State Wildlife Incentive Grant Program State of Illinois

Final Report

PROJECT NUMBER: T-28-M-1

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

PURPOSE/NEED:

The State of Illinois contains over 36 million acres, including more than 26,000 miles of streams. Illinois is divided into 14 Natural Divisions that describe the different physiographic and biotic communities found across the state (Schwegman 1973).

While Illinois supports a wide diversity of floral and faunal species, the current landscape now supports only a small fraction of the biodiversity and tremendous plant and animal populations that once existed. The Illinois Critical Trends Assessment Project (1994) and the Department of Natural Resources (2001) concluded that the natural ecosystems of Illinois are rapidly declining as a result of fragmentation and continual stress. Most agricultural land is in intensive monoculture covering 77.5% of the total land area of the state. In contrast, native grassland has declined. Less than 0.1% of the original tall grass prairie remains. Forested areas, while increasing, cover only 11% of the land area. Illinois has lost approximately 90% of its wetlands. The remaining natural wetlands now occupy 3.2% of Illinois, and only 6,800 acres are graded as high quality. Urban sprawl continues to threaten natural areas and other open spaces. Road construction, industrial discharges and the continued introduction of invasive exotic species, whether accidental or intentional, continue to cause stress on our natural systems. Most of the wetlands have been cleared, drained, or altered. Due to these changes in the landscape, the diversity, abundance and distribution of Illinois' floral and faunal species have suffered and diminished.

The General Assembly defines IDNR's powers and duties in Article 805 of the Civil Administrative Code, 20 ILCS 805/805-1 et seq., which provides the framework for IDNR operations. Article 805 states that "the Department has the power to take all measures necessary for the conservation, preservation, distribution, introduction, propagation, and restoration of fish, mussels, frogs, turtles, game, wild animals, wild fowls and birds." (20 ILCS 805-805-100). Section 805-225 authorizes the conservation of natural and scenic areas, and Section 805-225 authorizes the development of recreational areas and facilities.

The following excerpts are from the goals and objectives of the IDNR's "STRATEGIC PLAN 2003-08, Strategic Issue 1 Natural and Cultural Resource Protection" at

http://163.191.195.105/StrategicPlan/resource.htm. Goals 1.1.1 and 1.1.2 have been established to direct the Department in addressing the issue of achieving sustainable ecosystems while meeting the broad array of other functions and responsibilities that the Department must address.

"Challenge 1.1 How can IDNR best restore, enhance, and sustain Illinois' natural and cultural resources for present and future generations?

Illinois' ecosystems (forests, lakes, rivers, wetlands, grasslands, and coastal estuaries) are vulnerable to disturbance, pollution, degradation and destruction as a result of human activities. Land use development patterns are a major stressor of ecosystems. Road building, stream channelization, industrial discharges, farming, home building, and many other activities alter the natural environment. The introduction of exotic plant and animal species into the state also

threatens native species and their ecosystems.

The impacts of change may be dramatic or subtle, abrupt or gradual. The cumulative impact from many small, unnoticed changes can result in habitat fragmentation and significantly diminish the capacity of ecosystems to renew themselves. Action needs to be taken to address these issues.

The IDNR has adopted an ecosystem-based strategy for managing the State's fish, wildlife, and plant resources. Management practices and methods that are the most effective in restoring ecosystem structure and function are being developed and implemented. Management activities include: prescribed burns of grasslands and forests, monitoring fish and wildlife populations utilizing a variety of surveys and census activities, protecting populations by establishing harvest and species protection regulations, and implementing population control efforts to address invasive/nuisance species. State-of-the-art information technologies are utilized to maintain resource databases to improve ecosystem management decision-making.

Goal 1.1.1 Protect and restore habitat.

The IDNR incorporates a diverse, broad approach to protect and restore a variety of habitat types. This approach embraces several strategies that address habitat protection and restoration on public and private lands, including land acquisition, conservation easements, formal dedications, and voluntary-incentive based programs. A secondary benefit of habitat restoration work is the sequestration of carbon from the atmosphere (CO2) through photosynthesis..."

Expected Outcomes

1. Improved ecosystem health.2. Increased biodiversity.3. Increased carbon sequestration.

Performance Measures 1. Number of acres enhanced on public lands for wildlife habitat.2. Carbon sequestration based on acres (tons).3. Number of acres protected as dedicated Nature Preserves.

Objectives

Objective 1.1.1.1 Protect and maximize quality habitat for all wildlife species and maintain the integrity of sensitive, high quality natural communities.

Objective 1.1.1.2 Develop a process which incorporates ecosystem management principles that can be used at any level of landscape planning to target the restoration of specific natural resources.

Objective 1.1.1.3 Protect habitat using formal dedications, e.g., Natural Preserve, Land & Water designations, and Natural Heritage Landmarks.

Objective 1.1.1.4 Propagate trees, shrubs and prairie grass seed in our nurseries and make available for restoring quality habitats..."

Goal 1.1.2 Manage plant and animal communities using ecosystem management principles. The state has approximately 2200 known native plant species, 15 percent of which are categorized as endangered or threatened, meaning some species are becoming increasingly rare or even face possible extinction within the state's ecosystems. Illinois also has a diverse mix of animals including 59 types of native mammals, 196 species of fish, 297 kinds of birds, 61 species

of reptiles, and 41 amphibian species.

The Illinois Endangered Species Protection Board (2004) lists 331 plants, 8 mammals, 32 fishes, 15 reptiles, and 52 invertebrates as either threatened or endangered in Illinois. The Board also maintains a "watch list", which identifies another 43 species whose status is unknown or are of special concern.

The downward population trends for these species must be reversed. This can be done through the development of recovery plans for individual species or for groups of species with similar ecological requirements. It is also important for the Department to be committed to an aggressive, comprehensive prevention strategy to provide protection for all native species, using ecosystem management principles.

Expected Outcomes

1. Improved ecosystem health.2. Stabilized or increased biodiversity.3. Increased protection for endangered and threatened species.

Performance Indicators

1. Number of surveys conducted for specific plant and animal species. 2. Number of at risk species evaluated to determine population trends.

Objectives

Objective 1.1.2.1 Establish plant and animal species harvest and protection regulations and administrative rules and measure harvests annually.

Objective 1.1.2.2 Conduct surveys and census activities for targeted plant and animal species.

Objective 1.1.2.3 Develop & implement recovery plans for targeted endangered and threatened species and protect and restore the range of these species.

Objective 1.1.2.4 Develop and implement strategies to control or reduce invasive species.

Objective 1.1.2.5 Conduct prescribed burns using state-of-the-art methods.

Objective 1.1.2.6 Utilize state-of-the-art Geographic Information System technologies and highly trained staff to maintain resource databases to improve ecosystem management decision-making.

Objective 1.1.2.7 Develop and document scientifically based ecosystem practices for general use and access..."

The Department of Natural Resources has also submitted and had approved their Wildlife Action Plan (http://dnr.state.il.us/orc/wildliferesources/theplan/home.htm.) This plan outlines 654 species in greatest conservation need, including, 433 invertebrates, 79 fish, 14 amphibians, 23 reptiles, 85 birds, and 20 mammals. The plan also identifies habitat areas that demonstrate the greatest conservation need and potential. It also establishes specific conservation goals for the enhancement and protection of these sites. The plan identifies tools to achieve specific and broad conservation goals for forest, opens woodland/savanna/barrens, grassland, shrubland, wetland, lakes, ponds and streams. Besides fulfilling the legal requirements for receiving federal aid funding under WCRP and SWG, the CWCPS will support future grants, direct habitat programs, guide the

management of IDNR sites and land acquisitions, and facilitate partner projects with federal, local and not-for profit conservation organizations and private landowners. This plan will be useful for prioritizing allocations from the State Wildlife Grants Program , Federal Aid in Sportfish and Wildlife Restoration, waterfowl stamp, habitat stamp, furbearer fund, Wildlife Preservation Fund, C2000 Ecosystem Program, Natural Areas Acquisition Fund, and other sources. The following excerpts are from the goals and objectives of the Wildlife Action Plan.

"IDNR has set the following habitat goals below for 2025. Goals for these major habitat types are compilations of habitat objectives derived for individual species or guilds. Note that habitat objectives are complimentary in nature, e.g., restoring and managing terrestrial habitats contributes to reduced sedimentation in wetlands and streams, and thus will benefit multiple habitats, SGNC, sport fishes and game animals.

Forest -

- 1. Implement improved forestry practices, including timber stand improvement, prescribed fire and invasive species control to enhance oak-dominance and maintain understory diversity on 1 million acres of forest.
- 2. Increase statewide forest acreage by 350,000 acres, emphasizing restoration of floodplains and riparian corridors, increasing ecological connectivity among forests and other habitat patches, and reducing fragmentation of forests 500 acres and larger.
- 3. High-quality examples of all forest communities are restored and managed within all natural divisions within which they occur.
- 4. Urban forests are healthy and well-maintained.

Open Woodland/Savanna/Barrens -

- 1. Extent and condition of open woodland, savanna, and barrens habitats are known and monitoring can identify conservation needs.
- 2. Degraded habitats have been identified and restored as possible; small woodlots are managed as open woodlands/savannas as appropriate.
- 3. High-quality examples of all open woodland, savanna and barren communities are restored and managed within all natural divisions within which they occur.

Grassland -

- 1. An additional 1 million acres of grassland, emphasizing upland, treeless grasslands larger than 0.5 mile wide and ecological connectivity among grasslands and other habitat patches, are established and maintained.
- 2. Wildlife-value (structure, floral diversity, disturbance regimes) of 1 million existing acres of grassland are enhanced.
- 3. Five additional "ecological pattern" grassland Bird Conservation Areas (BCAs; see Fitzgerald et al. 2000) have been established.
- 4. Three wet prairie areas of 1,000 to 2,000 acres, connected by dispersal corridors, are restored and managed in the Grand Prairie natural division.
- 5. At least 6 areas (300-500 acres each) of ephemeral wetlands and accompanying upland sand prairie habitat are restored and managed for Illinois chorus frogs in the inland sand areas.
- 6. High-quality examples of all prairie communities are restored and managed within all natural divisions within which they occur.

Shrub/successional -

1. Extent and condition of shrub/successional habitats are known and monitoring can identify

conservation needs.

- 2. Additional habitat has been established and is being managed.
- 3. As appropriate, small woodlots and forests have native shrub-dominated, early successional edges and perennial herbaceous borders.

Wetland -

- 1. A net gain of 20% of marsh wetland types is achieved through restoration, enhancement and management.
- 2. A net gain of 40% of combined wetland types is achieved in the river bottomlands natural divisions of Illinois.
- 3. Ephemeral and fishless semi-permanent wetlands (i.e. vernal pools, prairie potholes, landscape depressions) support objectives for dependent species of wildlife.
- 4. Moist-soil management strategies adopted on public waterfowl management areas and other sites increase wading bird, waterfowl, shorebird, and other wildlife use."

To address the objectives of Goals 1.1.1 and 1.1.2 from IDNR's "STRATEGIC PLAN 2003-08, Strategic Issue 1 Natural and Cultural Resource Protection" above, the IDNR has put in place a number of comprehensive programs and initiatives to address the loss of habitat; the spread of invasive, exotic species; improving and expanding quality habitat. The Illinois Endangered Species Protection Board (2004) lists 339 plants, 9 mammals, 31 fishes, 16 reptiles, 8 amphibians, 32 birds and 48 invertebrates as either threatened or endangered in Illinois. The Board also continually monitors populations of animals and plants that are not yet listed but are in question as to their status/designation.

Approximately 720,000 acres of the state of Illinois is in public ownership. These acres are entirely devoted to natural resource management. The Illinois Natural Areas Inventory (INAI) identifies 363,284 acres as having significant natural communities that serve as habitat for a multitude of wildlife species, including endangered and threatened plants and animals. A portion of this acreage is publicly owned. The Illinois Nature Preserves Commission has dedicated 44,085 acres as Nature Preserves and enrolled another 33,521 acres Land and Water Reserves Program throughout the state. Through these programs, permanent easements are established solely for conservation purposes. The need for restoration of these protected and/or public lands for wildlife habitat far exceeds available funding.

Similarly, IDNR's *Wildlife Action Plan* developed priority conservation strategies for Illinois habitats to meet these ambitious conservation goals listed above. These include:

Forests

- 1. Maintain and enhance the composition of Illinois' forested habitats
- 2. Expected increases in statewide forest acreage (the continuation of an 80-year trend) should emphasize restoring floodplains and riparian corridors, ecological connectivity, and reducing fragmentation.
- 3. Develop and expand programs to assist private forest owners in managing forest resources.
- 4. Promoting the increased use of prescribed fire and sustainable forestry practices will require a campaign of marketing, demonstration areas on public and private forests, technical assistance, professional training, access to fire equipment, cooperation with fire protection districts, and reform or clarification of liability issues.
- 5. Local and state authorities must cooperate to develop zoning criteria and local greenway

- plans that protect important habitats and ensure "smart growth."
- 6. Fill information gaps and develop conservation actions to address stresses
- 7. Restore and manage high-quality examples of all forest, savanna and barrens communities in all natural divisions within which they occur

Grasslands

- 1. Through incentives-based programs and technical assistance, establish or restore grassland, early successional/shrub, wetland, and riparian habitat.
- 2. Through incentives-based programs and technical assistance, moderate disturbance regimes and enhance the condition of farmland habitats.
- 3. Restore and manage native prairie communities and populations of imperiled and extirpated prairie wildlife.
- 4. Emphasize multiple-resource benefits of conservation in agricultural landscapes.
- 5. Inter-agency cooperation and coordination to ensure agricultural programs do not have conflicting objectives.
- 6. Fill information gaps and develop conservation actions to address stresses.
- 7. At local, county and regional scales, involve stakeholders in discussions of long-term land use planning to meet agricultural, conservation, economic, residential and recreational needs.
- 8. Clarification or change in liability statues to promote private land access.

Wetlands

- 1. Improve the condition of existing natural and artificial wetlands.
- 2. adopt moist-soil management strategies on public waterfowl management areas and other sites that increase wading bird, waterfowl, shorebird, and other wildlife use
- 3. Develop and manage additional wetland habitat
- 4. Fill information gaps and develop conservation actions to address stresses, inter-agency cooperation and coordination to ensure wetland programs do not have conflicting objectives
- 5. Emphasize multiple-resource benefits of wetland conservation.
- 6. Increase water quality education efforts in areas under high development pressure and/or within fragile geographic zones (i.e. karst terrain)

Funds approved through this grant will be used to expand the restoration and stewardship of high quality wildlife habitats on publically owned lands to meet the goals and objectives set forth in the IDNR's STRATEGIC PLAN 2003-08, Strategic Issue 1 Natural and Cultural Resource Protection and Illinois' Wildlife Action Plan. This project will include species protection and recovery efforts for specific wildlife populations. Target species include endangered or threatened species in Illinois as well as many listed as "species in greatest conservation need" within the Wildlife Action Plan. Habitat protection, habitat management, surveys to locate extant populations, monitoring of the effects of management practices and improving natural resource databases are examples of the types of activities done under this effort. The management and restoration of rare habitat types that contain unique assemblages of wildlife will also be targeted among different physiographic divisions. The focus of this initiative is suitable IDNR-owned sites. Projects will include habitat expansion, protection and stewardship, management for state and federal endangered and threatened species, and invasive species management.

RESULTS:

Amendments

The original segment of T-28-M-1 was for approved for 13 sites and 640K with a 1:1 Fed/State cost share. The contract was amended 7 times between 2006-2012. Amendments added funds, time, sites, or small language changes to the approach of the grant. As a result, T-28-M-1 included 30 sites at a cost of more than \$4,108,699.00. The significant changes to the grant via amendment are included below.

Amendment #1: Ten sites and \$347,000.00 in FY06 SWG Funds to be matched with \$347,000.00 in state match (50:50) were added to the project. The additional 10 sites brought the total number of sites within the grant to twenty three. The grant was also extended one year to December 31, 2009

Amendment # 2: This amendment to T-28-M-1 obligated the balance of the remaining SWG'06 fed aid funding of \$107,530 (50% federal share) for additional habitat restoration/management work and to help address equipment needs at Prairie Ridge to benefit the Prairie Chicken, as one of the species of greatest need of conservation at this site. This was possible because two previously approved SWG'06 projects, the "Open Grassland Project, Phase II with the National Wild Turkey Federal" @ \$27,550 (50% fed aid) and the "Farmland & Prairie Campaign" of the IDNR @ \$79,980 (50% fed aid) were dropped.

Amendment #3: An amendment to T-28-M-1 obligate SWG'07 fed aid funding of \$71,492 (50% federal share) for personal services to implement additional habitat restoration and management work, and to help address equipment needs at Prairie Ridge to benefit the Prairie Chicken, as one of the species of greatest need of conservation at this site.

Amendment #4: An amendment to T-28-M-1 obligated FY07 SWG funding of \$1,082,766.00 (50% federal share) for personal services to implement additional habitat restoration/management work at 6 additional sites. This amendment brought the total number of sites in the grant to thirty. The grant deadline was also extended from December 31, 2009 to December 31, 2011.

<u>Amendment #5</u>: An amendment to T-28-M-1 added groundwater monitoring to the hydrological restoration Approach Section of the grant proposal. This allowed for further comprehensive analysis of the hydrology restoration at Iroquois State Wildlife Area, Job #2.

Amendment #6: On August 5, 2011, the USFWS approved Amendment #6 to T-28-M-1 Public Lands SWG to extend the grant's deadline from December 31, 2011 to December 31, 2012 because State fiscal issues delayed a dozen contracts by 12 months or more.

Amendment #7: On June 13, 2012 the final amendment to T-28-M-1 Public Lands SWG was submitted to the USFWS for approval. This amendment added \$503,366.00 in SWG FY11 money to carry out activities among the 10 remaining jobs not completed in the grant. It was matched with in-kind personnel services totaling \$830,553.00 and therefore, met, the new 65:35 match ratio of federal to state dollars.

Appendix A provides the seven amendments that were approved by the USFWS and how each changed the overall grant.

Budget

The original budget was \$640,000.00 with a 50:50 match ratio federal to state dollars. Five times additional funds were added, including amendments #1, #2, #3, #5, and #7. The grant ended up totaling \$3,640,310.00, including \$1,890,771.00 in federal funds and \$1,749,539.00 in state funds (Table 1).

Budgetary expenditures of all the Public Lands SWG grants have always changed between the proposal and the final budget. From R-6-D-1, T-5-M-1 to the current T-28-M-1, the proposal is just a rough estimate of what goods and services will cost. Over the life of the grant, funds are taken from some jobs and added to others (always approved and/or noted through an amendment or annual report). In addition funds are added over the life of the grant. Of particular note for this grant was the extraordinary amount of in-kind state match. Retirements led staff to administering additional jobs that required a steep learning curve. The nationwide economic downturn led to lower bids, and therefore, more paperwork to get jobs bid out. There was even a year when all contracts were put on hold, requiring them to be rebid. All of these lead to increased staff time on T-28-M-1 jobs.

Table 1: Actual dollar sum of T-28-M-1 grant agreement and approved the approved amendments between 2006-2012.

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Budget Details of T-28-M-1 between 2006 – 2012					
	Federal Share	State Share	Match Ratio	Total Funds	
Grant Request	\$320,000.00	\$320,000.00	50:50	\$640,000.00	
Amendment #1	\$347,000.00	\$347,000.00	50:50	\$694,000.00	
Amendment #2	\$107,530.00	\$145,500.00	50:50	\$253,030.00	
Amendment #3	\$71,492.00	\$71,492.00	50:50	\$142,984.00	
Amendment #5	\$541,383.00	\$541,383.00	50.50	\$1,082,766.00	
Amendment #7	\$503,366.00	\$347,187.00	65:35	\$830,553.00	
TOTAL REQUESTED	\$1,890,771.00	\$1,772,562.00		\$3,663,333.00	
TOTAL EXPENDED	\$1,890,771.00	\$1,749,539.00*		\$3,640,310.00	

^{* =} Does not include state in-kind personnel match

ACCOMPLISHMENTS

Thirteen sites were originally chosen for the grant. Amendment #1 added 11 sites to the grant and Amendment #4 added an additional 6 sites to the grant for a total of 30 sites included in the grant. Project sites were ion public ownership and, selected in part, based upon their ability to protect endangered, threatened, or conservation priority species, whether the project improved rare or declining habitats, maintained or improved already existing high quality sites, and/or how the project fit into IDNR's Wildlife Action Plan goals and campaign strategies.

The 30 sites within the grant include: Jim Edgar Panther Creek State Fish and Wildlife Management Area, Iroquois County State Wildlife Area Land and Water Reserve, Hooper Branch Savanna Nature Preserve, Prairie Ridge State Natural Area, Harlem Hills Nature Preserve, Rock Cut State Park, Jubilee College Forest Nature Preserve, Jubilee College State Park, Starved Rock State Park, Rend Lake State Fish and Wildlife Area, Mount Vernon Game Propagation Center, Silver Springs State Fish and Wildlife Area, Union County Conservation Area, Stephen A. Forbes State Park, Cypress Pond State Natural Area, Sparks Pond State Natural Area, Rollo Prairie State Natural Area, Illinois Sand Areas Land and Water Reserve, and Sand Ridge State Forest., Des Plaines Dolomote Prairie Land and Water Reserve, Miller Anderson Woods Nature Preserve, Weinberg-King State Park, and the newly acquired Fliermans property, a satellite of Middle Fork State Natural Area, Washington County Conservation Area, Posen Woods Nature Preserve, Franklin Creek State Natural Area, Pine Rock Nature Preserve, Nachusa

Grasslands, Chauncey Marsh Nature Preserve and State Natural Area, Beall Woods Nature Preserve, Red Hills State Park, Red Hills Woods Nature Preserve, Red Hills Seeps Spring Land and Water Reserve, Ramsey Lake State Park, Rock Cave Nature Preserve, Rock Cave Land and Water Reserve, Kickapoo State Recreational Area, Green River Fish and Wildlife Area, Goose Lake Prairie State Natural Area, Cache River State Natural Area, Collier Glades Land and Water Reserve, Gibbons Creek Barrens Nature Preserve, Volo Bog State Natural Area, Moraine Hills State Park, and Chain O Lakes State Park. Figure 1.provides the locations of the sites across the state.



Figure 1. Thirty projects across the state were included in the USFWS T-28-M-1 grant.

The work completed within the grant will have a lasting effect these 30 public sites and the related species in greatest need of conservation. At Prairie Ridge State Natural Area, intensive woody vegetation control, planting, seeding and prescribed burning is continually required to maintain 4100 acres of grassland for greater prairie chickens and other grassland birds. Blanding's turtle will benefit from improved wetland habitat at Iroquois State Wildlife Area Land and Water Reserve. Mud turtles will benefit from improved ephemeral ponds. At Washington County Conservation, the state listed Buffalo Clover (Trifolium reflexum) showed up after exotic species were controlled and prescribed fire was reintroduced. At Goose Lake Prairie, hedgerows separating grasslands were removed for the benefit of grassland birds. Additional fishless wetlands were repaired or constructed across Illinois for the benefits to reptiles and amphibians. The only high quality dolomite prairie in Illinois received additional management. Areas were reforested to reduce habitat fragmentation for forest interior breeding birds. And boundaries were established to protect high quality sites because good fences make good neighbors.

The amount of acres that received different types of management is as follows.

- Prescribed Burns were conducted on 11,885 acres across Illinois. Some of these sites were receiving fire for the first time and others were for grassland, woodland and/or savanna maintenance. Several prescribed burns were completed as site preparation for prairie reconstruction or reforestation.
- At Prairie Ridge State Natural Area, mowing is a critical component to maintain habitat structure for Greater Prairie Chickens and other grassland birds. Over the life of the project approximately 10,400 acres were mowed to various heights. Also at PRSNA 1448 acres of cool season grasses to maintain suitable habitat for grassland birds
- Most sites received treatment for invasive woody or exotic vegetation. A few highlights include: Chauncey Marsh Nature Preserve had 25 acres of black willow treated from a marsh community. Two hundred and eighty acres of savanna, forest, prairie, and wetland were treated of exotic species and/or cleared of mesophytic species at Miller Anderson Woods Nature Preserve. More than 300 acres of exotic species were treated at the Cache River State Natural Area. And the Georgetown Addition to the Little Vermilion River Land and Water Reserve received 120 acres of exotic species control. All totaled, there was 8,391 acres of invasive woody or exotic vegetation controlled. Acres treated more than once, with an expanded time between treatments, were counted as separate treatments.
- Grasslands were reconstructed on 710 acres. This includes enhancement of native prairie, reconstructing new prairie and planting of warm season grass fields. At Starved Rock Nature Preserve, 130 acres of prairie was reconstructed, whereas at Jubilee State College, 40 acres were planted to prairie and an additional 59 acres of prairie were enhanced.
- One Hundred and eighty two acres of habitat were reforested. At the Kickapoo State Recreational Area Dynegy Tract, 16 acres (several small fields) were reforested to reduce habitat fragmentation. Similarly,
 25 acres were reforested at the Georgetown Addition to the Little Vermilion River Land and Water
 Reserve.
- Firebreaks installation and establishment was an important component of this grant. At Prairie Ridge State Natural Area, the ability to roto-till 25 miles of firebreaks allowed staff to complete approximately 750 acres of prescribed burning in specific parcels every year to benefit grassland birds. The Nature Conservancy was able to install permanent firebreaks at the IDNR owned Franklin Creek State Natural Area, where fire had not been used as a management tool for decades. More than 154 miles of firebreaks were installed or established across the state via this grant.
- Collier Glades Land and Water Reserve had its high quality communities protected via 4 miles of fencing. Two miles of fence was erected at Harlem Hills Nature Preserve. And 50 miles of fencing and boundaries were posted and maintained yearly at Prairie Ridge State Natural Area. All totaled, 57.7 miles of fence was constructed or maintained.
- Seventeen wetlands were constructed or restored across the state. At Green River State Fish and Wildlife Area a new agri drain was required to repair a 200 acre wetland. A series of small wetlands were lined with clay and an agri drain was installed to allow for management of water levels at the

Union County Conservation Area. At Rend Lake State Fish and Wildlife Area, 5 wetlands, each less than ¼ acre were installed. A total of 276.5 acres of wetlands were either created or restored during the granting period.

- Five ponds totaling 5 acres were constructed. Three were at Cypress Pond State Natural Area. The remaining 2 ponds were revamped at Sparks Pond State Natural Area to benefit the Illinois Mud turtle.
- A single kiosk was developed and installed at Cache River State Natural Area Wildcat Bluff Area. The
 kiosk is used as an educational tool to describe the restoration activities and the ultimate management
 goals for the site.

Appendix B provides information on each job, its' goals and objectives, approach, whether or not the job was completed, and final results. For more specific information on each job within the grant, one can view the T-28-M-1 Public Lands SWG Annual Reports from June 2007 thru June 2012. Annual reports contain specific work progression for each year, contract details, budget expenditures, reasons for not completing tasks, photos and any changes that were made to each job.

For 10 jobs, the budget is just an approximation. Amendment #7 added ~800K that actually should have been spread out over the entire 30 jobs but was not because the other 20 jobs had already been completed. In addition, for many jobs, the in-kind match does not take into account personnel time. This was all captured in our electronic programmatic accounting system. I would take an inordinate amount of time to match up each person's time and pay with each project. Therefore State Commodities are typically an estimate. Finally, the contractual dollar amounts should be accurate.

APPENDIX A Grant Amendments

AMENDMENT #1

State Wildlife Incentive Grant Program

State of Illinois

State Wildlife Grant Proposal Amendment # 1

PROJECT NUMBER: T-28-M

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

PURPOSE/NEED: No Change

OBJECTIVES: Changes and additions in bold.

