

**LAND AND WATER REGISTRY PROPOSAL:
ADDITION TO THE
CACHE RIVER LAND AND WATER RESERVE**

**Cache River State Natural Area in
Johnson and Pulaski Counties, Illinois.**

Proposal submitted by:

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and

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31 August 2001

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1.0 Statement of Significance

General Information

The existing Cache River Land and Water Reserve (Reserve) includes 9,274.89 acres in Johnson and Pulaski Counties located within the Cache River Watershed in extreme southern Illinois. Land included in the Register of Land and Water Reserves occurs within the 11,768 acre Cache River State Natural Area (CRSNA), which is owned and managed by the Illinois Department of Natural Resources (IDNR).

The Cache River watershed is one of 30 sites in Illinois identified by the Illinois Department of Natural Resources as a Resource Rich Area. This basin contains over 20 unique plant communities, 128 species of native breeding birds, 49 species of mammals, 32 amphibian species, and 43 reptile species. Nearly three-fourths of the amphibian and reptile species that occur in Illinois can be found in this watershed. Aquatic species which can be found throughout the Cache River and its tributaries include 84 species of freshwater fish (native and introduced), 47 native mussels, 34 species of crustaceans, and more than 430 species of freshwater macroinvertebrates (in addition to crustaceans and mussels). Within this list of natural plants and animals are over 100 state threatened or endangered species. The Reserve provides essential habitat for all of these natural features and elements.

The propose addition will add 1092.268 acres in five separate tracts to the Cache River Land and Water Reserve. This acreage occurs within the purchase boundary established for the Cache River State Natural Area. Acquisition of parcels within this purchase boundary will assist with implementation of landscape scale hydrologic restoration described in the Cache River Basin Study sponsored by the U.S. COE and the Illinois Department of Natural Resources. Wetland restoration and reforestation on these tracts will be based on the lands pre-disturbance character, will provide habitat for numerous state threatened and endangered species, and will help reduce forest fragmentation. Registration of these tracts will provide additional protection by protecting the site from incompatible uses.

2.0 Identification

These parcels will be added to the existing Cache River Land and Water Reserve.

3.0 Size

The proposed addition will add 1092.268 acres to the 9,274.89 acre Cache River Land and Water Reserve (Total acreage - 10,367.158 acres).

4.0 Location

The Cache River Land and Water Reserve is located in extreme southern Illinois in southern Johnson County and southeastern Pulaski County (Appendix 10.1). It occurs within the Cache River State Natural Area and falls within the administrative authority of Region 5 of the Illinois Department of

Natural Resources. The proposed additions are located in Johnson County (T13S, R2E, 3rd PM, Sections 14,15, 22, 27) and Pulaski County (T14S, R2E, 3rd PM, Sections 9, 16).

5.0 Ownership

The proposed additions occur within the Cache River State Natural Area which is owned and managed by the Illinois Department of Natural Resources. The local contact person is the Site Superintendent, Cache River State Natural Area, 930 Sunflower Lane, Belknap, Illinois 62908, phone:(618) 634-9678.

6.0 Agency Contacts

Site Superintendent, Cache River State Natural Area, 930 Sunflower Lane, Belknap, IL 62908, phone: 618-634-9678.

District 26 Natural Heritage Biologist, 0139 Rustic Campus Drive, Ullin, IL 62992, phone: 618-634-2545.

Natural Areas Preservation Specialist, 4648 Highway 127, Carbondale, IL 62901, phone: 618-684-2660.

7.0 Qualifying Features

7.1 Lands and Waters included on the INAI

Preservation, restoration and management of the proposed additions to enhance the lands natural character will provide significant water quality benefits by removing 332.2 acres of tillable land, and grassland/pasture from production/grazing. Reforestation of this acreage will slow runoff and reduce erosion, which will eliminate a significant source of sediment entering the Cache River.

7.2 Habitats of State-listed Endangered, Threatened, and Watch-list Species

The proposed additions provide habitat for a number of state listed species. Existing forests provide habitat for numerous neotropical migratory songbirds, including the prothonotary warbler (*Protonotaria citrea*), Cerulean warbler (*Dendroica cerulea*), and brown creeper (*Certhia americana* - state threatened). Red-shouldered hawks (*Buteo lineatus* - state threatened) are also residents of bottomland forests in the Cache River basin, as are timber rattlesnakes (*Crotalus horridus* - state threatened).

Wetlands on proposed additions provide habitat for numerous wildlife species. Herons and egrets are commonly encountered, including the little blue heron (*Egretta caerulea* - state endangered), and snowy egret (*Egretta thula* - state endangered). River otters (*Lutra canadensis* - state threatened), while seldom seen are frequent visitors of the wetlands throughout the floodplain of the Cache River, and are especially common in forested wetlands directly adjacent to the river.

7.3 Forests Over 100 Acres

The existing Cache River Reserve contains over 6000 acres of relatively uninterrupted forest habitat, the largest area in the state outside of the Shawnee National Forest. Reforestation of the pastures/fields on these tracts will reduce fragmentation and improve habitat for the 96 species of songbirds that breed in the bottomland forests along the Cache River.

8.0 Synopsis of Registered Area's Significance

This 1092.268 tract expands the Reserve, allowing for management that will restore terrestrial natural communities (bottomland hardwood forest and forested wetlands) within the Cache River Land and Water Reserve. Preservation and restoration of the proposed additions will reduce forest fragmentation, increase wetland acreage, help to improve water quality, and provide habitat for 96 species of neotropical migratory songbirds that breed in the bottomland forests in the Cache River Basin.

9.0 Management Program

The proposed addition to the Cache River Land and Water Reserve will be managed according to existing protocols specified in the current Land and Water Reserve Management Schedule. These additions will become part of the Little Black Slough Management Unit (Schaefer, Main, Meyer, and Rose Tracts - 495.551 acres), and the Lower Cache River Swamps Management Unit (Rose Tract - 596.717 acres).

