
Pacific Northwest National Laboratory

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U.S. Department of Energy

January 14, 2005

James Wilson, Environmental Project Manager
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Jim:

Enclosed are copies of information staff at the Pacific Northwest National Laboratory gathered and referenced in the Grand Gulf Early Site Permit Environmental Impact Statement. Also enclosed is a list of the references—one for each Accession number entry. For us to properly reference this information in the document, we would appreciate it if the U.S. Nuclear Regulatory Commission would assign each entry (identified by paper clip groupings) an Accession number and enter them in ADAMS.

As soon as we receive the Accession numbers for each entry from you, we will enter those numbers in the pertinent reference citations in the Grand Gulf EIS.

We appreciate your help. If you have questions concerning this package, please contact Sandra Cannon (Tel. 509-529-1535 or sandra.cannon@pnl.gov).

Sincerely,



Charles A. Brandt, Manager
Ecology Group

Attachments:

(1) List of referenced documents

(Copies of referenced documents to be assigned Accession numbers and entered in ADAMS)

902 Battelle Boulevard • P.O. Box 999 • Richland, WA 99352

Telephone (509) 376-5345 ■ Email charles.brandt@pnl.gov ■ Fax (509) 372-3515

Personal Communications
Referenced in the Grand Gulf Early Site Permit Environmental
Impact Statement
to Be Given Accession Nos. and Input into ADAMS

Contact: Sandra Cannon, Tel. 509-529-1535
Pacific Northwest National Laboratory

Clark, A. 2004. Letter from Adrienne Clark (Mississippi Natural Heritage Program, Biological GIS technician) to Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Occurrences of federal and state listed species near the Grand Gulf site," July 14, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Clark, A. 2004. Telephone call to Adrienne Clark (Mississippi Natural Heritage Program, Biological GIS Technician) from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Florida Panther (*Puma concolor coryi*)," November 12, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX

Crawley, D. 2004. Meeting with Don Crawley (System Energy Resources, Inc., Environmental Specialist) by Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Forest restoration in old fields," April 13, 2004, Grand Gulf Nuclear Station Unit 1, Mississippi. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

French, T. W. 2004. Letter from Thomas French (Massachusetts Division of Fisheries and Wildlife, Assistant Director) to James Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Occurrences of federal and state listed species near the Pilgrim site," June 1, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Johnson, W. 2004. Telephone call to William Johnson (Mississippi Natural Heritage Program, Coordinator) from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Florida panther (*Puma concolor coryi*)," November 12, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Ketcham, B.A. 2004. Letter from Betty Ketcham (New York State Division of Fish, Wildlife, and Marine Resources, Information Services specialist) to James Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Occurrences of federal and state listed species near the FitzPatrick site," April 29, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Lester, G. 2004. Letter from Gary Lester (Louisiana Natural Heritage Program, Coordinator) to Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Occurrences of federal and state listed species near the River Bend site," April 12, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Mann, T. 2004. Meeting with Tom Mann (Mississippi Department of Wildlife, Fisheries, and Parks) by Amoret Bunn (Pacific Northwest National Laboratory, Aquatic Ecology Specialist), "Aquatic Ecology of Grand Gulf Site and Vicinity," April 14, 2004, Jackson, Mississippi. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Rumancik, J. 2004. Telephone call to John Rumancik (U.S. Army Corps of Engineers, Least Tern Specialist) from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Interior least tern (*Sterna antillarum*)," November 8, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Scott, M.J. 2004a. "Socioeconomics and Environmental Justice Contribution to Grand Gulf Trip Report 4-12-04 to 4-16-04." Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Scott, M.J. 2004b. "Socioeconomics and Environmental Justice Contribution to Grand Gulf Trip Report 7-6-04 to 7-09-04--Alternative Sites." Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Scott, M.J. 2004c. "West Feliciana Parish Meeting: Morning April 15, 2004." Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Scott, M.J. 2004d. "Meeting with Oswego County, NY Officials: Morning July 8, 2004." Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Snow, M. 2004a. Telephone call to Margaret Snow (Entergy Services, Inc., Environmental Support Specialist) from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Occurrences of habitats and species of concern along transmission corridors," December 2, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Snow, M. 2004b. Telephone call to Margaret Snow (Entergy Services, Inc., Environmental Support Specialist) from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Right-of-way maintenance practices along transmission corridors," December 7, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Soileau, D. 2004. E-mail from David Soileau (U.S. Fish and Wildlife Service, Louisiana black bear specialist) to Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Louisiana black bear (*Ursus americanus luteolus*)," November 9, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Stapp, D.C. 2004. "Grand Gulf Trip Report: Historic and Cultural Resources - April 2004." Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.

Young, B. 2004. E-mail received from Brad Young (Mississippi Department of Wildlife, Fisheries and Parks, Black Bear Biologist) by Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist), "Louisiana black bear sightings in Mississippi," August 30, 2004. Available at <http://www.nrc.gov/reading-rm/adams.html>, Accession No. ML0XXXXXXXXX.



July 14, 2004

Pacific Northwest National Laboratory
902 Battelle Boulevard
Richland, Washington 99352

Re: Baseline Documentation
Claiborne County

To Mr. Jim Becker:

In response to your request for information dated July 14, 2004, I have searched our database for occurrences of state or federally listed species and other special concern animals and plants on and within 2 miles of the site referenced above.

SCIENTIFIC NAME	COMMON NAME	FED	STATE	STATE RANK
EUDOCIMUS ALBUS	WHITE IBIS			S3B,SZN
MYCTERIA AMERICANA	WOOD STORK	(PS:LE)	LE	S1N
CORAGYPS ATRATUS	BLACK VULTURE			S4B
LANIUS LUDOVICIANUS	LOGGERHEAD SHRIKE	(PS)		S4B,SZN
ACIPENSER FULVESCENS	LAKE STURGEON			SA
POLYODON SPATHULA	PADDLEFISH			S3
HIODON ALOSOIDES	GOLDEYE			S4
ICTIOBUS NIGER	BLACK BUFFALO			S3
ICTIOBUS NIGER	BLACK BUFFALO			S3
NOTURUS FLAVUS	STONECAT			SA
CRYSTALLARIA ASPRELLA	CRYSTAL DARTER		LE	S1
URSUS AMERICANUS LUTEOLUS	LOUISIANA BLACK BEAR	LT	LE	S1
PUMA CONCOLOR CORYI	FLORIDA PANTHER	LE	LE	SH
GRAPTEMYS PSEUDOGEOGRAPHICA KOHNI	MISSISSIPPI MAP TURTLE			S4?
ALLIGATOR MISSISSIPPIENSIS	AMERICAN ALLIGATOR	LT(S/A)		S4

Preserving Natural Mississippi

1/2

2148 RIVERSIDE DRIVE ■ JACKSON, MS 39202-1353 ■ PHONE 601 354-7303 FAX 601 354-7227 ■ www.mdwfp.state.ms.us/museum

DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS



The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, endangered or otherwise significant plants, animals, plant communities and natural features. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed, and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.

Please feel free to contact us if we can provide any additional information.