The grant will be broken into four segments, March 2006 thru December 2008, Jan 2007 thru December 2009, Jan 2008 thru December 2010, and Jan 2009 thru December 2010, totaling a five year grant agreement. The four segments are necessary to complete the tasks as well as to meet the state match through other grants and inkind services.

By the end of the first segment of this grant period of December 31, 2008 2009, the following activities will be accomplished:

- \$ Protect 3145 acres of high quality natural areas at Harlem Hills Nature Preserve and Rock Cut State Park, Winnebago County by constructing approximately 2 miles of permanent fencing along all inadequately fenced boundaries. Conduct boundary surveys whenever the line is in question.
- \$ Restore hydrology to 2500 acres of rare sand prairies and savannas at Iroquois State Wildlife Area Land and Water Reserve and Hooper Branch Savanna NP, Iroquois County.
- \$ Restore and/or maintain prairie and savanna habitats at the 16,550 acre Jim Edgar Panther Creek State Fish and Wildlife, in Cass County by the removal of invasive and exotic woody species.
- \$ Maintain and restore approximately 200 acres of forest and restore over 30 acres of agricultural fields and old field to prairie at Jubilee College State Park, Peoria County to restore habitat for area sensitive forest and grassland species as well as the state threatened Franklin=s ground squirrel and short-eared owl.
- \$ Provide, restore and maintain 3600 acres of grassland habitat at Prairie Ridge Sanctuary, Marion and Jasper Counties that provide habitat to 26 state endangered species, 5 watch list species and 5 area sensitive grassland species.

- \$ Create two wetlands and restore prairie, and savanna habitat at Starved Rock State Park, LaSalle County to restore hydrologic function above a natural area canyon system in Starved Rock Nature Preserve.
- \$ Create ≥8 ephemeral wetlands at Mount Vernon Game Propagation Center and Rend Lake State Fish and Wildlife Area, Jefferson County to provide direct benefits to the crawfish frog, listed as a Critical Species for the Southern Till Plain. The project will also benefit non-game indicator species for the region, including southern leopard frog, cricket frog, chorus frog, spring peeper, and smallmouth salamander.
- \$ Provide habitat for the northern harrier, Wilson=s snipe, American bittern and American woodcock, listed as Species in Greatest Need of Conservation by Illinois= Comprehensive Wildlife Conservation Plan by creating a 4.5 acre ephemeral wetland and controlling exotic/invasive woody plants at Silver Springs State Fish and Wildlife Area (SSSFWA), Kendall County.
- \$ Create/restore ≥40 acres of diverse wetland habitats (i.e., sedge meadows; ephemeral and permanent wetlands) at Union County Conservation Area, Union County to provide direct benefits to the Mississippi kite, Mississippi green water snake, mud snake, bald eagle and common moorhen, all listed as critical species for Lower Mississippi River Bottomlands.
- \$ Create 15 acres of additional wetland habitat at Stephen A. Forbes State Park, Marion County.
- \$ Create three 1-acre ponds at Cypress Pond State Natural Area, Johnson County to provide watershed protection and slow run-off to mimic pre-settlement hydroperiod.
- \$ Create/restore shallow ponds and ephemeral wetlands for the state endangered Illinois mud turtle and state threatened Stroecker=s chorus frog at Sparks Pond State Natural Area, Rollo Prairie State Natural Area, Illinois Sand Areas Land and Water Reserve and/or Sand Ridge State Forest, Mason County.
- \$ Create a large shallow water wetland at Jim Edgar Panther Creek State Fish and Wildlife Area, Cass County, Illinois.
- \$ Provide, restore and maintain 9 acres of dolomite prairie at Des Plaines Dolomite Prairie Land and Water Reserve in Will County, Illinois. This is the only high quality dolomite prairie in the Grand Prairie Natural Division.

- Restore, maintain, or establish 50 acres of savanna, 100 acres of upland forest, and 15 acres of wetland habitat at Miller Anderson Woods Nature Preserve in Bureau and Putnam Counties, Illinois.
- \$ Restore and/or maintain prairie and savanna habitats at the 772 acre Weinberg King State Park, in Scyhuler County by the removal of invasive and exotic woody species.
- \$ Restore and maintain 180 acres of floodplain and upland forest at the Georgetown Addition to the Little Vermilion River Land and Water Reserve in Vermilion County, Illinois.
- \$ Restore and/or maintain 400 acres of oak woodlands, flatwoods, and barrens habitats at Washington County Conservation, including Posen Woods Nature Preserve, in southwestern Washington County.
- \$ Restore, maintain, or establish 25 acres of savanna, 25 acres of oak woodland, and 50 acres of prairie at Franklin Creek State Natural Area, Nachusa Grasslands, and Pine Rock Nature Preserve in Lee and Ogle Counties.
- \$ Restore and maintain 140 acres of floodplain forest, 25 acres of marsh and wetland communities, and establish 17 acres of wet mesic prairie at Chauncey Marsh Nature Preserve and State Natural Area in Lawrence County, Illinois.
- \$ Restore and maintain approximately 120 acres of floodplain and upland forest in Beall Woods Nature Preserve and State Park located 2.0 miles east of Keensburg, Wabash County, Illinois.
- \$ Restore and maintain approximately 250 acres of upland forest communities at Red Hills State Park, Red Hills Woods Nature Preserve and Red Hills Seeps Spring Land and Water Reserve in Lawrence County, Illinois.
- \$ Restore approximately 200 acres of upland forest and flatwoods communities at Ramsey Lake State Park in Fayette County, Illinois.
- \$ Maintain and restore 136 acres of upland forest and flatwoods communities at Rock Cave Nature Preserve and Rock Cave Land and Water Reserve, Effingham County, Illinois.

During the other segments, additional projects on public land will be added. Projects will be solicited from district wildlife-ecologists biologists and restoration ecologists heritage biologists. The approach for new

projects will not change from those written into this proposal. Projects will be selected in part, based upon their ability to protect endangered, threatened, or conservation priority species, whether the projects improve rare or declining habitats, whether the project maintains or improves already existing high quality sites, as well as how the project fits into IDNR=s Wildlife Action Plan and STRATEGIC PLAN 2003-08.

EXPECTED RESULTS OR BENEFITS: Changes and additions in bold. .

Wildlife habitat in Illinois is fragmented into small tracts and subject to detrimental external pressures, such as non-compatible land use, pollution, invasive and exotic species, etc. These projects strive to improve this situation. The key benefit of these projects is the opportunity it affords the IDNR to expand efforts currently under way to create, preserve and enhance Illinois= wildlife habitat on public lands.

The habitat restoration at state sites has the expected benefit of increased wildlife habitat establishment and restoration on approximately 25 35 IDNR sites over the life of the grant.

APPROACH: Changes and additions in bold.

The IDNR and non-governmental organizations will direct the habitat restoration efforts on these sites. Consulting and contractual services will also be needed on several projects.

Natural Resource and Restoration Trust Funds (NRRTF) will also be used as state match. The Natural Resource Restoration Trust Fund is managed by the Illinois Department of Natural Resource, Office of Realty & Environmental Planning. The Federal law requires the designation of federal and state officials to act as trustees to protect public interest in natural resources and the services they provide. Therefore, IDNR, along with IEPA, has been designated as a natural resource trustees by the Governor and has the regulatory authority to assess damages to natural resources and to collect compensation for those injured natural resources and/or associated service losses. The Natural Resource Restoration Trust Fund was created to receive and disburse such funds.

The Natural Resource Restoration Trust Fund receives money in two ways: First, as a Natural Resource Trustee for the State of Illinois, monies are received from court ordered natural resource damage assessment settlements. Secondly, IDNR is frequently requested to support ecological risk assessment activities at numerous USEPA and IEPA remedial sites. IDNR receives reimbursement of staff time for participation in these projects through the Defense State Memorandum of Agreement (DSMOA) with the U.S. Department of Defense.

Finally, the NRRTF is divided into three constituent parts with funds allocated to: cost recovery (non-restricted), restoration and education, both which are restricted. Money is tracked through the Office of Realty and Environmental Protection.

Recently, A natural resource damage assessment settlement provided approximately \$263,000 as compensation for numerous pipeline releases by Marathon Ashland Pipe Line Company. From the damage assessment, \$105,500, or 30%, will be used as non-federal match for this 347,000.00 grant segment.

Three Four sites within this grant (Rend Lake FWA, Stephen Forbes FWA, and Cypress Pond SNA, and Red Hills State Park) also receive funding through federal W-76-D funds. Coordination will be necessary to ensure there is no overlap between funds on a site and that both projects can continue simultaneously for the greatest resource benefit. Coordination among the Office of Resource Conservation (Divisions of Natural Heritage, Wildlife, Forestry, Fisheries, Lands, and Law Enforcement) will occur through the Departments

programmatic system and the annual plan of work meetings. District Resource Staff complete bi-monthly programmatic time sheets. Work time will thus be allocated to projects with different funding sources accurately and accordingly to federal and state standards. The annual plan of work meetings occur yearly to address all management activities conducted on public owned sites as well as available funding sources. These meetings allow for the disciplines to work at sites together by looking at project differentiation, efficiency in accomplishing project goals, and the complementary benefits of various projects and their funding sources. This is all accomplished while clarifying which management activities are coded to particular funding sources.

- \$ Prescribed Fire No Change
- \$ <u>Invasive Woody Plant Control</u> **No Change**
- \$ <u>Invasive Exotic Species Control</u> No Change
- \$ Erosion/sedimentation control **No Change**
- \$ Boundary Protection/Fence Repair No Change
- \$ Habitat Creation/Restoration: Planting No Change
- \$ <u>Hydrology Restoration</u> **No Change**

LOCATION: Changes and additions in bold.

The Public Land Native Wildlife Habitat Restoration Project sites will be statewide on public lands. Projects will be conducted at Jim Edgar Panther Creek State Fish and Wildlife Management Area, Iroquois County State Wildlife Area Land and Water Reserve, Hooper Branch Savanna Nature Preserve, Prairie Ridge State Natural Area, Green River State Wildlife Area, Harlem Hills Nature Preserve, Rock Cut State Park, Jubilee College Forest Nature Preserve, Jubilee College State Park, Starved Rock State Park, Rend Lake State Fish and Wildlife Area, Mount Vernon Game Propagation Center, Silver Springs State Fish and Wildlife Area, Union County Conservation Area, Stephen A. Forbes State Park, Cypress Pond State Natural Area, Sparks Pond State Natural Area, Rollo Prairie State Natural Area, Illinois Sand Areas Land and Water Reserve, and Sand Ridge State Forest-, Des Plaines Dolomote Prairie Land and Water Reserve, Miller Anderson Woods Nature Preserve, Weinberg-King State Park, and the newly acquired Fliermans property, a satellite of Middle Fork State Natural Area, Washington County Conservation Area, Posen Woods Nature Preserve, Franklin Creek State Natural Area, Pine Rock Nature Preserve, Nachusa Grasslands, Chauncey Marsh Nature Preserve and State Natural Area, Beall Woods Nature Preserve, Red Hills State Park, Red Hills Woods Nature Preserve, Red Hills Seeps Spring Land and Water Reserve, Ramsey Lake State Park, Rock Cave Nature Preserve and Rock Cave Land and Water Reserve. Figure One shows the locations of these sites within Illinois. Specific locations are provided in Appendices A-M X in the Grant Agreement for all work locations. Detailed topographic maps are also provided to better illustrate the terrain at and near the project area.

Specific Public Land Native Wildlife Habitat Restoration Project sites for the additional segments of this proposal will be included with the grant agreement in each year.

RELATED GRANTS Changes and additions in bold.

The following are related federal grant projects by location:

Rend Lake FWA, Stephen Forbes FWA, and Cypress Pond SNA, and Red Hills State Park have active W-76-D projects. The project occurring at Red Hills State Park will occur at the Red Hills Seeps Spring Land and Water Reserve, Red Hills Woods Nature Preserve, or north of US Highway 50 which divides the park in half. None of these project sites are in areas where W-76-D funds are spent. In addition, none of the 50% match for this project will come from staff personnel completing in-kind work.

Coordination will be necessary to ensure there is no overlap between funds on a site and that both projects can continue simultaneously for the greatest resource benefit. Coordination among the Office of Resource Conservation (Divisions of Natural Heritage, Wildlife, Forestry, Fisheries, Lands, and Law Enforcement) will occur through the Departments programmatic system and the annual plan of work meetings. District Resource Staff complete bi-monthly programmatic time sheets. Work time will thus be allocated to projects with different funding sources accurately and accordingly to federal and state standards. The annual plan of work meetings occur yearly to address all management activities conducted on public owned sites as well as available funding sources. These meetings allow for the disciplines to work at sites together by looking at project differentiation, efficiency in accomplishing project goals, and the complementary benefits of various projects and their funding sources. This is all accomplished while clarifying which management activities are coded to particular funding sources

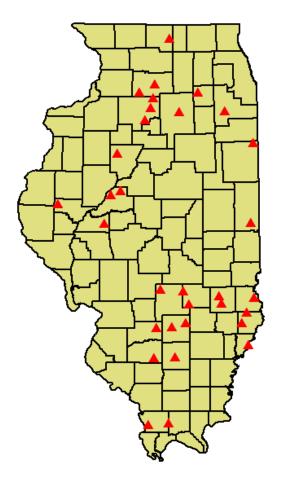


Figure One. Locations within Illinois for the first **and second** segments (2006-2008 **2009**) of the Public Land Native Wildlife Habitat Restoration Project.

PERSONNEL:

Mr. Eric L. Smith, Project Leader Illinois Department of Natural Resources 301 South Date Street Gibson City, IL 60936 Phone: (217)784-4730

Esmith@dnrmail.state.il.us

Mr. Randy Heidorn Illinois Nature Preserves Commission One Natural Resources Way Springfield, IL 62702-1271 Phone:(217) 782-4919

Rheidorn@dnrmail.state.il.us

Mr Dean Corgiat, Project Leader Illinois Department of Natural Resources P.O. Box 477 Pittsfield, IL 62363 (217) 285-2221 Dcorgiat@dnrmail.state.il.us

District Heritage Biologists, Wildlife Biologists, and/or the site manager will be tasked with implementing and coordinating projects at the site level. Names of those job leaders are included with the individual projects within the grant agreement.

Changes and additions in bold.

<u>ESTIMATED COST</u> (Segment 1: May 2006 - December 2008-2009)

Job	Work Location	Federal Share	State Share	Project Total
1	Harlem Hills Nature Preserve / Rock Cut State Park Winnebago Co	\$24,500.00	\$24,500.00	\$49,000.00
2	Iroquois SWA Land & Water Reserve and Hooper Branch Savanna NP, Iroquois Co	\$23,600.00	\$23,600.00	\$47,200.00
5	Jim Edgar Panther Creek State Fish and Wildlife Area, Cass Co	\$25,000.00	\$25,000.00	\$50,000.00
4	Jubilee College Forest Nature Preserve/Jubilee College State Park, Peoria County	\$40,000.00	\$32,390.00	\$72,390.00
5	Prairie Ridge State Natural Area, Marion and Jasper Co.	\$80,000.00	\$80,000.00	\$160,000.00
6	Starved Rock State Park, LaSalle Co.	\$57,000.00	\$57,000.00	\$114,000.00
7	Rend Lake State Fish and Wildlife Area and Mount Vernon Game Propagation Center, Jefferson Co.	\$5,000.00	\$2,000.00	\$7,000.00
8	Silver Springs State Fish and Wildlife Area, Kendall Co.	\$10,000.00	\$2,000.00	\$12,000.00
9	Union County Conservation Area, Union Co.	\$12,100.00	\$10,410.00	\$22,510.00
10	Stephen A. Forbes State Park, Marion Co.	\$0.00	\$14,100.00	\$14,100.00
11	Cypress Pond State Natural Area, Johnson Co.	\$0.00	\$17,000.00	\$17,000.00
12	Sparks Pond State Natural Area and Rollo Prairie State Natural Area , Illinois Sand Areas Land and Water Reserve, and Sand Ridge State Forest, Mason Co	\$42,800.00	\$20,000.00	\$62,800.00
13	Jim Edgar Panther Creek FWA	\$0.00	\$12,000.00	\$12,000.00
	Project Totals: SWG >05	\$320,000.00	\$320,000.00	\$640,000.00
Job	Work Location (Additions)	Federal Share	State Share	Project Total
5	Prairie Ridge State Natural Area, Marion and Jasper Co.	\$115,000.00	\$140,500.00	\$255,500.00
14	Des Plaines Dolomite Prairies Land and	\$15,000.00	\$15,000.00	\$30,000.00

	Water Reserve, Will County			
15	Miller Anderson Nature Preserve, Bureau and Putnam Counties	\$20,000.00	\$20,000.00	\$40,000.00
16	Weinberg-King State Park	\$25,000.00	\$25,000.00	\$50,000.00
17	Carl Fliermans= River Nature Preserve, Vermilion County	\$12,000.00	\$12,000.00	\$24,000.00
18	Washington County Cons Area and Posen Woods Nature Preserve	\$10,000.00	\$10,000.00	\$20,000.00
19	Franklin Creek State Natural Area, Pine Rock Nature Preserve, and Nachusa Grasslands	\$65,000.00	\$65,000.00	\$130,000.00
20	Chauncey Marsh Nature Preserve and State Natural Area	\$20,000.00	\$22,500.00	\$42,500.00
21	Beall Woods Nature Preserve and State Park	\$30,000.00	\$25,000.00	\$55,000.00
22	Red Hills State Park, Red Hills Woods Nature Preserve and Red Hills Seeps Spring Land and Water Reserve	\$15,000.00	\$7,000.00	\$22,000.00
23	Ramsey Lake State Park	\$20,000.00	\$0.00	\$20,000.00
24	Rock Cave Nature Preserve	\$0.00	\$5,000.00	\$5,000.00
	Project Totals: SWG >06	\$347,000.00	\$347,000.00	\$694,000.00
	SEG. 1 TOTAL:	\$667,000.00	\$667,000.00	\$1,334,000.00

ESTIMATED COST (Segment 3 2: Jan 2010 - December 2010 2012)

Job	Work Location	Federal Share	State Share	Project Total
~2	Public Land Sites	\$105,000.00 \$250,000.00	\$105,000.00 \$250,000.00	\$210,000.00 \$500,000.00

ESTIMATED COST (Segment 4 3: Jan 2011 2013 - December 2011 2015)

Job	Work Location	Federal Share	State Share	Project Total
~10	Public Land Sites	\$300,000.00 \$250,000.00	\$300,000.00 \$250,000.00	\$600,000.00 \$250,000.00

TOTAL COSTS: GRANT PROPOSAL 2006 - 2011 2015

Job	Work Location	Federal Share	State Share	Project Total
~25	Public Land Sites	\$830,000.00	\$830,000.00	\$1,660,000.00
~40		\$1,170,000.00	\$1,170,000.00	\$2,340,000.00

NEPA COMPLIANCE:

The IDNR will use its CERP (Comprehensive Environmental Review Process) as a tool to aid the Department in meeting NEPA compliance for the projects outlined under this grant proposal. It is the Department=s policy to require CERP applications for all land disturbing activities unless those activities are covered by CERP exemptions (see the enclosed Comprehensive Environmental Review Process documents).

All work identified in this proposal is believed to be addressed by several categorical exclusions (1.4A(3) & 1.4B(1-4), 516 DM 6Appendix 1) with no known exceptions to those categorical exclusions. If exceptions are identified or the scope of the work changes during the execution of the proposed projects, the Federal Aid Division of the USFWS will be contacted to determine if additional NEPA compliance actions are needed.

All planned activities will also be in compliance with the Endangered Species Act. All determinations and documentation will in accordance with the current established U. S. Fish and Wildlife Service protocols for Section 7.

All planned activities will be in compliance with the National Historic Preservation Act and the Council on Historic Preservation Act. All determinations and documentation will be in accordance with the terms of the Programmatic Agreement, as amended, effective September 23, 2002.

When applicable, those planned activities which involve a floodplain and/or jurisdiction wetlands will be done in accordance with Presidential Executive Orders 11988 and 11990.

When applicable, those planned activities which involve programs and/or site improvements will be done in accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.

When applicable, those planned activities which involve the use of pesticides, herbicides or other comparable chemicals wills be done in accordance with current state and federal regulations to assure the safe and legal application of those chemicals. All chemicals will be applied in accordance with the manufacturer=s label instructions. All persons applying chemicals will be licensed by the Illinois Department of Agriculture as a chemical operator along with a licensed applicator, in accordance with Illinois state law.

DOCUMENTS SUPPORTING THE GRANT PROPOSAL:

Application for Federal Assistance (Standard Form 424)
Federal Aid Section 7 Evaluation form
Grant Proposal Budget
NEPA Compliance Checklist

The following documents are attached in support of this grant proposal.

U.S. Department of the Interior, Part E: Certifications Certification Regarding Lobbying

Literature Cited

Admiraal, A.N., M.J. Morris, T.C. Brooks, J.W. Olson and M.V. Miller. 1997. Illinois wetland restoration & creation guide. Illinois Natural History Survey Special Publication 19. Illinois Natural History Survey, Champaign, Illinois, USA.

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Illinois Department of Energy and Natural Resources 1994. The Changing Illinois Environment: Critical Trends. Summary Report and Volumes 1-7 Technical Report. Illinois Department of Energy and Natural Resources. Springfield. 242 p.

Illinois Department of Natural Resources. 2005. Illinois Comprehensive Wildlife Conservation Plan-Strategy. Illinois Department of Natural Resources. Version 1.0. xxv+353 pp.

Illinois Department of Natural Resources. 2001. Critical Trends in Illinois Ecosystems. Department of Natural Resources. Springfield. 112 p.

Partners in Amphibian and Reptile Conservation. 2002. Habitat management guidelines for amphibians and reptiles of the Midwest. Purdue University, Fort Wayne, Indiana, USA.

Schwegman, J. E., G. B. Fell, M. Hutchison, W. M. Shepherd, G. Paulson, and J. White. 1973. Comprehensive plan for the Illinois Nature Preserves System. Part 2, The Natural Divisions of Illinois. Illinois Nature Preserves Commission. Rockford. 32 p + map.

Szafoni, R.E., C.A. Phillips, S.R. Ballard, R.A. Brandon and G. Kruse. 2002. Illinois Landowner=s Guide to Amphibian Conservation. Illinois Natural History Survey Special Publication 22. Illinois Natural History Survey, Champaign, Illinois, USA.

AMENDMENT #2

State Wildlife Incentive Grant Program

State of Illinois

State Wildlife Grant Proposal Amendment # 2

REASON FOR THIS AMENDMENT: Two previously approved SWG'06 projects, the "Open Grassland Project, Phase II with the National Wild Turkey Federal" @ \$27,550 (50% fed aid) and the "Farmland & Prairie Campaign" of the IDNR @ \$79,980 (50% fed aid) have both been dropped.. An amendment to T-28-M-1 will obligate the balance of the remaining SWG'06 fed aid funding of \$107,530 (50% federal share) for additional habitat restoration/management work and to help address equipment needs at Prairie Ridge to benefit the Prairie Chicken, as one of the species of greatest need of conservation at this site.

PROJECT NUMBER: T-28-M

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

PURPOSE/NEED: No Change

OBJECTIVES: No Change

EXPECTED RESULTS OR BENEFITS: No Change

APPROACH: Changes and additions in bold.

The IDNR and non-governmental organizations will direct the habitat restoration efforts on these sites. Consulting and contractual services will also be needed on several projects.

Natural Resource and Restoration Trust Funds (NRRTF) will also be used as state match. The Natural Resource Restoration Trust Fund is managed by the Illinois Department of Natural Resource, Office of Realty & Environmental Planning. The Federal law requires the designation of federal and state officials to act as trustees to protect public interest in natural resources and the services they provide. Therefore, IDNR, along with IEPA, has been designated as a natural resource trustees by the Governor and has the regulatory authority to assess damages to natural resources and to collect compensation for those injured natural resources and/or associated service losses. The Natural Resource Restoration Trust Fund was created to receive and disburse such funds.

The Natural Resource Restoration Trust Fund receives money in two ways: First, as a Natural Resource Trustee for the State of Illinois, monies are received from court ordered natural resource damage assessment settlements. Secondly, IDNR is frequently requested to support ecological risk assessment activities at

numerous USEPA and IEPA remedial sites. IDNR receives reimbursement of staff time for participation in these projects through the Defense State Memorandum of Agreement (DSMOA) with the U.S. Department of Defense.

Finally, the NRRTF is divided into three constituent parts with funds allocated to: cost recovery (non-restricted), restoration and education, both which are restricted. Money is tracked through the Office of Realty and Environmental Protection.

Recently, A natural resource damage assessment (**NRDA**) settlement provided approximately \$263,000 as compensation for numerous pipeline releases by Marathon Ashland Pipe Line Company. From the damage assessment, \$105,500 \$145,500 or 30%, will be used as non-federal match for this \$347,000 grant segment a portion of the \$774,530 in match funds required under Segment 1.

Four sites within this grant (Rend Lake FWA, Stephen Forbes FWA, Cypress Pond SNA, and Red Hills State Park) also receive funding through federal W-76-D funds. Coordination will be necessary to ensure there is no overlap between funds on a site and that both projects can continue simultaneously for the greatest resource benefit. Coordination among the Office of Resource Conservation (Divisions of Natural Heritage, Wildlife, Forestry, Fisheries, Lands, and Law Enforcement) will occur through the Departments programmatic system and the annual plan of work meetings. District Resource Staff complete bi-monthly programmatic time sheets. Work time will thus be allocated to projects with different funding sources accurately and accordingly to federal and state standards. The annual plan of work meetings occur yearly to address all management activities conducted on public owned sites as well as available funding sources. These meetings allow for the disciplines to work at sites together by looking at project differentiation, efficiency in accomplishing project goals, and the complementary benefits of various projects and their funding sources. This is all accomplished while clarifying which management activities are coded to particular funding sources.

- 1. Prescribed Fire No Change
- 2. Invasive Woody Plant Control **No Change**
- 3. Invasive Exotic Species Control **No Change**
- 4. Erosion/sedimentation control **No Change**
- 5. <u>Boundary Protection/Fence Repair</u> **No Change**
- 6. Habitat Creation/Restoration: Planting **No Change**
- 7. <u>Hydrology Restoration</u> **No Change**

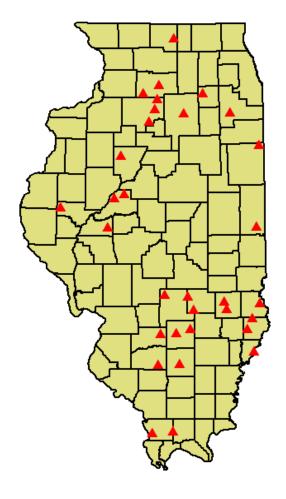


Figure One. Locations within Illinois for the first segment (2006-2009) of the Public Land Native Wildlife Habitat Restoration Project.

LOCATION: No Change

RELATED GRANTS No Change

PERSONNEL: **No Change**

Changes and additions in bold.

