara River Greenway Commission
Beaver Island State Park
2136 West Oakfield Road
Grand Island, New York 14072

To Whom It May Concern:

On behalf of Audubon New York, I am writing to inform you that we are an eager partner in the project to plan and implement habitat restoration and bird habitat enhancement at Joseph Davis State Park that is being submitted by Buffalo Audubon Society.

Joseph Davis State Park lies within the globally significant Niagara River Important Bird Area (IBA) that was designated by Audubon and the Canadian Nature Federation in the late 1990s. Joseph Davis SP is also a state Bird Conservation Area (BCA). The proposed project to restore and enhance bird habitat at Joseph Davis SP is very compatible with the Niagara River IBA Plan and the Joseph Davis BCA Management Guidance Summary.

Audubon New York currently is conducting research on the use of stopover habitat by migrating birds in the Lake Ontario Basin of New York and is well qualified to provide expert advice on the type of habitat that should be restored at Joseph Davis SP.

We look forward to implementing this project with Buffalo Audubon Society and Ecology & Environment, and in consultation with the New York State Office of Parks, Recreation and Historic Preservation.

Sincerely,

Michael F. Burger, Ph.D.

Director of Conservation & Science



ecology and environment, inc.

BUFFALO CORPORATE CENTER

368 PLEASANT VIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060

International Specialists in the Environment

KEVIN S. NEUMAIER, P.E.
PRESIDENT AND CEO

January 11, 2010

Mr. William Hudson
Buffalo Audubon Society
1610 Welch Rd
North Java, NY 14113

Dear Mr. Hudson:

Ecology and Environment, Inc. (E & E) is pleased to participate with Buffalo Audubon Society (BAS) in the proposed project: HABITAT RESTORATION AND BIRD HABITAT ENHANCEMENT, to be conducted at the Joseph Davis State Park, Lewiston, NY.

We understand that this project proposal is being submitted by BAS to the Niagara Greenway Commission for consistency review, and then to a Standing Committee to determine ultimate funding support that will be made available under the NYPA Niagara Relicensing Agreement. We further understand that Audubon New York is another team member on this project.

The specific role of E & E on this is described in the Application. Subject to detailed negotiations prior to contract award, E & E understands that we will provide technical support to the project that will involve habitat assessment, habitat restoration, native and invasive species management, and educational trail planning and development. BAS will be the Greenway Grant recipient and will provide leadership, direction, and project management. E & E will serve as a sub-contractor to BAS for this proposed project.

We support the goals of the BAS as well as those of the Niagara Greenway Commission and endorse the proposal that BAS is submitting for support.

Sincerely yours,

Kevin S. Neumaier



NEW YORK STATE
OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

CAROL ASH
Commissioner

DAVID A. PATERSON
Governor

January 11, 2010

Niagara River Greenway Commission
Beaver Island State Park
2136 West Oakfield Road
Grand Island, New York 14072

To Whom It May Concern:

On behalf of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), I am writing to express support for the proposal to plan and implement habitat restoration and bird habitat enhancement at Joseph Davis State Park that is being submitted by Buffalo Audubon Society, Ecology & Environment, and Audubon New York.

Joseph Davis State Park lies within the globally significant Niagara River Important Bird Area (IBA) that was designated by Audubon and the Canadian Nature Federation in the late 1990s. Subsequent to that designation, Joseph Davis SP was identified by OPRHP and the NYS Department of Environmental Conservation as a Bird Conservation Area (BCA) under a state law that was modeled after Audubon's Important Bird Area program. The proposed project to restore and enhance bird habitat at Joseph Davis SP is entirely compatible with the Niagara River IBA Plan, the Joseph Davis BCA Management Guidance Summary, the Joseph Davis SP Master Plan, and the Niagara River Greenway Plan.

By virtue of its position between two of the Great Lakes, Joseph Davis SP is very heavily used by migrating birds during spring and fall migrations. These birds will benefit from the habitat restoration that is being proposed, as will numerous breeding birds and other species of wildlife that require similar shrubby habitat.