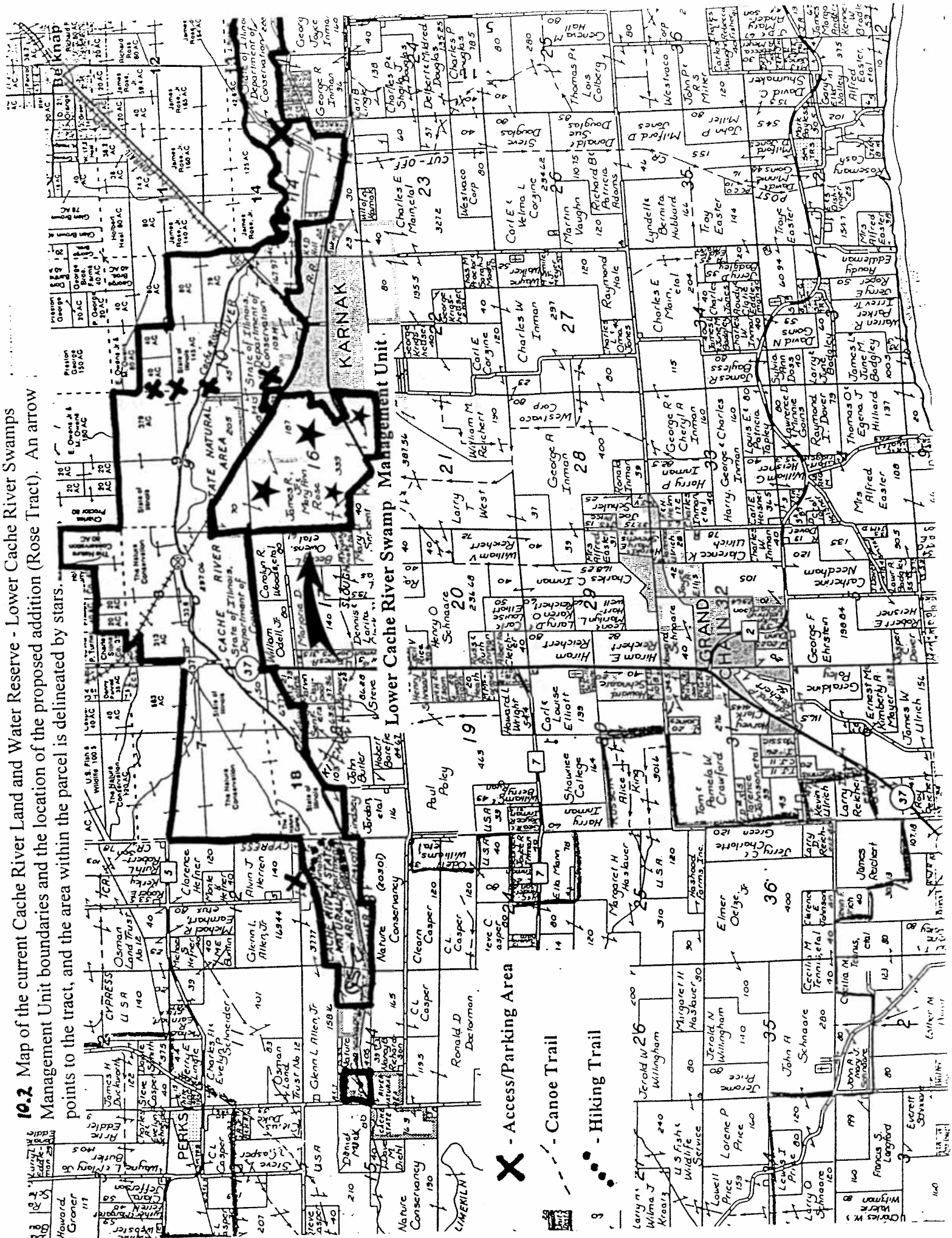
The Rose Tract was enrolled in the Cache Special Wetland Reserve Program administered by the USDA - Natural Resources Conservation Service (NRCS). Land enrolled in the Cache Special WRP transfers certain land-use rights to NRCS, while the remaining or residual rights remain with the landowner. Under this program, a team of biologists from IDNR, USFWS, and NRCS develop a restoration plan. Implementation of this plan is funded by C2000 (IDNR). Inclusion of the Rose Tract in the Land and Water Reserve Program adds an additional layer of protection by requiring INPC oversight of management responsibilities and residual rights.

Existing forests and wetlands will be preserved and managed according to INPC guidelines, and will be managed to restore as closely as possible the sites pre-disturbance natural character. Exotic species will be controlled through currently accepted guidelines (prescribed burning, spraying, and mechanical removal).

Landscape scale hydrologic restoration currently being finalized as part of the Cache River Alexander and Pulaski Counties Study (sponsored by the U.S. COE and IDNR) will help to restore and maintain the sites natural character and ongoing restoration efforts. All pasture/fields will be reforested to native bottomland hardwood species that occurred on the site prior to human disturbance. Wetland areas will also be restored by eliminating drainage tiles and ditches.

Hunting, trapping, and recreational activities will be allowed as described in the current management schedule and the Cache River SNA Annual Plan of Work.

10.2 Map of the current Cache River Land and Water Reserve - Lower Cache River Swamps Management Unit boundaries and the location of the proposed addition (Rose Tract). An arrow points to the tract, and the area within the parcel is delineated by stars.

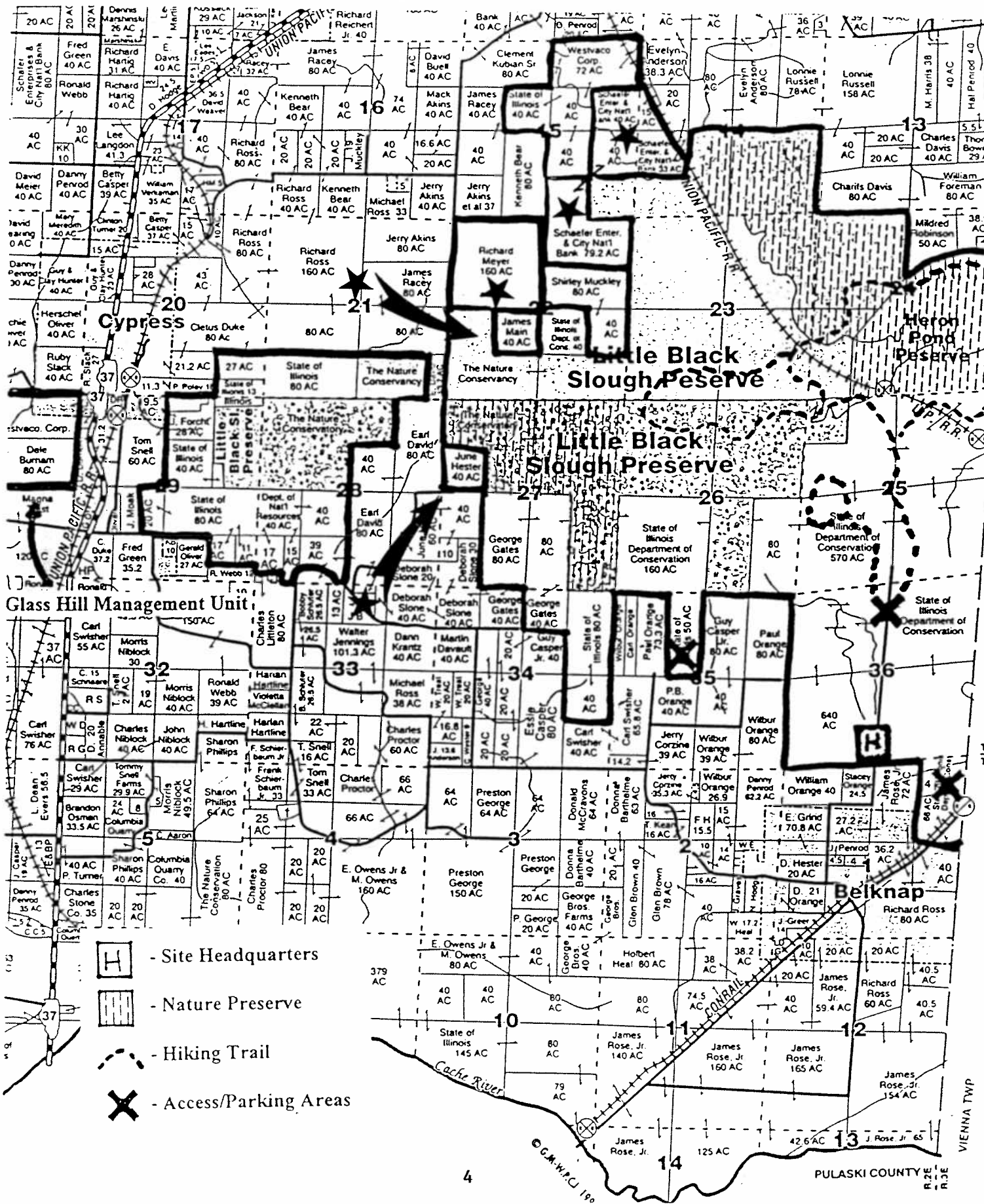


X - Access/Parking Area

- - - Canoe Trail

• • • Hiking Trail

10.1 Map of the current Cache River Land and Water Reserve - Little Black Slough Management Unit boundaries and the location of the proposed additions (Schaefer, Meyer, Main, and Hester Tracts). Parcels are delineated by a star(s), or star and arrow.