<u>ESTIMATED COST</u> (Segment 1: May 2006 - December 2009)

Job	Work Location	Federal Share	State Share	Project Total
1	Harlem Hills Nature Preserve / Rock Cut State Park Winnebago Co	\$24,500.00	\$24,500.00	\$49,000.00
2	Iroquois SWA Land & Water Reserve and Hooper Branch Savanna NP, Iroquois Co	\$23,600.00	\$23,600.00	\$47,200.00
5	Jim Edgar Panther Creek State Fish and Wildlife Area, Cass Co	\$25,000.00	\$25,000.00	\$50,000.00
4	Jubilee College Forest Nature Preserve/Jubilee College State Park, Peoria County	\$40,000.00	\$32,390.00	\$72,390.00
5	Prairie Ridge State Natural Area, Marion and Jasper Co.	\$80,000.00	\$80,000.00	\$160,000.00
6	Starved Rock State Park, LaSalle Co.	\$57,000.00	\$57,000.00	\$114,000.00
7	Rend Lake State Fish and Wildlife Area and Mount Vernon Game Propagation Center, Jefferson Co.	\$5,000.00	\$2,000.00	\$7,000.00
8	Silver Springs State Fish and Wildlife Area, Kendall Co.	\$10,000.00	\$2,000.00	\$12,000.00
9	Union County Conservation Area, Union Co.	\$12,100.00	\$10,410.00	\$22,510.00
10	Stephen A. Forbes State Park, Marion Co.	\$0.00	\$14,100.00	\$14,100.00
11	Cypress Pond State Natural Area, Johnson Co.	\$0.00	\$17,000.00	\$17,000.00
12	Sparks Pond State Natural Area and Rollo Prairie State Natural Area , Illinois Sand Areas Land and Water Reserve, and Sand Ridge State Forest, Mason Co	\$42,800.00	\$20,000.00	\$62,800.00
13	Jim Edgar Panther Creek FWA	\$0.00	\$12,000.00	\$12,000.00
	Project Totals: SWG '05	\$320,000.00	\$320,000.00	\$640,000.00

Job	Work Location (Additions)	Federal Share	State Share	Project Total
5	Prairie Ridge State Natural Area, Marion and Jasper Co.	\$115,000.00 \$222,530.00	\$140,500.00 \$248,030.00	\$255,500.00 \$470,560.00
14	Des Plaines Dolomite Prairies Land and Water Reserve, Will County	\$15,000.00	\$15,000.00	\$30,000.00
15	Miller Anderson Nature Preserve, Bureau and Putnam Counties	\$20,000.00	\$20,000.00	\$40,000.00
16	Weinberg-King State Park	\$25,000.00	\$25,000.00	\$50,000.00
17	Carl Fliermans' River Nature Preserve, Vermilion County	\$12,000.00	\$12,000.00	\$24,000.00
18	Washington County Cons Area and Posen Woods Nature Preserve	\$10,000.00	\$10,000.00	\$20,000.00
19	Franklin Creek State Natural Area, Pine Rock Nature Preserve, and Nachusa Grasslands	\$65,000.00	\$65,000.00	\$130,000.00
20	Chauncey Marsh Nature Preserve and State Natural Area	\$20,000.00	\$22,500.00	\$42,500.00
21	Beall Woods Nature Preserve and State Park	\$30,000.00	\$25,000.00	\$55,000.00
22	Red Hills State Park, Red Hills Woods Nature Preserve and Red Hills Seeps Spring Land and Water Reserve	\$15,000.00	\$7,000.00	\$22,000.00
23	Ramsey Lake State Park	\$20,000.00	\$0.00	\$20,000.00
24	Rock Cave Nature Preserve	\$0.00	\$5,000.00	\$5,000.00
	Project Totals: SWG '06	\$347,000.00 \$454,530.00	\$347,000.00 \$454,530.00	\$ 694,000.00 \$909,060.00
	SEG. 1 TOTAL:	\$667,000.00 \$774,530.00	\$667,000.00 \$774,530.00	\$1,334,000.00 \$1,549,060.00

ESTIMATED COST (Segment 2: Jan 2010 - December 2012)

Job	Work Location	Federal Share	State Share	Project Total
~2	Public Land Sites	\$250,000.00	\$250,000.00	\$500,000.00

ESTIMATED COST (Segment 3: Jan 2013 - December 2015)

Job	Work Location	Federal Share	State Share	Project Total
~10	Public Land Sites	\$250,000.00	\$250,000.00	\$500,000.00

TOTAL COSTS: GRANT PROPOSAL 2006 - 2015

Job	Work Location	Federal Share	State Share	Project Total
~40	Public Land Sites	\$1,167,000.00 \$1,274,530.00	\$1,167,000.00 \$1,274,530.00	\$2,334,000.00 \$2,549,060.00

NEPA COMPLIANCE:

No Change

DOCUMENTS SUPPORTING THE GRANT PROPOSAL:

No Change

Literature Cited **No Change**

AMENDMENT #3

STATE WILDLIFE GRANT

State of Illinois

Grant Segment - Work Plan Amendment #3

<u>REASON FOR THE AMENDMENT</u>: An amendment to T-28-M-1 will obligate SWG'07 fed aid funding of \$71,492 (50% federal share) for personal services to implement additional habitat restoration/management work and to help address equipment needs at Prairie Ridge to benefit the Prairie Chicken, as one of the species of greatest need of conservation at this site.

PROJECT NUMBER: T-28-M

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

OBJECTIVES: No Change

APPROACH: No Change

LOCATION: No Change

GRANT AGREEMENT SUPPORT DOCUMENTATION: - No Change

APPENDICES: - Change as noted

A-D No Change

E Prairie Ridge State Natural Area, Marion and Jasper Counties grassland habitat restoration project. (Refer to Appendix E for details of the changes)

F-Y. No Change

Appendix E - Change as Noted

Job Title: Job 5. Prairie Ridge State Natural Area grassland habitat restoration project.

Job Leader: Scott Simpson

Prairie Ridge State Natural Area

4295 N. 1000th St. Newton, IL 62448

ssimpson@dnrmail.state.il.us

618-783-2685

Purpose/need: No Change

Objective: No Change

Expected Results: Change as Noted

The addition of **200 400** acres of prairie pasture at Prairie Ridge will provide **40 80**% more grazed area and greatly enhance the vegetative structure for nesting and brooding prairie chickens as well as other grassland birds. The additional prairie pasture's will be leased to area farmers for grazing therefore providing opportunities for local individuals, providing maintenance income for the site and also keeps these acres on local tax rolls.

The intensive habitat management program at Prairie Ridge requires equipment. Currently IDNR owns one cab tractor, three mowers and leases two tractors. This grant would allow for the purchase of two additional tractors to eliminate the need for leasing two tractors. Tractor leases have become very difficult and expensive. It takes nearly 6 months for a tractor lease to be approved. There is no guarantee from year to year that funding can be secured for a tractor lease. Tractor leases are often paid from Farm Lease Revenues, grants and other state funding sources that are subject to change. The management of threatened and endangered species at Prairie Ridge is highly dependent upon annual management operations as described above. Without the tractor's these operations will not be completed and the resources will be compromised. The purchase of these two tractors will significantly improve the IDNR's ability to meet management goals and ensure preservation of these Illinois endangered and threatened species.

Approach: Change as Noted

IDNR personnel and contractors will implement of grassland and wetland habitat development that will include the following practices: prescribed fire, invasive woody plant control, invasive exotic species control, erosion/sedimentation control, boundary protection/fence repair, habitat creation/restoration: planting, and hydrology restoration. This type of will management will occur throughout the site. Descriptions of these practices are in the body of the grant proposal.

Amendment #2 and #3 will allow the Department to utilize a fence contractor to construct a perimeter 5 strand barb wire cattle fence with gates (approximately 18,000 40,000 ft) on 200 400 acres of restored warm season grasses on the Hunt and Frohning Tracts (see attached location map) Contractor will supply materials and labor for the project. The grazing will provide the necessary disturbance to enhance the vegetative structure on this tract to allow for better utilization by state threatened and endangered grassland birds.

Amendment #2 will also allow Prairie Ridge State Natural Area to purchase two John Deere 6430 MFWD (Mechanical Front Wheel Drive) cab tractor to be used for management of 4100 acres of grassland habitat for threatened and endangered birds as well as future land acquisitions. These tractors are currently on state contract. The tractor will be driven and maintained by site staff, contractual service employees for numerous habitat restoration and management operations.

Budget: Change As Noted

Line Item	Federal Share	State Share	Project Total
Contractual	247,530.00	\$118,630.00	\$366,160.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00 \$71,492.00	\$154,400.00 \$225,892.00	\$154,400.00 \$297,384.00
Equipment	\$55,000.00	\$55,000.00	\$110,000.00
Total	\$302,530.00 \$374,022.00	\$328,030.00 \$399,522.00	\$630,560.00 \$773,544.00

\$80,000.00 Federal dollars were obligated under SWG '05 with an additional \$115,000.00 in Federal dollars obligated under the grant amendment #1 from the SWG '06 appropriations. Of the \$115,000 non federal match, \$55,500.00 will come from the NRRTF. Under amendment #2 an additional \$107,530 in federal dollars from the SWG'06 appropriation will be obligated. The source of non-federal funding match will be as follows: \$40,000 - NRDA (Marathon Restoration) funding; \$12,530- Prairie Ridge Farm Lease Funds; \$25,000 - Natural Areas Acquisition Fund; \$30,000 - Prairie Ridge Staff Salary. Under amendment #3 an additional \$71,492 in federal dollars from the SWG'07 appropriation will be obligated. The source of non-federal funding match will be \$71,492 - Prairie Ridge Staff Salary.

Table E: No Change

Prairie Ridge Sanctuary

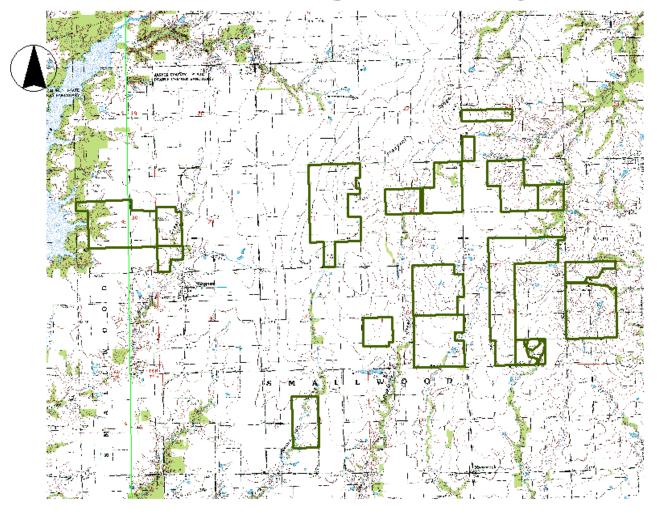


Figure E1. Sites at Prairie Ridge State Natural Area, Jasper County, Illinois.

Figure E2. Sites at Prairie Ridge State Natural Area, Marion County, Illinois

AMENDMENT #4

STATE WILDLIFE GRANT

State of Illinois

Grant Segment - Work Plan Amendment #4

<u>REASON FOR THE AMENDMENT</u>: An amendment to T-28-M-1 will obligate SWG'07 fed aid funding of \$1,082,766.00 (50% federal share) for personal services to implement additional habitat restoration/management work at additional sites to benefit multiple species in greatest need of conservation across Illinois.

PROJECT NUMBER: T-28-M

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

OBJECTIVES: Changes as Noted

- Restore and/or maintain 400 an additional 100 acres of oak woodlands, flatwoods, and barrens habitats at Washington County Conservation, including Posen Woods Nature Preserve, in southwestern Washington County.
- Restore, maintain, or establish 25 75 acres of savanna, 25 75 acres of oak woodland, and 50 150 acres of prairie at Franklin Creek State Natural Area, Nachusa Grasslands, and Pine Rock Nature Preserve in Lee and Ogle Counties.
- Restore and maintain 50 acres dry-mesic oak woodland, 10 acres open woodland, 3 acres of seep, and plant 16 acres of tree and 20 acres of prairie at Kickapoo State Recreational Area in Vermilion County.
- Implement a program to eliminate invasive and exotic plant species, restore prairie, to promote sand prairie, savanna and wetland at Green River State Natural Area in Carroll County.
- Implement a program of native woody vegetation removal to eliminate as many fencerows as possible from a 600 acre block of prairie to reduce grassland fragmentation for area sensitive grassland birds at Goose Lake State Natural Area in Grundy County Illinois.
- Implement an exotic invasive species, primarily autumn olive (*Eleagnus angustifolia*), management program at Cache River State Natural Area, Johnson County.

- Locate and permanently post site boundaries by legal survey to address site integrity issues. Control 105 acres of invasive vegetation at Colliers Glade and 133 acres at Gibbons Creek Barrens.
- Remove exotic species at Moraine Hills State Park, Volo Bog State Nature Preserve and Chain O Lakes Nature Preserve to restore rare wetland communities.

APPROACH: No Change

LOCATION: Changes as noted

Kickapoo State Recreational Area, Green River Fish and Wildlife Area, Goose Lake Prairie State Natural Area, Cache River State Natural Area, Collier Glades Land and Water Reserve, Gibbons Creek Barrens Nature Preserve, Volo Bog State Natural Area, Moraine Hills, and Chain O Lakes.

GRANT AGREEMENT SUPPORT DOCUMENTATION: - No Change

APPENDICES: - Changes as noted

- A No Change
- **B.** Iroquois SWA Land & Water Reserve and Hooper Branch Savanna, Iroquois County hydrology restoration project. (**Refer to Appendix B for details of the changes**)
- C-D No Change
- E. Prairie Ridge State Natural Area, Marion and Jasper Counties, grassland habitat restoration project. (Refer to Appendix E for details of the changes)
- F-Q No Change
- R. Washington County Conservation Area and Posen Woods Nature Preserve, Washington County, invasive and exotic woody species control project. (**Refer to Appendix R for details of the changes**)
- S. Community Restoration at Franklin Creek State Natural Area, Pine Rock Nature Preserve, and Nachusa Grasslands (**Refer to Appendix S for details of the changes**)
- T. Restore and maintain 140 acres of floodplain forest, 25 acres of marsh and wetland communities, and establish 17 acres of wet mesic prairie at Chauncey Marsh Nature Preserve and State Natural Area in Lawrence County, Illinois. (**Refer to Appendix T for details of the changes**)
- U-X No Change
- Y. Community Restoration at Kickapoo State Recreation Area, Dynegy Tract, Vermilion County.

- Z. Green River State Fish and Wildlife Area, Carroll County, grassland and wetland restoration.
- AA. Goose Lake Prairie State Natural Area, Grundy County, grassland habitat restoration and invasive woody species control project.
- BB. Cache River State Natural Area, Johnson County, invasive exotic species control project.
- CC. Boundary Survey and Invasive Species Control at Collier Glade LWR, Hardin County, Illinois and Gibbons Creek Barrens NP, Pope County, Illinois
- DD. Kettle Moraine Hills State Park, Volo Bog State Nature Preserve, and Turner Lake Nature Preserve, Lake and McHenry county, Illinois, exotic species control.

Appendix B – Change as Noted

Job Title: Job 2. Hydrology Restoration at Iroquois State Wildlife Area Land and Water Reserve and

Hooper Branch Savanna NP, Iroquois County.

Job Leader: Eric L. Smith

Natural Heritage Biologist 301 South Date Street Gibson City, Illinois 60936

217-784-4730

Eric.L.Smith@illinois.gov

Purpose/need: No Change

Objective: No Change

Approach: No Change

Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$23,600.00	\$15,600.00	\$39,200.00
	\$73,600.00	\$60,600.00	\$134,200.00
		φυυ,υυυ.υυ	\$134,200.00
Commodities	\$0.00	\$3,000.00	\$3,000.00
Dansannal	\$0.00	\$ 5,000.00	\$5,000.00
Personnel		\$10,000.00	\$8,000.00
Total	\$23,600.00	\$23,600.00	\$47,200.00
Total	\$73,600.00	\$73,600.00	\$147,200.00

Table B. No Changes



Figure 1. Locations of current and future water control structures to restore hydrology to the site.

Figure 2. No Changes

Appendix E - Change as Noted

Job Title: Job 5. Prairie Ridge State Natural Area grassland habitat restoration project.

Job Leader: Scott Simpson

Prairie Ridge State Natural Area

4295 N. 1000th St. Newton, IL 62448

ssimpson@dnrmail.state.il.us

618-783-2685

Purpose/need: No Change

Objective: No Change

Budget: Change As Noted

Line Item	Federal Share	State Share	Project Total
Contractual	\$247,530.00 \$327,530.00	\$118,630.00 \$148,630.00	\$366,160.00 \$476,160.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$71,492.00	\$225,892.00 \$275,892.00	\$297,384.00 \$347,384.00
Equipment	\$55,000.00	\$55,000.00	\$110,000.00
Total	\$374,022.00 \$454,022.00	\$399,522.00 \$479,522.00	\$773,544.00 \$933,544.00

\$80,000.00 Federal dollars were obligated under SWG '05 with an additional \$115,000.00 in Federal dollars obligated under the grant amendment #1 from the SWG '06 appropriations. Of the \$115,000 non federal match, \$55,500.00 will come from the NRRTF. Under amendment #2 an additional \$107,530 in federal dollars from the SWG'06 appropriation will be obligated. The source of non-federal funding match will be as follows: \$40,000 - NRDA (Marathon Restoration) funding; \$12,530- Prairie Ridge Farm Lease Funds; \$25,000 - Natural Areas Acquisition Fund; \$30,000 - Prairie Ridge Staff Salary. Under amendment #3 an additional \$71,492 in federal dollars from the SWG'07 appropriation will be obligated. The source of non-federal funding match will be \$71,492 - Prairie Ridge Staff Salary.

Table E: No Change

Prairie Ridge Sanctuary

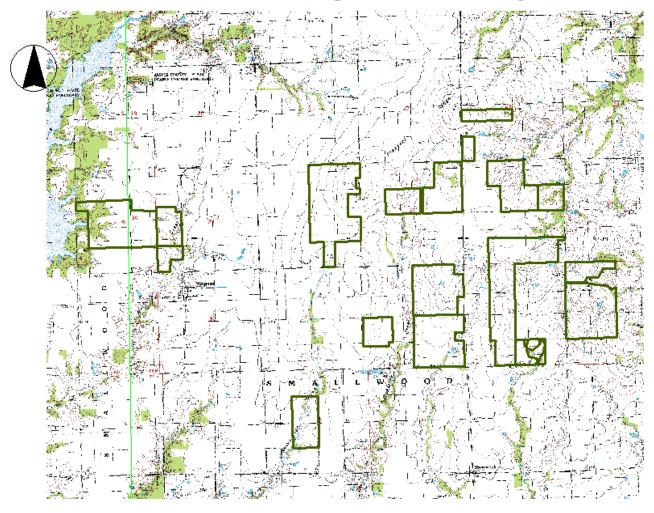


Figure E1. Sites at Prairie Ridge State Natural Area, Jasper County, Illinois.

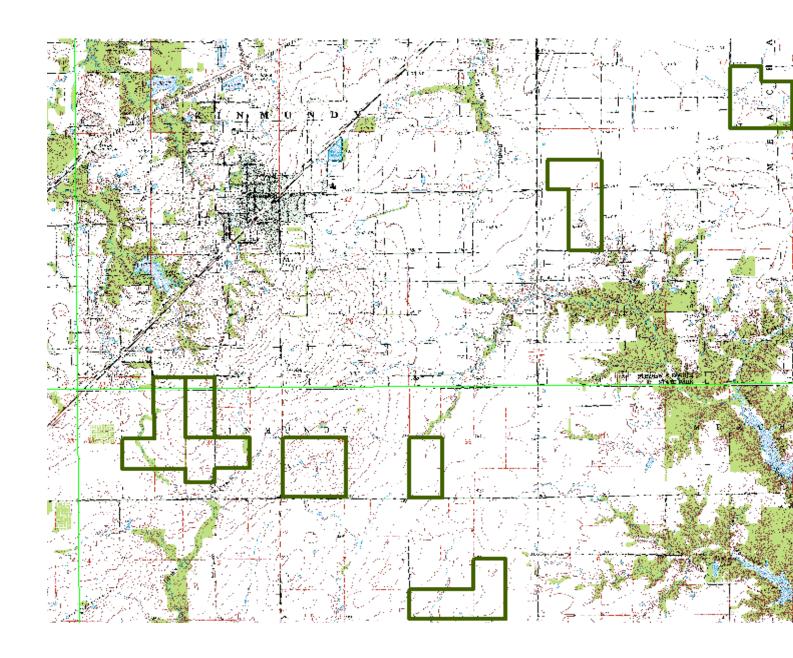


Figure E2. Sites at Prairie Ridge State Natural Area, Marion County, Illinois

Appendix P Change at Noted

Job 16. Exotic Vegetation Control on Remnant Prairie and Savanna at Weinberg-King State

Park.

Job Leader: Dean Corgiat

Natural Heritage Biologist

Illinois Department of Natural Resources

Route 106 West PO Box 477

Pittsfield, IL 62363

217/285-2221 fax 217/284-2750

deancorgiat@illinois.gov

Purpose/need: No Change

Objective:

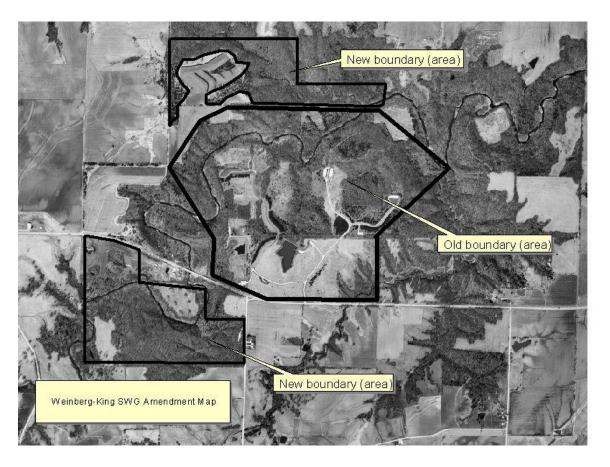
Restore and/or maintain prairie and savanna habitats on approximately 350 600 acres at Weinberg-King State Park by the removal of invasive and exotic woody species.

Approach: No Change

Budget No Change

Table P1. No Change

Figure P1. Location of exotic species control at Weinberg-King State Park in Schuyler County, Illinois.



Appendix R - Change as Noted

Job Title: Job18: Non-native, invasive species control at Washington County Conservation Area

Job Leader: Martin Kemper

District Natural Heritage Biologist One Main Event Drive Suite 140

Sparta, IL 62263 618/295-2877

martin.kemper@illinois.gov

Purpose/need: No Change

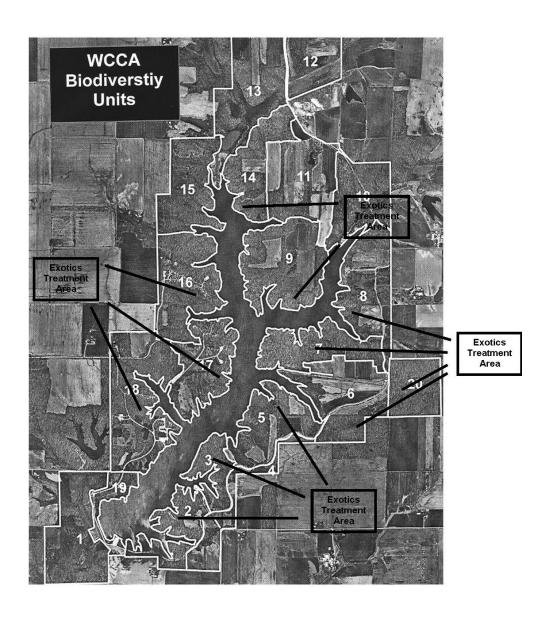
Objective: No Change

Budget: Change As Noted

Line Item	Federal Share	State Share	Project Total
Contractual	\$,000.00 \$18,000.00	\$5000.00	\$13,000.00 \$23,000.00
Commodities	\$2,0000.00 \$4,000.00	\$1000.00 \$2,000.00	\$3,000.00 \$6,000.00
Personnel	0.00	\$4000.00 \$15,000.00	\$4,000.00 \$15,000.00
Total	\$10,000.00 \$22,000.00	\$10,000.00 \$22,000.00	\$20,000.00 \$44,000.00

Table R: No Change

Figure R. Proposed locations of exotic species control at Washington County Conservation Area, Washington County, Illinois. Note: this map shows the medium term (approximately 20 years) exotics treatment plan; the current job will extend treatment to about 100 acres of this area in units designated below.



Appendix S - Change as Noted

Job 19. Community Restoration at Franklin Creek State Natural Area, Pine Rock Nature

Preserve, and Nachusa Grasslands

Job Leader: Ed A. Anderson

Lost Mound Unit 3159 Crim Road Savanna, IL 61074

Purpose/need: No Change

Objective: No Change

Budget: Change As Noted

Line Item	Federal Share	State Share	Project Total
Contractual	\$65,000.00 \$308,000.00	\$11,000.00	\$76,000.00 \$319,000.00
Commodities	\$0.00	\$26,000.00 \$56,000.00	\$26,000.00 \$56,000.00
Personnel	\$0.00	\$28,000.00 \$241,000.00	\$28,000.00 \$241,000.00
Total	\$65,000.00 \$308,000.00	\$65,000.00 \$308,000.00	\$130,000.00 \$616,000.00

Table S1: No Change

Figure S1. Location of work activities at Franklin Creek State Natural Area/Nachusa Grasslands in Lee and Ogle County, Illinois.

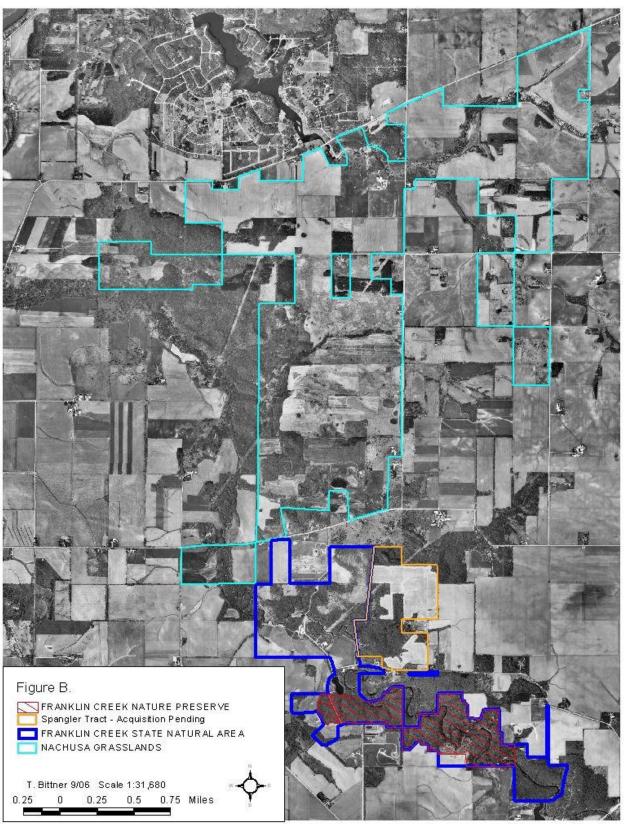


Figure S2. Location of work activities at Pine Rock Nature Preserve, Ogle County, Illinois.



Figure B.

☐ Pine Rock Nature Preserve

500 0 500 1000 1500 2000 2500 Feet

T. Bittner 9/06

Scale 1: 7,920

Appendix T

Job Title: Job 20. Natural Community Restoration at Chauncey Marsh Nature Preserve and State

Natural Area, Lawrence County, Illinois

Job Leader: Terry L. Esker

Natural Heritage Biologist

4295 N. 1000th St. Newton, IL 62448 618-783-2685

terry.esker@illinois.gov

Purpose/need: No Change

Objective: No Change

Approach: No Change

Budget:

Duagett			
Line Item	Federal Share	State Share	Project Total
Contractual	\$20,000.00	\$8,000.00 (NRRTF)	\$37,500.00
	\$29,500.00	\$9,500.00 (NAAF)	\$56,500.00
		\$19,000.00 (NAAF)	
Commodities	\$0.00	\$5,000.00 (NRRTF)	\$5,000.00
Personnel	\$0.00	\$0.00	\$0.00
Total	\$20,000.00	\$22,500.00	\$42,500.00
	\$29,500.00	\$32,000.00	\$61,500.00

Terry Esker is requesting an additional \$9,500.00 in federal funds to complete additional woody invasive species control within the original project area. He underestimated the cost of removing woody vegetation within this area. An equal amount of state match will come from the Natural Areas Stewardship Fund.

Figure T1. Location of exotics and woody invasive species control at Chauncey Marsh Nature Preserve and State Natural Area.