Sincerely,

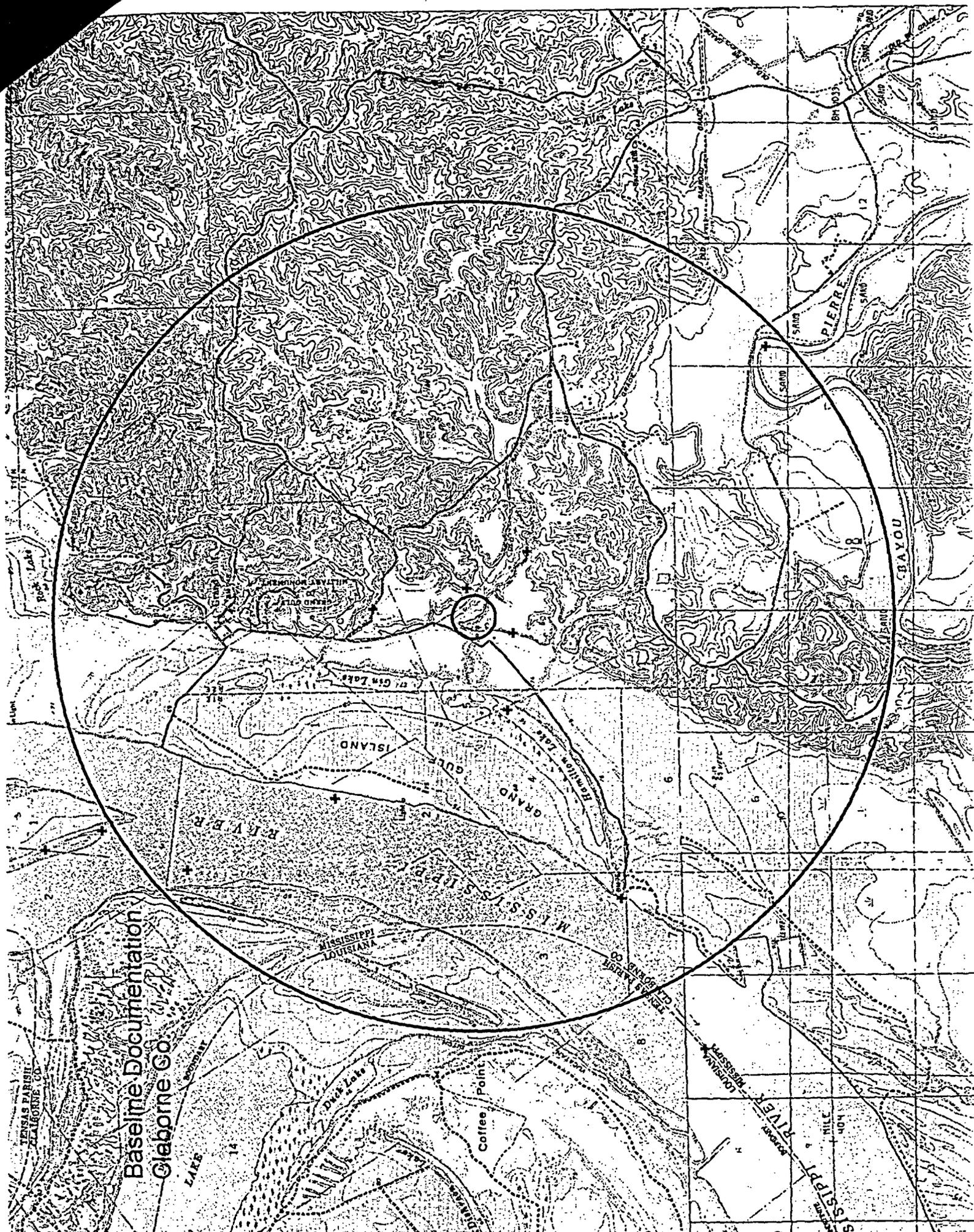
Adrienne Clark, Biological GIS Technician
Mississippi Natural Heritage Program

Preserving Natural Mississippi

va

2148 RIVERSIDE DRIVE ■ JACKSON, MS 39202-1353 ■ PHONE 601 354-7303 FAX 601 354-7227 ■ www.mdwfp.state.ms.us/museum

DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS



Baseline Documentation
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TEXAS PARISH
ALABORNE CO.

1 MILE
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July 14, 2004

Pacific Northwest National Laboratory
902 Battelle Boulevard
Richland, Washington 99352

Re: Baseline Documentation
Claiborne County

To Mr. Jim Becker:

In response to your request for information dated July 14, 2004, I have searched our database for occurrences of state or federally listed species and other special concern animals and plants on and within 10 miles of the site referenced above.

SCIENTIFIC NAME	COMMON NAME	FED	STATE	STATE RANK
PLETHODON WEBSTERI	WEBSTER'S SALAMANDER			S3
EUDOCIMUS ALBUS	WHITE IBIS			S3B,SZN
MYCTERIA AMERICANA	WOOD STORK	(PS:LE)	LE	S1N
CORAGYPS ATRATUS	BLACK VULTURE			S4B
LANIUS LUDOVICIANUS	LOGGERHEAD SHRIKE	(PS)		S4B,SZN
ICHTHYOMYZON CASTANEUS	CHESTNUT LAMPREY			S3
ACIPENSER FULVESCENS	LAKE STURGEON			SA
SCAPHIRHYNCHUS ALBUS	PALLID STURGEON	LE	LE	S1
POLYODON SPATHULA	PADDLEFISH			S3
HIODON ALOSOIDES	GOLDEYE			S4
NOTROPIS POTTERI	CHUB SHINER			SA
CYCLEPTUS ELONGATUS	BLUE SUCKER			S3
ICTIOBUS NIGER	BLACK BUFFALO			S3
NOTURUS FLAVUS	STONECAT			SA
CRYSTALLARIA ASPRELLA	CRYSTAL DARTER		LE	S1
ETHEOSTOMA RUBRUM	BAYOU DARTER	LT	LE	S1
URSUS AMERICANUS LUTEOLUS	LOUISIANA BLACK BEAR	LT	LE	S1
PUMA CONCOLOR CORYI	FLORIDA PANTHER	LE	LE	SH
GRAPTEMYS PSEUDOGEOGRAPHICA KOHNI	MISSISSIPPI MAP TURTLE			S4?
ALLIGATOR MISSISSIPPIENSIS	AMERICAN ALLIGATOR	LT(S/A)		S4