REGISTRATION AGREEMENT

ADDITION TO CACHE RIVER LAND AND WATER RESERVE

KNOW ALL PEOPLE BY THESE PRESENTS, that this Registration Agreement in the form of a Grant of Conservation Right and Easement pursuant to the Real Property Conservation Rights Act, 765 ILCS 120, as amended, is made this _____ day of _____, 20____.

WITNESSETH:

WHEREAS, the Illinois Department of Natural Resources, an agency of the state, whose address is 524 South Second Street, Springfield, Illinois (hereinafter with its heirs and assigns, called the "Grantor"), is the owner in fee simple of certain real property (hereinafter called "Registered Reserve") which supports natural heritage resources or archaeological resources of Statewide significance and is described as follows:

See Attachment A

WHEREAS, The Illinois Nature Preserves Commission (hereinafter with its successors and assigns, called "Grantee"), is an agency of the State of Illinois with offices at 524 South Second Street, Springfield, Illinois; and

WHEREAS, The Grantor and Grantee, by this Registration Agreement and Conveyance to the Grantee of a Conservation Right and Easement on, over, and across the Registered Reserve, desire to conserve the natural heritage resources or archaeological resources thereof and prevent the use or development of the Registered Area for any purpose or in any manner that would conflict with the maintenance of the significant natural features and associated ecological processes thereof; and

WHEREAS, The Grantee is willing to accept this Grant of Conservation Right and Easement subject to the reservations and to the covenants, terms, conditions, and restrictions set out herein and imposed hereby; and

WHEREAS, The Registered Reserve is registered for the purposes, and shall be held, maintained and used, as provided for in the Illinois Natural Areas Preservation Act and the rules entitled the Register of Land and Water Reserves (17 Ill. Adm. Code, Part 4010) and as provided for in any amendment to that Act or rule, but no such amendment shall alter the commitment to the preservation of natural conditions of the Registered Reserve by the Grantor as of the date of this Registration Agreement;

NOW THEREFORE, The Grantor, for and in consideration of the above recitations and of the mutual covenants, terms, conditions, and restrictions hereinafter contained, and as an absolute and unconditional gift, does hereby give, grant, bargain, sell, and convey unto the Grantee, forever, a Conservation Right and Easement in perpetuity on, over, and across the Registered Reserve, consisting of the following:

1. The right to view the Registered Reserve in its natural, scenic, and open condition;
2. The right to enter the Registered Reserve at reasonable times upon reasonable notice to inspect the condition of the Registered Reserve; and
3. The right to enforce by proceedings at law or in equity the covenants set forth below, it being agreed that there shall be no waiver or forfeiture of the Grantee's right to ensure compliance with the covenants and conditions of this grant by reason of any prior failure to act.

And in furtherance of the above affirmative rights of the Grantee, the Grantor makes the following covenants which shall run with and bind the Registered Reserve, the Grantor shall not commit any act or omission in violation of the rules entitled the Register of Land and Water Reserves, as amended (17 Ill. Adm. Code, Part 4010).

Grantor shall have prepared a Management Program in accordance with the Register of Land and Water Reserves, as amended. The Management Program is attached hereto and hereby approved by Grantee.

Grantee shall be subject to the provisions of the Illinois Natural Areas Preservation Act, as amended, as that Act relates to registered areas, and the Register of Land and Water Reserves, as amended, and shall hold and exercise the rights and responsibilities described therein.

Grantor agrees to incorporate this Grant of Conservation Right and Easement by reference in any deed or other legal instrument by which it divests itself of any interest in all or a portion of the Registered Reserve and to use reasonable efforts to notify Grantee of any such transaction.

By their acceptance hereof the Grantee also agrees to be bound by the covenants binding on the Grantor as set forth above.

TO HAVE AND TO HOLD the said Conservation Easement unto the Grantee forever.

Except as expressly limited herein, the Grantor reserves all rights as owner of the Registered Reserve, including the right to use the Registered Reserve for purposes not inconsistent with this Grant.

The terms hereof shall be deemed to run with the land and be binding upon all successors and assigns of both the Grantor and the Grantee.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day
of _____, 20____.

Director, Illinois Department of
Natural Resources

STATE OF ILLINOIS)
) SS
COUNTY OF SANGAMON)

I, the undersigned, a Notary Public, in and for the County and State aforesaid, Do HEREBY CERTIFY that Brent Manning, Director of the Illinois Department of Natural Resources, an agency of the State, personally known to me to be the same person whose name is subscribed to the foregoing Instrument, appeared before me this day in person and acknowledged that he signed, sealed, and delivered the said Instrument as his free and voluntary act, for the uses and purposes herein set forth.

GIVEN under my hand and notarial seal, this ____ day of _____, 20____.

Notary Public

My Commission expires:

ACCEPTED:

Chair, Illinois Nature Preserves
Commission

Date

Attest:

Secretary, Illinois Nature Preserves
Commission

Date

Attachment A
Addition to Cache River Land and Water Reserve
Legal Description

10.1 Legal Description

Parcel 284-38

Tract 1: Being part of the Northwest Quarter (NW1/4) of the Southwest Quarter (SW 1/4), and part of the South Half (S1/2) of the Southwest Quarter (SW1/4) of Section Nine (9), and the Northwest Quarter (NW1/4), part of the Northeast Quarter (NE1/4), and the Northwest Quarter (NW1/4) of the Southwest Quarter (SW1/4) of Section Sixteen (16), all in Township Fourteen (14) South, Range Two (2) East of the Third Principal Meridian, Pulaski County, Illinois, and more particularly bounded and described as follows, to-wit: Beginning at a point in the East line of Section 16, Township 14 South, Range 2 East of the Third Principal Meridian, said point being at the intersection of said East line and the Southerly right-of-way line of the Chicago and Eastern Illinois Railroad and also being in the centerline of a county road; thence South 3 degrees 17 minutes 56 seconds East with the East line of said Section 16, 902.50 feet to the Southeast corner, Northeast Quarter of said Section 16; thence South 82 degrees 46 minutes 37 seconds West with the South line of the Northeast Quarter and the South line of the Northwest Quarter of said Section 16, 4067.81 feet to the Northeast corner of the Northwest Quarter of the Southwest Quarter of said Section 16; thence South 3 degrees 17 minutes 56 seconds East with the East line of said Northwest Quarter of the Southwest Quarter of Section 16, 1334.88 feet, to the Southeast corner thereof, thence South 82 degrees 46 minutes 37 seconds West with the South line of said Northwest Quarter of the Southwest Quarter of Section 16, 1349.58 feet to the Southwest corner thereof; thence North 3 degrees 34 minutes 19 seconds West with the West line of said Section 16, and the West line of Section 9, 6000.03 feet to a point in the Southerly right-of-way line of said Chicago and Eastern Illinois Railroad property, said point being 125 feet Southerly from and square off of the main line; thence South 61 degrees 06 minutes East with said Southerly right-of-way line, 3216.03 feet to a point in the West line of the Southeast Quarter of Section 9; thence South 3 degrees 17 minutes 56 seconds East with said West line, 96.92 feet to Southwest corner thereof; thence North 82 degrees 46 minutes 37 seconds East with the South line of said Southeast Quarter of Section 9, 181.52 feet to a point; said point being 100 feet Southerly from and square off of the main line of said C. & E.I. Railroad; thence South 61 degrees 06 minutes East with said Southerly right-of-way line, 2990.76 feet to the point of beginning and containing 387.246 acres, subject to a drainage ditch and road right-of-way on the East side of this property which contains 0.948 acres, situated in the County of Pulaski, in the State of Illinois, all according to a Boundary Survey prepared by Hunter H. Martin and Associates and recorded at Page 40 of Book of Maps in the Office of Recorder of Deeds of Pulaski County, Illinois.