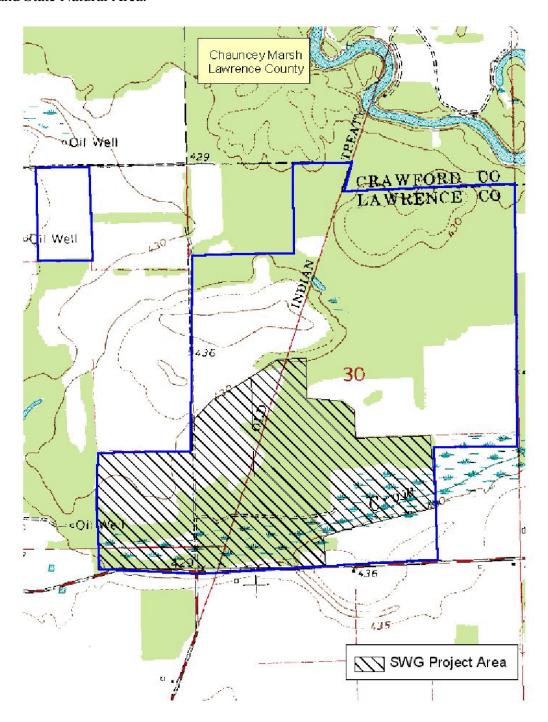


Figure T2. **No Change**

Figure T3. **No Change**

Appendix Y.

Job Title: Job 25. Community Restoration at Kickapoo State Recreational Area – Dynegy Tract

Job Leader: Roger Jansen

Natural Heritage Biologist

1660 W Polk Ave Charleston, IL 61920 Ph: 217-345-2420 Fax: 217-348-5873

Roger.Jansen@illinois.gov

Purpose/Need:

The Dynegy tract is located in Vermilion County northwest of Danville, Illinois (Figure Y1). The 1,100 tract was transferred to the IDNR in 2008. The tract links Kickapoo State Recreation Area (2,800 acres), Kennekuk Cove County Park (3,000 acres) and Middlefork State Fish and Wildlife Area (2,700 acre). Combined, these 9,600 acres of publicly owned land are managed for natural resources and compatible recreation. This tract provides additional buffer to the Middlefork River, Illinois' only National Wild and Scenic River. The Dynegy tract provides habitat for several species that are threatened and endangered and conservation priority. The buffered Middlefork River also has several threatened and endangered and conservation priority species (Table Y).

The dry mesic upland forest community is the dominant forest type on the Dynegy tract. The drymesic upland forest on the Dynegy tract has herbaceous characteristics suggesting a past history of open woodland/savanna. The western extent of *Fagus grandifolia* (American beech), and the beechmaple forest association ends in the Vermilion River watershed in east-central Illinois and is present on this tract. Several seeps occur at various sites throughout the property. The largest seep has some uncommon species and is relatively undisturbed and may have been much larger at one time. Swamp wood betony and *Solidago patula* (rough leaf goldenrod) are rare species in the Vermilion River valley. Exotic and invasive species (i.e. maple) removal and periodic prescribed fire could help to maintain these various community types.

Objective:

Restore and manage upland forest and seep communities. Enhance habitats for forest, savanna, and grassland species of conservation concern. Objective is to restore and maintain 50 acres dry-mesic oak woodland, 10 acres open woodland, 3 acres of seep, 16 acre tree planting, and 20 acres of prairie.

Approach:

IDNR personnel and contractors will implement a program to eliminate invasive and exotic plant species, restore prairie, and encourage oak regeneration through forest management throughout the tract. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, and habitat creation/restoration planting.

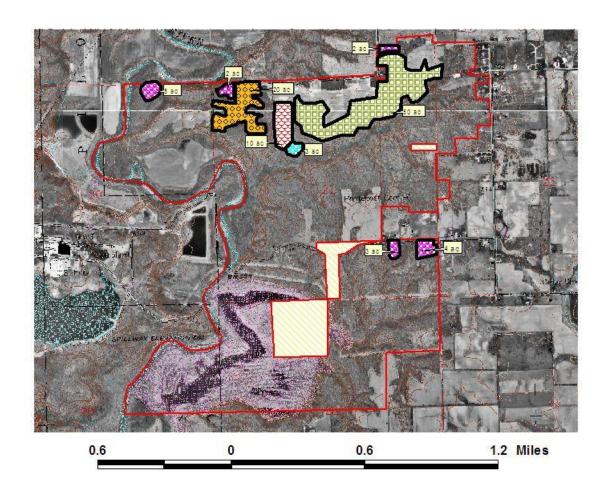
Budget:

Line Item	Federal	State	Total
Contractual	\$19,500.00	\$16,500.00	\$36,000.00
Commodities	\$2,000.00	\$2,000.00	\$4,000.00
Personnel	\$0.00	\$3,000.00	\$3,000.00
Total	\$21,500.00	\$21,500.00	\$43,000.00

Table Y. State Endangered (SE), Threatened (ST), and Conservation Priority Species (CP) at the Dynegy tract of the Kickapoo State Recreational Area.

COMMON NAME	SCIENTIFIC NAME	STATUS
Birds		
Henslow's sparrow	Ammodramus henslowii	ST
Red-shouldered hawk	Buteo lineatus	CP
Northern flicker	Colaptes auratus	CP
Yellow-breasted chat	Icteria virens	CP
Red-headed woodpecker	Melanerpes erythrocephalus	CP
Kentucky warbler	Oporornis formosus	CP
Ovenbird	Seiurus aurocapillus	CP
Blue-winged warbler	Vermiforma pinus	CP
Fish		
River redhorse	Moxostoma carinatum	ST
Bluebreasted darter	Etheostoma camurum	SE
Eastern sand darter	Ammocrypta pellucidum	ST
Bigeye chub	Hybopsis amblops	SE
Mollusks		
Wavy-rayed lampmussel	Lampsilis fasciola	SE
Plants		
Sedge	Carex communis	ST

Figure Y. The Dynegy Tract links Kickapoo State Recreational Area with the Middlefork Fish and Wildlife Area and Kennekuk Cove County Park in Vermilion County, Illinois.



Pink = tree planting Yellow = prairie planting Red = open woodland Green = dry mesic woodland Blue = seep



APPENDIX Z

JOB TITLE: Job 26. Green River State Wildlife Area Grassland and Wetland Restoration

Job Leader: Frank Ostling

District Wildlife Biologist

Green River State Wildlife Area

375 Game Farm Road Harmon, Illinois 61042

815-379-2760-office, 815-379-2664 fax

Frank.Ostling@illinois.gov

Purpose/Need:

Green River State Wildlife Area (GRSWA) provides some of the largest and highest quality native prairies and wetlands remaining in the state, habitat for over 15 rare species. The 2554 acre GRSWA contains the entire natural community continuum from sand pond to dry sand prairie and savanna within the nine natural plant communities at this site. GRSWA contains nearly 500 plant species including four State listed species, over 150 bird species including 11 State listed species, 8 amphibians, and 16 reptile species including two listed species, and at least 23 species of mammals. The site contains over 65 species in greatest need of conservation This site also provides some of the highest quality habitat for wetland and prairie remnant dependant invertebrates in the state. More than 1000 acres are designated as an Illinois Natural Areas Inventory Site.

Green River State Wildlife Area has experienced tremendous amount of tree, brush, and invasive exotic species invasion over the last five decades, causing considerable degradation to prairie and wetland resources. In addition, hydrological changes have resulted in reduced wetland acreage compared to the historical extent. A significant effort is needed to reverse the recent succession and continue the prairie and wetland restoration and management to support the species of primary management concern according to USF&WS / Green River SWA W-8-L Amendment #4.

Amendment 4 to Illinois Federal Aid Grant W-8-L revised the primary purpose of GRSWA to restore and maintain communities of wildlife species associated with prairie and wetland habitats. This amendment to W-8-L was approved by the United States Fish and Wildlife Service (FWS) on September 26, 1995.

The United States Fish and Wildlife Service (FWS) programmatic review of Illinois Federal Aid Grant W-8-L Green River State Wildlife Area conducted in October 1998 concluded that two activities, horseback field trials and put and take pheasant shooting, placed the Illinois Department of Natural Resources (IDNR) in noncompliance with federal Law, regulations, and grant provisions. This finding of noncompliance compelled the FWS as the federal granting agency to require the grantee, IDNR, to resolve the findings in an expedient manner.

Twelve remedies were "required to bring Grant W-8-L, the Illinois Department of Natural Resources, and the Fish and Wildlife Service into programmatic compliance with the Federal Aid in Restoration

Act, Program Regulations, Grant Administration Requirements, Program Standards, Grant Conditions, and the Grant Proposal." Except for remedy #10, all of these remedies have been addressed, although the current site superintendant vacancy outlined in remedy #4 is again valid. In Remedy #10, FWS "notifies IDNR that: (a) lands adversely impacted by field trial activities must be restored in a manner that supports accomplishment of grant objectives; (b) a restoration plan that identifies needs, objectives, benefits, approaches, locations, time frames, costs, and other details must be submitted by January 1, 1999; (c) work to restore the site must commence in calendar year 1999 and proceed annually until the plan has been completed; and (d) the FWS must be provided an annual status report regarding plan implementation and a final report when implementation of the plan has been completed."

The project proposed in State Wildlife Grant (SWG) T-28-M-1 is consistent with the grant objectives outlined in Amendment 4 and with the IDNR commitment to resolve the findings of the programmatic review. This project specifically addresses remedies 10 a) and c).

Objective:

Maintain and restore approximately 2200 acres of prairie and wetland habitats at Green River State Natural Area, Lee County. And of these, 9 are state endangered or threatened species. Targeted heavy brush control will be done on approximately 200 acres and scattered invasive species control will be done on the remaining project acreage as needed. Wetland restoration efforts will increase water surface area by at least 15%.

Approach:

IDNR personnel, volunteers, and contractors will implement a program to eliminate invasive and exotic plant species in sand savanna, prairie and wetland habitats. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal

BUDGET:

Line Item	Federal Share	State Share	Total
Contractual	\$30,000.00	\$20,000.00	\$50,000.00
Commodities	\$5,000.00	\$5,000.00	\$10,000.00
Personnel	\$0.00	\$10,000.00	\$10,000.00
Total	\$35,000.00	\$35,000.00	\$70,000.00

Table Z. Endangered (SE), Threatened (ST) and Conservation Priority Species (CP) of Green River State Wildlife Area.

BIRDS

Henslow's sparrow (ST)

Grasshopper sparrow

American bittern (SE)

Whip-poor-will

Northern harrier (SE)

Marsh wren

Northern flicker

Northern bobwhite

Bobolink

Common moorhen (ST)

Sandhill crane (SE)

Least bittern (ST)

Red-headed woodpecker

Savanna sparrow

Pied-billed grebe

American woodcock

Dickcissel

Greater yellowlegs

Bell's vireo

Yellow-headed blackbird (SE)

MAMMALS

American badger

REPTILES

Blanding's turtle (ST)

Western hognose snake (ST)

Smooth green snake

Ornate box turtle

INSECTS

Boloria selene myrina

Capis curvata

Catocala whitneyi

Chlosyne gorgone carolata

Chortodes defecta

Destria fumida

Eritettix simplex

Eucoptocnemis fimbriaris

Eucosma n.s.

Eucosma palabundana

Euphyes bimacula

Flexamia atlantica

Flexamia pyrops

Loxagrotis grotei

Lycaena helloides

Oncocnemis viriditincta

Paecetes abrostolella

Papaipema birdi

Papaipema cerina

Papaipema maritima

Papaipema rigida

Phytometra ernestinana

Plagiomimicus spumosum

Platyperigea meralis

Polyamia herbida

Polyamia rossi

Polyamia similaris

Problema byssus

Protorthodes incincta

Pseudeva purpurigera

Pygarctia spraguei

Rosenus cruciatus

Scaphytopius cinereus

Schinia lucens

Speyeria aphrodite

Speyeria idalia (ST)

Triclonella manifesta

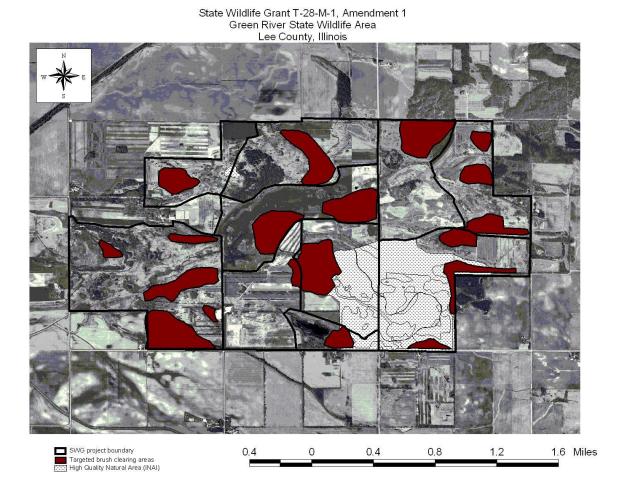
Triclonella determinatella

Ulolonche modesta

Xerophloea peltata

- (SE) State Endangered Species (ST) State Threatened Species

Figure Z.



Job Title: Job 27. Habitat Restoration at Gooselake Prairie State Natural Area,

Grundy County, Illinois.

Job Leader: Dan Kirk

Natural Heritage Biologist

13608 Fox Rd.

Yorkville, IL. 60560

630-553-1372

Dan.kirk@illinois.gov

Purpose/need:

The Project will take place at Gooselake prairie State Natural Area, located in Grundy County, 5 miles east of Morris, Illinois, between the confluence of the Kankakee and Des Plaines Rivers (Figure 1). The site is located within Prairie Parklands, one of the 30 identified Resource Rich Areas (RRA) in Illinois. Goose Lake Prairie State Natural Area (GSPSNA) is the largest remnant prairie in Illinois, totaling nearly 2600 acres. A 1700 acre state dedicated nature preserve contains marshes, seeps, sedge meadow, wet, mesic, and dry prairie. GLPSNA's large size and rare species makes it one of the most significant Midwestern prairies. Six Illinois threatened and endangered plant species and 12 animal species (2 winter residents) are known from GLPSNA along with 33 species of conservation priority. Particularly significant are the populations of grassland birds and Blanding's turtles. GLPSNA may have one of the few viable populations of Blanding's turtles in the state.

Objective:

Remove as many fencerows as possible from a 600 acre block of prairie to reduce grassland fragmentation for area sensitive grassland birds.

Approach:

IDNR personnel and contractors will implement a program to control woody vegetation in fencerows. The practices to be applied include invasive woody control and habitat restoration; planting. Descriptions of these practices are in the body of the grant proposal.

Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$20,000.00	\$10,000.00	\$30,000.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$10,000.00	\$10,000.00
Total	\$20,000.00	\$20,000.00	\$40,000.00

Table AA. Endangered (SE), Threatened (ST) and Conservation Priority Species (CP) of Goose Lake Prairie State Natural Area.

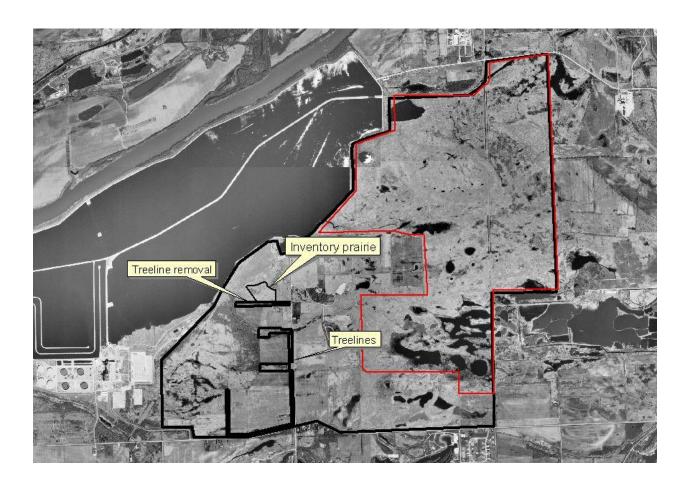
Common Name	Scientific Name	Status
INSECTS		
Redveined Prairie Leafhopper	Aflexia rubranura	ST
Eryngium Stem Borer	Papaipema eryngii	SE
	Hydraecia immanis	СР
	Lemmeris digitalis	СР
	Papaipema beeriana	СР
	Papaipema cerrusata	СР
	Papaipema maritima	СР
	Papaipema sciata	СР
	Papaipema silphii	СР
	Tricholita notata	СР
	Boloria selene myrina	СР
	Euphyes bimacula	СР
	Erynnis martialis	СР
	Lycaeides xanthoides dione	СР
	Lycaena helloides	СР
	Poanes viator	СР
	Problema byssus	СР
	Speyeria idalia	СР
	Speyria aphrodite	СР
BIRDS		
Henslow's Sparrow	Ammodramus henslowii	SE

Grasshopper Sparrow	Ammodramus savannarum	СР
Northern harrier	Circus cyaneus	SE
Northern Flicker	Colaptes auratus	СР
Eastern Meadowlark	Sturnella magna	СР
Willow Flycatcher	Empidonax traillii	СР
Bell's Vireo	Vireo bellii	СР
King rail	Rallus elegans	SE
Pied billed grebe	Podilymbus podiceps	СР
Common moorhen	Gallinula chloropus	ST
Least bittern	Ixobrychus exilis	SE
American bittern	Botaurus lentiginosus	SE
Sandhill crane	Grus canadensis	ST
Marsh wren	Cistothorus palustris	СР
bobolink	Dolichonyx oryzivorus	СР
Hooded merganser	Lophodytes cucullatus	СР
American woodcock	Scolopax minor	СР
Dickcissel	Spiza americana	СР
Herps		
Blanding's turtle		ST
Slender glass lizard		СР
Smooth green snake		СР
Mammals		
Badger	Taxidea taxus	СР
Least weasel	Mustela nivalis	СР
Mustrat	Odontra zibethicus	СР

CP-Conservation priority

SE-State Endangered ST-State Threatened

Figure AA. Fencerows will be removed within the areas outlined in black at Goose Lake Prairie State Natural Area to decrease habitat fragmentation for area sensitive grassland birds.



Job Title: Job 28: Cache River State Natural Area, Johnson County invasive exotic species management project.

Job Leader: Mark Guetersloh

0139 Rustic Campus Drive

Ulin, IL 62992 618-634-9656

Purpose/need:

The Cache River State Natural Area (Figure H1) contains critical habitat for eight Illinois threatened or endangered species and two federal endangered species. Other rare or uncommon species that occur within the area are generally associated with wetlands of the deep south or prairie species associated with the till plain region located north of the Shawnee Hills Natural Division. Boss island has portions that are old field and pine plantations. These areas fragment and act at seed sources for invasive species within the Natural Area.

Objectives:

Implement an exotic invasive species, primarily autumn olive (*Eleagnus angustifolia*), management program at Cache River State Natural Area, Johnson County.

Approach:

IDNR personnel and contractors will implement a program of exotic species control and forest restoration. The primary target area will include Boss Island which is either included as part of Cache River Land and Water Reserve or the Heron Pond-Little Black Slough Nature Preserve (). Practices that will be included in the management program are prescribed fire, invasive woody plant control, invasive exotic species control, erosion/sedimentation control, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$42,200.00	\$40,000.00	\$82,200.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$2,200.00	\$2,200.00
Total	\$42,200.00	\$42,200.00	\$84,400.00

Figure BB1.

Wildcat Bluff East Burn Unit

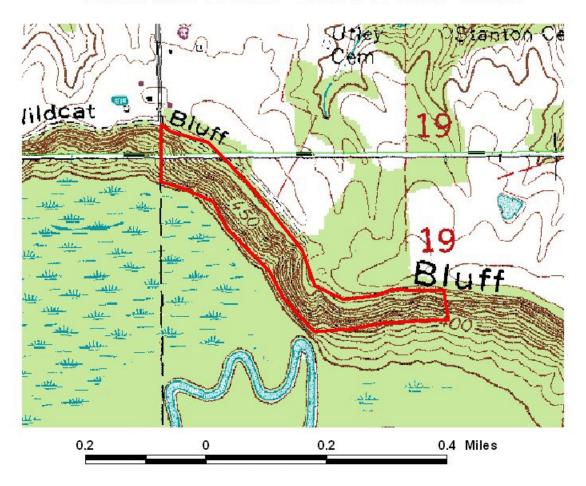
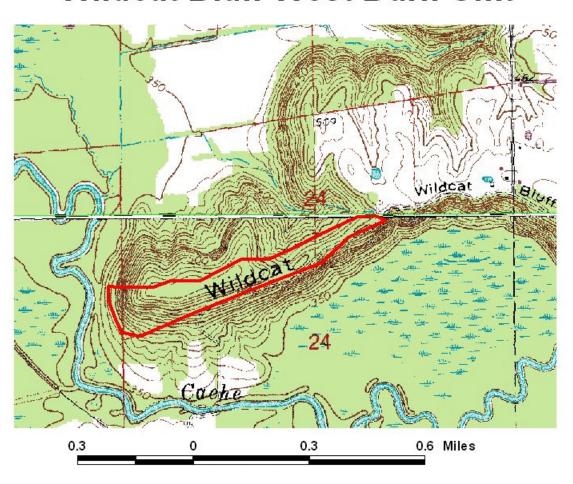




Figure BB2.

Wildcat Bluff West Burn Unit





Job Title: Job 29. Boundary Survey and Invasive Species Control at Collier Glade LWR, Hardin County, Illinois and Gibbons Creek Barrens NP, Pope County, Illinois

Job Leader: Bob Lindsay

Ferne Clyffe State Park

P O Box 67, Goreville, IL 62939

618-995-2568

Bob.lindsay@illinois.gov

Purpose/need:

Gibbons Creek Barrens NP (Figure CC1) is located 1 mile NW of Herod in Pope County and exists within a matrix of publically owned lands – both IL DNR and Shawnee National Forest (USDA). Gibbons Creek is owned by the IDNR and supports high and very high quality dry barrens, high quality dry upland forest, and essentially undisturbed sandstone cliff. Gibbons Creek Barrens is one of the best remaining examples of barrens habitat anywhere in Illinois. Collier Glade LWR is located in Pope County, Illinois and is owned by the IL DNR (Figure CC2). Collier Glade supports very high and high quality examples of limestone glade habitats.

Both sites are Illinois Natural Areas Inventory Sites. Gibbons Creek is one of only 3 high quality dry barrens remaining within the region. High quality limestone glades, such as those at Collier, persist at only 12 such sites. The maintenance and restoration of high and very high quality habitats on the INAI is an objective of several campaigns of the Illinois Wildlife Action Plan. Both sites contain numerous species in greatest need of conservation (Table CC).

Boundary issues exist regarding the actual boundary of each site to permanently address neighboring land use issues. In addition, barrens and glades are being degraded at a faster rate than other habitat types due to the high edge-to-area ratio of these habitats. Invasion by woody and exotic vegetation is shading out barren or glade dependent species and degrading the sites.

Objective:

Locate and permanently post site boundaries by legal survey to address site integrity issues. Control 105 acres of invasive vegetation at Colliers Glade and 133 acres at Gibbons Creek Barrens.

Approach:

IDNR personnel and contractors will implement a program to eliminate invasive and exotic plant species and boundary posting. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, and boundary protection/fence repair as outlined in the body of the grant.

Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$15,500	\$15,500	\$31,000
Commodities	0	0	0
Personnel	0	0	0
TOTAL	\$15,500	\$15,500	\$31,000

Table CC. State Endangered (SE), State Threatened (ST) Conservation Priority Species (CP) at Gibbons Creek Barrens Nature Preserve and Collier Glade Land and Water Reserve in Pope County, Illinois.

Common Name	Scientific Name	Status
Willdenow's sedge	Carex willdenowii	SE
Hale's corydalis	Corydalis halei	SE
Timber rattlesnake	Crotalus horridus	ST
Red-headed woodpecker	Melanerpes erythrocephalus	СР
Henslow's sparrow	Ammodramus henslowii	СР
Chuck-will's-widow	Caprimulgus carolinensis	СР
Whip-poor-will	Caprimulgus vociferus	СР
Yellow-billed cuckoo	Coccyzus americanus	СР
Northern flicker	Colaptes auratus	СР
Northern bobwhite	Colinus virginianus	СР
Prairie warbler	Dendroica discolor	СР
Willow flycatcher	Empidonax trailli	СР
Acadian flycatcher	Empidonax virescens	СР
Yellow-breasted chat	Icteria virens	СР
American woodcock	Scolopax minor	СР
Field sparrow	Spizella pusilla	СР
Bewick's wren	Thryomanes bewickii	SE
Bell's vireo	Vireo belli	СР
Bobcat	Lynx rufus	СР
Least weasel)	Mustela nivalis	СР
Indiana bat	Myotis sodalis	FE, SE
Gray fox	Urocyon cinereoargenteus	CP

Gibbons Creek Barrens

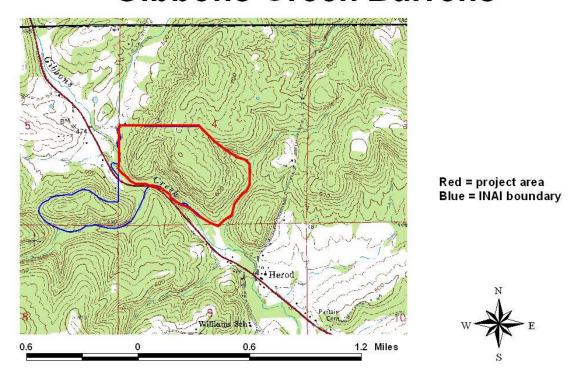


Figure CC1: Gibbons Creek Barrens, located one mile northwest of Herod, IL is one of the best remaining examples of barrens habitat anywhere in Illinois. Boundary posting/fencing and exotic species control will be conducted within the Illinois Natural Areas Site, outlined in blue.

Collier Glade

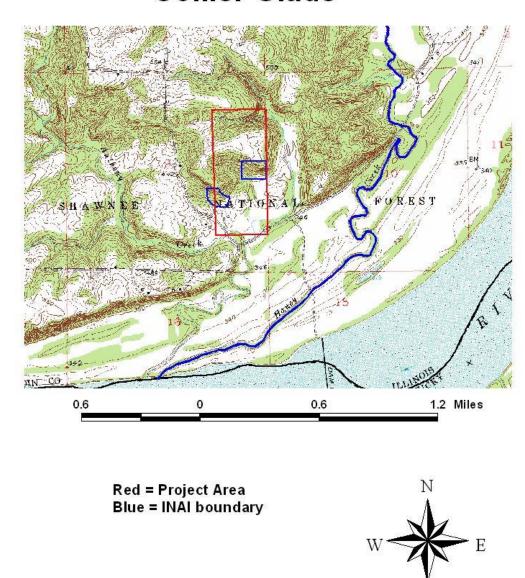


Figure CC2. Collier Glade LWR is located in Pope County, Illinois and is owned by the IL DNR. Exotic and woody invasive control will be conducted within the Illinois Natural Areas Site, outlined in blue, and the surrounding buffer.

Job 30. Exotic Species Control in High Quality Northeastern Illinois

Wetlands

Job Leader: Brad Semel

Chain O' Lakes State Park

8916 Wilmot Road Spring Grove, IL 60081 815-675-2386.1 EXT 317 brad.semel@illinois.gov

Purpose/need:

Kettle Moraine, Volo Bog, and Turner Lake Nature Preserves, Lake and McHenry counties in northeastern Illinois, constitute the principle high quality natural areas of their respective state parks and provide habitat for at least 41 state listed endangered and threatened species collectively (Table DD).