Preserving Natural Mississippi

1/3

2148 RIVERSIDE DRIVE ■ JACKSON, MS 39202-1353 ■ PHONE 601 354-7303 FAX 601 354-7227 ■ www.mdwfp.state.ms.us/museum

DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

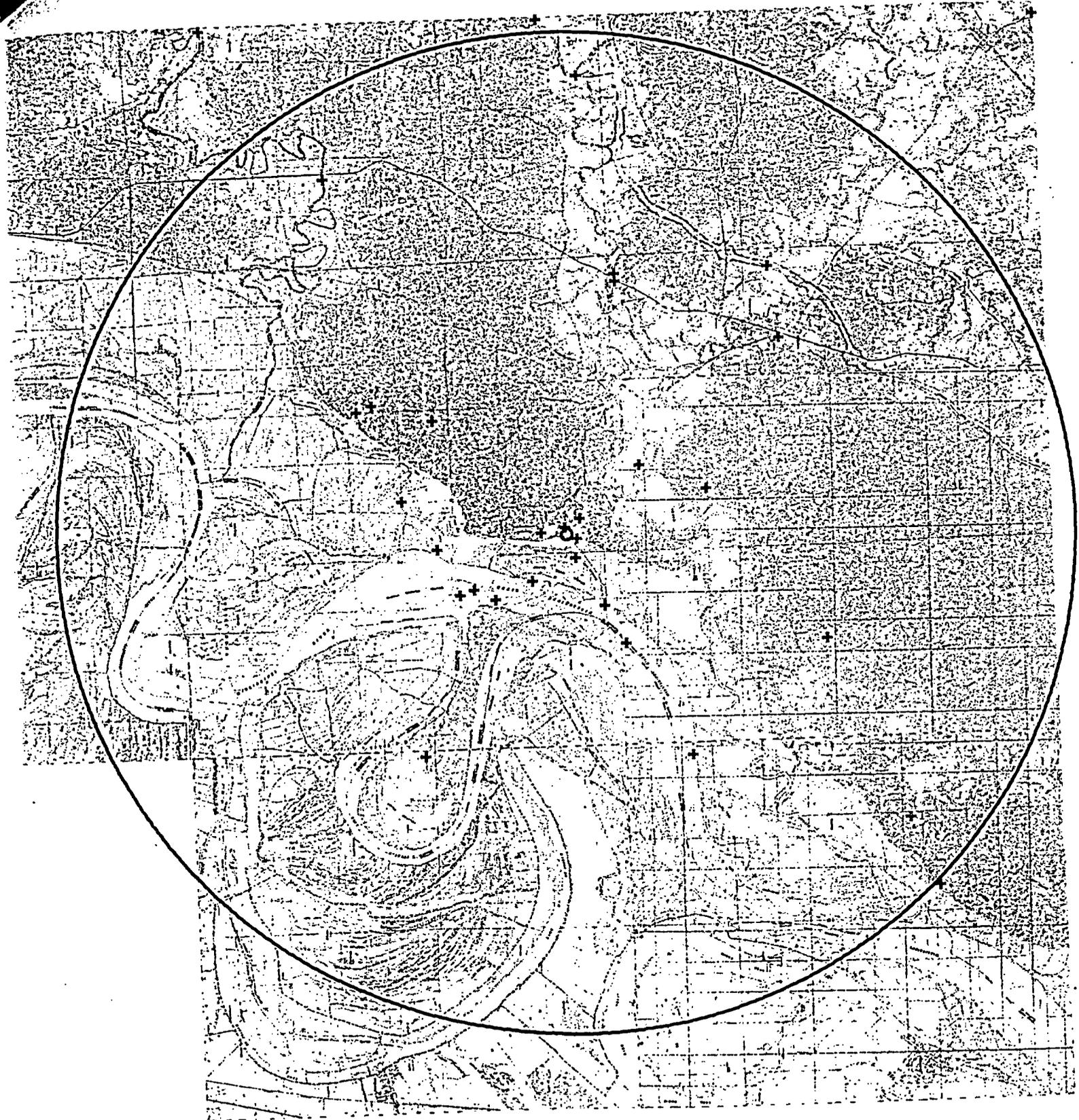
SCIENTIFIC NAME	COMMON NAME	FED	STATE	STATE RANK
CHAMPION TREE				
MIKANIA CORDIFOLIA	FLORIDA KEYS HEMPVINE			S3
PACHYSANDRA PROCUMBENS	ALLEGHENY-SPURGE			S3
CELASTRUS SCANDENS	CLIMBING BITTERSWEET			S2S3
TRILLIUM FOETIDISSIMUM	FETID TRILLIUM			S3
ERYTHRODES QUERCETICOLA	LOW ERYTHRODES			S1?
ATHYRIUM PYCNOCARPON	GLADE FERN			S2S3
MARSILEA VESTITA	HAIRY WATER-FERN			S1

The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, endangered or otherwise significant plants, animals, plant communities and natural features. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed, and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.

Please feel free to contact us if we can provide any additional information.

Sincerely,

Adrienne Clark, Biological GIS Technician
Mississippi Natural Heritage Program



Log of telephone call from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist) to Adrienne Clark (Mississippi Natural Heritage Program, Jackson, Mississippi, Biological GIS technician)

Clark: (601) 354-7303 ext. 119

Date: November 12, 2004

The date of the Florida panther occurrence within 2 miles of the Grand Gulf site (as referenced in Adrienne Clark's letter to Jim Becker of July 14, 2004) is 1973.

Log of meeting with Don Crawley (System Energy Resources, Inc., Environmental Specialist)
by Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist)

Date: April 13, 2004

Of the total area of the Grand Gulf site affected by construction of the GGNS Unit 1 plant, the areas that are not currently occupied by permanent structures and facilities and are not artificially maintained in an herbaceous state (e.g., via herbicide applications), have been allowed to revegetate naturally. In the ensuing 30 years, these areas have largely become colonized by invasive weedy plant species and have not succeeded to hardwood forest communities. The same applies to old fields in the uplands (presumably former grazing land) and bottomlands (presumably former crop land) that now appear to be succeeding to loblolly pine and American sycamore stands, respectively. However, in reality, hardwood forest succession is not taking place in these old fields, instead these forest stands had been restored by Entergy via planting.



MassWildlife

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

June 1, 2004

Jim Becker
Pacific Northwest National Laboratory
PO Box 999, MSIN K6-85
Richland, WA 99352

Re: Pilgrim Nuclear Power Station
Plymouth, MA
NHESP File: 04-16063

Dear Mr. Becker,

Thank you for contacting the Natural Heritage and Endangered Species Program ("NHESP") of the MA Division of Fisheries & Wildlife for information regarding state-protected rare species in the vicinity of the above referenced site. We have reviewed the site and would like to offer the following comments.

Please see the attached list of rare species in the vicinity of the Pilgrim Nuclear Power Station. As requested, we have provided you with a list of the species found within a 2-mile and 10-mile radius of the entire 517 acre site. Part of this project site is located within Priority Habitat 1320 and Estimated Habitat 148 as indicated in the 11th Edition of the Massachusetts Natural Heritage Atlas.

The rare species attached are protected under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). State-listed wildlife are also protected under the state's Wetlands Protection Act (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.37 and 10.59). Fact sheets for these species can be found on our website <http://www.state.ma.us/dfwele/dfw/nhosp/nhfact.htm>. This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered.

MA Endangered Species Act (G.L. c. 131A)

Using the list of rare species provided above, we recommend that rare wildlife and/or plant surveys and assessments be conducted by qualified individuals within suitable habitats on and near the site according to scientifically accepted survey methodologies. Survey methodologies should be approved by NHESP prior to initializing rare species surveys. A Rare Animal/Plant Observation Form, available at our website www.nhosp.org, should be submitted for each species encountered. If during this site evaluation rare species are found on or near the site, then site plans and a project description should be sent to NHESP Environmental Review to determine whether a probable "take" under the MA Endangered Species Act would occur (321 CMR 10.04).

www.masswildlife.org

Division of Fisheries and Wildlife

Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 792-7270 Fax (508) 792-7275

An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement

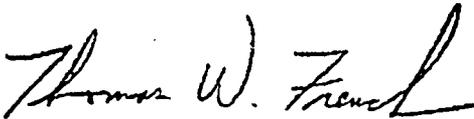
If NHESP determines that the proposed project would "take" a rare species, and the site is greater than two acres, and within a Priority Habitat site, an Environmental Notification Form should be submitted pursuant to the MA Environmental Policy Act regulations (301 CMR 11.03(2)(b)(2)). A Conservation & Management Permit (321 CMR 10.04 (3)(b)) may be required for work in rare species habitat.

Wetlands Protection Act

If the project site is within Estimated Habitat for Rare Wildlife and a Notice of Intent (NOI) is required, then a copy of the NOI must be submitted to the NHESP in a timely manner, so that it is received at the same time as the local conservation commission. Using the species list provided above, the Resource Areas on the site should be evaluated as important wildlife habitat for state-protected species, focusing on those areas that provide feeding, breeding, over-wintering, shelter and migration functions. The project should be evaluated for compliance with the rare species performance standard, which is that there shall be no short or long-term adverse affects to the habitat (within Resource Areas) (310 CMR 10.37 and 10.59).

If you have any questions regarding this review please call Ellen Shuitzabarger, Environmental Review Assistant, at ext. 154.