Being all of the property in Pulaski County conveyed to John Hancock Mutual Life Insurance Company by Deed dated December 29, 1986, and recorded in the Office of the Recorder for the County of Pulaski, Illinois, in Book 172, Page 429, as Instrument No. 2170.

Tract 2: Beginning at an iron pipe set at the Northwest corner of the Northeast Quarter (NE1/4) of the Southwest Quarter (SW1/4) of Section Sixteen (16), Township Fourteen (14) South, Range Two (2) East of the Third Principal Meridian, in Pulaski County, Illinois, thence North 82 degrees 55 minutes 49 seconds East, along the Quarter Section line a distance of 4006.70 feet to an iron axle, thence continue on the bearing North 82 degrees 55 minutes 49 seconds East, 63.82 feet to the East line of Section 16, thence South 3 degrees 18 minutes East along the East Section line, 328.11 feet to a point; thence North 87 degrees 47 minutes West for a distance of 723.33 feet to a 24 inch White Oak Tree; thence South 5 degrees 37 minutes 45 seconds East for a distance of 692.20 feet, to a point lying 240 feet from the centerline of Illinois Route No. 169; thence South 57 degrees 57 minutes West, parallel with said Route; 300 feet to a point; thence South 32 degrees 03 minutes East, perpendicular to said Route, for a distance of 200 feet, to the Northerly right-of-way line of said Route; thence continue South 32 degrees 03 minutes East across said Route, 80 feet to the Southerly right-of-way thereof; thence North 57 degrees 57 minutes East along the Southerly right-of-way of Route 169 to a curve whose radius is 1870.08 feet; thence bear right along said curve to the East line of Section 16, Township 14 South, Range 2 East of the 3rd P.M.; thence South 3 degrees 18 minutes East along the Section line to a point 84.80 feet Northerly from the Southeast corner of said Section as measured along said East Section line; thence South 42 degrees 03 minutes West a distance of 129.51 feet, along the Northwesterly right-of-way line of the C.C.C. & St. Louis Railroad and fifty feet from centerline of track to the South line of Section 16; thence South 82 degrees 50 minutes 40 seconds West along the South line of Section 16, 2567.82 feet to an iron pipe set marking the South Quarter corner of Section 16; thence North 32 degrees 03 minutes West on a line perpendicular to the centerline of Illinois Route 169, a distance of 413.10 feet to the Southerly right-of-way thereof thence continue on said bearing, 80 feet to the Northerly right-of-way line of Route 169; thence South 57 degrees 57 minutes West along the Northerly right-of-way of Route 169, to the centerline of Kitchel Slough; thence Northwesterly along the centerline of Kitchel Slough, to the line separating the East one half from the West one half of the Southwest Quarter (SW1/4) of Section 16, Township 14 South, Range 2 East of the 3rd P.M.; thence North 5 degrees 01 minutes 46 second West along the West line of the East Half (E1/2) of the Southwest Quarter (SW1/4) to the East-West Quarter Section line marked by an iron pin, being the point of beginning of this survey; **EXCEPTING** a strip of land 80 feet in width and running Northeasterly across this tract as located in the above description and dedicated to the State of Illinois for highway purposes, said strip being approximately 2700 feet in length on a bearing of South 57 degrees 57 minutes West; all land above described contains 209.471 acres, more or less, and lies in the Southeast Quarter (SE1/4) and the East Half (E1/2) of the Southwest Quarter (SW1/4) of Section 16, Township 14 South, Range 2 East of the Third Principal Meridian, situated in Pulaski County, Illinois.

Parcel 284-62

The Southwest Quarter of the Northwest Quarter of Section 27, Township 13 South, Range 2 East of the Third Principal Meridian, situated in the County of Johnson, State of Illinois.

Parcel 284-22

The Northeast Quarter of the Southwest Quarter of Section 22, Township 13 South, Range 2 East of the Third Principal Meridian, Situated in the County of Johnson, State of Illinois.

Parcel 284-29

The Southwest Quarter of the Northwest Quarter, and the Northwest Quarter of the Southwest Quarter, EXCEPT that part lying East of the West Right of Way line of the Railroad in Section 14 and the Northeast Quarter of the Southeast Quarter, in Section 15; and the Southeast Quarter of the Northeast Quarter; the Southwest Quarter of the Southeast Quarter in Section 15; and the Northwest Quarter of the Northeast Quarter, and the Northeast Quarter of the Northeast Quarter in Section 22, all the above described real estate being in Township 13 South, Range 2 East of the Third Principal Meridian, in Johnson County.

EXCEPT that part conveyed to the State of Illinois, Department of Conservation by warranty Deed, dated June 13, 1980 and recorded June 13, 1980, in Book 149, page 11.

ALSO EXCEPTING THEREFROM so much thereof as is owned by the Cache River Drainage District.

SITUATED IN THE COUNTY OF JOHNSON, STATE OF ILLINOIS.

Parcel 284-61

The Northwest Quarter of Section 22, Township 13 South, Range 2 East of the Third Principal Meridian, Johnson County, Illinois, being more particularly described as follows: Beginning at the Northwest Corner of said Quarter Section; thence North 85 degrees 13 minutes 17 seconds East (an assumed Bearing) on the North line of said Quarter section, 2670.30 feet to the Northeast corner thereof; thence South 00 degrees 40 minutes 26 seconds East on the East line of said Quarter Section, 2715.72 feet to the Southeast corner thereof; thence South 86 degrees 16 minutes 12 seconds West on the South line of said Quarter Section, 2618.40 feet to the Southwest corner thereof; thence North 01 degrees 43 minutes 22 seconds West on the West line of said Quarter Section, 2664.63 feet to the Point of Beginning, containing 163.062 acres, more or less;

EXCEPTING that part thereof described as follows: Commencing at the Northwest corner of the Northwest Quarter of Section 22, Township 13 South, Range 2 East of the Third Principal Meridian, Johnson County, Illinois; thence North 85 degrees 13 minutes 17 seconds East (an assumed Bearing) on the North line of said Quarter Section, 379.19 feet for the Point of Beginning; thence North 85 degrees 13 minutes 17 seconds East on the North line of said Quarter Section, 336.59 feet to a point; thence South 04 degrees 46 minutes 43 seconds East, 137.25 feet to a point; thence South 87 degrees 50 minutes 13 seconds West, 336.95 feet to a point; thence North 04 degrees 46 minutes 43 seconds West, 121.87 feet to the Point of Beginning said EXCEPTION containing 1.001 acres, more or less;

Containing a net area of 162.061 acres, more or less, all situated in the County of Johnson, State of Illinois.