Kettle Moraine Nature Preserve (Figure DD1), within Moraine Hills State Park, supports very high and high quality calcareous floating mat and Graminoid fen habitats, very high quality low shrub bog habitats, and high quality marsh, pond, and sedge meadow. Twenty-two state-listed species occur at this site. Volo Bog Nature Preserve, Lake County (Figure DD2), is the best remaining example of classic bog vegetation in Illinois, supporting very high and high quality examples of tall shrub bog, forested bog, graminoid bog, and pond. Twenty three state-listed species occur at Volo Bog. Turner Lake Nature Preserve (Figure DD3), within Chain O' Lakes State Park, supports very high quality examples of calcareous floating mat, graminoid fen, pond, and sedge meadow. The site also supports 10 state-listed species.

Objective:

Invasive woody vegetation and exotic species are invading these high quality wetlands, displacing native flora. Plant community degradation threatens the habitat necessary to support the diverse assemblage of threatened and endangered fauna and flora of the Nature Preserves.

Approach:

Exotic invasive species will be controlled using a selection of herbicides (dependent upon species to be controlled) and timed for appropriate phenology. Maintaining native vegetation will allow more effective community maintenance with the use of prescribed fire.

Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$12,500	\$12,500	\$25,000
Commodities	0	0	0
Personnel	0	0	0

TOTAL	\$12,500	\$12,500	\$25,000

Table DD. State Endangered (SE), State Threatened (ST) Conservation Priority Species (CP) at Gibbons Creek Barrens Nature Preserve and Collier Glade Land and Water Reserve in Pope County, Illinois

Common name	Scientific Name	Status
Iowa darter	Etheostoma exile	СР
Sandhill crane	Grus canadensis	ST
Least bittern	Ixobrychus exilis	ST
Black tern	Chlidonias niger	SE
Yellow-headed blackbird	Xanthocephalus xanthocephalus	SE
Pinweed	Lechea intermedia	ST
Leatherleaf	Chamaedaphne calyculata	ST
Pale vetchling	Lathyrus ochroleucus	ST
Flat-leaved bladderwort	Utricularia intermedia	ST
Horned bladderwort	Utrichularia minor	SE
Downy willowherb	Epilobium strictum	ST
	Galium labardoricum	
Pitcher Plant	Sarracenia purpurea	SE
Few-seeded sedge	Carex oligosperma	SE
Rusty cottongrass	Eriophorum virginicum	SE
Beaked rush	Rhynchospora alba	ST
False asphodel	Tofieldia glutinosa	ST
Grass pink orchid	Calopogon tuberosus	SE
Spotted coralroot orchid	Corallorhiza maculata	ST
White lady's slipper orchid	Cypripedium candidum	ST
Small yellow lady's slipper	Cypripedium parviflorum	SE
Beaked spike rush	Eleocharis rostellata	ST
Tufted bulrush	Trichophorum cespitosus	SE
Yellow birch	Betula alleghaniensis	SE
Round-leaved sundew	Drosera rotundifolia	SE
Highbush blueberry	Vaccinium corymbosum	SE
Large cranberry	Vaccinium macrocarpon	SE
Star-flower	Trientalis borealis	SE
Alder buckthorn	Rhamnus alnifolia	SE
Dwarf raspberry	Rubus pubescens	SE
Autumn willow	Salix serissima	SE
Tamarack	Larix larcina	ST
Water arum	Calla palustris	SE
Silvery sedge	Carex canescens	SE
Cordroot sedge	Carex chordorhiza	SE
Shortleaf sedge	Carex disperma	SE
Three-seeded sedge	Carex trisperma	SE
Smith's bulrush	Schoenoplectus smithii	SE

Snake-mouth	Pogonia ophioglossoides	Se



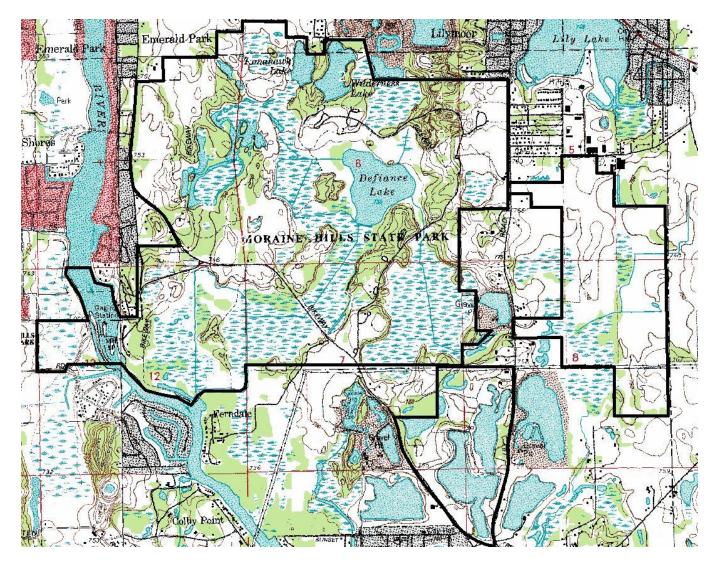


Figure DD2. Volo Bog State Nature Preserve is located 45 miles northwest of Chicago in Lake County.

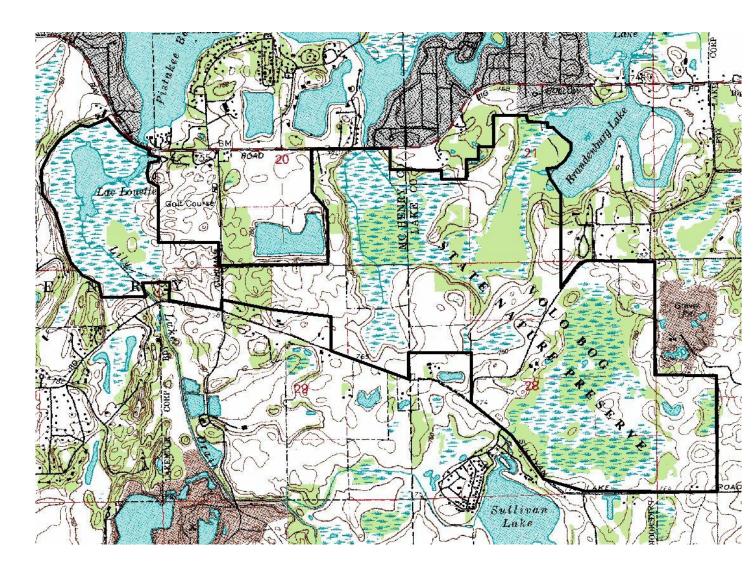
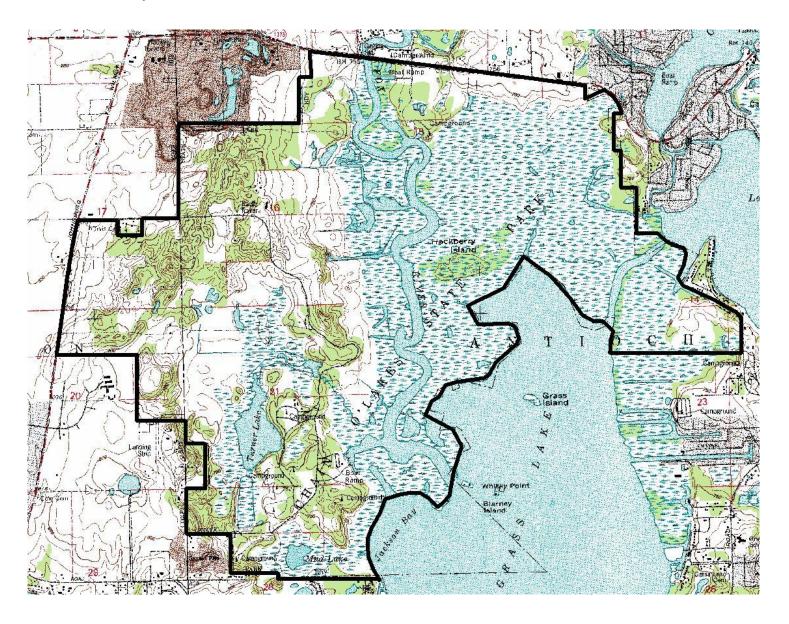


Figure DD3. Chain O Lakes State Park is located 60 miles northwest of Chicago in Lake and McHenry Counties.



AMENDMENT #5

Grant Segment - Work Plan Amendment #5

<u>REASON FOR THE AMENDMENT</u>: An amendment to T-28-M-1 will add groundwater monitoring to the hydrological restoration approach. This will allow further comprehensive analysis of the hydrology restoration at Iroquois State Wildlife Area, Job #2. Funding amounts and allocations will not change.

PROJECT NUMBER: T-28-M

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

OBJECTIVES: No Change

APPROACH:

1. Hydrology Restoration

Details - Changes in hydrology can impact the viability of target species. No streams or other bodies of water will be impacted. All work will be done in hydrologically isolated areas or in such a way that they will not impact the movement of aquatic organisms. All hydrologic restorations will be done in accordance with local, state and federal laws and in consultation with the local NRCS office.

All activities included in planning, implementing and evaluating the success of hydrology restoration projects will be included in this practice. This includes groundwater monitoring to verify the results of hydrologic restoration. It allows identification of impacted areas, verification of appropriate hydrologic regimes for specific vegetation communities, and assistance with active hydrologic management of a site, (i.e., measuring the effectiveness of weir settings to achieve target water levels). Monitoring wells also collect basic groundwater and surface-water levels that can be used to identify baseline conditions, identify impacted hydropatterns in plant communities of interest, and document post-construction results.

The proposed projects might be greatly improved with the addition of groundwater monitoring, including making geologic borings, installing monitoring wells, and installing surface-water gauges (both manual and electronic) in selected locations for an integrated view of the site hydrology.

Monitoring wells will be installed according to the methods of Miner and Simon (1997), which are constructed at shallow depths (2.5 ft) in order to identify saturation in the root

zone of plant communities. Exact locations are to be chosen in the field, with emphasis on both high quality and degraded communities of interest, for comparison and identification of impacts. The locations are expected to be located along cross-sections through the westernmost square mile of the site.

Deep monitoring wells (ca. 10 ft) will be used to identify the geologic units present and estimate infiltration capacity and determine effectiveness of proposed water control structures.

All wells will be measured biweekly in spring, and monthly throughout the remainder of the year.

Surface water will also be measured to determine the interaction between surface water and groundwater with staff guages.

Dataloggers will be used to measure surface-water levels at various locations.

All hydrologic restoration will be approved through the annual site resource planning process and included on the site's annual plan of work.

Wetland restoration will be limited to the removal of previously placed fill or drain tiles in existing wetland basins as well as the addition of water control structures. The maximum surface area of disturbance for the restoration of a wetland will be less than 5 acres. There will be no more than 5 wetlands restored by the removal of fill at any project site.

Wetland creation will be limited to the creation of low berms or depressions designed to capture precipitation or groundwater, as well as the addition of water control structures. Where porous soil exists, clay or synthetic liners will be allowed to be placed. These practices are described in greater detail by publications such as *A Guide to Creating Vernal Ponds* (Biebighauser 2002), *Habitat Management Guidelines for Amphibians and Reptiles of the Midwest* (Partners in Amphibian and Reptile Conservation 2002) and the *Illinois Landowner's Guide to Amphibian Conservation* (Szafoni et al. 2002). The wetlands constructed under this project will consist of an earthen berm with a maximum height of four (4) feet. The maximum surface area of disturbance for the construction of a wetland will be fifteen (15) acres. There will be no more than 16 wetlands constructed at any project site.

Pond restoration and creation will be limited to areas ≤ 3 acre in size. Ponds restored or created under this project will be constructed according to NRCS specifications.

LOCATION: No Change

GRANT AGREEMENT SUPPORT DOCUMENTATION: - No Change

<u>APPENDICES</u>: - Change as noted

- A No Change
- B Hydrology Restoration at Iroquois State Wildlife Area Land and Water Reserve and Hooper Branch Savanna NP, Iroquois County. (**Refer to Appendix B for details of the changes**)
- C-DD. No Change

Job: Job 2. Hydrology Restoration at Iroquois State Wildlife Area Land and Water Reserve and Hooper Branch Savanna NP, Iroquois County.

Job Leader: Eric L. Smith

Restoration Ecologist 301 South Date Street Gibson City, Illinois 60936

217-784-4730

esmith@dnrmail.state.il.us

Purpose/need: No Change

Objective: No Change

Approach:

Several water control structures will be built in strategic locations, including the SW corner of Iroquois State Wildlife Area LWR and along 1.5 miles of drainage ditch in Hooper Branch Savanna NP. Potential locations are circled in brown in Figure B. Exact locations will depend on where it is determined that makes the most hydrological and economic sense. Descriptions of these practices are in the body of the grant proposal.

To fully understand results of water control structures on the 1000 acre sedge meadow, Twelve monitoring wells are proposed to be installed according to the methods of Miner and Simon (1997), which are constructed at shallow depths (2.5 ft) in order to identify saturation in the root zone of plant communities. Exact locations are to be chosen in the field, with emphasis on both degraded and nondegraded plant communities of interest, for comparison and identification of impacts. The locations are expected to be located along cross-sections through the westernmost square mile of the site. Wells are also to be located adjacent to interior ditches to identify any groundwater drawdowns due to drainage from the ditches. In addition, a deep monitoring well (ca. 10 ft) will be installed northeast of the intersection of the Interior Ditch and the North Tributary in order to identify the geologic units present and estimate infiltration capacity, in order to determine if dams proposed to be placed along those ditches will be effective in holding water.

Surface water will also be measured to determine the interaction between surface water and groundwater. Approximately 5 staff gauges will be installed at various locations along the Interior Ditch and the North Tributary. In addition, 6 dataloggers be purchased to measure surface-water levels at each location plus one for the deeper monitoring well discussed above.

Budget No Change

Table B. No Change

Figure 1. No Change Figure 2. No Change

AMENDMENT #6



United States Department of the Interior

PISH & WILDLIFE SERVICE

FISH AND WILDLIFE SERVICE

Wildlife and Sport Fish Restoration Programs 5600 American Boulevard West, Suite 990 Bloomington, Minnesota 55437-1458

RECEIVED

AUG 2 2 2011

Dept. of Natural Resources

IN REPLY REFER TO:

FWS/R3/MBSP-WSFR

August 5, 2011

Mr. Marc Miller Director Department of Natural Resources 1 Natural Resources Way Springfield, Illinois 62702-1271

Dear Mr. Miller:

This letter is to notify you that we have approved and hereby award your Application for Federal Assistance (AFA) and supporting grant documents. Details of the approved AFA are as follows:

Grant Number: T-28-M-1

Amendment No.: 6

Title: Public Land Native Wildlife Habitat Restoration Project

Effective Date: July 15, 2011

Start Date: June 30, 2006

End Date: December 31, 2012

Interim Report(s) Due: September 28

The approved Federal share, Federal funds obligated, and subject to availability of funding (SAF) amounts by Federal Sub-activity are as follows:

Federal	Federal	Federal	Federal	Federal
Program	Sub-activity	Share	Funds	Funds
	Number	Approved	Obligated	SAF
SWG-N	5621	\$497,859.00	\$497,859.00	\$0.00
SWG-I	5721	\$889,546.00	\$889,546.00	\$0.00
	Total	\$1,387,405.00	\$1,387,405.00	\$0.00

The funds shown in the table above were approved and obligate previously. This amendment is for a one-year time extension and a revision to Job 19 only.

An AFA amendment will be required to add or delete a project, increase or decrease the Federal funds, modify the period of performance, and/or change key personnel on the Grant Segment.

: Eric Smith Amina Everett ICIC -Computer -



Acceptance of a Federal Assistance award carries with it the responsibility to be aware of and comply with terms and conditions contained in program legislation, Federal regulations, OMB Circulars, program guidance, grant specific terms and provisions (see below), and Assurances SF 424 B and SF424D submitted annually by your agency. Of particular note, acceptance includes compliance with: administrative and audit requirements and cost principles for assistance programs (43 CFR 12); restrictions on lobbying (43 CFR Part 18); drug-free workplace (43 CFR Part 43, Subpart B); integrity of scientific and scholarly activities (DOI Policy 305 DM 3); and debarment, suspension, and other responsibility matters (43 CFR Part 42, Subpart C). Reference http://wsfrprograms.fws.gov/subpages/toolkitfiles/toolkit.pdf for laws, regulations, and policies and procedures applicable to Federal Assistance programs. Acceptance is defined as the start of work, drawing down funds, or accepting the award via electronic means. Awards are based on the AFA and supporting documents submitted to and approved by the U.S. Fish and Wildlife Service (USFWS).

The special conditions and provisions applicable to this award are noted below:

Note: Conditions/provisions which are inapplicable can be deleted from the final letter to grantee.

REPORTS

For guidance on financial and performance reporting requirements, reference USFWS WSFR Program Memorandum dated May 15, 2009 at http://wsfrprograms.fws.gov/subpages/toolkitfiles/intgdrpt.pdf, and 43 CFR 12.80 and 12.81. Key requirements are as follows:

<u>Financial</u> Grantees must use the SF-425, Federal Financial Report, for reporting the status of funds under an award. Financial reports will contain cumulative cost information.

<u>Performance</u> For Performance Reporting requirements refer to 43 CFR 12.80 and appropriate Service Manual (522 FW) chapters.

Performance Reports will contain, for each grant, brief information on the following: a comparison of planned versus actual accomplishments including costs as outlined in the grant, the reasons for slippage if objectives were not met; and additional pertinent information including explanation of cost overruns. Cost figures in the programmatic performance reports are not subject to audit and may not reflect certified costs identified on the Federal Financial Report.

Performance reporting for land acquisition grants requires more extensive reporting due to the permanent Federal interest in such property. For land acquisition grants, performance reporting will include a Lands Summary Statement and associated documents such as, but not limited to: appraisals, appraisal reviews, transaction summaries, title vesting evidence, State Attorney General certificates, plats, survey maps and other miscellaneous documentation.

<u>Due Dates</u> Grantees must submit final Federal Financial and Performance Reports to the WSFR Chief no later than 90 calendar days after the ending date of the funding period or termination of grant support.

Grantees must submit interim Federal Financial and Performance Reports to the WSFR Chief annually on date noted above.

REQUESTS FOR REPORTING DUE DATE EXTENSIONS MUST BE RECEIVED BY THE WSFR CHIEF BEFORE THE ORIGINAL DUE DATE. Due dates may be extended 90 calendar days by the USFWS upon receipt of a written request addressed to the WSFR Chief (or the WSFR Chief's fiscal/program representative) identifying the type of report to be extended, the requested revised due date, and a justification for the extension. The WSFR Chief may, upon receipt of a written request from the grantee, approve an additional extension if justified by a catastrophe that significantly impairs the grantee's operations.

<u>Sanctions for Noncompliance</u> Failure to comply with reporting requirements will result in various sanctions which are detailed in Questions (Q) and Answers (A) 25 through 34 of the May 15, 2009, USFWS WSFR Program Memorandum at http://wsfrprograms.fws.gov/subpages/toolkitfiles/intgdrpt.pdf.

LEVEL OF COST ACCOUNTING

Grantee must certify and is accountable for cost data at the Federal Sub-activity level.

MATCHING (COST SHARING)

Grantee must certify and is accountable for matching (cost sharing) at the Federal Sub-activity level.

BUDGET CHANGES (for non-construction grants only when Federal Share exceeds \$100,000)

This grant is not subject to the prior written approval requirements of 43 CFR 12.70(c)(1)(ii), the "10 percent rule."

PRE-AGREEMENT COSTS

In accordance with 50 CFR 80.15(c) and 522 FW 1.11B(2), pre-agreement costs in the amount of \$0.00, specified in the grant documents are approved.

FEDERAL SHARE NOT TO EXCEED 50 PERCENT (SWG Implementation)

Grant is eligible for reimbursement of amount obligated, not to exceed 50 percent of total expenditures.

REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION

In accordance with 2 CFR Part 170, the grantee is required to report first-tier sub-award obligations of \$25,000 or more in the Federal Funding Accountability and Transparency Act (FFATA) Sub-award Reporting System (FSFR - URL: http://www.fsrs.gov) when

certain conditions apply effective October 1, 2010. In addition, grantees **AND** subgrantees are required to report executive compensation of the five most highly compensated executives for the preceding fiscal year when certain conditions apply. Refer to Appendix A to Part 170 for the complete award term and details. To distinguish between a sub-grantee (aka sub-recipient) versus a vendor (which is not subject to FFATA reporting requirements) under a grant, refer to the characteristics of each listed in OMB Circular A-133, Subpart B, .210.

CENTRAL CONTRACTOR REGISTRATION (CCR) AND UNIVERSAL IDENTIFIER (DUNS)

In accordance with 2 CFR Subtitle A, Chapter I, and Part 25, grantees are required to register in the CCR prior to submitting a grant application. The grantee is also responsible for actively ensuring that the information in CCR remains current, accurate, and complete while it has active, open grant awards. Further, the grantee must furnish its Dun & Bradstreet Data Universal Numbering System (DUNS) number in each grant application (SF-424). In addition, grantees must obtain DUNS numbers from subgrantees prior to issuing sub-awards under FWS awards. Refer to Appendix A to Part 25 for the complete award term and details.

PROGRAM INCOME

The grantee has not identified or anticipated program income from this grant.

USEFUL LIFE

The USFWS concurs in the useful life or the lengthened useful life that the State proposed for each capital improvement that will be constructed or rehabilitated under this Grant Segment.

If you should have any questions, please contact our office at 612-713-5130.

Sincerely.

James B. Hodgson, Chief

Wildlife and Sport Fish Restoration Programs

cc: Mr. Paul Vehlow, Federal Aid Coordinator

AMENDMENT #7

State Wildlife Incentive Grant Program

State of Illinois

State Wildlife Grant Proposal Amendment # 7

PROJECT NUMBER: T-28-M-1

PROJECT TITLE: Public Land Native Wildlife Habitat Restoration Project

<u>PURPOSE/NEED</u>: This segment will add \$503,366.00 in FY11 Federal money to carry out activities within the 10 remaining jobs not completed in the proposal. It will be matched with in-kind personnel services totaling \$830,553.00. This will meet the new 65:35 match ratio federal to state dollars.

OBJECTIVES: No Change

EXPECTED RESULTS OR BENEFITS: No Change

APPROACH: No Change

- <u>Prescribed Fire</u> No Change
- · <u>Invasive Woody Plant Control</u> No Change
- · <u>Invasive Exotic Species Control</u> No Change
- · <u>Erosion/sedimentation control</u> No Change
- · Boundary Protection/Fence Repair No Change
- · Habitat Creation/Restoration: Planting No Change
- · Hydrology Restoration No Change

LOCATION: No Change

RELATED GRANTS No Change

PERSONNEL: No Change

Paul/Kathy;

As we discussed, I need additional information about why the amendment is needed on a job by job basis for this amendment. For each job, where costs have increased, please provide an explanation as to why the cost has increased so much without a change in objective. For example, was the cost estimate wrong? Why was it wrong (some job costs are increasing by nearly 3x)?

Mike Sweet
U.S. Fish & Wildlife Service
Wildlife and Sport Fish Restoration Program
5600 American Blvd. West, Suite 990
Bloomington, MN 55437-1458
Phone 612/713-5129
Cell 612/309-2201
Fax 612/713-5290
mike sweet@fws.gov

Eric.

Please see Mike Sweet's e-mails below in regards to the site by site information he wants for both projects before he will process the request for each amendment any further. We're under the gun because this is SWG'11 monies that run out at the end of September and the feds are again shutting down the accounting system starting 9/23/12 – 10/21/12, so the deadline for getting these amendment thru is getting more limited

I'm in Tue – Thur next week (8:30 am – 5:30 pm). Please contact me so we can talk about how we get this done.

TXS.

Paul E. Vehlow
Federal Aid Coordinator
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271
paul.vehlow@illinois.gov
217/785-5922 (phone)
217/785-2438 (fax)

From: Vehlow, Paul

Sent: Wednesday, September 05, 2012 9:46 AM

To: Mike_Sweet@fws.gov

Cc: Justison, Kathy; Smith, Eric L.

Subject: RE: F07AF00002 T-43-D-01, Amend. 4 Hill Prairie/Bluff Habitat Restoration

Thanks.......Eric Smith, T-28-M-1 project manager, is working on the site by site information you requested for that amendment. I don't want to ruin the surprise, but the overarching issues with T-43-D-1 carry over to T-28-M-1 as well. T-28-M-1 has also experienced cost overruns, staffing issues, ever more complicated state bidding, purchasing, and reporting requirements demanding more project administration time.

TXS.

Dear Mike --

Thank you for allowing me to provide the further explanation you requested before approving the Amendment to T-28-M-1. Sorry for the delay. I was 95% finished on Tuesday but was in the field yesterday.

The simple truth is that IDNR has expended far more personnel dollars than anticipated over the life of this grant. There are several reasons for this.

procurement rules have necessitated posting bids to websites, submitting m information, mandatory pre- bid meetings, etc.	
IIIIOIIIIalioii. Iiiaiiualoiv bie- biu iiieeliiius. elc.	ancies and
□ Some projects have required several planning meetings with various age	
individuals, including District Soil and Water Conservation Agencies, design	
Park Superintendents, or the Illinois Nature Preserve Commission.	erigineers, one
In this tough economy, contractor's profit margins have probably shrunk	a little to be more
competitive. Therefore, what was estimated to be a 30K project turned out t	
for 20K. To spend the 10K difference, new Site Specific Job Specification for	•
developed and sent out for bids, all requiring more in-kind staff time.	inis need to be
 At several sites, additional money left over from the first project was spe 	nt completing
follow-up management. Management is never a one-time event; it takes rep	
of several projects on the same parcel of land.	reated application
☐ There was one fiscal year when not enough money was appropriated to	the fund and all
projects had to be put on hold. A lot of those projects had to be re-bid or at	
Fourthly, retirements over the past several years has forced staff to take	
projects. This has required a steep learning curve to catch up to speed. I ki	<u> </u>
experience as I am now the administrator for the T-43-D-1 Hill Prairie Project	
☐ As the agency's budget constraints worsen, there has been an ever incr	
having the remaining IDNR staff work on fed aid supported projects, when a	_
Prescribed burns 5 years ago may have consisted of only 2 staff members of	
as match. Now there are 6 individuals that are matching their time on presc	_
because it's the only assistance we can obtain.	ibod iiios

Mike, these conditions that I outlined above apply equally to all the sites in T-28-M-1. Therefore, I decided against listing each specific site since it would be a repeat each time of the same issues.

Please feel free to contact me if you have any questions. Paul and Kathy are out of the office the rest of the week completing federal aid site inspections. They will be back Monday.

Thanks--Eric

Eric L. Smith
Natural Heritage Biologist
301 South Date Street
Gibson City, IL 60936
217-784-4730 EXT 225
217-784-4905 (Fax)
Eric.L.Smith@illinois.gov

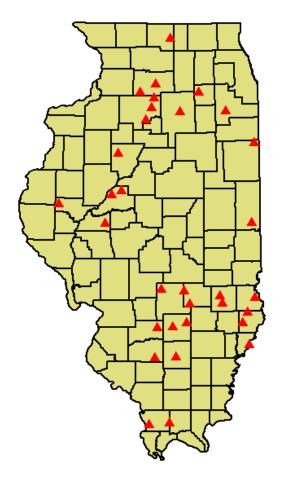


Figure One. Locations within Illinois Public Land Native Wildlife Habitat Restoration Project, T-28-M-1.