Sincerely,



Thomas W. French, Ph.D.
Assistant Director

cc:

Plymouth Conservation Commission

Natural Heritage and Endangered Species Program

6/1/2004

Pilgrim Nuclear Power Station, Plymouth, MA

Rare Species in Vicinity of Site

10-mile Radius

E=Endangered T=Threatened SC=Special Concern

SCIENTIFIC NAME	COMMON NAME	STATUS
<u>Amphibians</u>		
AMBYSTOMA LATERALE	BLUE-SPOTTED SALAMANDER	SC
<u>Reptiles</u>		
CLEMMYS GUTTATA	SPOTTED TURTLE	SC
EMYDOIDEA BLANDINGII	BLANDING'S TURTLE	T
PSEUDEMYYS RUBRIVENTRIS POP 1	NORTHERN RED-BELLIED COOTER	E
TERRAPENE CAROLINA	EASTERN BOX TURTLE	SC
<u>Fish</u>		
LAMPETRA APPENDIX	AMERICAN BROOK LAMPREY	T
NOTROPIS BIFRENATUS	BRIDLE SHINER	SC
<u>Birds</u>		
AMMODRAMUS SAVANNARUM	GRASSHOPPER SPARROW	T
CHARADRIUS MELODUS	PIPING PLOVER	T
HALIAEETUS LEUCOCEPHALUS	BALD EAGLE	E
POOECETES GRAMINEUS	VESPER SPARROW	T
STERNA ANTILLARUM	LEAST TERN	SC
STERNA DOUGALLII	ROSEATE TERN	E
STERNA HIRUNDO	COMMON TERN	SC
STERNA PARADISAEA	ARCTIC TERN	SC
TYTO ALBA	BARN OWL	SC
<u>Moths and Butterflies</u>		
ABAGROTIS NEFASCIA BENJAMINI	COASTAL HEATHLAND CUTWORM	SC
ACRONICTA ALBARUFA	BARRENS DAGGERMOTH	T
ANISOTA STIGMA	SPINY OAKWORM	SC

10-mile Radius

CALLOPHRYS HESSELI	HESSEL'S HAIRSTREAK	SC
CATOCALA HERODIAS GERHARDI	GERHARD'S UNDERWING MOTH	SC
CICINDELA PATRUELA	BARRENS TIGER BEETLE	SC
CICINDELA PURPUREA	PURPLE TIGER BEETLE	SC
CICINNUS MELSHEIMERI	MELSHEIMER'S SACK BEARER	T
ERYNNIS PERSIUS PERSIUS	PERSIUS DUSKYWING	E
HEMARIS GRACILIS	SLENDER CLEARWING SPHINX MOTH	SC
HEMILEUCA MAIA	BARRENS BUCKMOTH	SC
HYPOMECIS BUCHHOLZARIA	BUCHHOLZ'S GRAY	E
ITAME SP 1 NR INEXTRICATA	PINE BARRENS ITAME	SC
LITHOPHANE VIRIDIPALLENS	PALE GREEN PINION MOTH	SC
METARRANTHIS PILOSARIA	COASTAL SWAMP METARRANTHIS MOTH	SC
PAPAPEMA SULPHURATA	WATER-WILLOW STEM BORER	T
PSECTRAGLAEA CARNOSA	PINK SALLOW MOTH	SC
ZALE SP 1 NR LUNIFERA	PINE BARRENS ZALE	SC
ZANCLOGNATHA MARTHA	PINE BARRENS ZANCLOGNATHA	T
<u>Dragonflies</u>		
ANAX LONGIPES	COMET DARNER	SC
<u>Damselflies</u>		
ENALLAGMA DAECKII	ATTENUATED BLUET	SC
ENALLAGMA LATERALE	NEW ENGLAND BLUET	SC
ENALLAGMA RECURVATUM	PINE BARRENS BLUET	T
<u>Mussels</u>		
ALASMIDONTA UNDULATA	TRIANGLE FLOATER	SC
LEPTODEA OCHRACEA	TIDEWATER MUCKET	SC
STROPHITUS UNDULATUS	CREEPER	SC
<u>Plants</u>		
CALAMAGROSTIS PICKERINGII	REED BENTGRASS	E
CAREX STRIATA VAR BREVIS	WALTER'S SEDGE	E
COREMA CONRADII	BROOM CROWBERRY	SC
DICHANTHELIUM WRIGHTIANUM	WRIGHT'S PANIC-GRASS	SC
EUPATORIUM LEUCOLEPIS VAR NOVAE-ANGLIAE	NEW ENGLAND BONESET	E
HELIANTHEMUM DUMOSUM	BUSHY ROCKROSE	SC
ISOETES ACADIENSIS	ACADIAN QUILLWORT	E
LACHNANTHES CAROLIANA	REDROOT	SC

10-mile Radius

LIATRIS BOREALIS	NEW ENGLAND BLAZING STAR	SC
LIPOCARPHA MICRANTHA	DWARF BULRUSH	T
OPHIOGLOSSUM PUSILLUM	ADDER'S-TONGUE FERN	T
PANICUM PHILADELPHICUM	PHILADELPHIA PANIC-GRASS	SC
POLYGONUM PURITANORUM	PONDSHORE KNOTWEED	SC
RHYNCHOSPORA INUNDATA	INUNDATED HORNED-SEDGE	T
RHYNCHOSPORA NITENS	SHORT-BEAKED BALD-SEDGE	T
RHYNCHOSPORA SCIRPOIDES	LONG-BEAKED BALD-SEDGE	SC
RHYNCHOSPORA TORREYANA	TORREY'S BEAK-SEDGE	E
SABATIA KENNEDYANA	PLYMOUTH GENTIAN	SC
SAGITTARIA TERES	TERETE ARROWHEAD	SC
SPHENOPHOLIS PENNSYLVANICA	SWAMP OATS	T
UTRICULARIA SUBULATA	SUBULATE BLADDERWORT	SC

Natural Communities

ACIDIC GRAMINOID FEN
 ATLANTIC WHITE CEDAR BOG
 COASTAL ATLANTIC WHITE CEDAR SWAMP
 COASTAL FOREST/WOODLAND
 ESTUARINE INTERTIDAL: BRACKISH TIDAL MARSH
 ESTUARINE INTERTIDAL: SALT MARSH
 FOREST SEEP COMMUNITY
 LEVEL BOG
 PITCH PINE - SCRUB OAK COMMUNITY
 SANDPLAIN HEATHLAND
 SCRUB OAK SHRUBLAND

2-mile Radius

E=Endangered T=Threatened SC=Special Concern

SCIENTIFIC NAME

COMMON NAME

STATUS

Reptiles

CLEMMYS GUTTATA	SPOTTED TURTLE	SC
PSEUDEMYS RUBRIVENTRIS POP 1	NORTHERN RED-BELLIED COOTER	E
TERRAPENE CAROLINA	EASTERN BOX TURTLE	SC

2-mile Radius

Fish

LAMPETRA APPENDIX
NOTROPIS BIFRENATUS

AMERICAN BROOK LAMPREY
BRIDLE SHINER

T
SC

Moths and Butterflies

HEMILEUCA MAIA

BARRENS BUCKMOTH

SC

Plants

OPHIOGLOSSUM PUSILLUM
SABATIA KENNEDYANA

ADDER'S-TONGUE FERN
PLYMOUTH GENTIAN

T
SC

Natural Communities

COASTAL PLAIN PONDSHORE

Log of telephone call from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist) to William Johnson (Mississippi Natural Heritage Program, Jackson, Mississippi, Coordinator)

Johnson: (601) 354-7303

Date: November 12, 2004

The Florida panther occurrence within 2 miles of the Grand Gulf site (as referenced in Adrienne Clark's [of the Mississippi Natural Heritage Program] letter to Jim Becker of July 14, 2004) from 1973 is most likely spurious (of dubious origin), since the species has not been definitively known to occur in Mississippi since the late 1800s or early 1900s.

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • FAX: (518) 402-8925
Website: www.dec.state.ny



April 29, 2004

Jim Becker
Battelle - Pacific Northwest National Laboratory
902 Battelle Blvd
PO Box 999, MSIN K6-85
Richland, Washington 99352

Dear Mr. Becker:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed possible siting for a new Nuclear Facility - Fitzpatrick Nuclear Power Station, as an Entergy Plant Alternate Site, area as indicated on the map you provided, including a 2-mile Buffer radius; and a 10-mile Buffer radius, approximately 702 acres, located in the Towns of Scriba and New Haven, Oswego County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

The presence of rare species may result in this project requiring additional permits, permit conditions, or review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Betty A. Ketcham, Information Services
NY Natural Heritage Program

Encs.

cc: Reg. 7, Wildlife Mgr.
Reg. 7, Fisheries Mgr.
Reg. 7, Regional Habitat Mgr.