**SITE MANAGEMENT SCHEDULE FOR ILLINOIS
LAND AND WATER RESERVE -
MANAGEMENT GOALS**

Reserve Number:

Prepared By: Mark Guetersloh

Site Name: Cache River Land and Water Reserve (including 2001 addition)

County: Johnson, Pulaski

Landowner: Illinois Department of Natural Resources

Manager: Jim Waycuilis

OBJECTIVES FOR ESTABLISHING THE PRESERVE:

The primary objective for establishing the Cache River Land and Water Reserve (Reserve) is the preservation and restoration of wetland and aquatic natural communities along the riparian corridor of the Cache River. Special consideration is given to southern deepwater forested swamps dominated by bald cypress and water tupelo, which reach the northernmost extension of their range within the Coastal Plain Natural Division in extreme southern Illinois. Other high quality natural communities which will be protected within the registry site include wet floodplain forest, wet-mesic floodplain forest, mesic floodplain forest, dry upland forest, dry-mesic upland forest, limestone glade, and sandstone cliff communities. Designation of this site as a Registered Land and Water Reserve will protect existing significant and exceptional natural features, and assure restoration and management of the site are consistent with the preservation of the predisturbance natural character (communities and species) representative of this geographic region.

STATUS OR CONDITION OF NATURAL FEATURES PRESENT:

The Cache River Land and Water Reserve contains high quality examples (Grades A, B) of pond, swamp, wet floodplain forest, wet-mesic floodplain forest, mesic floodplain forest, mesic upland forest, dry-mesic upland forest, and sandstone cliff natural communities. The finest examples of these communities are protected within the Heron Pond-Little Black Slough Nature Preserve (includes portions of Wildcat Bluff), Section 8 Woods Nature Preserve, and the Buttonland Swamp National Natural Landmark (within the Lower Cache River Swamps Natural Area). Still other relatively undisturbed natural communities (terrestrial, wetland, and aquatic), restored wetlands, and upland/bottomland reforestation sites in various stages of succession occur within the the Reserve, and within the boundaries of land owned and managed by the other Joint Venture Partners (USFWS-Cypress Creek National Wildlife Refuge, and The Nature Conservancy). The geographic location, continuity of land in public ownership, and diversity of habitat found on these public lands eliminates habitat fragmentation, allows for hydrologic restoration, and provides buffer that is essential for the preservation of natural communities and species within the Reserve.

TYPES AND EXTENT OF DEGRADATION/ POTENTIAL FOR RESTORATION:

Preservation and restoration efforts continue to maintain and improve the natural character of the proposed Reserve. However, past and present drainage, logging, and land clearing activities disrupted the processes which sustain the natural character of habitat within the watershed. These human caused disturbances continue to affect the runoff and delivery of rainwater that falls in the basin by increasing the volume and velocity of flow within the Cache River and its tributaries. The result is channel incision, lateral gullying, stream bank instability, excessive sediment transport/deposition, increased depth of floodwater, and prolonged duration of flooding during periods of heavy rainfall. Conversely, drainage, logging, and land clearing also causes unnatural and excessive dewatering of wetland and aquatic habitats during seasonal dry periods and drought. Oak-dominated floodplain and upland forests that have had selective timber harvest in the past show some signs of invasion by sugar maple and sassafras. Forest openings and edges have considerable growths of Autumn Olive, Japanese Honeysuckle, and Multiflora Rose. Sandstone cliff communities remain relatively undisturbed. Massive restoration (terrestrial and aquatic) and reforestation efforts have been undertaken by the Cache River Wetlands Joint Venture Partners (Illinois Department of Natural Resources, U.S. Fish and Wildlife Service, The Nature Conservancy, and Ducks Unlimited). Restoration of disturbed land within the purchase boundaries of the Joint Venture Partners will require coordination between each agency. Because of the diversity of resources and the ecological complexity involved with landscape scale restoration, input from other divisions (Wildlife, Forestry, Streams, Fisheries, Land Management) will be required to assure the compatibility and sustainability of restoration efforts. Restoration within the Reserve will primarily involve returning disturbed areas to their predisturbance natural character. However, site specific intensive management for a particular species or range of species may be necessary or desirable where such management potential exists. Recreational use (consumptive and non-consumptive) of the area has increased dramatically each year since the site was created. Impacts from public use are minimal, but could become a problem if the number of users continues to increase.

AMOUNTS OF CURRENT/POTENTIAL VISITOR USE AS RELATED TO MANAGEMENT ISSUES:

Visitor use is moderate and seasonal, but will likely increase as the public becomes aware of available outdoor recreation opportunities at the site. The completion of the Cache River-Tunnel Hill Trail and Cache River Visitor/Education Center will also bring more people to the site. Use is highest during waterfowl, wild turkey, and whitetail deer seasons, but non-consumptive use (examples: hiking, wildlife observation) has increased dramatically during the last five years.

POTENTIAL LINKAGE WITH NEARBY LANDS/ACQUISITION BEING CONSIDERED:

The Cache River Land and Water Reserve (including the 2001 addition) includes 10,367.15 acres of land within the Cache River State Natural Area. The purchase boundary of the Cache River State Natural Area is described in Master Management

Plans completed by IDNR for the Little Black Slough Unit and the Lower Cache River Unit. This purchase boundary includes all acreage within the Heron Pond-Little Black Slough and Lower Cache River Swamp Natural Area Inventory Sites, and includes all land within the Reserve. These boundaries include areas which still contain significant forested tracts or wetlands, those areas with restoration potential, and acreage that provides essential buffer for existing high quality natural communities. The primary consideration for the establishment of a purchase boundary for each management unit was to preserve and protect existing high quality natural communities. Since this purchase boundary was established, management objectives for the Reserve have required modification to remain consistent with the concept of landscape scale ecosystem restoration. Primary reasons for this stem from the need for hydrologic restoration throughout the watershed, and recognition of the need to provide unfragmented forested habitat throughout the river corridor. A periodic assessment of management objectives and the purchase boundary for the Cache River State Natural Area should be conducted to assure they are sufficient to achieve long term preservation and restoration goals. All lands within the purchase boundary should be considered integral to the accomplishment of these goals. Currently, land within the Reserve (the Little Black Slough, Lower Cache River, and Glass Hill Management Units) are separated by a 2,234 acre tract of land owned by The Nature Conservancy. Acquisition of this parcel allows restoration of an unfragmented block of natural land along the riparian corridor of the Cache River, and reconnection of the upper and lower segments of the River. This site also has tremendous potential for wetland restoration and reforestation. In addition to lands within the Reserve, the U. S. Fish and Wildlife Service-Cypress Creek National Wildlife Refuge also owns considerable land in the Cache River watershed, and have a purchase boundary of 35,320 acres (1,500 acres of land within the Refuge boundary are owned by the Illinois Department of Natural Resources). The Nature Conservancy (TNC) owns 1,100 acres within the Refuge purchase boundary (Limekiln Springs Preserve). Together, the project boundaries of the Joint Venture Partners encompass 60,000 acres within the Cache River watershed. Sites within this managed area include the Cache River State Natural Area (current ownership proposed for registry in the Land and Water Reserve Program), Horseshoe Lake State Conservation Area, Cypress Creek National Wildlife Refuge, and the Limekiln Springs Preserve. Of the 60,000 acres within the project boundary, 40,000 acres have been acquired.