In addition to supporting this proposal, OPRHP, through its regional office and/or Environmental Management Bureau, will be happy to assist with this project as we are able. Given our current fiscal constraints and considerable capital needs, we regret that no Park's Greenway funding will be available over the upcoming three years through the NYS Parks Standing Committee to contribute to this worthwhile project.

Sincerely,

Carol Ash
Commissioner

Empire State Plaza • Agency Building 1 • Albany, New York 12238
518-474-0443 • Fax: 518-474-1365

printed on recycled paper

Joseph Davis BCA Management Guidance Summary

Site Name: Joseph Davis Bird Conservation Area

State Ownership and Managing Agency: Office of Parks, Recreation, and Historic Preservation

Location: Niagara County, Town of Lewiston

Size of Area: ~230 acres

DEC Region: 9

OPRHP Region: Niagara Frontier

General Site Information: The Joseph Davis BCA is part of Joseph Davis State Park. It includes approximately 1,400 feet of frontage on the Niagara River and 31 acres of underwater land. About two-thirds of the BCA is successional shrubland. Mature second growth forests are found in the eastern portion of the BCA and along the Niagara River shoreline. Other ecological communities represented in the BCA are old fields, open water and wetlands.

Joseph Davis State Park is part of the National Audubon Society's Niagara River Corridor Important Bird Area.

Vision Statement: Recreational/interpretive opportunities and access will continue in a manner consistent with conservation of the diverse assemblage of bird species using the area for breeding or during migration.

Key BCA Criteria: Migratory concentration site; diverse species concentration site and species at risk site (ECL §11-2001, 3.e, f, and h). During spring and fall migration, songbirds concentrate along major rivers (Wells 1998a). The habitats along the Niagara River shoreline support an exceptional diversity of migratory songbirds during spring and fall migration (Wells 1998b). The vegetation, including several species of berry producing shrubs at Joseph Davis provide significant food sources for migratory birds (Wells 1998a). The fields host Northern Harrier, Horned Lark, Savannah Sparrow, Bobolink and Eastern Meadowlark. Species at risk include state threatened Pied-billed Grebe, Bald Eagle, Northern Harrier and Common Tern and state species of special concern, Osprey, Sharp-shinned and Cooper's Hawk, Common Nighthawk, Whip-poor-will, Horned Lark and Yellow-breasted Chat. Joseph Davis is also one of the best spots in the Niagara Region for wintering Eastern Bluebirds.

Critical Habitat Types: Successional shrubland is the dominant ecological community in the BCA (OPRHP 1998). Many species dependent on successional habitats have shown dramatic declines in New York State. The upland forest along the Niagara River is important to those migratory songbirds that use the river as a migration corridor during spring and fall.

Operation and Management Considerations:

Identify habitat management activities needed to maintain site as a BCA.

Management of the BCA will safeguard and enhance populations of wild birds and the habitats that the birds depend upon for breeding, migration, shelter, and sustenance.

Maintain the forest, shrubland and old field areas in as nearly natural condition as possible (NYS DEC 1994). Protection of wetland, forest and shrub habitat along the shoreline should be a priority (Wells 1998b).

A specific habitat management plan will be developed in concert with the DEC, Audubon, and other interest groups.

Identify seasonal sensitivities; adjust routine operations accordingly.

To the extent possible, mowing within the BCA will not occur until after birds have fledged their broods, preferably after August 15th.

Identify state activities or operations which may pose a threat to the critical habitat types identified above; recommend alternatives to existing and future operations which may pose threats to those habitats.

There are no current state activities that pose a threat to critical habitats.

Improvements to the trail system and its operation will be subject to environmental review and consultation will be sought from DEC and other resource agencies or groups as appropriate. Activities at the proposed Nature Center will be done in concert with Bird Conservation efforts.

Identify any existing or potential use impacts; recommend new management strategies to address those impacts.

In the fall NYS DEC stocks pheasants for hunting. Hunting is allowed on opening day and the first Saturday of hunting season, by permit only. Any proposed changes in permits for hunting or modification of habitat should be evaluated in terms of the impact to shrubland birds and their habitat.

Education, Outreach, and Research Considerations:

Assess current access; recommend enhanced access, if feasible.