DIVISION OF ENVIRONMENTAL PERMITS

June 2001

REGION	COUNTIES	REGIONAL PERMIT ADMINISTRATORS
1	Nassau & Suffolk Telephone: (631) 444-0365	John Pavacic NYS-DEC BLDG. 40 SUNY at Stony Brook Stony Brook, NY 11790-2356
2	New York City (Boroughs of Manhattan, Brooklyn, Bronx, Queens, & Staten Island) Telephone: (718) 482-4997	John Cryan NYS-DEC One Hunters Point Plaza 47-40 21st Street Long Island City, NY 11101-5407
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster & Westchester Telephone: (845) 256-3054	Margaret Duke (Peg) NYS-DEC 21 South Putt Corners Road New Paltz, NY 12561-1696
4	Albany, Columbia, Greene, Montgomery, Rensselaer & Schenectady Telephone: (518) 357-2069	William Clarke NYS-DEC 1150 North Wescott Road Schenectady, NY 12306-2014
4 (sub-office)	Delaware, Otsego & Schoharie Telephone: (607) 652-7741	John Felman NYS-DEC Route 10 HCR#1, Box 3A Stamford, NY 12167-9503
5	Clinton, Essex, Franklin & Hamilton Telephone: (518) 897-1234	Richard Wild NYS-DEC Route 86, PO Box 296 Ray Brook, NY 12977-0296
5 (sub-office)	Fulton, Saratoga, Warren & Washington Telephone: (518) 623-1281	Thomas Hall* NYS-DEC County Route 40 PO Box 220 Warrensburg, NY 12885-0220
6	Jefferson, Lewis & St. Lawrence Telephone: (315) 785-2245	Brian Fenlon NYS-DEC State Office Building 317 Washington Street Watertown, NY 13601-3787
6 (sub-office)	Herkimer & Oneida Telephone: (315) 793-2555	J. Joseph Homburger* NYS-DEC State Office Building 207 Genesee Street Utica, NY 13501-2885

7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga & Tompkins	Ralph Manna NYS-DEC 615 Erie Blvd. West (Env. Permits Room 206) Syracuse, NY 13204-2400
7 (sub-office)		Michael Barylski* NYS-DEC 1285 Fisher Avenue Cortland, NY 13045-1090
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne & Yates	Peter Lent NYS-DEC 6274 East Avon Lima Road Avon, NY 14414-9519
9	Allegany, Cattaraugus, Chautauqua, Erie, Niagara & Wyoming	Steve Doleski NYS-DEC 270 Michigan Avenue Buffalo, NY 14203-2999
9 (sub-office)		Ken Taft* NYS-DEC 182 East Union, Suite 3 Allegany, NY 14706-1328

* Deputy Regional Permit Administrator

USERS GUIDE TO NY NATURAL HERITAGE DATA

New York Natural Heritage Program, 625 Broadway, Albany, NY, 12233-4757 (518) 402-8935

NATURAL HERITAGE PROGRAM: The Natural Heritage Program is an ongoing, systematic, scientific inventory whose goal is to compile and maintain data on the rare plants and animals native to New York State, and significant ecological communities. The data provided in the report facilitate sound planning, conservation, and natural resource management and help to conserve the plants, animals and ecological communities that represent New York's natural heritage.

DATA SENSITIVITY: The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should not be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

NATURAL HERITAGE REPORTS (may contain any of the following types of data):

COUNTY NAME: County where the occurrence of a rare species or significant ecological community is located.

TOWN NAME: Town where the occurrence of a rare species or significant ecological community is located.

USGS 7 1/2' TOPOGRAPHIC MAP: Name of 7.5 minute US Geological Survey (USGS) quadrangle map (scale 1:24,000).

SIZE (acres): Approximate acres occupied by the rare species or significant ecological community at this location. A blank indicates unknown size.

SCIENTIFIC NAME: Scientific name of the occurrence of a rare species or significant ecological community.

COMMON NAME: Common name of the occurrence of a rare species or significant ecological community.

ELEMENT TYPE: Type of element (i.e. plant, animal, significant ecological community, other, etc.)

LAST SEEN: Year rare species or significant ecological community last observed extant at this location.

EO RANK: Comparative evaluation summarizing the quality, condition, viability and defensibility of this occurrence. Use with LAST SEEN.

A-E = Extant: A=excellent, B=good, C=fair, D=poor, E=extant but with insufficient data to assign a rank of A - D.

F = Failed to find. Did not locate species, but habitat is still there and further field work is justified.

H = Historical. Historical occurrence without any recent field information.

X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.

? = Unknown.

Blank = Not assigned.

NEW YORK STATE STATUS (animals): Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.

E = Endangered Species: any species which meet one of the following criteria:

1) Any native species in imminent danger of extirpation or extinction in New York.

2) Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.

T = Threatened Species: any species which meet one of the following criteria:

1) Any native species likely to become an endangered species within the foreseeable future in NY.

2) Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.

SC = Special Concern Species: those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, species of special concern receive no additional legal protection under Environmental Conservation Law section 11-0535 (Endangered and Threatened Species).

P = Protected Wildlife (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.

U = Unprotected (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.

G = Game (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

NEW YORK STATE STATUS (plants): The following categories are defined in regulation 6NYCRR part 193.3 and apply to NYS Environmental Conservation Law section 9-1503.

E = Endangered Species: listed species are those with:

1) 5 or fewer extant sites, or

2) fewer than 1,000 individuals, or

3) restricted to fewer than 4 U.S.G.S. 7 1/2 minute topographical maps, or

4) species listed as endangered by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

T = Threatened: listed species are those with:

1) 6 to fewer than 20 extant sites, or

2) 1,000 to fewer than 3,000 individuals, or

3) restricted to not less than 4 or more than 7 U.S.G.S. 7 and 1/2 minute topographical maps, or

4) listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

R = Rare: listed species have:

1) 20 to 35 extant sites, or

2) 3,000 to 5,000 individuals statewide.

V = Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.

U = Unprotected; no state status.

continued on next page

NEW YORK STATE STATUS (communities): At this time there are no categories defined for communities.

FEDERAL STATUS (plants and animals): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527.

(blank) = No Federal Endangered Species Act status.

LE = The element is formally listed as endangered.

LT = The element is formally listed as threatened.

E/SA = The element is treated as endangered because of similarity of appearance to other endangered species or subspecies.

PE = The element is proposed as endangered.

PT = The element is proposed as threatened.

C = The element is a candidate for listing.

(LE) = If the element is a full species, all subspecies or varieties are listed as endangered; if the element is a subspecies, the full species is listed as endangered.

(LE-LT) = The species is formally listed as endangered in part of its range, and as threatened in the other part; or, one or more subspecies or varieties is listed as endangered, and the others are listed as threatened.

(LT-C) = The species is formally listed as threatened in part of its range, and as a candidate for listing in the other part; or, one or more subspecies or varieties is listed as threatened, and the others are candidates for listing.

(LT-(T/SA)) = One or more subspecies or populations of the species is formally listed as threatened, and the others are treated as threatened because of similarity of appearance to the listed threatened subspecies or populations.

(PS) = Partial status: the species is listed in parts of its range and not in others; or, one or more subspecies or varieties is listed, while the others are not listed.

GLOBAL AND STATE RANKS (animals, plants, ecological communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Intraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world. ? = Indicates a question exists about the rank. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

GLOBAL RANK:

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.

G2 = Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.

G3 = Entirely rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.