	Job Name	Federal	State	Total Cost
		Share	Share	
2	Iroquois SWA Land & Water Reserve and	\$73,600.00	\$73,600.00	\$147,200.00
	Hooper Branch Savanna NP, Iroquois Co	\$139,037.58	\$181,571.89	\$320,609.47
	Jubilee College Forest Nature	\$40,000.00	\$32,390.00	\$72,390.00
4	Preserve/Jubilee College State Park, Peoria County	\$105,437.58	\$140,361.89	\$245799.47
6	Starved Rock State Park, LaSalle Co.	\$ 57,000.00	\$ 57,000.00	\$114,000.00
		\$122,437.58	\$164,971.89	\$287,409.47
	Weinberg-King State Park	\$25,000.00	\$25,000.00	\$50,000.00
16		\$60,235.62	\$83,138.71	\$143,374.33
18	Washington County Cons Area and Posen	\$22,000.00	\$22,000.00	\$44,000.00
	Woods Nature Preserve	\$57,235.62	\$80,138.71	\$137,374.33
25	Kickapoo State Recreational Area,	\$21,500.00	\$21,500.00	\$43,000.00
	Vermilion County	\$56,735.62	\$79,638.71	\$136,374.33
26	Green River FWA	\$35,000.00	\$35,000.00	\$70,000.00
		\$100,437.58	\$142,971.89	\$243,409.47
27	Goose Lake State Natural Area, Grundy	\$ 20,000.00	20,000.00	\$40,000.00
	County.	\$55,235.62	\$78,138.71	\$133,374.33
28	Cache River State Natural Area	\$42,200.00	\$42,200.00	\$84,400.00
		\$107,637.58	\$150,171.89	\$257,809.47
29	Collier Glades and Gibbons Creek Barrens	\$15,500.00	\$15,500.00	\$31,000.00
		\$50,735.62	\$73,638.71	\$124,374.33
	DIFFERENCE	\$503,366.00	\$830,553.00	\$1,333,889.00

ESTIMATED COST (May 2006 - December 2012) Changes in Bold

Revised T-28-M-1 Public Lands Initiative Budget

	Federal Share	State Share	Total Cost
SWG 05 – SWG 10	\ \$1,387,405.00	\$1,387,405.00	\$2,774,810.00
SWG FY11	\$503,366.00	\$830,553.00	\$1,333,889.00
TOTAL AMOUNT	\$1,890,771.00	\$2,217,958.00	\$4,108,699.00

NEPA COMPLIANCE: No Change

DOCUMENTS SUPPORTING THE GRANT PROPOSAL: No Change

LITERATURE CITED: No Change

APPENDIX B Job Accomplishments

Job 1: Construct approximately 2 miles of permanent fencing along all inadequately fenced

boundaries at Harlem Hills Nature Preserve (HHNP) and Rock Cut State Park (RCSP).

Job Leader: Brad Semel

Chain O' Lakes State Park

8916 Wilmot Road Spring Grove, IL 60081 815-675-2386.1 EXT 317 brad.semel@illinois.gov

Purpose/need:

Harlem Hills Nature Preserve (HHNP) and Rock Cut State Park (RCSP) provide significant habitat for prairie, woodland, and wetland species of conservation concern, within an urban and suburban landscape. These sites are currently being impacted from external intrusions from off road vehicles and activities of adjacent land owners. These intrusions are causing direct harm to resources, and are resulting in increased erosion and the spread of exotic, invasive species.

Objective:

Protect high quality natural areas at Harlem Hills Nature Preserve and Rock Cut State Park by constructing approximately 2 miles of permanent fencing along all inadequately fenced boundaries. Conduct boundary surveys whenever the line is in question.

Protect 3145 acres of high quality natural areas at Harlem Hills Nature Preserve and Rock Cut State Park, Winnebago County by constructing approximately 2 miles of permanent fencing along all inadequately fenced boundaries. Conduct boundary surveys whenever the line is in question.

Final Results: Job Completed. In 2006 JAD Treecycle was hired to complete the clearing for the proposed fence. A second contractor was hired (Hulscher Fencing) to install the fence. Finally, Natural Areas Improvements, INC was hired to control woody exotic vegetation around the perimeter boundaries along the fence.

Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$22,500.00 \$22,443.00	\$24,500.00 \$26,537.00	\$49,000.00 \$49,890.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel*	\$0.00	\$0.00	\$0.00
Total	\$24,500.00 \$22,443.00	\$24,500.00 \$26,537.00	\$49,000.00 \$48,980.00

Job 2: Hydrology Restoration at Iroquois State Wildlife Area Land and Water Reserve and Hooper

Branch Savanna NP, Iroquois County.

Job Leader: Eric L. Smith

Natural Heritage Biologist 301 South Date Street Gibson City, Illinois 60936

217-784-4730

Eric.l.smith@illinois.gov

Purpose/need:

The Iroquois County SWA Land and Water Reserve and Hooper Branch Savanna Nature Preserve, located 3 miles northeast of Beaverville, Illinois in far northeastern Iroquois County, is a 2500-acre site containing a diverse mosaic of oak sand savanna, sand flatwoods, prairie, sedge meadow and marsh communities. The site contains one of the finest and most extensive sedge meadow/wet prairie/marsh complexes remaining in Illinois. The complex provides habitat for 14 state-listed species, several of which are only known from a handful of sites in the state. There are also several unusual mammals, such as the plains pocket gopher (*Geomys bursarius*), southern flying squirrel (*Glaucomys volans*), and the rare and restricted red squirrel (*Tamiasciurus hudsonicus*). This area is listed as a conservation priority area in the Grand Prairie Division of the Comprehensive Wildlife Conservation Plan. However, changes in hydrology from drainage ditches, broken water control structures, and a significant increase in pivot point irrigation throughout the Kankakee Sands Section ecosystem has significantly lowered the water table. This altered hydrology is threatening the site and its associated fauna and flora.

Objective:

Restore hydrology within 2500 acres of Iroquois County State Wildlife Area LWR and Hooper Branch Savanna Nature Preserve by installing several water control structures to reverse the impacts of artificial water loss.

Approach:

Several water control structures will be built in strategic locations, including the SW corner of Iroquois State Wildlife Area LWR and along 1.5 miles of drainage ditch in Hooper Branch Savanna NP. Exact locations will depend on where it is determined that makes the most hydrological and economic sense. Descriptions of these practices are in the body of the grant proposal.

Final Results: Using the hydrology approach detailed in the grant proposal, 7 ditch plugs totaling 2100 feet were installed at Hooper Branch Savanna Nature Preserve and Iroquois State Wildlife Area LWR. Two breeches in southeastern levee were repaired and filled. In addition, two reports were written, including "Hydrological Restoration of Hooper Branch Nature Preserve & Iroquois County SWA Land and Water Reserve": (prepared by Cardno JFNew) and "Iroquois County State Wildlife Area: Strategic Planning Study" (prepared by (Illinois Department of Natural Resources Office of Water Resources). Finally the Illinois State Geological Survey installed 14 ground watering monitoring wells and data loggers. These reports, along with the information continually gathered by the ISGS will be used to continue hydrological restoration of the site.

- Amendment 1 extended the deadline for completions from December 2008 to December 2009
- Amendment #4 added 50K in federal funds and 50K in state match
- Amendment #5 added groundwater monitoring to the hydrological restoration approach to further allow

comprehensive analysis of the hydrology restoration. Funding amounts and allocations will not change.

- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$65,437.58 in federal funds and \$107,971.89 in state matching funds per the new 65:35 matching requirements.

Final Budget:

0			
Line Item	Federal Share	State Share	Project Total
Contractual	\$23,600.00	\$15,600.00	\$39,200.00
	\$139,037.58	\$130,600.00	\$269,637.58
Commodities	\$0.00	\$3,000.00	\$3,000.00
		\$5,000.00	\$5,000.00
Personnel	\$0.00	\$47,971.89	\$47,971.89
	\$23,600.00	\$23,600.00	\$47,200.00
Total	\$139,037.58	\$181,571.89	\$320,609.47

Job 3. Exotic Vegetation Control at Jim Edgar Panther Creek State Fish and Wildlife Area

Job Leader: Timothy M. Kelley, Natural Heritage Biologist

Illinois Department of Natural Resources

700 S. 10th St. Havana, IL 62644 (309) 543-3262

tkelley@dnrmail.state.il.us

Purpose/need:

Jim Edgar Panther Creek State Fish and Wildlife Area is located in east-central Cass Co., approximately 12 miles west of Petersburg and 6 miles northwest of Ashland, Illinois. The site contains significant acreage that once supported high quality grassland and savanna habitats, both of which are habitats designated as important by the Illinois Wildlife Action Plan. Further, several thousand acres within this site have been converted from fescue pasture to more wildlife-compatible native warm-season grass and forb communities over the last five years. The areas within the park supporting these grassland habitats are provide habitat for various furbearing mammals, neotropical migrant songbirds, etc., that are delineated as important wildlife resources and/or "species in greatest need of conservation" in the CWCP. Furthermore, populations of the state-threatened blazing star (*Liatris scariosia* var. *neuwlandii*), pale false foxglove (*Agalinis skinnerianna*), and white lady's slipper orchid (*Cypripedium candidum*) are present at various areas on the site, along with numerous other prairie-adapted plant species supported by these native and restored habitats, suggesting high quality for both plant species and the prairie-adapted wildlife that depend on them. One of the major threats to the continued viability and improvement of the prairie and savanna areas on site is invasion by a number of invasive, exotic species including, autumn olive, osage orange, bush honeysuckle, and multiflora rose

Objective:

Restore and/or maintain prairie and savanna habitats at Jim Edgar Panther Creek State Fish and Wildlife Area, in Cass County, by the removal of invasive and exotic woody species, primarily located in the central and west-central portions of the site along the Panther Creek valley.

Approach:

IDNR personnel and contractors will implement a program to reduce and control woody species. The primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control and habitat restoration/creation: planting. Descriptions of these practices are in the body of the grant proposal.

Final Status: Job Completed: Using the approach of prescribed fire, invasive woody plant control, and invasive exotic species control, more than 60 acres of exotic species were controlled. In addition, more than 7500 acres of prairie and forest received prescribed fire.

- Amendment 1 extended the deadline for completions from December 2008 to December 2009
- Amendment #6 added an additional year to complete the project until December 2012.

Final Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$25,000.00	\$0.00	\$25,000.00
Commodities	\$0.00	\$9,000.00	\$9,000.00
Personnel	\$0.00	\$16,000.00	\$16,000.00
Total	\$25,000.00	\$25,000.00	\$50,000.00

Maintain and restore approximately 200 acres of forest and restore over 30 acres of agricultural fields and old field to prairie at Jubilee College State Park, Peoria County to restore habitat for area sensitive forest and grassland species as well as the state threatened Franklin's ground

squirrel and short-eared owl.

Job Leader: Michelle Simone

Natural Heritage Biologist Jubilee College Start Park 13921 W. Route 150 Brimfield, IL 61517

Michelle.simone@illinois.gov

Purpose/need:

Jubilee College State Park is a 3200 acre site with a mix of forest, prairie, old field, row crops, and recreational areas. The several hundred acres of forest at Jubilee College provide habitat for woodland species of insects, reptiles, amphibians, mammals, and many area sensitive bird species. Sixty four acres of the site are dedicated as an Illinois Nature Preserve for the protection of high quality mesic and dry mesic upland forest. Invasive and exotic woody and herbaceous species and lack of oak regeneration are reducing the quality of the forest and its habitat value for wildlife at Jubilee College. Areas of restored and remnant tallgrass prairie cover more than 100 acres of Jubilee College State Park. Several area sensitive grassland birds have been documented in these prairies, including the state endangered short-eared owl. More than one hundred acres of agricultural fields and old fields are being converted to native prairie plants, providing additional habitat for grassland birds, insects, and mammals.

Jubilee College State Park is located in Peoria County, approximately ten miles northwest of the city of Peoria. To visit the site, from Interstate 74, take the Kickapoo-Edwards Exit #82, then turn right and travel 1.5 miles to Kickapoo. At Kickapoo, turn left onto US Rte 150 and travel 4 miles to the park entrance.

Objectives:

Maintain and restore approximately 200 acres of forest and restore over 30 acres of agricultural fields and old field to prairie at Jubilee College State Park to restore habitat for area sensitive species and other wildlife.

Approach:

IDNR personnel, volunteers, and contractors will implement a program to eliminate invasive and exotic plant species, restore prairie, and encourage oak regeneration through forest management throughout the park. Prairie restorations will occur in retired agricultural fields in southern sections of the park. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, and habitat creation/restoration:planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Over the course of this SWG project, a total of 40 acres were planted to prairie and an additional 59 acres were enhanced at Jubilee College State Park. Restoration efforts were conducted on a total of 150 acres of forest including exotic species removal, mesophytic species thinning, and planting oak seedlings. Prescribed fire was conducted on 90 acres of prairie and forest. This total fell short of the 200 acres that were proposed for restoration. Exotic species invasions in the newly planted prairies required additional attention that was not anticipated. Because of the extra money that went for prairie management, less work was completed in the forest during this grant period.

- Amendment 1 extended the deadline for completions from December 2008 to December 2009
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$65,437.58 in federal funds and \$107,971.89 in state matching funds per the new 65:35 matching requirements.

Final Proposed Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$20,000.00 \$85,437.58	\$0.00 \$107,971.89	\$20,000.00 \$193,409.47
Commodities	\$20,000.00	\$5,600.00	\$25,600.00
Personnel	\$0.00	\$26,790.00	\$26,790.00
Total	\$40,000.00	\$32,390.00	\$72,390.00
Total	\$105,437.58	\$140,361.89	\$245,799.47

Job 5: Prairie Ridge State Natural Area grassland habitat restoration project.

Job Leader: Scott Simpson

Prairie Ridge State Natural Area

4295 N. 1000th St. Newton, IL 62448

ssimpson@dnrmail.state.il.us

618-783-2685

Purpose/need:

Prairie Ridge State Natural Area (an INAI site), at nearly 3,800 acres, contains two of the five significant grasslands in Illinois, and a key site for grassland birds in the Midwest. Grassland birds have shown more consistent, steeper, and more geographically widespread declines than any other group of North American birds, primarily due to loss of grassland habitat. The response of flora and fauna to habitat restoration and conservation at Prairie Ridge State Natural Area has been well documented. This site provides critical habitat for 78 of the Species in Greatest Need of Conservation identified in the Illinois Wildlife Action Plan, including 26 state listed species (17 endangered and 9 threatened). Among these are breeding populations of 8 state endangered and 3 state threatened birds species, 2 state endangered and 1 state threatened plant species and two state threatened reptile species. Unique to any site in the state, all 10 area sensitive grassland birds species found in Illinois occur at Prairie Ridge, eight with breeding populations. The 2004 National Audubon State of the Birds Report lists 10 species nesting in Illinois among the 26 species undergoing population declines of greater than 66% from 1966-2003. Of those 10 species, eight are among the key nesting birds at Prairie Ridge State Natural Area, including Henslow's sparrow, loggerhead shrike and grasshopper sparrow. Prairie Ridge has been formally designated an Important Bird Area for nesting populations of ten special concern species, concentrations of migratory shorebirds, and concentrations of wintering grassland raptors. Prairie Ridge provides habitat for 23 Species of Concern identified by Partners in Flight, 15 species of Regional Conservation Concern listed by the US Fish & Wildlife Service, and 20 of National Audubon's Watch list Species. Of special importance is the fact that Prairie Ridge hosts Illinois' only breeding population of greater prairie chickens and the state's largest breeding populations of northern harriers and short-eared owls.

Prairie Ridge State Natural Area is located in the SW portion of Jasper County, approximately 5 miles SW of Newton, IL and in the NE portion of Marion County both NE and sounth of Kinmundy, IL.

DIRECTIONS TO OFFICE: Driving East from Effingham or West from Newton on Route 33 turn south on Bogota Road (990N 900E) and go 4 miles to first curve in road. Go straight off of curve to crossroads (600N 900E), turn left (east) for 1 mile or first crossroads (600N 1000E) then turn right (south) and go 1 3/4 miles to white house with wire fence.

From Route 130 turn west at St. Marie Road (600N 1390E) and go 4 miles to (600N 1000E) then turn south (left) and go 1 3/4 miles to white house with wire fence.

Objective:

Provide, restore and maintain 3600 acres of grassland habitat at Prairie Ridge Sanctuary, Marion and Jasper Counties that provide habitat to 78 of the Species in Greatest Need of Conservation identified in the Illinois Comprehensive Wildlife Conservation Plan, including 26 state endangered species, 5 watch list species and 5 area sensitive grassland species.

Approach:

IDNR personnel and contractors will implement of grassland and wetland habitat development that will include the following practices: prescribed fire, invasive woody plant control, invasive exotic species control, erosion/sedimentation control, boundary protection/fence repair, habitat creation/restoration: planting, and hydrology restoration. This type of will management will occur throughout the site. Descriptions of these practices are in the body of the grant proposal.

Final Results: Amendment #2 obligated the balance of the remaining SWG'06 fed aid funding of \$107,530 (50% federal share) for additional habitat restoration/management. Match was provided by increasing NRDA funds to \$145,500 will be used as non-federal match for this portion of the \$774,530 in match funds required under Segment 1.

Amendment #3 obligate SWG'07 fed aid funding of \$71,492 (federal share) for personal services to implement additional habitat restoration/management work and to help address equipment needs by purchasing 2 new tractors. The source of non-federal funding match will be \$71,492 from staff salary.

Increased grazed area would increase from 200 acres to 400 acres and the length of fencing increased from 20,000 feet to 40,000 feet

Amendment #4 added 100K in Federal contractual dollars, 20K in state contractual and 50K in state personnel match.

Over the life of this grant, 1448 acres were seeded to nest or brood cover, more than 10,400 acres were mowed to provide disturbance, 150 miles of firebreaks were tilled to complete 3170 acres of prescribed burning, 120 acres of prairie grasses and forbs were planted, 250 container shrubs and 300 prairie forbs for shrubland nesting birds were planting, and 7.5 miles of prairie pasture fencing and 50 miles of refuge boundary signs were maintained. Much of this work was done contractually through the Illinois Audubon Society, Hamilton Native Outpost, and Tri-County Agriculture.

Much of these tasks were able to be accomplished because federal funds were used to purchase 2 new tractors. Since their purchase with federal funds (03/19/08, \$104,281.92) the two tractors (tag numbers F02738 and F02739) have been used for 1486.8 hours and 1375 hours, respectively. This equals 762 hours of use each year for conducting numerous habitat restoration/management operations (seeding grass, high rotary mowing for nest cover development, disking for brood cover enhancement, snow removal, firebreak construction, invasive brush control, application of herbicides for exotic species control, fescue conversion, and wetland maintenance).

Final Proposed Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$80,000.00	\$47,900.00	\$127,900.00
	\$327,530.00	\$148,630.00	\$476,160.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$32,100.00	\$32,100.00
	\$71,492.00	\$275,892.00	\$347,384.00
Equipment	\$55,000.00	\$55,000.00	\$110,000.00
Total	\$80,000.00	\$80,000.00	\$160,000.00
	\$454,022.00	\$479,522.00	\$933,544.00

Job 6: Starved Rock State Park Prairie Wetland Establishment

Job Leader: Michelle Simone

Natural Heritage Biologist Jubilee College Start Park 13921 W. Route 150 Brimfield, IL 61517

Michelle.simone@illinois.gov

Purpose/need:

Starved Rock Nature Preserve provides significant habitat for woodland and wetland species of conservation concern, all within Illinois' most well-known and visited natural area. However, conversions within the watershed that lead into natural area canyons at Starved Rock Nature Preserve have been altered by historic habitat conversion, numerous drainage improvements, and resulting in stream bed head-cutting, erosion, and deposition.

Objective:

The purpose of this project is to create two wetlands totaling 7 acres, restore 40 acres of prairie, and restore 10 acres of savanna habitat in order enhance wildlife habitats for species of concern and to restore hydrologic function above a natural area canyon system. The project will take place north of Rt. 71 and south of the Illinois River, west of Rt. 178 and east of the Vermilion River. It includes the Starved Rock Nature Preserve and adjacent DNR land to its south in Starved Rock Nature Preserve.

Approach:

IDNR personnel and contractors will implement grassland and wetland habitat development that will include the following practices: erosion/sedimentation control, habitat creation/restoration: planting, hydrology restoration, prescribed fire, invasive woody plant control, and invasive exotic species control. Descriptions of these practices are in the body of the grant proposal.

Final Results: Five acres of wetland and wet prairie was constructed, 130 acres of prairie was reconstructed or enhanced, 40 acres of exotic species were control, and prescribed fire was applied to 80 acres of prairie and savanna. The second wetland was not completed. Multiple Site Superintendent and Natural Heritage Biologist personnel changes did not allow everyone to get on the same page with this project.

- Amendment 1 extended the deadline for completions from December 2008 to December 2009
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$65,437.58 in federal funds and \$107,971.89 in state matching funds per the new 65:35 matching requirements.

Final Proposed Budget:

Line Item	Federal Share		State Share	Project Total
Contractual		\$57,000.00 \$122,437.58	\$55,000.00 \$155,000.00	\$112,000.00 \$277,437.58
Commodities		\$0.00	\$0.00	\$0.00
Personnel		\$0.00	\$2,000.00 \$9,971.89	\$2,000.00 \$9,971.89
Total		\$57,000.00 \$122,437.58	\$57,000.00 \$164,971.89	\$114,000.00 \$287,409.47

Job 7: Construct ephemeral wetlands at Rend Lake State Fish and Wildlife Area and Mount Vernon

Game Propagation Center.

Job Leader: John Tippitt

District Wildlife Biologist

Illinois Department of Natural Resources

13995 East Game Farm Road

Mt. Vernon, IL 62864

618/242-1272

Purpose/need:

Creating 10-15 ephemeral wetlands per year per IDNR administrative region is listed as a Priority Conservation Strategy by the Illinois Wildlife Action Plan. This project will provide direct benefits to the crawfish frog, listed as a critical species for the Southern Till Plain. The project will also benefit non-game indicator species for the region, including southern leopard frog, cricket frog, chorus frog, spring peeper, and smallmouth salamander.

Objective:

Implement the construction of ≥ 5 ephemeral wetlands in depth in idled agricultural fields (grasslands) near wooded areas at Mount Vernon Game Propagation Center and Rend Lake State Fish and Wildlife Area, Jefferson County. Mount Vernon Game Propagation Center is associated with Rend Lake State Fish and Wildlife Area, which is located in Jefferson and Franklin counties approximately 8 miles south of Mt. Vernon and just west of Bonnie, IL.

Approach:

IDNR personnel and contractors will implement a program of ephemeral wetland construction. Practices that will be included in the management program are invasive woody plant control, invasive exotic species control, hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Five ephemeral wetlands averaging one quarter acre and 15" in depth were constructed on the two properties as described in the Approach Section.

Final Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$5,000.00	\$0.00	\$ 5,000.00
	\$4,200.00		\$4,200.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$2,000.00	\$2,000.00
	\$5,000.00	\$2,000.00	\$7,000.00
Total	\$4,200.00		\$6,200.00

Job 8: Construct ephemeral wetland at Silver Springs State Fish and Wildlife Area.

Job Leader: Frank Ostling, Associate Wildlife Biologist

13608 Fox Road Yorkville, IL 60560 630/553-5284

Purpose/need:

Creating 10-15 ephemeral wetlands per year per IDNR administrative region is listed as a Priority Conservation Strategy by the Illinois Wildlife Action Plan. This project will provide direct benefits to the northern harrier, Wilson's snipe, American bittern and American woodcock, listed as Species in Greatest Need of Conservation by Illinois' Wildlife Action Plan. Blanding's turtle, marsh wren, smooth green snake, and Kirtland's water snake, listed as critical species for the Grand Prairie Natural Division, are known to occur in the region and could benefit from the project.

Objective:

Create a large (approximately 4.5-acre) ephemeral wetland and control exotic/invasive woody plants in the project area at Silver Springs State Fish and Wildlife Area (SSSFWA), a 1,350-acre site located 5 miles west of Yorkville, IL in Kendall County.

Approach:

IDNR personnel and contractors will implement a program of constructing ephemeral wetlands around a previous pond construction. Practices that will be included in the management program are invasive woody plant control, invasive exotic species control, hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: **Job completed**. A contractor was hired to break or remove any functioning drain tiles encountered and grade the excavation spoils alongside a 1-acre pond in a manner that allowed a gradual taper of the surrounding landscape resulting in a 4.5-acre vernal wetland/wildlife pond.

Final Spent Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$ 7,500.00 \$9,900.00	\$0.00	\$7,500.00 \$9,900.00
Commodities	\$ 2,500.00 \$100.00	\$0.00	\$2,500.00 \$100.00
Personnel	\$0.00	\$2,000.00	\$2,000.00
Total	\$10,000.00	\$2,000.00	\$12,000.00

Job 9: Create and restore wetland habitats at Union County Conservation Area.

Job Leader: Dan Woolard, District Wildlife Biologist

Illinois Department of Natural Resources

336 South Church Road Makanda, IL 62958 618/529-6470

Purpose/need:

Union County Conservation Area is located approximately 7 miles west of Jonesboro, IL off Route 146 in Union County. The site encompasses 6,202 acres in the Coastal Plain Natural Division. Lakes (625 acres) and wetlands (227 acres) comprise about 14% of the area. Of the 5,350-acre land area, approximately 2,400 acres are cultivated. The remaining acreage is timber, brush or permanent grass cover The Illinois Wildlife Action Plan advocates increasing wetland habitat in the Lower Mississippi River Bottomlands by 4,000 acres. It also advocates use of wetland complexes and diverse water regimes to maximize benefits to wildlife.

Objective:

Create/restore \geq 40 acres of diverse wetland habitats (i.e., sedge meadows; ephemeral and permanent wetlands) at Union County Conservation Area to provide habitat for the Mississippi kite, Mississippi green water snake, mud snake, bald eagle and common moorhen, listed as critical species for the region. The project will also benefit efforts to restore the alligator snapping turtle as the recovery plan for this species identifies Union County Conservation Area as a potential site for repatriation. Other Species in Greatest Need of Conservation that will benefit from this project include the little blue heron, marsh rice rat and copperbelly water snake.

Approach:

IDNR personnel and contractors will implement a program of constructing and restoring ephemeral wetlands. Practices that will be included in the management program are hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. A contractor was awarded a job to restore a series of small wetlands that were constructed >40 years ago as per the Approach Section. Wetlands were lined with clay and an agri drain was installed to allow for management of water levels.

Final Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$12,100.00	\$8,410.00 \$12,900.00	\$20,510.00 \$25,000.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$2,000.00	\$2,000.00
Total	\$12,100.00	\$10,410.00 \$14,900.00	\$22,510.00 \$27,000.00

Job 10: Create 15 acres of wetland habitat at Stephen A. Forbes State Park.

Job Leader: Steve Kern, District Wildlife Biologist

Illinois Department of Natural Resources

Stephen A. Forbes State Park

6924 Omega Road Kinmundy, IL 62854

618/547-3398

Purpose/need:

Illinois' Comprehensive Wildlife Conservation Plan advocates creating 3,800 acres of backwater and wetland habitats in the Southern Till Plain Natural Division. This project will help meet the objective and provide direct benefits to the little blue heron, osprey and river otter, listed as Critical Species for this region. The project will also benefit other Species in Greatest Need of Conservation, including the muskrat and bald eagle. Non-game indicator species for the region such as southern leopard frog, cricket frog, chorus frog and spring peeper will benefit.

Objective:

Create approximately 15 acres of additional wetland habitat at Stephen A. Forbes State Park that can be managed for moist soil production using spring/summer draw-downs based on recommendations of the U.S. Fish and Wildlife Service's Waterfowl Management Handbook and local experience and conditions. The site is located 15 miles northeast of Salem, IL in Marion County.

Approach:

IDNR personnel and contractors will implement a program of wetland construction. Practices that will be included in the management program are hydrology restoration, and habitat creation/restoration. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. An alternate site was selected when it became clear that that proposed actions at the original site would require a 404 permit from the Army Corps of Engineers, approval from the US Fish and Wildlife Service and Environmental Protection Agency, and, quite likely, mitigation for actions. A contractor was hired and 15 acres of additional wetland was created.

Final Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$0.00	\$6,200.00 \$11,770.00	\$6,200.00 \$11,770.00
Commodities	\$0.00	\$5,900.00 \$ 0.00	\$5,900.00 \$0.00
Personnel	\$0.00	\$2,000.00	\$2,000.00
Total	\$0.00	\$14,100.00 \$13,770.00	\$14,100.00 \$13,770.00

Job 11: Construct three 1-acre ponds at Cypress Pond State Natural Area.