Current access is adequate. Grounds are open year round. Trails are available for hiking, skiing and nature interpretation. Access may increase with implementation of the master plan. Increased access will require prior evaluation relative to bird conservation.

Determine education and outreach needs; recommend strategies and materials.

Education should focus on (1) the value of shrubland and successional fields and (2) the importance of upland habitats along the Niagara River to migratory birds. On a regional level, the importance of the Niagara River as a migratory route and the Joseph Davis BCA's role as part of the Niagara River Corridor Important Bird Area should be interpreted.

Continue cooperation with the Buffalo Ornithological Society and Buffalo Audubon.

A BCA kiosk will be designed and installed in an appropriate location.

Identify research needs; prioritize and recommend specific projects or studies.

Monitor birds in successional shrub and grassland habitats to establish a baseline for these species, especially species at risk.

Contacts:

Thomas Welch, OPRHP, Joseph Davis State Park, 716-754-4596

Tom Lyons, OPRHP, Albany, phone: 518-474-0409

Ray Perry, OPRHP, Albany, phone: 518-474-0409

Sources:

NYS DEC, 1994. *Niagara River Remedial Action Plan*.

NYS Office of Parks, Recreation and Historic Preservation, 1998. *Draft Master Plan and Draft Environmental Impact Statement for Joseph Davis State Park*.

Wells, J.V. 1998a Written comments on Joseph Davis Draft Environmental Impact Statement.

Well, J. V. 1998b Important Bird Areas in New York State, National Audubon Society.

Date BCA Designated: 3/14/05

Date MGS Prepared: 3/9/05

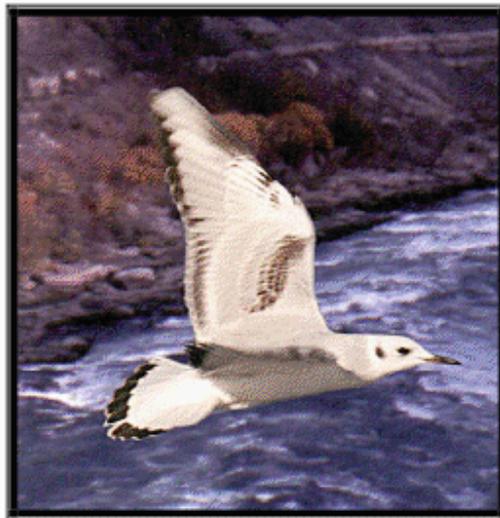
<http://www.dec.ny.gov/animals/27161.html>

**IMPORTANT BIRD
AREAS OF CANADA**



**LES ZONES IMPORTANTES
POUR LA CONSERVATION
DES OISEAUX AU CANADA**

**NIAGARA RIVER CORRIDOR
IMPORTANT BIRD AREA
CONSERVATION PLAN**



By the Niagara River Corridor IBA Working Group

Fall 2002



- Action 2** Summarize toxic loads in local fish species (volunteers).
Progress: Data exists (DFO, other agencies), needs to be summarized.

Priority: MODERATE

Objective B: To identify source areas of heavy metal and organic chemical contaminants affecting selected species.

- Action 1** Summarize information about known contaminant areas in the Niagara River.
- Action 2** Compare diets of bird species with toxic loads in fish species.
Use data from Research Goal 2: Obj. A and Research Goal 4: Obj. A.
- Action 3** Use marking or satellite telemetry to identify habitat use of selected waterfowl species.

Priority: MODERATE

GOAL 4: Determine migrating songbird usage of the Niagara River corridor.

Objective A: To summarize data known on songbird migration through area.

- Action 1** Get summary of migrating songbird research conducted (by TNC) along the New York shoreline of Lake Ontario.
- Action 2** Speak with Dr. J. Black (Brock University) who is using radar to track migration in St. Catharines area (volunteer).
Progress: Dr. J. Black is presently involved in determining how the data from the weather radar can be converted to numbers of birds migrating over Brock University.
- Action 3** Talk to radar operators at the larger airports along the peninsula re: migration routes (volunteer)
- Action 4** Summarize BOS data/surveys, such as the Christmas Bird Counts, the April and May Migration Counts, and the August Shorebird Count.

Priority: MODERATE

Objective B: To develop a study for data collection of songbird migration through the Niagara River Corridor IBA.