THREATS TO INTEGRITY OF THE RESERVE:

Changes in flooding periodicity (increased depth and duration, and increased drainage), and excessive sediment deposition are the major threats to aquatic and wetland natural communities. Exotic and invasive species on forest edges and in openings disrupt natural regeneration of native species. Woody encroachment is a problem in limestone glades.

OVERALL MANAGEMENT GOALS (RANKED IN PRIORITY ORDER IF POSSIBLE):

- 1) Continue work with the Corps, USDA-Natural Resources Conservation Service, and the Joint Venture Partners to restore the hydrology of the Cache River to a level that will assure the long-term sustainability of preservation and restoration efforts throughout the Cache River Wetlands.

- 2) Develop/implement plans to restore aquatic and wetland natural communities throughout the Reserve using a variety of site specific methods (weirs, levees, water control structures, ditch plugs, dredging).
- 3) Continue reforestation on all tracts which once supported forested communities.
- 4) Restore the predisturbance character of existing forested natural communities and glades using prescribed fire and herbicides to control invasive and exotic species.
- 5) Coordinate restoration of wetlands on disturbed sites with Wildlife Resources to provide maximum benefits for migratory waterfowl and shorebirds.

OTHER:

Existing activities, which include hunting, fishing, trapping, hiking, nature study, wildlife viewing, and photography, will be maintained on the Reserve. Hiking trails, boardwalks, parking lots, and other existing access areas will be maintained so that public use of the site does minimal damage to natural communities and species. Construction of a part of the Cache River-Tunnel Hill Trail will be allowed, as will a Visitor/Education Center. The Visitor/Education Center will be built on a 95 acre site east of Route 37, just north of the Section 8 Woods Nature Preserve.

This management schedule has been reviewed by (date indicates approval):

Landowner:

Manager:

Steward:

Illinois Nature Preserves Commission:

This copy has been approved by the Illinois Nature Preserves Commission.

(signature)

(date)

MANAGEMENT UNIT FEATURES

8/14/98

CACHE RIVER
MANAGEMENT UNIT

Author: MARK GUETERSLOH
FEATURES

A: General

Dry upland forest
Dry-mesic upland forest
Mesic upland forest
Wet-mesic upland forest
Mesic floodplain forest
Wet-mesic floodplain forest
Wet floodplain forest
Swamp
Shrub swamp
Spring community
Pond
Low-gradient creek
Low-gradient river
Successional field
Artificial pond
Developed land
Tree plantation
Archaeological site

B: Upper Cache River Channel

Low-gradient river

C: Lower Cache River Channel

Low-gradient river

D: Little Black Slough

Mesic upland forest
Wet-mesic upland forest
Mesic floodplain forest
Wet-mesic floodplain forest
Wet floodplain forest
Swamp
Shrub swamp
Spring community
Pond
Low-gradient creek
Low-gradient river
Successional field
Artificial pond
Tree plantation
Developed land

E: Lower Cache River Swamp
Mesic floodplain forest
Wet-mesic floodplain forest
Wet floodplain forest
Southern flatwoods
Swamp
Shrub swamp
Low-gradient creek
Low-gradient river
Successional field
Artificial pond

F: Boss Island
Dry-mesic upland forest
Mesic upland forest
Wet-mesic upland forest
Tree plantation
Successional field

G: Glass Hill
Dry upland forest
Dry-mesic upland forest
Mesic upland forest
Tree plantation
Archaeological site

OTHER SITE INFORMATION

Natural Heritage Biologist: MARK GUETERSLOH

Natural Areas Preservation Specialist: JUDY FAULKNER DEMPSEY

Volunteer Steward:

Topographic Map: Karnak, Vienna, and Cypress

Location: 13S02E; 13S03E; 14S01E; 14S02E
Sections: 14, 15, 21-30, 34-36; 19, 20, 21, 28-31; 11-16, 21-24; 7-11, 14-18

Natural Division: 013B, 014B

Legis. Dist: S59; R118

Dedication Date:
Features Report Form Version 1.0 1/27/95

Size: 10,367.1

Illinois Nature Preserve Commission Management Schedule
Cache River Land and Water Reserve

INPC Approval Expires: 12/31/2004					
Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Person(s)
A: General	Annual coordination with other IDNR divisions	Review Plan of Work at Site Resource Meeting.	10/15/2002	11/30/2002	Guetersloh
A: General	Annual coordination with other IDNR divisions	Review Plan of Work at Site Resource Meeting.	10/15/2003	11/30/2003	Guetersloh
A: General	Annual coordination with other IDNR divisions	Review Plan of Work at Site Resource Meeting.	10/15/2004	11/30/2004	Guetersloh
A: General	Control Exotic Woody Vegetation (Autumn Olive)	Cut stump treatment with 50% Roundup or 20% Garlon 4 in oil. Use Rodeo in or near wetland or aquatic natural communities.	01/01/2002	12/31/2002	Guetersloh
A: General	Control Exotic Woody Vegetation (Autumn Olive)	Cut stump treatment with 50% Roundup or 20% Garlon 4 in oil. Use Rodeo in or near wetland or aquatic natural communities.	01/01/2003	12/31/2003	Guetersloh
A: General	Control Exotic Woody Vegetation (Autumn Olive)	Cut stump treatment with 50% Roundup or 20% Garlon 4 in oil. Use Rodeo in or near wetland or aquatic natural communities.	01/01/2004	12/31/2004	Guetersloh
A: General	Control Herbaceous Exotic Vegetation	Use 2% Roundup foliar application for Japanese Honeysuckle. Wait until after killing frost, but before hard freeze.	11/01/2002	12/31/2002	Guetersloh
A: General	Control Herbaceous Exotic Vegetation	Use 2% Roundup foliar application for Japanese Honeysuckle. Wait until after killing frost, but before hard freeze.	11/01/2003	12/31/2003	Guetersloh
A: General	Control Herbaceous Exotic Vegetation	Use 2% Roundup foliar application for Japanese Honeysuckle. Wait until after killing frost, but before hard freeze.	11/01/2004	12/31/2004	Guetersloh
A: General	Document changes due to management	Conduct general surveillance on a semi-annual basis (Boundary, Features, Plants, and Animals).	01/01/2002	12/31/2002	Guetersloh

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Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Agency(ies)	Lead Person(s)
A: General	Document changes due to management	Conduct general surveillance on a semi-annual basis (Boundary, Features, Plants, and Animals).	01/01/2003	12/31/2003	IDNR	Guetersloh
A: General	Document changes due to management	Conduct general surveillance on a semi-annual basis (Boundary, Features, Plants, and Animals).	01/01/2004	12/31/2004	IDNR	Guetersloh
A: General	Document changes due to management	Set up photo stations in management units; Photograph communities prior to management activity.	01/01/2002	12/31/2002	IDNR	Guetersloh
A: General	Maintain hunting program	Monitor hunter impacts to the site. Record hunter use/harvest data on sign-in sheets at each access area.	01/01/2002	12/31/2002	IDNR	Woolard
A: General	Maintain hunting program	Monitor hunter impacts to the site. Record hunter use/harvest data on sign-in sheets at each access area.	01/01/2003	12/31/2003	IDNR	Woolard
A: General	Maintain hunting program	Monitor hunter impacts to the site. Record hunter use/harvest data on sign-in sheets at each access area.	01/01/2004	12/31/2004	IDNR	Woolard
A: General	Allow trapping of nuisance animals	Allow trapping of nuisance animals as necessary. Trapping by permit only.	01/01/2002	12/31/2002	IDNR	Woolard; Guetersloh; Waycullis
A: General	Allow trapping of nuisance animals	Allow trapping of nuisance animals as necessary. Trapping by permit only.	01/01/2003	12/31/2003	IDNR	Woolard; Guetersloh; Waycullis
A: General	Allow trapping of nuisance animals	Allow trapping of nuisance animals as necessary. Trapping by permit only.	01/01/2004	12/31/2004	IDNR	Woolard; Guetersloh; Waycullis
A: General	Wetland restoration	Develop detailed site-specific plans to restore wetlands throughout the Reserve.	01/01/2002	12/31/2002	IDNR	Guetersloh; Woolard; Waycullis