Job Leader: Bill Reynolds, Site Superintendent

Cypress Pond State Natural Area

P.O. Box 10

Goreville, IL 62939

618/995-2411

Purpose/need:

Illinois' Comprehensive Wildlife Conservation Plan recognizes that intensive management and modification of lakes and ponds throughout the Coastal Plain Natural Division offers perhaps the most significant opportunity for watershed improvements. This project will provide watershed protection and directly benefit the river otter, listed as a Critical Species for the region. Other Species in Greatest Need of Conservation such as the muskrat, marsh rice rat, bald eagle and osprey will also benefit from this project.

Objective:

Create 3 1-acre ponds at Cypress Pond State Natural Area. Cypress Pond State Natural Area, located ½ mile north of State Route 146 at the Union/ Johnson County line, is a satellite of Ferne Cliff State Park.

Approach:

IDNR personnel and contractors will implement a program of wetland construction. Practices that will be included in the management program are hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Three small ponds, each approximately 1 acre in size, were constructed according to NRCS specifications.

Final Spent Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$0.00	\$15,000.00 \$14,850.00	\$15,000.00 \$14,850.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$2,000.00 \$0.00	\$2,000.00 \$ 0.00
Total	\$0.00	\$17,000.00 \$14,850.00	\$17,000.00 \$14,850.00

Job 12: Habitat enhancement for the Illinois mud turtle in the Illinois River and Mississippi River Sand

Areas Natural Division.

Job Leader: Tim Kelley, Natural Heritage Biologist

Illinois Department of Natural Resources

700 S. 10th St. Havana, IL 62644 (309) 543-3262

Tim.Kelley@illinois.gov

Purpose/need:

The Illinois mud turtle, due to its specialized habitat requirements and habitat loss, is one of the rarest reptile species in Illinois and has been designated as a state endangered species. The species also occurred historically in eastern Iowa and northeastern Missouri. Of the 3 initial populations in Iowa, 2 are considered to be extinct and one is considered to be the largest of all populations of Illinois mud turtles with a population estimate of 300-600 individuals. The population in Missouri is considered to be extinct due to the floods of 1993.

In Illinois, historic occurrence records for this species are known from Lake, Morgan, Cass, Mason, Tazewell, Lee, Henderson, Whiteside, and Henry counties. Currently, 8 of the initial 12 populations (66%) from Illinois are considered locally extinct. Populations have not been relocated in Lake, Whiteside and Morgan Counties. However the Cass County population, which was considered extinct, was relocated in 1995. The Lee County population and two of the three initial populations in Henderson County are extant. Of the 4 initial populations in Mason County all 4 are considered to be locally extinct (Illinois Natural Heritage Database, 2002). However, new populations have been found in Henderson County, Mason County southwest of the town of Manito, and 3 populations were found in Tazewell County. One of those has not been relocated since 1979, and one has not been relocated since 1985 (Illinois Natural Heritage Database, 2002).

Objective:

Sand Ridge State Forest is located approximately 20 miles southwest of Peoria, IL in Mason County. From the west, east or south: Follow IL Rt 136 to Mason County Road 2800E and turn north. Continue in a straight line for about 6 miles, through the village of Forest City. This road will turn to the west and become Mason County Road 2300N and will lead you directly into the forest.

This project will create or enhance habitat for Illinois mud turtles at state sites where they are extant or occurred historically (Sparks Pond State Natural Area, Rollo Prairie State Natural Area, Illinois Charles "Chinee" Colvin Sand Prairie Sand Land and Water Reserve and/or Sand Ridge State Forest, Mason County). It will also provide habitat for the Illinois (Stroecker's) chorus frog, a state threatened species that depends on sandy soils and occurs in the project area. In addition, Illinois' Wildlife Action Plan identifies both the Illinois mud turtle and Stroecker's chorus frog as critical species in the Illinois River and Mississippi River Sand Areas Natural Division. The plan lists Sparks Pond State Natural Area and Rollo Prairie State Natural Area as Conservation Opportunity Areas and calls for a net increase of 1,000 acres of wetlands in this Natural Division.

Approach:

IDNR personnel and contractors will implement a program of constructing ephemeral wetlands, restoring a pond, and creating a pond. Practices that will be included in the management program are invasive woody plant control, invasive exotic species control, hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Partially Completed. Two ponds were improved at Sparks Pond Natural Area. At Rollo Prairie State Natural Area, one pond was dredged and an ephemeral pond was constructed. A nearby irrigation well was repaired to allow management of water levels at critical times of the year. A small, shallow pond was created next to the ephemeral wetland. At Sand Ridge, a pond that Illinois Mud Turtles had used historically was improved by removing exotic/invasive woody vegetation that had lowered water levels through transpiration. And at Illinois River Sands Land and Water Reserve, an engineer provided design specifications for restoration of a wetland at the site. Bids exceeded the available budget. This project will be completed under another grant. Nearly 30 acres of upland vegetation was treated to improve habitat for nesting and aestivating Illinois Mud Turtles.

Estimated Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$22,000.00	\$10,000.00	\$32,000.00
Commodities	\$20,800.00	\$10,000.00	\$30,800.00
Personnel	\$0.00	\$0,000.00	\$0,000.00
Total	\$42,800.00	\$20,000.00	\$62,800.00

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Job 13: Wetland construction at Jim Edgar Panther Creek State Fish and Wildlife Area.

Job Leader: Mike Chandler

Illinois Department of Natural Resources

700 South 10th Street Havana, IL 62644 309/543-3288

Purpose/need:

Illinois' Wildlife Action Plan advocates a net increase of 5,000 acres of wetland habitat in the Grand Prairie Natural Division. This project will help meet habitat objectives and benefit Wilson's snipe, American bittern, least bittern and American woodcock, listed as Critical Species for this region. It will also benefit Species in Greatest Need of Conservation such as the river otter and muskrat.

Objective:

Create a large (approximately 5-acre) wetland at Jim Edgar Panther Creek State Fish and Wildlife Area. Jim Edgar Panther Creek State Fish and Wildlife Area is located in east-central Cass Co., approximately 12 miles west of Petersburg and 6 miles northwest of Ashland, Illinois.

Approach:

IDNR personnel and contractors will implement a program of constructing a shallow water wetland. Practices that will be included in the management program are hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Design work was completed by NRCS, Bids were solicited and a contract was awarded. The wetland was constructed in spring 2008.

Final Spent Budget:

Line item	Federal Share	State Share	Project Total
Contractual	\$0.00	\$9,000.00 \$9,999.00	\$9,000.00 \$9,999.00
Commodities	\$0.00	\$1,000.00 \$ 0.00	\$1,000.00 \$0.00
Personnel	\$0.00	\$2,000.00	\$2,000.00
Total	\$0.00	\$12,000.00 \$11,999.00	\$12,000.00 \$11,999.00

Job 14: Exotic species control at Des Plaines dolomite prairie Land and Water Reserve, Will County.

Job Leader: Dan Kirk

Natural Heritage Biologist

13608 Fox Rd. Yorkville, IL. 60560

630-553-1372

Dan.kirk@illinois.gov

Purpose/need:

The Des Plaines Dolomite Prairies Land and Water Reserve is in Will County between the confluence of the Kankakee and Des Plaines Rivers. The proposed preserve is located in the Grand Prairie Section of the Grand Prairie Division of Illinois. The reserve is owned by the Illinois Department of Natural Resources, and consists of approximately 575 acres of the 4652 acre Des Plaines Conservation Area.

The reserve, 5 miles northwest of Wilmington, Illinois, is located within Prairie Parklands, one of the 30 identified Resource Rich Areas (RRA) in Illinois. On its southern border, the proposed reserve is adjacent to a Biologically Significant Stream (Kankakee River, Momence to Des Plaines Conservation Area). A total of 9 endangered or threatened species are known to occur on the proposed reserve, including one endangered area sensitive bird species, the Henslow=s Sparrow (*Ammodramus henslowii*). Leafy prairie clover (Dalea foliosa) is also scheduled to be introduced into the site in 2007.

Included within the reserve are three areas recognized by the Illinois Natural Areas Inventory: 1) Nine acres of rare high quality dolomite prairie, currently known as Des Plaines Dolomite Prairie, contains features recognized by the Illinois Natural Areas Inventory as Category I (high quality natural community), Category II (habitat with listed species), and Category IV (outstanding geological feature), (INAI #889). The 4.2 acres of high quality (Grade B) dry-mesic dolomite prairie found by Illinois Natural Areas Inventory at this site constitutes the only natural community of its type recorded in the Grand Prairie Division and over 50% of the total found in the State.

Objective:

Maintain and restore nine acres of rare high quality dolomite prairie, the only such prairie within the Grand Prairie Division.

Approach:

IDNR personnel and contractors will implement a program to reduce and control woody species. The primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control and habitat restoration/creation: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Twenty acres of bush honeysuckle and glossy buckthorn was treated. In addition, fire was applied to 500 acres of prairie.

Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG

Estimated Budget:

Line Item	Federal Share	State Share	Project Total	
Contractual	\$15,000.00	\$10,000.00	\$25,000.00	
Commodities	\$0.00	\$0.00	\$0.00	
Personnel	\$0.00	\$5,000.00	\$5,000.00	
Total	\$15,000.00	\$15,000.00	\$30,000.00	

Job 15: Community Restoration at Miller Anderson Nature Preserve, Bureau and Putnam Counties

Job Leader: Michelle Simone

Natural Heritage Biologist Jubilee College Start Park 13921 W. Route 150 Brimfield, IL 61517

Michelle.simone@illinois.gov

Purpose/need: Miller Anderson Woods Nature Preserve, located 3 miles west of Hennepin Illinois in Bureau and Putnam Counties, is a 425 acre site containing a diverse mosaic of upland and bottomland forests, savanna, hill prairies, seeps, wet prairies, pond, and stream communities. The preserve contains habitat for numerous state-listed species and species of conservation concern, two of which are Federally threatened. Miller Anderson Woods Nature Preserve (MANP) is also an Illinois Natural Areas Inventory Site for the presence of high quality upland forests, seeps, hill prairies, and wet prairie communities.

This area is listed as a conservation priority area in the Mississippi and Illinois River Valleys Bottomlands Natural Division Wildlife Action Plan, and is a keystone site for conservation efforts along the Illinois River Valley for several other regional and national conservation programs (TNC Ecoregional Target Site, C2000, etc.). This site has been damaged by high levels of deer overbrowsing, invasive species encroachment, and past incompatible land use practices. Restoration and management of habitats at this site is needed in order to return the area ecosystems to their former healthy condition.

Objective:

Restore and manage Illinois Natural Areas Inventory Quality Upland Forests, seeps, hill prairie, and wet prairie communities, and enhance habitats for forest, savanna, and wetland species of conservation concern. Specifically, to restore, maintain, or establish 50 acres of savanna, 100 acres of upland forest, and 15 acres of wetland habitat at Miller Anderson Woods Nature Preserve.

Approach:

IDNR personnel and contractors will implement a program to reduce and control invasive species and establish approximately 29 acres of savanna habitat within previously cleared and cropped areas. The primary practices to be applied will include conducting prescribed burns, invasive woody plant control, invasive exotic species control, and habitat creation/restoration/planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Two hundred and eighty acres of savanna, forest, prairie, and wetland were treated of exotic species and/or cleared of mesophytic species per the Approach Section of this job. Twenty five acres were reforested and 25 acres of grassland were established. Eighty acres of forest and savanna received prescribed fire

 Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for completion of all jobs from December 2008 to December 2009 **Final Budget:**

Line Item	Federal Share	State Share	Project Total
Contractual	\$15,000.00	\$7,000.00	\$22,000.00
	\$11,972.00	\$45,658.50	\$57,630.50
Commodities	\$5,000.00	\$10,000.00	\$15,000.00
	\$7,507.12	\$6,138.50	\$13,645.62
Personnel	\$0.00	\$3,000.00	\$3,000.00
Total	\$20,000.00	\$20,000.00	\$40,000.00
	\$19,479.12	\$54,797.00	\$74,276.12

Job 16: Exotic Vegetation Control on Remnant Prairie and Savanna at Weinberg-King State Park.

Job Leader: Dean Corgiat

Natural Heritage Biologist 1252 West Washington Street

Pittsfield, IL 62363

217/285-2221

Dean.Corgiat@illinois.gov

Purpose/need:

Weinberg-King State Fish and Wildlife Area is an area of rolling hills with a meandering creek in western Illinois. The 772-acre State Fish & Wildlife Area is in Schuyler County 3 miles east of Augusta north of Route 101. The site contains significant acreage that once supported high quality grassland and savanna habitats, both of which are habitats designated as important by the Illinois Wildlife Action Plan (WAP). The areas within the park supporting these habitats are home to many wildlife species such as white-tailed deer, squirrels, wild turkey, mourning doves, various furbearing mammals, neotropical migrant songbirds, etc., that are delineated as important wildlife resources and/or Aspecies in greatest need of conservation@ in the WAP. Furthermore, populations of the state-threatened blazing star (*Liatris scariosia* var. *neuwlandii*) and state-endangered ground pine (*Lycopodium dendroideum*), along with various other prairie-adapted plant species are supported in some of these remnant habitats. However, these remnants are currently threatened by a number of invasive, exotic species including, autumn olive, bush honeysuckle, and multiflora rose. The objective of this project, in keeping with the exotics control objectives of the WAP, is to mechanically and/or chemically reduce the populations of invasive, exotic species, thereby increasing the vigor of native plant growth and allowing the maintenance and restoration of existing native communities.

Objective:

Restore and/or maintain prairie and savanna habitats on approximately 350 acres at Weinberg-King State Park by the removal of invasive and exotic woody species.

Approach:

IDNR personnel and contractors will implement a program to reduce and control invasive species to restore savanna and prairie on 350 acres. The primary practices to be applied will include conducting prescribed burns, invasive woody plant control, invasive exotic species control, and habitat creation/restoration/planting. Descriptions of these practices are in the body of the grant proposal.

Final Report: Job Partially Completed. Approximately 100 acres received treatment to control invasive species in savanna and prairie habitat. An additional 100 acres received prescribed fire treatments. Thirty two acres were restored to prairie. More than 240 man hours were used as in kind match.

- Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009
- Amendment #4 changed the number of acres of prairie and savanna habitat restored from approximately 350 to 600 acres. The amendment also changed the project leader to Dean Corgiat from Tim Kelley after their districts were changed.
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$35,235.62 in federal funds and \$58,138.71 in state matching funds per the new 65:35 matching requirements.

Final Proposed Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$25,000.00 \$60,235.62	\$0.00 \$20,000.00	\$25,000.00 \$80,235.62
Commodities	\$0.00	\$13,000.00	\$13,000.00
Personnel	\$0.00	\$12,000.00 \$ 38,138.71	\$12,000.00 \$ 38,138.71
Total	\$25,000.00 \$60,235.62	\$25,000.00 \$83,138.71	\$50,000.00 \$143,374.33

Job 17: Floodplain forest restoration at the Georgetown Addition to the Little Vermilion River Land and

Water Reserve

Job Leader: Roger Jansen

Natural Heritage Biologist 1660 West Polk Avenue Charleston, Il 61920 217-345-2420

Roger.jansen@illinois.gov

Purpose/need:

The Illinois Department of Natural Resources recently acquired a 180 acre tract just south of the Georgetown city limits, along Route 1, in Vermilion County. Within the tract is the Carl Fliermans' River Nature Preserve, a 22 acre preserve that protects approximately 1/3 mile of streambed and 100 feet of floodplain forest on each side of the Little Vermilion River. This stretch of river qualifies as a class A stream according to the Biological Stream Characterization standards. In addition, the state threatened bigeye shiner (*Notropsis boobs*) and two state endangered mussels, the slippershell (*Alismodonta viridis*) and little spectacle case (*Villosa lienosa*) occur in this segment of the Little Vermilion River.

The remainder of the site (158 acres) is currently being enrolled as a Registered Land and Water Reserve to provide a buffer to the Nature Preserve. The majority of habitat consists of young floodplain, dry mesic and mesic upland forests and second year reforestations. There are 23 acres that have yet to be reforested. The entire property is within the Vermilion River and Little Vermilion River Conservation Opportunity Area within the Wabash Border Natural Division of the Wildlife Action Plan.

Objective:

Restore and maintain approximately 170 acres floodplain and upland forests habitats and reforest 6 acres of former row crops at Fliermans' tract of the Middle Fork Woods State Natural Area by the removal of exotic woody species and habitat restoration; planting.. This will help to meet the objectives of the Vermilion River Conservation Priority by obtaining forested tracts >200 acres, enhance oak recruitment in existing wooded tracts, and decreasing amount of Phard habitat edges invasive species control, and planting.

Approach:

IDNR personnel and contractors will implement a program to reduce and control exotic species to restore floodplain and upland forest on 120 acres. The primary practices to be applied will include prescribed burning, invasive woody plant control, invasive exotic species control, and habitat creation: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: **Job Completed**. Eighty acres of exotic species in the upland and floodplain forest were treated. In addition, 24.6 acres of old fields were reforested to upland forest species.

 Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009

Final Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$12,000.00	\$9,000.00	\$21,000.00
	\$2,190.00	\$23,000.00	\$25,190.00
Commodities	\$0.00	\$2,000.00	\$2,000.00
	\$1,350.67	\$0.00	\$1,350.67
Personnel	\$0.00	\$1,000.00	\$1,000.00
Total	\$12,000.00	\$12,000.00	\$24,000.00
	\$3,540.67	\$24,000.00	\$27,540.67

Job 18: Non-native, invasive species control at Washington County Conservation Area

Job Leader: Mark Phipps

District Natural Heritage Biologist 4521 Alton Commerce Parkway

Alton, IL 62002 618/462-1181

mark.phipps@illinois.gov

Purpose/need:

The Southern Till Plain Natural Division encompasses over a quarter of the state's land mass but relatively few public land sites exist that represent the areas natural character. The 1,460 acre Washington County Conservation Area, including Posen Woods Nature Preserve, is a significant example of this natural division that has been greatly impacted by the presence of non-native, invasive plants. Considerable effort has been initiated to reduce heavy infestations of autumn olive, bush honeysuckle, multiflora rose, sericea lespedeza and Japanese honeysuckle. Oak Woodlands and barrens communities have responded positively shown excellent promise for restoration as oak woodland and barrens habitat. This directly improves conditions for several conservation priority species outlined in the Illinois Wildlife Action Plan, including the northern bobwhite, American woodcock, red-headed woodpecker, and yellow-billed cuckoo. Many acres of degraded oak-hickory forest have yet to be addressed to reduce the abundance of invasive plants.

Objective:

Restore and/or maintain 400 acres of oak woodlands, flatwoods, and barrens at Washington County Conservation, including Posen Woods Nature Preserve, in Washington County, by the removal of invasive and exotic woody species. Washington County Conservation Area is located in southern Washington County approximately 3 miles south of Nashville, IL and 2 miles east of State Route 127. The site is approximately 40 miles southeast of East St. Louis.

Approach:

IDNR personnel and contractors will implement a program to reduce and control woody species. The primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control and habitat restoration/creation: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Per the above Approach, 484 acres of forest and woodland received prescribed fire, 358 acres of exotic species were controlled, and 4 miles of firebreaks were maintained or created. Highlights included observation of the quickly Japanese Stilt grass, that has hopefully been controlled. In addition, Buffalo Clover (Trifolium reflexum), a state threatened plant species was detected for the first time ever at Washington County Conservation Area, after woodland management units had received prescribed fire and exotic species control.

- Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009
- Amendment #4 added 12K in federal funds and 12K in state match in addition to increasing the total number of acres treated from 400 to 500.
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$35,235.62 in federal funds and \$58,138.71 in state matching funds per the new 65:35 matching requirements.

Trifolium reflexum at WCCA

Year		Field Numl	ber	
	18.4a	18.4b	16.1e	Total # Plants
2009	yes	yes	yes	33
2010	8	8	2	18
2011	138	18	2	158
2012	yes	yes	yes	~ 100

Final Proposed Budget:

Line item	Federal share	State share	Project total
Contractual	\$8000.00	\$5000.00	\$13,000.00
	\$51,235.62	\$57,138.71	\$108,374.33
Commodities	\$2000.00	\$1000.00	\$3000.00
	\$6,000.00	\$3,000.00	\$9,000.00
Personnel	\$0.00	\$4000.00 \$20,000.00	\$4000.00 \$20,000.00
Total	\$10,000	\$10,000	\$20,000
	\$57,235.62	\$80,138.71	\$137,374.33

Job 19: Community Restoration at Franklin Creek State Natural Area, Pine Rock Nature Preserve, and

Nachusa Grasslands

Job Leader: Michelle Simone

District Natural Heritage Biologist

Jubilee College State Park

P.O. Box 509

Brimfield, Illinois 61517

815-667-5364

Michelle.Simone@illinois.gov

Purpose/need:

Franklin Creek State Natural Area (FCSNA), located 1 mile northwest of Franklin Grove, Illinois, is a 660 acre Ill. Dept. Of Natural Resources owned site containing upland forests, hill prairies, savannas, seeps, cliffs, prairie restorations, old fields, and a perennial stream. The IDNR is currently finalizing a 217 acre addition to the site. FCSNA is adjacent to the 2550 acre Nachusa Grasslands (NG), Nature Conservancy Preserve, which contains remnant and restored tallgrass prairie, sedge meadow, fen, seep, savanna, oak woodland, and stream communities. Pine Rock Nature Preserve (PRNP), located 3 miles east of Oregon, Illinois, contains wet prairie, sedge meadow, savanna, oak woodland, and cliff communities within the 58 acre preserve. A portion of PRNP is owned by Northern Illinois University and a portion by IDNR. The site is jointly managed by IDNR and TNC. The areas including FCSNA, NG, and PRNP provide habitat for numerous state listed species and species of conservation concern.

Franklin Creek, Nachusa Grasslands, and Pine Rock fall within the Rock River conservation priority area within the Rock River Hill Country Natural Division Section of the Illinois Wildlife Action Plan, and are keystone sites for conservation efforts in this region. These sites, while all containing high quality natural area inventory quality natural communities and endangered species habitats, have been partially degraded by past incompatible land use practices, invasive species encroachment, high levels of deer overbrowsing, or have been directly converted to agricultural production. Restoration and management of habitats at these sites is needed in order to return the area's ecosystems to their former healthy condition.

Objective:

Restore and manage upland forests, seeps, hill prairies, and tallgrass prairie communities, and enhance habitats for forest, savanna, and wetland species of conservation concern. Specifically, to restore, maintain, or establish 25 acres of savanna, 25 acres of oak woodland, and 50 acres of prairie at Franklin Creek State Natural Area, Nachusa Grasslands, and Pine Rock Nature Preserve.

Approach:

IDNR and The Nature Conservancy will continue working to restore, establish, and manage prairie, savanna, and woodland at PRNP, NG, and FCSNA, including portions of a pending 217 acre acquisition at FCSNA. Primary management activities include habitat establishment, invasive woody plant control, invasive exotic species control, prescribed burns, etc. at these sites. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. More than 12,000 acres were treated during the life of this grant at Franklin Creek State Natural Area, Pine Rock Nature Preserve, and Nachusa Grasslands. This includes 6000 acres of prescribed burning, 5500 acres of exotic species treated, 300 acres of forests and savanna thinned, and 250 acres of prairie reconstructed or over seeded.

Table 1. T-28-M-1 State Wildlife Incentive Grant summary table for Nachusa Grasslands,
Franklin Creek Natural Area, and Pine Rock Nature Preserve (GRAND TOTALS FOR
ENTIRE GRANT PERIOD THRU MARCH 2012).

Type of Work Done by SWG crew when charging to grant center (in hours)

hours do not include our match hours which would easily double these hours.

Brush	Prescribed Fire	Invasive Species Control	Habitat Establishment	Seed Harvest
5,000 hours	3,000 hours	3,000 hours	1,500 hours	5,000 hours

Acres of Habitat Treated (by type)

These acres are for life of grant. We very much exceeded the grant goal.

Prairie	Savanna	Oak Woodland
7,300 acres	3,300 acres	1,450 acres

- Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009
- Amendment #4 increased the number of acres restored, maintained, or established to 75 acres of savanna, 75 acres of oak woodland, and 150 acres of prairie at Franklin Creek State Natural Area, Nachusa Grasslands, and Pine Rock Nature Preserve in Lee and Ogle Counties. This amendment also added 263K in both federal and state funds.
- Amendment #6 added an additional year to complete the project until December 2012.

Final Proposed Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$65,000.00	\$11,000.00	\$76,000.00
	\$308,000.00		\$319,000.00
Commodities	\$0.00	\$26,000.00	\$26,000.00
		\$56,000.00	\$56,000.00
Personnel	\$0.00	\$28,000.00	\$28,000.00
		\$241,000.00	\$241,000.00
Total	\$65,000.00	\$65,000.00	\$130,000.00
	\$308,000.00	\$308,000.00	\$616,000.00

Final Grant Expenditures

Table 2. T-28-M-1 State Wildlife Grant, Community Restoration at Franklin Creek/Pine Rock/Nachusa

TNC Center 1131643803; Proj. #T-28-M-1; Agreement # RC07R115NS

				1
		Cumulative		
		Project	Percent	
		Expenses	of	Remaining
		through	Budget	Amount to
Budget Category	Budget	3/31/2012	Spent	Spend
TNC Reimbursable Expenses				
Salaries	107,000.00	109,138.89	102%	(2,138.89)
Benefits	38,000.00	28,938.45	76%	9,061.55
Travel	300.00	0.00	0%	300.00
Supplies	39,366.67	46,986.84	119%	(7,620.17)
Contractual	72,000.00	71,848.70	100%	<u>151.30</u>
Subtotal TNC Reimbursement	256,666.67	256,912.88	100%	(246.21)
Indirect*	<u>51,333.33</u>	<u>51,382.58</u>	100%	<u>(49.24)</u>
Total TNC Reimbursement	308,000.00	308,295.46	100%	(295.45)
TNC Match Expenses				
Salaries	196,558.27	194,035.86	99%	2,522.41
Fringe Benefits	39,311.65	52,561.54	134%	(13,249.89)
Supplies	146.34	<u>146.34</u>	100%	<u>0.00</u>
Subtotal TNC Match	236,016.26	246,743.74	105%	(10,727.48)
Indirect through FY12	61,983.74	40,758.28	103%	(1 011 00)
Indirect beginning FY12	01,965.74	23,037.26	103%	<u>(1,811.80)</u>
TNC Total Match	298,000.00	310,539.28	104%	(12,539.28)
State In-kind Match	10,000.00	11,000.00		(1,000.00)
				,
Total Project	616,000.00	629,834.74	102%	(13,834.73)
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^{*}Until June 30, 2011, TNC's federally approved rate was 23% or greater. On invoices through June 30, 2011,

20% indirect is applied to SWG share, and 23% plus unrecovered SWG 3% is applied to TNC share. Beginning July 1, 2011, TNC's federally approved rate is 22.55%. 20% indirect is applied to SWG share; 22.55% plus unrecovered SWG 2.55% applied to TNC share. prepared 5/3/2012

Job 20: Natural Community Restoration at Chauncey Marsh Nature Preserve and State

Natural Area, Lawrence County, Illinois

Job Leader: Terry L. Esker

Natural Heritage Biologist

4295 N. 1000th St. Newton, IL 62448 618-783-2685

terry.esker@illinois.gov

Purpose/need:

Chauncey Marsh State Natural Area contains 512 acres of outstanding examples of marsh, prairie, bottomland forest and riverine communities typical of the Bottomland Section of the Wabash Border Natural Division in Illinois. Chauncey Marsh is located approximately 4 miles east of the town of Chauncey, in Lawrence County, Illinois. This Illinois Natural Areas Inventory (INAI) site provides habitat for several state listed species, including the bald eagle, cerulean warbler, eastern ribbon snake, yellow-crowned night heron, royal catchfly and the federally protected copper-bellied water snake. The site also provides habitat for several rare plant communities and other unusual species including swamp rabbits. Approximately 155 acres of this natural area has been dedicated as the Chauncey Marsh Nature Preserve. Marsh, prairie, bottomland forest and riverine community restoration of this site follows recommendations identified in the Illinois State Wildlife Action Plan.