Action 1 Get data collection techniques and results from TNC re: migrating songbird research conducted along the New York shoreline of Lake Ontario (volunteer).

Action 2 Develop protocol and identify important areas for similar study on both Ontario and New York sides of the Niagara River Corridor (Sci. Comm., Bird Studies Canada).

Action 3 Find and organize volunteers to survey potentially important areas in spring 1999.

Priority: MODERATE

INFRASTRUCTURE GOALS FOR THE NIAGARA RIVER CORRIDOR IBA

GOAL 1. Promote communication and cooperation among Niagara River Corridor IBA partners, so their respective actions are coordinated, efficient, effective, cooperative, and value-added relative to each other.

Objective A: To facilitate communication amongst Niagara River Corridor IBA partners.

Action 1 Maintenance of email and fax mailing list to facilitate communication.

Progress: Email: This is working well, most members on email; need to get more people on the NY-NRIBA list serv. We need a volunteer to take over the fax mailing list.

Action 2 Meet regularly as a group to make decisions on direction of Niagara River Corridor IBA group actions.

Progress: With completion of this plan, a more regular meeting schedule should be set.

Action 3 Get smaller committees to work on actions and provide information to the entire group at meetings.

Progress: Science Committee has met. Other committees (Education, Gull Festival, etc.) should be formed.

Priority: MODERATE

Objective B: To produce a conservation plan for Niagara River Corridor IBA with longer-term goals.

Action 1 The Action Plan needs to be rewritten into a more comprehensive conservation plan format.

Progress: this is the penultimate draft.

Action 2 All interested members of the Niagara River Corridor IBA will have the opportunity to comment and revise sections of this, and future plans.

Progress: ongoing

Priority: HIGH

CONSERVATION GOALS FOR THE NIAGARA RIVER CORRIDOR IBA

GOAL 1. Ensure the sustainability of key resources and habitats for IBA bird species (once we have identified these resources/habitats with supporting scientific data).

Objective A. To encourage, persuade, and support governments and major landowners.

Action 1 Advocate for government follow-through on RAPs implementation

Action 2 Ensure bird conservation is a priority within the Canadian and American RAPs.

Action 3 Promote Niagara River Corridor IBA species with CWS booklet and Niagara River Corridor IBA pamphlet. Completed 1999.

Action 4 Continue to encourage government agencies and landowners to join the Niagara River Corridor IBA group.

Priority: HIGH

Objective B. To have relevant agencies manage habitat on public lands.

Action 1 Determine important habitat (see Research Goal 2) and possible management.

Action 2 Work with the relevant agencies.

Objective C. To manage water quality, via the RAP, GLI, and LaMP programs.

Action 1 Determine contaminants affecting IBA species (see Research Goal 4).

Action 2 Advocate for government follow-through on RAPs implementation.

Objective D. To have public agencies and stewardship organizations acquire and manage land.

EDUCATION AND OUTREACH GOALS FOR THE NIAGARA RIVER CORRIDOR IBA

GOAL 1 Inform and educate various interest groups about the importance of and opportunities surrounding the Niagara River Corridor IBA.

Objective A: To inform and educate local government leaders, the general public (locals, tourists, and potential tourists), and local school children about the global significance of the abundance and species diversity of gulls and waterfowl using the river in late fall and early winter and the overall importance of the corridor for biodiversity conservation in a highly modified landscape.

- Action 1** Produce pamphlet with information on Niagara River Corridor IBA working group, identification of important gull and waterfowl species, and map with viewing locations.
Progress: completed
- Action 2** Place pamphlets in high traffic tourist areas (NPC, NYSParks, etc.).
- Action 3** Create “Niagara River Corridor IBA Charter”, and encourage municipalities to sign on the IBA concept.
- Action 4** Promote and learn from NY State Bird Conservation legislation (NAS).
- Action 5** Develop a logo.
- Action 6** Develop an informational package targeting adults, e.g. slide presentation and handouts, and present to local government, business, and other groups (NAS-NYS).
- Action 7** Develop an informational/educational package targeting school children (create with input from experienced environmental education experts) and present at local schools (NAS-NYS).
- Action 8** Promote Niagara River Corridor IBA in the local, state, and provincial media (e.g. volunteer journalists write for local media; NY groups encourage NYSDEC to film a piece during winter for their new TV show).
- Action 9** Promote available pamphlets, fact sheets, and informational/educational presentations, i.e. identify potential target groups.
Progress: Buffalo Institute of Urban Ecology has information already available for distribution
Priority: HIGH

Objective B: To inform and educate the same groups (above) about the tremendous quality of the bird-watching resource of the area and the ecotourism opportunities within the corridor during the off-season, i.e. winter.