G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GH = Historically known, with the expectation that it might be rediscovered.

GX = Species believed to be extinct.

STATE RANK:

S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.

S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.

S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

S4 = Apparently secure in New York State.

S5 = Demonstrably secure in New York State.

SH = Historically known from New York State, but not seen in the past 15 years.

SX = Apparently extirpated from New York State.

SZ = Present in New York State only as a transient migrant.

SxB and SxN, where Sx is one of the codes above, are used for migratory animals, and refer to the rarity within New York State of the breeding (B) populations and the non-breeding populations (N), respectively, of the species.

TAXON (T) RANK: The T-ranks (T1 - T5) are defined the same way as the Global ranks (G1 - G5), but the T-rank refers only to the rarity of the subspecific taxon.

T1 through T5 = See Global Rank definitions above.

Q = Indicates a question exists whether or not the taxon is a good taxonomic entity.

OFFICE USE: Information for use by the Natural Heritage Program.

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 2 mile radius

Prepared 28 April 2004 by NY Natural Heritage Program, NYS DEC, Albany, New York

This report contains SENSITIVE information that should be treated in a sensitive manner -- Please see cover letter. Refer to the Users' Guide for explanations of codes, ranks, and fields. We do not always provide maps of locations of species most vulnerable to disturbance, nor of some records whose locations and/or extents are not precisely known or are too large to display.

* County						
** Town						
Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Detailed Location	General Habitat and Quality	Office Use	
* NY STATE WATERS, OSWEGO						
** NY STATE WATERS, SCRIBA						
WATERFOWL CONCENTRATION AREA Other	UNPROTECTED S3S4	E 1992-01-08	LAKE ONTARIO SCRIBA The concentration area is in east. Lake Ontario, just off shore of the nine mile point nuclear power station, Oswego County.	A discharge area for warm water from the power plant and station. The warmest water is discharged on the west end of the area and from there it spreads east. The water is 80+ degrees F at the point of discharge.	4307654 S	

1 Records Processed

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius

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* County ** Town	Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* NY STATE WATERS ** NY STATE WATERS	<i>Prosopium cylindraceum</i> ROUND WHITEFISH Fish	ENDANGERED G5 S1S2	H 1923-08-24	LAKE ONTARIO	9999999 M BOF
	<i>Myoxocephalus thompsoni</i> DEEPWATER SCULPIN Fish	ENDANGERED G5 S1	H 1923-08-30	LAKE ONTARIO NEW HAVEN	9999999 M BOF
* NY STATE WATERS, OSWEGO ** CITY OF OSWEGO, SCRIBA, NY STATE WATERS	<i>Ixobrychus exilis</i> LEAST BITTERN Bird	THREATENED G5 S3B,S1N		TEAL MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307644 ESU
** NY STATE WATERS, SCRIBA					

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius

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* County ** Town	Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* NY STATE WATERS, OSWEGO					
** NY STATE WATERS, SCRIBA					
	WATERFOWL CONCENTRATION AREA Other	UNPROTECTED S3S4	E 1992-01-08	LAKE ONTARIO SCRIBA	4307654 S
** NY STATE WATERS, SCRIBA, CITY OF OSWEGO					
	<i>Podilymbus podiceps</i> PIED-BILLED GREBE Bird	THREATENED G5 S3B,S1N		TEAL MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307644 ESU
* OSWEGO ** CITY OF OSWEGO					
	<i>Acipenser fulvescens</i> LAKE STURGEON Fish	THREATENED G3G4 S1S2	E 1982-05-21	OSWEGO RIVER AND HARBOR	4307645 S BOF

Natural Heritage Report on Rare Species and Ecological Communities



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- * County
- ** Town

Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO				
** CITY OF OSWEGO				
WARM WATER FISH CONCENTRATION AREA Other	UNPROTECTED S4	U NO DATE	OSWEGO RIVER AND HARBOR	4307645 S
WATERFOWL CONCENTRATION AREA Other	UNPROTECTED S3S4	E 1992-01-08	OSWEGO RIVER AND HARBOR	4307645 S
** MEXICO				
<i>Carex chordorrhiza</i> CREEPING SEDGE Vascular Plant	THREATENED G5 S2	C 2001-07-19	MEXICO BOG	4307653
DWARF SHRUB BOG Community	UNPROTECTED G4 S3	BC 2001-07-19	MEXICO BOG	4307653

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius

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* County ** Town	Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO					
** MEXICO					
	<i>Chlidonias niger</i> BLACK TERN Bird	ENDANGERED G4 S2B		SAGE CREEK MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
	<i>Ixobrychus exilis</i> LEAST BITTERN Bird	THREATENED G5 S3B,S1N		SAGE CREEK MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
	<i>Ammodramus henslowii</i> HENSLOW'S SPARROW Bird	THREATENED G4 S3B,SAN		SIHERMAN ROAD MEXICO For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
** MEXICO, NEW HAVEN					
	<i>Ixobrychus exilis</i> LEAST BITTERN Bird	THREATENED G5 S3B,S1N		BUTTERFLY SWAMP For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307653 ESU

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius.

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- * County
- ** Town

Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO				
** MEXICO, NEW HAVEN				
<i>Podilymbus podiceps</i> PIED-BILLED GREBE Bird	THREATENED G5 S3B,S1N		BUTTERFLY SWAMP For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307653 ESU
** MINETTO, OSWEGO				
<i>Desmodium ciliare</i> LITTLE-LEAF TICK-TREFOIL Vascular Plant	THREATENED G5 S2S3	H 1883-08-13	MINETTO	4307644
** NEW HAVEN				
SHRUB SWAMP Community	UNPROTECTED G5 S5			
BLACK SPRUCE-TAMARACK BOG Community	UNPROTECTED G4G5 S3	B 1985-06-06	LILY MARSH	4307643 S

Natural Heritage Report on Rare Species and Ecological Communities

Elements within a 10 mile radius

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- * County
- ** Town

Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO				
** NEW HAVEN				
<i>Carex chardorrhiza</i> CREEPING SEDGE Vascular Plant	THREATENED G5 S2	C 1998-05-12	LILY MARSH	4307643
** OSWEGO				
<i>Cistothorus platensis</i> SEDGE WREN Bird	THREATENED G5 S3B,SAN		RICE CREEK AREA <i>For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.</i>	4307645 ESU
** RICHLAND				
<i>Chlidonias niger</i> BLACK TERN Bird	ENDANGERED G4 S2B		GRINDSTONE MARSHES <i>For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.</i>	4307652 ESU
<i>Ixobrychus exilis</i> LEAST BITTERN Bird	THREATENED G5 S3B,SIN		GRINDSTONE MARSHES <i>For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.</i>	4307652 ESU

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius

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- * County
- ** Town

Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO				
** RICHLAND				
<i>Podilymbus podiceps</i> PIED-BILLED GREBE Bird	THREATENED G5 S3B,S1N		GRINDSTONE MARSHES For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
<i>Cypripedium arietinum</i> RAMS-HEAD LADYSLIPPER Vascular Plant	THREATENED G3 S2	F 1900-05-26	PORT ONTARIO	4307652
<i>Pterospora andromedea</i> GIANT PINE-DROPS Vascular Plant	ENDANGERED G5 S1	H 1854-07	PORT ONTARIO	4307652
<i>Icthyophaga exilis</i> LEAST BITTERN Bird	THREATENED G5 S3B,S1N		RAMONA BEACH MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius

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- County
- ** Town

Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO				
** RICHLAND				
<i>Podilymbus podiceps</i> PIED-BILLED GREBE Bird	THREATENED G5 S3B,S1N		RAMONA BEACH MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
<i>Chlidonias niger</i> BLACK TERN Bird	ENDANGERED G4 S2B		RAMONA BEACH MARSH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
<i>Chlidonias niger</i> BLACK TERN Bird	ENDANGERED G4 S2B		SALMON RIVER MOUTH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU
<i>Circus cyaneus</i> NORTHERN HARRIER Bird	THREATENED G5 S3B,S3N		SALMON RIVER MOUTH For information on the population at this location and management considerations, please contact the NYS DEC Endangered Species Unit at 518-402-8859.	4307652 ESU