Objective:

Restore and maintain 140 acres of floodplain forest, 25 acres of marsh and wetland communities, and 17 acres of wet mesic prairie (Figure T1 thru Figure T3) at Chauncey Marsh Nature Preserve and State Natural Area in Lawrence County, Illinois.

Approach:

IDNR personnel and contractors will implement a program to reduce and control woody vegetation and invasive exotics and conduct habitat restoration: planting on approximately 157 acres of the site. The primary practices to be applied will include prescribed fire, invasive woody control, invasive exotic species control and habitat restoration; planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Twenty five acres of woody native vegetation were controlled from the surrounding wetland.

- Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009.
- Amendment #4 provided an additional \$9,500.00 in federal funds to complete exotic species control after underestimating the cost of removing woody vegetation. An equal amount of state match (9.5K) came come from the Natural Areas Stewardship Fund.

Final Spent Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$20,000.00 \$29,052.00	\$17,500.00 \$27,000.00	\$37,500.00 \$56,052.00
Commodities	\$0.00	\$ 5,000.00 \$4996.47	\$ 5,000.00 \$4996.47
Personnel	\$0.00	\$0.00	\$0.00
Total	\$20,000.00 \$29,052.00	\$22,500.00 \$31,996.47	\$42,500.00 \$61,048.47

Job 21: Exotic Species Control and Reforestation at Beall Woods Nature Preserve and State

Park

Job Leader: Terry L. Esker

Natural Heritage Biologist

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Purpose/need:

Beall Woods Nature Preserve and State Park contains 356 acres of high quality examples of upland and bottomland forest communities typical of the Wabash Border Natural Division=s Bottomland Section. It is the last example of old growth forest remaining along the Wabash Border Division. The site is also designated a National Natural Landmark. There is approximately 150 acres of reforestation surrounding the nature preserve that was reforested with softwood species, which is now dominated by tulip trees. The understory of the reforestation areas is completely dominated by exotics, primarily autumn olive. This has prevented any natural regeneration of native hardwood trees within the restoration, which has significantly reduced the quality of the site. This Illinois Natural Areas Inventory (INAI) site provides habitat for several state listed species, including the bald eagle, Cerulean warbler, Swainson= warbler, Indiana bat, timber rattlesnake, northern madtom, bloodleaf and the federally protected copper-bellied water snake. The site also provides habitat for several rare plant communities and other forest species of conservation concern including the redshouldered hawk, brown creeper, ovenbird, and wood thrush.

Objective:

Restore and maintain approximately 120 acres of floodplain and upland forest in the Beall Woods Nature Preserve and State Park, located 2.0 miles east of Keensburg, Illinois. Restoration of this site follows recommendations identified in the Illinois State Wildlife Action Plan for restoration of upland and bottomland forest communities in the Wabash Border Natural Division in Illinois.

Approach:

IDNR personnel and contractors will implement a program of forest restoration. The primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Contractor completed planting 1300 RPM trees over 45 acres in what was formerly a dense tulip tree plantation as part of reforestation.

 Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009

Final Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$ 30,000.00	\$25,000.00	\$55,000.00
	\$29,875.00	\$5200.00	\$35,075.00
Commodities	\$0.00	\$0.00	\$0.00
		\$15,356.25	\$15,356.25
Personnel	\$0.00	\$0.00	\$0.00
	\$30,000.00	\$25,000.00	\$55,000.00
Total	\$29,875.00	\$20, 556.25	\$50,431.25

Job 22: Exotic Species Control and Forest Restoration at Red Hills State Park

Job Leader: Terry L. Esker

Natural Heritage Biologist

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Purpose/need:

The 1500 acre Red Hills State Park provides habitat for four state listed species and numerous species of conservation concern. Red Hills State Park is located 1.5 miles east of the town of Sumner, in Lawrence County, Illinois. The forested communities are excellent examples of upland forests typical of the Southern Till Plain Natural Division in Illinois. The highest quality forests of Red Hills State Park is located north of Highway 50. These forest communities contain all of the known state listed species (4 toed-salamander, drooping sedge, halbred-leaved tearthumb, and running pine) from the site and also include the Red Hills Seeps Spring Land & Water Reserve. The Red Hills Woods Nature Preserve is located south of Highway 50. However, forest communities in Red Hills State Park are threatened by woody encroachment (sugar maple) in the under-story and the presence of exotic species, including autumn olive, Japanese honeysuckle, multiflora rose, Chinese yam and winged wahoo, along the perimeter of the forest community.

Objective:

Restore and maintain approximately 250 acres of upland forest communities at Red Hills State Park, Red Hills Woods Nature Preserve and Red Hills Seeps Spring Land and Water Reserve in Lawrence County, IL. Restoration of this site follows recommendations identified in the Illinois State Wildlife Action Plan for restoration of upland forest communities in the Southern Till Plain Natural Division in Illinois.

Approach:

IDNR personnel and contractors will implement a program to reduce woody vegetation and control invasive exotics. The primary practices to be applied will include prescribed fire, invasive woody control, invasive exotic species control and habitat restoration. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Contractors completed 250 acres of exotic species control and woody vegetation control at the site. Species controlled included sugar maple, bush honeysuckle, autumn olive multiflora rose and winged wahoo in upland forest and flatwood communities.

 Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009

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Line Item	Federal Share	State Share	Project Total
Contractual	\$15,000.00	\$7,000.00 (NRRTF)	\$22,000.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$0.00	\$0.00
Total	\$15,000.00	\$7,000.00	\$22,000.00

Job 23: Exotic Species Control and Forest Restoration at Ramsey Lake State Park, Fayette

County, Illinois

Job Leader: Terry L. Esker

Natural Heritage Biologist

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Purpose/need:

Ramsey Lake State Park (1500 acres) is located 1.0 mile northwest of the town of Ramsey, in Fayette County, Illinois. The forested communities on Ramsey Lake State Park are excellent examples of upland forests typical of the Southern Till Plain Natural Division in Illinois. The park provides habitat for several species as well as flatwoods communities, both of which are identified as a conservation concern in the Illinois Wildlife Action. The highest quality forested portion of Ramsey Lake State Park is located around, west and north of lake located within the park. However, these forest communities in Ramsey Lake State Park have management concerns, primarily woody encroachment (sugar maple) in the under-story and the presence of exotic species along the perimeter of the forest community. Autumn olive, Japanese honeysuckle, multiflora rose and winged wahoo are some of the exotic species that exist along the perimeter and into these forest communities at Ramsey Lake State Park.

Objective:

Restore approximately 200 acres of upland forest and flatwoods communities at Ramsey Lake State Park in Fayette County, Illinois by controlling invasive exotic and woody vegetation control. Restoration of this site follows recommendations identified in the Illinois State Wildlife Action Plan for restoration of upland forest communities and flatwoods in the Southern Till Plain Natural Division in Illinois.

Approach:

IDNR personnel and contractors will implement a program to reduce and control invasive exotics. The primary practices to be applied will include prescribed fire, invasive woody control, invasive exotic species control and habitat restoration. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Contractors completed 200 acres of exotic species control and woody vegetation control at the site. Species controlled included bush honeysuckle, autumn olive multiflora rose and winged wahoo in upland forest and flatwood communities.

 Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009

Final Spent Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$20,000.00 \$19,950.00	\$0.00	\$20,000.00 \$19,950.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$0.00	\$0.00
Total	\$20,000.00 \$19,950.00	\$0.00	\$20,000.00 \$19,950.00

Job 24: Exotic Species Control and Forest Restoration at Rock Cave Nature Preserve,

Effingham County, Illinois

Job Leader: Terry L. Esker

Natural Heritage Biologist

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terry.esker@illinois.gov

Purpose/need:

Rock Cave State Nature Preserve (Figure X1) (79 acres) contains unique plant communities including Grade A sandstone cliff communities, Grade B dry-mesic forests, mesic ravine forests and a southern till plain flatwoods community. This dedicated preserve provides habitat for 2 state threatened species, the savanna blazing star (*Liatris scariosa var. nieuwlandii*) and fibrous rooted sedge (*Carex communis*). An adjoining 57 acres, the Rock Cave Land and Water Reserve, also contains high quality natural communities and species of conservation priority (Table X1). Both the Nature Preserve and Land & Water Reserve are on the Illinois Natural Areas Inventory and are located in the Southern Till Plain Natural Division in Illinois. Threats to the two sites include sugar maple encroachment in the dry-mesic forest, an increasing canopy in the flatwoods community, and scattered exotic species.

Objective:

Maintain and restore 136 acres of upland forest and flatwoods communities at Rock Cave Nature Preserve and Rock Cave land and Water Reserve in Effingham County, Illinois.

Approach:

IDNR personnel and contractors will implement a program to reduce and control invasive exotics. The primary practices to be applied will include prescribed fire, invasive woody control, invasive exotic species control and habitat restoration. Descriptions of these practices are in the body of the grant proposal.

Final Results: Job Completed. Contractors completed 136 acres of woody vegetation control in upland forest and flatwood communities per the objective.

• Amendment #1 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2008 to December 2009

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Line Item	Federal Share	State Share	Project Total
Contractual	\$0.00	\$5,000.00(NRDA)	\$5,000.00
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$0.00	\$0.00
Total	\$0.00	\$5000.00	\$5,000.00

Job 25: Community Restoration at Kickapoo State Recreational Area – Dynegy Tract

Job Leader: Roger Jansen

Natural Heritage Biologist

1660 W Polk Ave Charleston, IL 61920 Ph: 217-345-2420 Fax: 217-348-5873

Roger.Jansen@illinois.gov

Purpose/Need:

The Dynegy tract is located in Vermilion County northwest of Danville, Illinois. The 1,100 tract was transferred to the IDNR in 2008. The tract links Kickapoo State Recreation Area (2,800 acres), Kennekuk Cove County Park (3,000 acres) and Middlefork State Fish and Wildlife Area (2,700 acre). Combined, these 9,600 acres of publicly owned land are managed for natural resources and compatible recreation. This tract provides additional buffer to the Middlefork River, Illinois' only National Wild and Scenic River. The Dynegy tract provides habitat for several species that are threatened and endangered and conservation priority. The buffered Middlefork River also has several threatened and endangered and conservation priority species.

The dry mesic upland forest community is the dominant forest type on the Dynegy tract. The dry-mesic upland forest on the Dynegy tract has herbaceous characteristics suggesting a past history of open woodland/savanna. The western extent of *Fagus grandifolia* (American beech), and the beech-maple forest association ends in the Vermilion River watershed in east-central Illinois and is present on this tract. Several seeps occur at various sites throughout the property. The largest seep has some uncommon species and is relatively undisturbed and may have been much larger at one time. Swamp wood betony and *Solidago patula* (rough leaf goldenrod) are rare species in the Vermilion River valley. Exotic and invasive species (i.e. maple) removal and periodic prescribed fire could help to maintain these various community types.

Objective:

Restore and manage upland forest and seep communities. Enhance habitats for forest, savanna, and grassland species of conservation concern. Objective is to restore and maintain 50 acres drymesic oak woodland, 10 acres open woodland, 3 acres of seep, 16 acre tree planting, and 20 acres of prairie.

Approach:

IDNR personnel and contractors will implement a program to eliminate invasive and exotic plant species, restore prairie, and encourage oak regeneration through forest management throughout the tract. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, and habitat creation/restoration planting.

Final Results: Job Completed. One hundred and thirteen acres of exotic species were controlled in prairie, forest woodland, and seep communities. Prescribed fire was completed on 20 acres as part of site prep for reforestation. Sixteen acres of old field was reforested and 20 acres of prairie was reconstructed. An 80 acre prescribed fire contract was not executed due to poor weather conditions.

- Amendment #4 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2009 to December 2011
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$35,235.62 in federal funds and \$58,138.71 in state matching funds per the new 65:35 matching requirements.

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Line Item	Federal	State	Total
Controctival	\$19,500.00	\$13,500.00	\$36,000.00
Contractual	\$35,235.62	\$58,138.71	\$93,374.33
Common divisor	\$2,000.00	\$2,000.00	\$4,000.00
Commodities	\$1,999.98	\$2,654.00	\$4,653.98
Personnel	\$0.00	\$6,000.00	\$6,000.00
Total	\$21,500.00	\$21,500.00	\$43,000.00
Total	\$37,235.60	\$66,792.71	\$104,028.31

Job 26: Green River State Wildlife Area Grassland and Wetland Restoration

Job Leader: Frank Ostling

District Wildlife Biologist 375 Game Farm Road Harmon, Illinois 61042

815-379-2760-office, 815-379-2664 fax

Frank.Ostling@illinois.gov

Purpose/Need:

Green River State Wildlife Area (GRSWA) provides some of the largest and highest quality native prairies and wetlands remaining in the state, habitat for over 15 rare species. The 2554 acre GRSWA contains the entire natural community continuum from sand pond to dry sand prairie and savanna within the nine natural plant communities at this site. GRSWA contains nearly 500 plant species including four State listed species, over 150 bird species including 11 State listed species, 8 amphibians, and 16 reptile species including two listed species, and at least 23 species of mammals. The site contains over 65 species in greatest need of conservation This site also provides some of the highest quality habitat for wetland and prairie remnant dependant invertebrates in the state. More than 1000 acres are designated as an Illinois Natural Areas Inventory Site.

Green River State Wildlife Area has experienced tremendous amount of tree, brush, and invasive exotic species invasion over the last five decades, causing considerable degradation to prairie and wetland resources. In addition, hydrological changes have resulted in reduced wetland acreage compared to the historical extent. A significant effort is needed to reverse the recent succession and continue the prairie and wetland restoration and management to support the species of primary management concern according to USF&WS / Green River SWA W-8-L Amendment #4.

Amendment 4 to Illinois Federal Aid Grant W-8-L revised the primary purpose of GRSWA to restore and maintain communities of wildlife species associated with prairie and wetland habitats. This amendment to W-8-L was approved by the United States Fish and Wildlife Service (FWS) on September 26, 1995.

The United States Fish and Wildlife Service (FWS) programmatic review of Illinois Federal Aid Grant W-8-L Green River State Wildlife Area conducted in October 1998 concluded that two activities, horseback field trials and put and take pheasant shooting, placed the Illinois Department of Natural Resources (IDNR) in noncompliance with federal Law, regulations, and grant provisions. This finding of noncompliance compelled the FWS as the federal granting agency to require the grantee, IDNR, to resolve the findings in an expedient manner.

Twelve remedies were "required to bring Grant W-8-L, the Illinois Department of Natural Resources, and the Fish and Wildlife Service into programmatic compliance with the Federal Aid in Restoration Act, Program Regulations, Grant Administration Requirements, Program

Standards, Grant Conditions, and the Grant Proposal." Except for remedy #10, all of these remedies have been addressed, although the current site superintendant vacancy outlined in remedy #4 is again valid. In Remedy #10, FWS "notifies IDNR that: (a) lands adversely impacted by field trial activities must be restored in a manner that supports accomplishment of grant objectives; (b) a restoration plan that identifies needs, objectives, benefits, approaches, locations, time frames, costs, and other details must be submitted by January 1, 1999; (c) work to restore the site must commence in calendar year 1999 and proceed annually until the plan has been completed; and (d) the FWS must be provided an annual status report regarding plan implementation and a final report when implementation of the plan has been completed."

The project proposed in State Wildlife Grant (SWG) T-28-M-1 is consistent with the grant objectives outlined in Amendment 4 and with the IDNR commitment to resolve the findings of the programmatic review. This project specifically addresses remedies 10 a) and c).

Objective:

Maintain and restore approximately 2200 acres of prairie and wetland habitats at Green River State Natural Area, Lee County. And of these, 9 are state endangered or threatened species. Targeted heavy brush control will be done on approximately 200 acres and scattered invasive species control will be done on the remaining project acreage as needed. Wetland restoration efforts will increase water surface area by at least 15%.

Approach:

IDNR personnel, volunteers, and contractors will implement a program to eliminate invasive and exotic plant species in sand savanna, prairie and wetland habitats. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, hydrology restoration, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal

Final Results: Using the approach as outlined in this grant, 91 acres of exotic species were treated, 1,103 acres received prescribed fire, and a 200 acre wetland was restored via repairing and replacing water control structures.

- Amendment #4 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2009 to December 2011
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$65,437.58 in federal funds and \$107,971.89 in state matching funds per the new 65:35 matching requirements.

Line Item	Federal Share	State Share	Total
	\$30,000.00	\$20,000.00	\$50,000.00
Contractual	\$98,067.58	\$120,601.89	\$81,147.47
C 1''	\$0.00	\$5,000.00	\$10,000.00
Commodities	\$2,370.00	\$2,370.00	\$4,740.00
Personnel	\$0.00	\$10,000.00	\$10,000.00
		\$20,000.00	\$20,000.00
Total	\$35,000.00	\$35,000.00	\$70,000.00
	\$100,437.58	\$142,971.89	\$243,409.47

Job 27: Habitat Restoration at Goose Lake Prairie State Natural Area, Grundy County,

Illinois.

Job Leader: Dan Kirk

Natural Heritage Biologist

13608 Fox Rd.

Yorkville, IL. 60560

630-553-1372

Dan.kirk@illinois.gov

Purpose/need:

The Project will take place at Gooselake prairie State Natural Area, located in Grundy County, 5 miles east of Morris, Illinois, between the confluence of the Kankakee and Des Plaines Rivers. The site is located within Prairie Parklands, one of the 30 identified Resource Rich Areas (RRA) in Illinois. Goose Lake Prairie State Natural Area (GSPSNA) is the largest remnant prairie in Illinois, totaling nearly 2600 acres. A 1700 acre state dedicated nature preserve contains marshes, seeps, sedge meadow, wet, mesic, and dry prairie. GLPSNA's large size and rare species makes it one of the most significant Midwestern prairies. Six Illinois threatened and endangered plant species and 12 animal species (2 winter residents) are known from GLPSNA along with 33 species of conservation priority. Particularly significant are the populations of grassland birds and Blanding's turtles. GLPSNA may have one of the few viable populations of Blanding's turtles in the state.

Objective:

Remove as many fencerows as possible from a 600 acre block of prairie to reduce grassland fragmentation for area sensitive grassland birds.

Approach:

IDNR personnel and contractors will implement a program to control woody vegetation in fencerows. The practices to be applied include invasive woody control and habitat restoration; planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: Two thousand feet of woody fencerows (4-5 acres) were removed to decrease grassland fragmentation. In addition, 49 acres of exotic species were controlled and 258 acres of grassland received prescribed fire.

- Amendment #4 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2009 to December 2011
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$35,235.62 in federal funds and \$58,138.71 in state matching funds per the new 65:35 matching requirements.

Line Item	Federal Share	State Share	Project Total
Contractual	\$20,000.00 \$55,235.62	\$10,000.00 \$58,138.71	\$30,000.00 \$113,374.33
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$10,000.00 \$20,000.00	\$10,000.00 \$20,000.00
Total	\$20,000.00 \$55,235.62	\$20,000.00 \$78,138.71	\$40,000.00 \$133,374.00

Job 28: Cache River State Natural Area, Johnson County invasive exotic species

management project.

Job Leader: Mark Guetersloh

0139 Rustic Campus Drive

Ulin, IL 62992 618-634-9656

Purpose/need:

The Cache River State Natural Area contains critical habitat for eight Illinois threatened or endangered species and two federal endangered species. Other rare or uncommon species that occur within the area are generally associated with wetlands of the deep south or prairie species associated with the till plain region located north of the Shawnee Hills Natural Division. Boss island has portions that are old field and pine plantations. These areas fragment and act at seed sources for invasive species within the Natural Area.

Objectives:

Implement an exotic invasive species, primarily autumn olive (*Eleagnus angustifolia*), management program at Cache River State Natural Area, Johnson County.

Approach:

IDNR personnel and contractors will implement a program of exotic species control and forest restoration. The primary target area will include Boss Island which is either included as part of Cache River Land and Water Reserve or the Heron Pond-Little Black Slough Nature Preserve. Practices that will be included in the management program are prescribed fire, invasive woody plant control, invasive exotic species control, erosion/sedimentation control, and habitat creation/restoration: planting. Descriptions of these practices are in the body of the grant proposal.

Final Results: More than 300 acres of exotic species removal was completed totaling approximately 1254 hours. The goal is to return the site to its presettlement vegetation Because of the visibility of this kind of work, an interpretive panel was developed and integrated as part of informational/educational materials at the Kiosk – Wildcat Bluff public access/parking area. A copy of this panel is included with this report.

- Amendment #4 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2009 to December 2011
- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$65,437.58 in federal funds and \$107,971.89 in state matching funds per the new 65:35 matching requirements.

Line Item	Federal Share	State Share	Project Total
Contractual	\$42,200.00	\$40,000.00	\$82,200.00
	\$107,637.58	\$145,171.89	\$252,809.47
Commodities	\$0.00	\$0.00	\$0.00
Personnel	\$0.00	\$2,200.00	\$2,200.00
		\$5,000.00	\$5,000.00
Total	\$42,200.00	\$42,200.00	\$84,400.00
	\$107,637.58	\$150,171.89	\$257,809.47

Welcome to Wildcat Bluff

This steep south-facing bluff supports diverse habitats including upland forests, barrens and glade communities. The Bluff overlooks the Cache River basin where cypress and tupelo swamps mingle with bottomland trees and dense stands of giant cane, and is part of the Heron Pond-Little

Black Slough Nature Preserve. In an effort to restore the historic condition of Wildcat Bluff, this area is undergoing a *natural community* restoration that includes the removal of exotic and invasive plants. This procedure includes prescribed fire, mechanical removal and the selective use of herbicides to restore the oak dominated woodlands and prairie barrens that once dominated steep, rocky slopes at this site. These management techniques are intended to mimic natural disturbance that once discouraged exotic plants such as autumn olive and bush honey suckle, and to limit the establishment of invasive trees such as eastern red cedar, sugar maple and sassafras.

As you hike the scenic trail along the top of the bluff take time to appreciate the diversity of plants found here and the investment being made to restore this unique landscape.



Desired Conditions



Existing Conditions



Invasive Exotic Autumn Olive



Invasive Exotic Bush Honeysuckle



Invasive Eastern Red Cedar



Invasive Sugar Maple

Job 29: Boundary Survey and Invasive Species Control at Collier Glade LWR, Hardin

County, Illinois and Gibbons Creek Barrens Nature Preserve, Pope County,

Illinois

Job Leader: Bob Lindsay

Ferne Clyffe State Park

P O Box 67, Goreville, IL 62939

618-995-2568

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Purpose/need:

Gibbons Creek Barrens NP is located 1 mile NW of Herod in Pope County and exists within a matrix of publically owned lands – both IL DNR and Shawnee National Forest (USDA). Gibbons Creek is owned by the IDNR and supports high and very high quality dry barrens, high quality dry upland forest, and essentially undisturbed sandstone cliff. Gibbons Creek Barrens is one of the best remaining examples of barrens habitat anywhere in Illinois. Collier Glade LWR is located in Pope County, Illinois and is owned by the IL DNR. Collier Glade supports very high and high quality examples of limestone glade habitats.

Both sites are Illinois Natural Areas Inventory Sites. Gibbons Creek is one of only 3 high quality dry barrens remaining within the region. High quality limestone glades, such as those at Collier, persist at only 12 such sites. The maintenance and restoration of high and very high quality habitats on the INAI is an objective of several campaigns of the Illinois Wildlife Action Plan. Both sites contain numerous species in greatest need of conservation.

Boundary issues exist regarding the actual boundary of each site to permanently address neighboring land use issues. In addition, barrens and glades are being degraded at a faster rate than other habitat types due to the high edge-to-area ratio of these habitats. Invasion by woody and exotic vegetation is shading out barren or glade dependent species and degrading the sites.

Objective:

Locate and permanently post site boundaries by legal survey to address site integrity issues. Control 105 acres of invasive vegetation at Colliers Glade and 133 acres at Gibbons Creek Barrens.

Approach:

IDNR personnel and contractors will implement a program to eliminate invasive and exotic plant species and boundary posting. Primary practices to be applied will include prescribed fire, invasive woody plant control, invasive exotic species control, and boundary protection/fence repair as outlined in the body of the grant.

Final Results: Approximately 4 miles of boundary was surveyed and posted. Furthermore, Tim Probst was awarded a contract to control woody encroachment control at both Collier Glades and Gibbons Creek Barrens. However, was unable to complete the contract due to injury.

• Amendment #4 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2009 to December 2012

Final Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$15,500.00	\$15,500.00	\$31,000.00
	\$0.00	\$23,000.00	\$23,000.00
Commodities	0	0	0
Personnel	0	0	0
TOTAL	\$15,500.00	\$15,500.00	\$31,000.00
	\$0.00	\$23,000.00	\$23,000.00

Job 30: Exotic Species Control in High Quality Northeastern Illinois Wetlands

Job Leader: Brad Semel

Chain O' Lakes State Park

8916 Wilmot Road Spring Grove, IL 60081 815-675-2386.1 EXT 317 brad.semel@illinois.gov

Purpose/need:

Kettle Moraine, Volo Bog, and Turner Lake Nature Preserves, Lake and McHenry counties in northeastern Illinois, constitute the principle high quality natural areas of their respective state parks and provide habitat for at least 41 state listed endangered and threatened species collectively.

Kettle Moraine Nature Preserve, within Moraine Hills State Park, supports very high and high quality calcareous floating mat and Graminoid fen habitats, very high quality low shrub bog habitats, and high quality marsh, pond, and sedge meadow. Twenty-two state-listed species occur at this site. Volo Bog Nature Preserve, Lake County, is the best remaining example of classic bog vegetation in Illinois, supporting very high and high quality examples of tall shrub bog, forested bog, graminoid bog, and pond. Twenty three state-listed species occur at Volo Bog. Turner Lake Nature Preserve, within Chain O' Lakes State Park, supports very high quality examples of calcareous floating mat, graminoid fen, pond, and sedge meadow. The site also supports 10 state-listed species.

Objective:

Invasive woody vegetation and exotic species are invading these high quality wetlands, displacing native flora. Plant community degradation threatens the habitat necessary to support the diverse assemblage of threatened and endangered fauna and flora of the Nature Preserves.

Approach:

Exotic invasive species will be controlled using a selection of herbicides (dependent upon species to be controlled) and timed for appropriate phenology. Maintaining native vegetation will allow more effective community maintenance with the use of prescribed fire.

Final Results: Job Completed. More than 162 acres of phragmites and other exotic species were treated during this project. Phragmites has been nearly eliminated from the three state sites. Overall, a contractor deployed over 738 hours in application of herbicides and searching for exotic species among the three Nature Preserves. A combination of herbicides was used to selectively treat phragmites, reed canary grass, common buckthorn, glossy buckthorn and Japanese honeysuckle.

• Amendment #4 added this job to T-28-M-1 Public Lands Initiative SWG and extended the deadline for the completion of all jobs from December 2009 to December 2012.

- Amendment #6 added an additional year to complete the project until December 2012.
- Amendment #7 added \$35,235.62 in federal funds and \$5,8138.71 in state matching funds per the new 65:35 matching requirements.

Final Budget:

Line Item	Federal Share	State Share	Project Total
Contractual	\$12,500	\$12,500	\$25,000
Commodities	0.00	0.00	\$0.00
Personnel	\$0.00	\$0.00	\$0.00
		\$2,000.00	
TOTAL	\$12,500	\$12,500.00	\$25,000.00
		\$14,500.00	\$27,000.00