Action 1 Create a committee to promote and broaden the International Gull Festival into a binational event (all members).

Action 3 Provide a gull and waterfowl observation day for school groups, staffed by volunteers and Niagara River Corridor IBA members at 2 key concentration sites annually (in conjunction with Gull Festival).

Action 4 Arrange for local politicians and business leaders to attend Gull Festival and/or bird-watching trips to the area.

Action 5 Promote Niagara River Corridor IBA bird-watching opportunities in the local, state, and provincial media (e.g. volunteer journalists write for local media; NY groups encourage NYSDEC to film a piece during winter for their new TV show).

Priority: HIGH

GOAL 2. Develop ecotourism around bird-watching opportunities in the Niagara River Corridor.

Objective A: To promote/market/develop birding ecotourism during the off-season, i.e. winter.

Action 1 Promote bird-watching trips to the area, especially those targeting gulls and waterfowl during the winter season.

Action 2 Organize birding trips to the area.

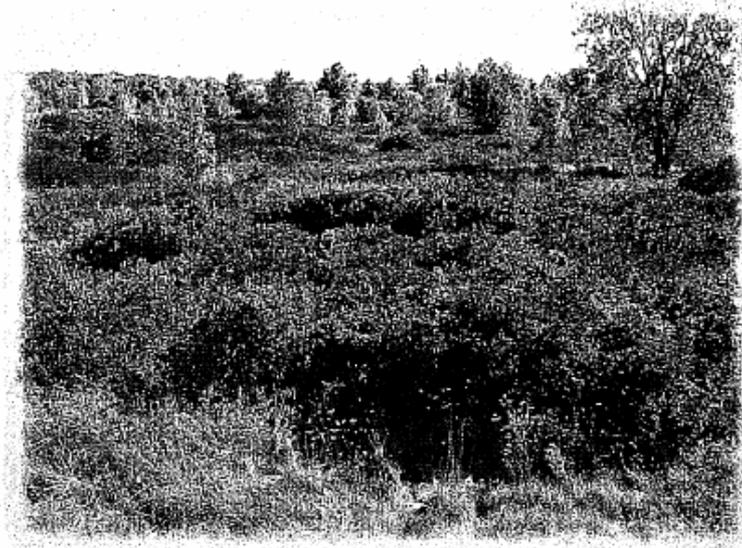
Action 3 Market birding trips outside the local area; enlist help of local businesses.

Priority: LOW

GOAL 3. Encourage broader participation in Niagara River Corridor IBA issues.

Objective A: To provide background information on the IBA program and the binational Niagara River Corridor IBA conservation partnership to various interest groups.

**FINAL MASTER PLAN
AND
FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR**



JOSEPH DAVIS STATE PARK
Niagara State Park Region
Niagara County, New York

Lead Agency:



NYS Office of Parks, Recreation & Historic Preservation
Empire State Plaza
Agency Building 1
Albany, New York 12238

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Environmental Design & Research, P.C.
238 West Division Street
Syracuse, New York 13204

Date of Completion: February 4, 2004

As proposed in the Final Master Plan, the pond will be enlarged and deepened to make it more suitable for a wider variety of recreational uses such as fishing and paddle-boating. Handicapped accessible fishing docks will be installed as well as trails around the pond. A paddle boat concession could be operated by OPRHP or by some other partner.

Winter recreation activities are also envisioned to take place in this area. An existing restroom could be kept open year-round and used as a warming hut. One or two portable roll-out ice rinks are proposed. Cross-country skiing currently occurs in the park and will continue, with this area serving as a staging area. Skate and ski rental concessions are also possibilities in this area.