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Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Agency(ies)	Lead Person(s)
A: General	Wetland restoration	Develop detailed site-specific plans to restore wetlands throughout the Reserve.	01/01/2003	12/31/2003	IDNR	Guetersloh; Woolard; Waycuilis
A: General	Wetland restoration	Develop detailed site-specific plans to restore wetlands throughout the Reserve.	01/01/2004	12/31/2004	IDNR	Guetersloh; Woolard; Waycuilis
B: Upper Cache River Channel	Document changes in channel morphology	Measure changes in channel morphology at selected sites every three years.	01/01/2002	12/31/2002	IDNR	Guetersloh; Joint Venture Partners
B: Upper Cache River Channel	Document changes in water quality	Conduct monthly sampling of basic water chemistry at selected sites.	01/01/2002	12/31/2002	IDNR	Guetersloh; Joint Venture Partners
B: Upper Cache River Channel	Document changes in water quality	Conduct monthly sampling of basic water chemistry at selected sites.	01/01/2003	12/31/2003	IDNR	Guetersloh; Joint Venture Partners
B: Upper Cache River Channel	Document changes in water quality	Conduct monthly sampling of basic water chemistry at selected sites.	01/01/2004	12/31/2004	IDNR	Guetersloh; Joint Venture Partners
B: Upper Cache River Channel	Control channel incision	Install cross-channel weirs at selected locations.	01/01/2002	12/31/2002	IDNR; USACOE	Guetersloh; Waycuilis
B: Upper Cache River Channel	Reconnect the upper and lower segments of the Cache River	Continue to work with the USACOE to develop and implement a structure to reconnect the river segments	01/01/2002	12/31/2002	IDNR; USACOE	Guetersloh; Waycuilis
B: Upper Cache River Channel	Restore deepwater habitat	Utilize IDNR mudcat dredge to remove silt from the channel of the Cache River at selected locations.	01/01/2002	12/31/2002	IDNR	Guetersloh; Waycuilis
C: Lower Cache River Channel	Document sediment deposition	Develop and implement a sediment monitoring protocol.	01/01/2002	12/31/2002	IDNR; ISWS; TNC	Guetersloh; Waycuilis; Nelson (TNC)
C: Lower Cache River Channel	Document changes in water quality	Conduct monthly sampling of basic water chemistry at selected sites.	01/01/2002	12/31/2002	IDNR; TNC; USFWS	Guetersloh
C: Lower Cache River Channel	Document changes in water quality	Conduct monthly sampling of basic water chemistry at selected sites.	01/01/2003	12/31/2003	IDNR; TNC; USFWS	Guetersloh

Illinois Nature Preserves Commission Management Schedule (Land and Water Reserve)

Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Agency(ies)	Lead Person(s)
C: Lower Cache River Channel	Document changes in water quality	Conduct monthly sampling of basic water chemistry at selected sites.	01/01/2004	12/31/2004	IDNR, TNC; USFWS	Guetersloh
C: Lower Cache River Channel	Maintain the Diehl Dam	Remove sediment and organic debris from the site as needed. Maintain dam elevation at 328.4 msl.	01/01/2002	12/31/2002	IDNR	Waycullis
C: Lower Cache River Channel	Restore deepwater habitat	Utilize IDNR mudcat dredge to remove silt from the channel of the Cache River at selected locations.	01/01/2002	12/31/2002	IDNR; USFWS	Waycullis; Guetersloh
C: Lower Cache River Channel	Maintain low-water levels at 328.4 msl	Remove beaver dams, debris dams as required	01/01/2002	12/31/2002	IDNR	Waycullis; Guetersloh
C: Lower Cache River Channel	Monitor flow volume and velocity	Record data from Stevens water level recorders and staff gages. Develop stage discharge curves at selected sites.	01/01/2002	12/31/2002	IDNR	Guetersloh
C: Lower Cache River Channel	Document changes in stream fauna	Sample aquatic macroinvertebrates, fish, and shellfish at selected sites every three years.	01/01/2002	12/31/2002	IDNR; USFWS	Guetersloh
C: Lower Cache River Channel	Document changes in stream fauna	Sample aquatic macroinvertebrates, fish, and shellfish at selected sites every three years.	01/01/2003	12/31/2003	IDNR; USFWS	Guetersloh
D: Little Black Slough	Restore/maintain natural communities	Cut invasive/exotic woody vegetation on reforestation sites; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2002	12/31/2002	IDNR	Guetersloh
D: Little Black Slough	Restore/maintain natural communities	Cut invasive/exotic woody vegetation on reforestation sites; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2003	12/31/2003	IDNR	Guetersloh
D: Little Black Slough	Restore/maintain natural communities	Cut invasive/exotic woody vegetation on reforestation sites; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2004	12/31/2004	IDNR	Guetersloh
D: Little Black Slough	Restore off-channel wetlands	Install retention structures in erosion gullies that are draining wetlands adjacent to the river channel.	01/01/2002	12/31/2002	IDNR	Guetersloh; Waycullis

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Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Agency(ies)	Lead Person(s)
D: Little Black Slough	Restore off-channel wetlands	Install retention structures in erosion gullies that are draining wetlands adjacent to the river channel.	01/01/2003	12/31/2003	IDNR	Guetersloh; Waycuilis
D: Little Black Slough	Restore off-channel wetlands	Install retention structures in erosion gullies that are draining wetlands adjacent to the river channel.	01/01/2004	12/31/2004	IDNR	Guetersloh; Waycuilis
E: Lower Cache River Swamp	Restore/maintain natural communities	Cut invasive/exotic woody vegetation; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2002	12/31/2002	IDNR	Guetersloh
E: Lower Cache River Swamp	Restore/maintain natural communities	Cut invasive/exotic woody vegetation; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2003	12/31/2003	IDNR	Guetersloh
E: Lower Cache River Swamp	Restore/maintain natural communities	Cut invasive/exotic woody vegetation; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2004	12/31/2004	IDNR	Guetersloh
E: Lower Cache River Swamp	Wetland restoration	Eliminate unnatural drainage of wetlands. Fill drainage ditches and/or install structures as needed.	01/01/2002	12/31/2002	IDNR	Guetersloh; Woolard; Waycuilis
E: Lower Cache River Swamp	Maintain canoe trails	Conduct annual surveillance; remove buttonbush as needed; maintain trail markers.	01/01/2002	12/31/2002	IDNR	Waycuilis
E: Lower Cache River Swamp	Maintain canoe trails	Conduct annual surveillance; remove buttonbush as needed; maintain trail markers.	01/01/2003	12/31/2003	IDNR	Waycuilis
E: Lower Cache River Swamp	Maintain canoe trails	Conduct annual surveillance; remove buttonbush as needed; maintain trail markers.	01/01/2004	12/31/2004	IDNR	Waycuilis