Natural Heritage Report on Rare Species and Ecological Communities



Elements within a 10 mile radius

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* County

** Town

Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Location	Office Use
* OSWEGO				
** RICHLAND				
SHALLOW EMERGENT MARSH Community	UNPROTECTED G5 S5	B 2001-08-07	SALMON RIVER PULASKI	4307652
** SCRIBA				
RICH SIRUB FEN Community	UNPROTECTED G3G4 S1S2	CD 1985-06-06	CLARK CORNERS FEN	4307644 S
<i>Polygonum setaceum var interjectum</i> SWAMP SMARTWEED Vascular Plant	ENDANGERED G5T4 S1S2	II 1897-09-08	PADDY POND	4307644
* OSWEGO, NY STATE WATERS				
** NY STATE WATERS, MEXICO				
WARM WATER FISH CONCENTRATION AREA Other	UNPROTECTED S4	U 1976	LITTLE SALMON RIVER	4307652

State of Louisiana



Dwight Landreneau
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

Kathleen Babineaux Blanco
Governor

Name Jim Becker
Company Battelle - Pacific Northwest National Laboratory
Street Address PO Box 999, MSIN K6-85
City, State, Zip Richland, Washington 99352
Project River Bend Nuclear Power Station
West Feliciana Parish, LA
Date April 12, 2004
Invoice Number 04040801

Personnel of the Habitat Section of the Fur and Refuge Division have reviewed the preliminary data for the captioned project. The Louisiana black bear (*Ursus americanus luteolus*) is known to occur in your general area and is provided a threatened status on both federal and state species lists. The enclosed lists contain information on species and communities of concern located within two miles and within ten miles of your project area. If suitable habitat for these species lies within your project area, there is a high potential that these species will occur there. For more information on these species and communities, please contact this office at 225-765-2357. Our database indicates that your site is adjacent to the River Bend Natural Area. The following areas, listed by 7.5" topographic quad map, occur within ten miles of your project area:

- Port Hudson Quad:

Port Hudson State Commemorative Area (SCA) - Contact LA Office of State Parks at 225-342-8111.

- Elm Park Quad:

Audubon SCA - Contact the LA Office of State Parks at 225-342-8111.

Locust Grove SCA - Contact the LA Office of State Parks at 225-342-8111.

Kakowi Fahpo Natural Area (NA) - Contact Joshua Conciencie with our office at 225-765-2357.

Mary Ann Brown Preserve - Contact The Nature Conservancy at 225-338-1040.

- St. Francisville Quad:

Oak Hill NA - Contact Joshua Conciencie with our office at 225-765-2357.

Greenwood Plantation NA - Contact Joshua Conciencie with our office at 225-765-2357.

Cat Island National Wildlife Refuge - Contact Refuge Manager Virginia Rettig at 225-635-4753.

- Jackson Quad:

Centenary SCA - Contact the LA Office of State Parks at 225-342-8111.

Jackson-confederate SCA - Contact the LA Office of State Parks at 225-342-8111.

In reviewing our database, no other rare, threatened, or endangered species or critical habitats were found within the area of the captioned project that lies in Louisiana. No other state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. The Louisiana Natural Heritage Program requires that this office be acknowledged in all reports as the source of all data provided here. If you have any questions or need additional information, please call Louisiana Natural Heritage Program Data Manager Jill Kelly at (225) 765-2643.

Sincerely,


Gary Lester, Coordinator
Natural Heritage Program

Gayle,

This is the letter
for the Lester
reference.

Jill

**Louisiana Natural Heritage Program
Element Records Within 2 Miles of River Bend Nuclear Power Station**

SCIENTIFIC NAME	COMMON NAME	USES A	GRANK	SRANK	COUNTY NAME	QUAD NAME	LAST OBS
BATTURE (RIVERFRONT PIONEER)	BATTURE (RIVERFRONT PIONEER)		G4	S4S5	West Feliciana	PORT HUDSON	8/9/2002
CYPRESS-TUPELO SWAMP	CYPRESS-TUPELO SWAMP			S4	West Feliciana	PORT HUDSON	8/9/2002
DEPARIA ACROSTICHOIDES	SILVERY GLADE FERN		G5	S2	West Feliciana	PORT HUDSON	8/8/2002
DICHANTHELIUM CLANDESTINUM	DEER-TONGUE WITCHGRASS		G5?	S2	West Feliciana	ELM PARK	9/2/2002
HACKBERRY-AMERICAN ELM- GREEN ASH FOREST	HACKBERRY-AMERICAN ELM- GREEN ASH FOREST		G4	S4	West Feliciana	PORT HUDSON	8/9/2002
MUSTELA FRENATA	LONG-TAILED WEASEL		G5	S2S4	West Feliciana	ELM PARK	5/25/1998
PHYSALIS CARPENTERI	CARPENTER'S GROUND-CHERRY		G3	S1	West Feliciana	PORT HUDSON	8/8/2002
SOUTHERN MESOPHYTIC FOREST	SOUTHERN MESOPHYTIC FOREST			S2S3	West Feliciana	PORT HUDSON/ELM PARK	8/8/2002
SCAPHIRHYNCHUS ALBUS	PALLID STURGEON	LE	G1	S1	East Baton Rouge	PORT HUDSON	4/5/1989
CYPRINELLA CAMURA	BLUNTFACE SHINER		G5	S2S3	West Feliciana	PORT HUDSON	7/30/1977

**Louisiana Natural Heritage Program
Element Records Within 10 Miles of River Bend Nuclear Power Station**

SCIENTIFIC NAME	SOMMON NAME	USES A	GRANK	SRANK	COUNTY NAME	QUAD NAME
ACTAEA PACHYPODA	WHITE BANE BERRY		G5	S2	West Feliciana	ST.FRANCISVILLE/LAUREL HILL/ELM PARK
ANTENNARIA SOLITARIA	SINGLE-HEAD PUSSYTOES		G5	S2	East Feliciana	PORT HUDSON
BATTURE (RIVERFRONT PIONEER)	BATTURE (RIVERFRONT PIONEER)		G4	S4S5	West Feliciana	PORT HUDSON
CIRCAEA LUTETIANA SSP CANADENSIS	INTERMEDIATE ENCHANTER'S NIGHTSHADE		G5T5	S2	West Feliciana/East Feliciana	ELM PARK/JACKSON
CYPRESS-TUPELO SWAMP	CYPRESS-TUPELO SWAMP			S4	West Feliciana	PORT HUDSON
CYPRINELLA CAMURA	BLUNTFACE SHINER		G5	S2S3	West Feliciana	JACKSON/PORT HUDSON
DEPARIA ACROSTICHOIDES	SILVERY GLADE FERN		G5	S2	West Feliciana	PORT HUDSON
DICHANTHELIUM CLANDESTINUM	DEER-TONGUE WITCHGRASS		G5?	S2	West Feliciana/East Feliciana	ELM PARK/JACKSON
DRYOPTERIS LUDOVICIANA	SOUTHERN SHIELD WOOD-FERN		G4	S1	East Feliciana	JACKSON
ELEOCHARIS RADICANS	ROOTED SPIKE-RUSH		G5	S1?	East Feliciana	JACKSON
ETHEOSTOMA CAERULEUM	RAINBOW DARTER		G5	S2S3	West Feliciana	ST.FRANCISVILLE/LAUREL HILL/JACKSON
HACKBERRY-AMERICAN ELM-GREEN ASH FOREST	HACKBERRY-AMERICAN ELM-GREEN ASH FOREST		G4	S4	West Feliciana	PORT HUDSON
HELMITHEROS VERMIVORUS	WORM-EATING WARBLER		G5	S4B	West Feliciana/East Feliciana	JACKSON/ELM PARK
MAGNOLIA PYRAMIDATA	PYRAMID MAGNOLIA		G4	S2	West Feliciana	LAUREL HILL
MIMULUS RINGENS	SQUARE-STEMMED MONKEY-FLOWER		G5	S2	East Feliciana	PORT HUDSON
MUSTELA FRENATA	LONG-TAILED WEASEL		G5	S2S4	West Feliciana	ST.FRANCISVILLE/ELM PARK
OVERCUP OAK-WATER HICKORY FOREST	OVERCUP OAK-WATER HICKORY FOREST		G4	S4	West Feliciana	ST.FRANCISVILLE
PACHYSANDRA PROCUMBENS	ALLEGHENY-SPURGE		G4G5	S2	West Feliciana	ST.FRANCISVILLE