The existing pool complex will be adaptively re-used. The Final Master Plan envisions this facility being redeveloped as a nature center with a focus on birds, especially birds of prey. The center would be the focal point of the park's interpretive programs and is anticipated to include display and classroom space. This facility would also serve as the gateway to the unique interpretive trails and environmental education features proposed for the Eastern Area of the park. The OPRHP is currently working with the Buffalo Audubon Society on a partnership agreement for this area.

Primary activities in the undeveloped Eastern Area of the park currently include walking, jogging, bird watching, fishing, and pheasant hunting. Most park users in this area confine their activity to the mowed trails, due to the density of the shrub thickets in this area. The Master Plan identifies the designation of this area as a Bird Conservation Area (BCA). The boundaries of the Joseph Davis State Park BCA are shown on Figure 10. Part of the BCA designation involves the creation of a Management Guidance Summary (MGS) that describes how habitat in the area will be managed. A MGS for the proposed Joseph Davis State Park BCA is included in Appendix C. More detailed management plans for this area of the park will be developed in conjunction with the NYSDEC and other groups such as the Audubon Society. It is anticipated that habitat management in this area will focus on maintaining early successional habitats (meadow and shrubland) that are becoming increasingly rare in the region.

The Eastern Area will also support the park's interpretive program. An outdoor classroom area will be developed and an interpretive/adventure trail with innovative designs such as shrub-top trailways and boardwalk systems in wetland areas may be incorporated into the

final design of this area. Environmental adventure stations that incorporate elements of discovery and play into the learning experience may be incorporated into the trail. These stations would be unique to the State Park system and could serve as a significant attraction for families and school groups throughout the region. Examples of the types of stations that could be developed include the following:

- Subterranean Search – A fully or partially buried trail segment that provides opportunities for viewing soil structure, root growth, animal burrows, etc.
- Meadow Labyrinth – A mowed maze within a native meadow area. Narrow mowed corridors allow up-close observation of meadow plants and wildlife while children navigate their way through to the other side.
- Tree or Shrub-Top Trail – An elevated section of trail, utilizing rope and timber construction, that provides access into trees or over shrub area. Up-close views of the arboreal community and long distance views of the surrounding park will be provided. (Alternate ground level trail segment would also be provided).
- Fallen Tree Adventure Area – An assemblage of fallen logs (including hollow logs) provides opportunities for play while introducing children to the value of fallen timber in the forest ecosystem.
- Build-A-Fort and Wildlife Viewing Blind – A blind allows photographers and bird watchers enhanced opportunities for wildlife observation. Associated loose timbers and limbs can also be used by children to build impromptu forts.
- Rope Swing – A simple rope swing suspended from a tree limb over a ditch or wet area serves as an alternative to a boardwalk crossing (also provided).
- Pond Overlook – An elevated structure providing views over existing ponds and possible wetland enhancement area. Enhanced wildlife viewing opportunities possibly utilizing a soil mound created from excavation of the wetland enhancement area.

APPENDIX C

Draft Management Guidance Summary for Joseph Davis State Park Bird Conservation Area

**New York State
Bird Conservation Area Program
Management Guidance Summary**

Site Name: Joseph Davis BCA

State Ownership and Managing Agency: Office of Parks, Recreation, and Historic Preservation

Location: Niagara County, Town of Lewiston

Size of Area: ~ 230 acres

DEC Region: 9

OPRHP Region: Niagara Frontier

General Site Information: The Joseph Davis BCA is part of Joseph Davis State Park. It includes approximately 1,400 feet of frontage on the Niagara River and 31 acres of underwater land. About two-thirds of the BCA is successional shrubland. Mature second growth forests are found in the eastern portion of the BCA and along the Niagara River shoreline. Other ecological communities represented in the BCA are old fields, open water and wetlands.

Joseph Davis State Park is part of the National Audubon Society's Niagara River Corridor Important Bird Area.

Vision Statement: Recreational/interpretive opportunities and access will continue in a manner consistent with conservation of the diverse assemblage of bird species using the area for breeding or during migration.