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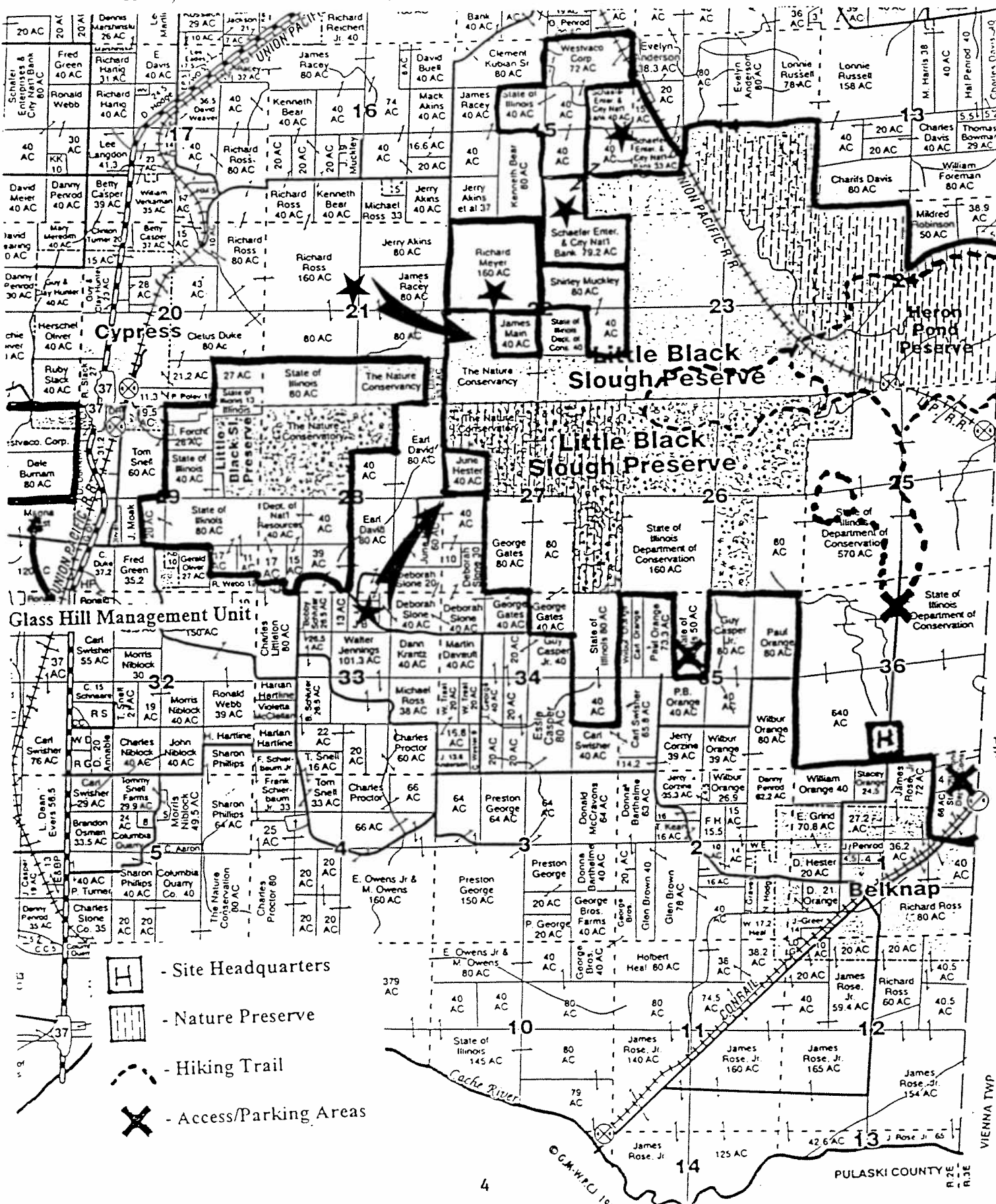
Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Agency(ies)	Lead Person(s)
F: Boss Island	Develop a restoration plan	Coordinate with regional forester to develop a restoration plan for Boss Island.	01/01/2002	12/31/2002	IDNR	Guetersloh
F: Boss Island	Restore/maintain natural communities	Conduct prescribed burn; spring or fall timing; skip a year between burns; delineate unburned areas each year to provide habitat for insects.	01/01/2002	12/31/2002	IDNR	Guetersloh
F: Boss Island	Restore/maintain natural communities	Conduct prescribed burn; spring or fall timing; skip a year between burns; delineate unburned areas each year to provide habitat for insects.	01/01/2003	12/31/2003	IDNR	Guetersloh
F: Boss Island	Restore/maintain natural communities	Cut invasive/exotic woody vegetation; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2002	12/31/2002	IDNR	Guetersloh
F: Boss Island	Restore/maintain natural communities	Cut invasive/exotic woody vegetation; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2003	12/31/2003	IDNR	Guetersloh
F: Boss Island	Restore/maintain natural communities	Cut invasive/exotic woody vegetation; treat with 20% Garlon 4A in oil carrier or 50% Roundup in water.	01/01/2004	12/31/2004	IDNR	Guetersloh
F: Boss Island	Restore/maintain natural communities	Girdle 25% of non-native pines to allow for regeneration of native tree species.	01/01/2002	12/31/2002	IDNR	Pirtle; Guetersloh; Waycuilis
F: Boss Island	Restore/maintain natural communities	Girdle 25% of non-native pines to allow for regeneration of native tree species.	01/01/2003	12/31/2003	IDNR	Pirtle; Guetersloh; Waycuilis
G: Glass Hill	Semi-annual surveillance	Conduct surveillance 2x/year to monitor for illegal digging of artifacts.	01/01/2002	12/31/2002	IDNR	Guetersloh
G: Glass Hill	Semi-annual surveillance	Conduct surveillance 2x/year to monitor for illegal digging of artifacts.	01/01/2003	12/31/2003	IDNR	Guetersloh

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Management Unit	Management Objective	Management Action	Start Date	End Date	Lead Agency(ies)	Lead Person(s)
G: Glass Hill	Semi-annual surveillance	Conduct surveillance 2x/year to monitor for illegal digging of artifacts.	01/01/2004	12/31/2004	IDNR	Guetersloh
G: Glass Hill	Post boundaries	Place Land and Water Reserve signs at 330' intervals around site boundaries.	01/01/2002	12/31/2002	IDNR	Waycullis
H: Foot traffic only trails	Maintain trails	Routine trail maintenance; removal of fallen trees, limbs; repair or resurface as needed.	01/01/2002	12/31/2002	IDNR	Waycullis
H: Foot traffic only trails	Construct new trail	Construct new trail from Wildcat Bluff to the Heron Pond area on old country road bed.	01/01/2002	12/31/2002	IDNR	Waycullis
I: Parking lots	Maintain existing parking lots and hunter sign-in boxes	Routine maintenance--remove garbage, add gravel, smooth surface, replace hunter sign-in sheets as needed.	01/01/2002	12/31/2002	IDNR	Waycullis

ID.1 Map of the current Cache River Land and Water Reserve - Little Black Slough Management Unit boundaries and the location of the proposed additions (Schaefer, Meyer, Main, and Hester Tracts). Parcels are delineated by a star(s), or star and arrow.



10.2 Map of the current Cache River Land and Water Reserve - Lower Cache River Swamps Management Unit boundaries and the location of the proposed addition (Rose Tract). An arrow points to the tract, and the area within the parcel is delineated by stars.