Key BCA Criteria: Migratory concentration site; diverse species concentration site and species at risk site. (ECL §11-2001, 3.e, f, and h).). During spring and fall migration, songbirds concentrate along major rivers (Wells 1998a). The habitats along the Niagara River shoreline support an exceptional diversity of migratory songbirds during spring and fall migration (Wells 1998b). The vegetation, including several species of berry producing shrubs at Joseph Davis provide significant food sources for migratory birds (Wells 1998a). The fields host Northern Harrier, Horned Lark, Savannah Sparrow, Bobolinks and Eastern Meadowlark. Species at risk include state threatened Pied-billed Grebe, Bald Eagle, Northern Harrier and Common Tern and Species of Special Concern, Osprey, Sharp-shinned and Cooper's Hawk, Common Nighthawk, Whip-poor-will, Horned Lark and Yellow-breasted Chat. Joseph Davis is also one of the best spots in the Niagara Region for wintering Eastern Bluebirds.

Critical Habitat Types: Successional shrubland is the dominant ecological community in the BCA (OPRHP 1998). Many species dependent on successional habitats have shown dramatic declines in New York State. The upland forest along the Niagara River is important to those migratory songbirds that use the river as a migration corridor during spring and fall.

Operation and Management Considerations:

- *Identify habitat management activities needed to maintain site as a BCA.*

Management of the BCA will safeguard and enhance populations of wild birds and the habitats that the birds depend upon for breeding, migration, shelter, and sustenance.

Maintain the forest, shrubland and old field areas in as nearly natural condition as possible (NYS DEC 1994). Protection of wetland, forest and shrub habitat along the shoreline should be a priority (Wells 1998b).

A specific habitat management plan will be developed in concert with the DEC, Audubon, and other interest groups.

- *Identify seasonal sensitivities; adjust routine operations, accordingly.*

To the extent possible, mowing within the BCA will not occur until after birds have fledged their broods, preferably after August 15th.

- *Identify state activities or operations that may pose a threat to the critical habitat types identified above; recommend alternatives to existing and future operations, which may pose threats to those habitats.*

There are no current state activities that pose a threat to critical habitats.

Improvements to the trail system and its operation will be subject to environmental review and consultation will be sought from DEC and other resource agencies or groups as appropriate. Activities at the proposed Nature Center will be done in concert with Bird Conservation efforts.

- *Identify any existing or potential use impacts; recommend new management strategies to address those impacts.*

In the fall NYS DEC stocks pheasants for hunting. Hunting is allowed on opening day and the first Saturday of hunting season, by permit only. Any proposed changes in permits for hunting or modification of habitat should be evaluated in terms of the impact to shrubland birds and their habitat.

Education, Outreach, and Research Considerations:

- *Assess current access; recommend enhanced access, if feasible.*

Current access is adequate. Grounds are open year round. Trails are available for hiking, skiing and nature interpretation. Access may increase with implementation of the master plan.

Increased access will require prior evaluation relative to bird conservation.

- *Determine education and outreach needs; recommend strategies and materials.*

Education should focus on (1) the value of shrubland and successional fields and (2) the importance of upland habitats along the Niagara River to migratory birds. On a regional level, the importance of the Niagara River as a migratory route and the Joseph Davis BCA's role as part of the Niagara River Corridor Important Bird Area should be interpreted.

Continue cooperation with the Buffalo Ornithological Society and Buffalo Audubon.

A BCA kiosk will be designed and installed in an appropriate location.

- *Identify research needs; prioritize and recommend specific projects or studies.*

Standardized point counts should be done on a weekly basis during spring and fall migrations.

Monitor birds in successional shrub and grassland habitats to establish a baseline for these species, especially species at risk.

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Ray Perry, OPRHP, Albany, phone: 518-474-0409

Sources:

NYS DEC, 1994. *Niagara River Remedial Action Plan*

NYS Office of Parks, Recreation and Historic Preservation, 1998. *Draft Master Plan and Draft Environmental Impact Statement for Joseph Davis State Park*

Wells, J.V. 1998a Written comments on Joseph Davis Draft Environmental Impact Statement

Well, J. V. 1998b Important Bird Areas in New York State, National Audubon Society

Date Designated:

Date Prepared: 08/28/03