**Louisiana Natural Heritage Program
Element Records Within 10 Miles of River Bend Nuclear Power Station**

SCIENTIFIC NAME	SOMMON NAME	USES A	GRANK	SRANK	COUNTY NAME	QUAD NAME
PHYSALIS CARPENTERI	CARPENTER'S GROUND-CHERRY		G3	S1	West Feliciana	WEYANOKE/PORT HUDSON
SCAPHIRHYNCHUS ALBUS	PALLID STURGEON	LE	G1	S1	East Baton Rouge	PORT HUDSON
SCHISANDRA GLABRA	SCARLET WOODBINE		G3	S3	West Feliciana	LAUREL HILL
SEIURUS MOTACILLA	LOUISIANA WATERTHRUSH		G5	S3S4B	West Feliciana/East Feliciana	JACKSON/ELM PARK
SIDA ELLIOTTII	ELLIOTT SIDA		G4G5	SH	East Baton Rouge	ZACHARY
SMALL STREAM FOREST	SMALL STREAM FOREST			S3	West Feliciana	ST.FRANCISVILLE/ELM PARK
SOREX LONGIROSTRIS	SOUTHEASTERN SHREW		G5	S2S3	West Feliciana/East Feliciana	ELM PARK/ZACHARY
SOUTHERN MESOPHYTIC FOREST	SOUTHERN MESOPHYTIC FOREST			S2S3	West Feliciana	ST.FRANCISVILLE/ELM PARK/PORT HUDSON
SPILOGALE PUTORIUS	EASTERN SPOTTED SKUNK		G5	S1	West Feliciana	ST.FRANCISVILLE
STATE CHAMPION TREE	STATE CHAMPION TREE				West Feliciana	ST.FRANCISVILLE
STEWARTIA MALACODENDRON	SILKY CAMELLIA		G4	S2S3	East Feliciana	PORT HUDSON
TRIPHORA TRIANTHOPHORA	NODDING POGONIA		G3G4	S2	West Feliciana	ST.FRANCISVILLE/PORT HUDSON

Louisiana Natural Heritage Program Biological Conservation Database Field Definitions

QUADNAME – (Quadrangle Name) Name of the US Geological Survey topographic quadrangle map(s) on which the element occurrence is located. If the EO spans more than one map, the map that includes the centrum of the EO is listed first. The code(s) for the map(s) is entered in the associated QUADCODE field.

GRANK– (Global Rank) The global element rank which best characterizes the relative rarity or endangerment of the element worldwide.

SRANK – (State Rank) The state element rank which best characterizes the relative rarity or endangerment of the element in the state.

USESA – (United States Endangered Species Act) Appropriate standard abbreviation for the U.S. federal register category for the element as proposed or determined by the U.S. Fish and Wildlife Service or the National Oceanic and Atmospheric Administration (marine species)

LASTOBS – (Last Observation) Date that the element occurrence was last observed to be extant at the site. This is not necessarily the last date the site was visited.

EXPLANATION OF RANKING CATEGORIES EMPLOYED BY NATURAL HERITAGE PROGRAMS NATIONWIDE

Each element is assigned a single global rank as well as a state rank for each state in which it occurs. Global ranking is done under the guidance of NatureServe, Arlington, VA. State ranks are assigned by each state's Natural Heritage Program, thus a rank for a particular element may vary considerably from state to state. Federal ranks are designated by the U.S. Fish & Wildlife Service under the provisions of the Endangered Species Act of 1973.

FEDERAL RANKS (USES FIELD):

LE = Listed Endangered

LT = Listed Threatened

PE = Proposed endangered

PT = Proposed Threatened

C = Candidate

PDL = Proposed for delisting

E (S/A) or T (S/A) = Listed endangered or threatened because of similarity of appearance

XE = Essential experimental population

XN = Nonessential experimental population

No Rank = Usually indicates that the taxon does not have any federal status. However, because of potential lag time between publication in the Federal Register and entry in the central databases and state databases, some taxa may have a status which does not yet appear.

(Rank, Rank) = Combination values in parenthesis = The taxon itself is not named in the Federal Register as having U.S. ESA status; however, all of its infraspecific taxa (worldwide) do have official status. The statuses shown in parentheses indicate the statuses that apply to infraspecific taxa or populations within this taxon. *THE SPECIES IS CONSIDERED TO HAVE A COMBINATION STATUS IN LOUISIANA*

(PS) = partial status = Status in only a portion of the species' range. Typically indicated in a "full" species record where an infraspecific taxon or population has U.S. ESA status, but the entire species does not. *THE SPECIES DOES NOT HAVE A STATUS IN LOUISIANA*

(PS: Rank) = partial status = Status in only a portion of the species' range. The value of that status appears because the entity with status does not have an individual entry in NatureServe. *THE SPECIES MAY HAVE A STATUS IN LOUISIANA*

GLOBAL ELEMENT RANKS:

G1 = critically imperiled globally because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extinction

G2 = imperiled globally because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extinction throughout its range

G3 = either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single physiographic region) or because of other factors making it vulnerable to extinction throughout its range (21 to 100 known extant populations)

G4 = apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery (100 to 1000 known extant populations)

G5 = demonstrably secure globally, although it may be quite rare in parts of its range, especially at the periphery (1000+ known extant populations)

GH = of historical occurrence throughout its range; i.e., formerly part of the established biota, with the possibility that it may be rediscovered (e.g., Bachman's Warbler)

GU = possibly in peril range-wide, but status uncertain; need more information

G7 = rank uncertain. Or a range (e.g., G3G5) delineates the limits of uncertainty

GQ = uncertain taxonomic status

GX = believed to be extinct throughout its range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered

T = subspecies or variety rank (e.g., G5T4 applies to a subspecies with a global species rank of G5, but with a subspecies rank of G4)

STATE ELEMENT RANKS:

S1 = critically imperiled in Louisiana because of extreme rarity (5 or fewer known extant populations) or because of some factor(s) making it especially vulnerable to extirpation

S2 = imperiled in Louisiana because of rarity (6 to 20 known extant populations) or because of some factor(s) making it very vulnerable to extirpation

S3 = rare and local throughout the state or found locally (even abundantly at some of its locations) in a restricted region of the state, or because of other factors making it vulnerable to extirpation (21 to 100 known extant populations)

S4 = apparently secure in Louisiana with many occurrences (100 to 1000 known extant populations)

S5 = demonstrably secure in Louisiana (1000+ known extant populations)

(B or N) may be used as qualifier of numeric ranks and indicating whether the occurrence is breeding or nonbreeding)

SA = accidental in Louisiana, including species (usually birds or butterflies) recorded once or twice or only at great intervals hundreds or even thousands of miles outside their usual range

S11 = of historical occurrence in Louisiana, but no recent records verified within the last 20 years; formerly part of the established biota, possibly still persisting

SR = reported from Louisiana, but without conclusive evidence to accept or reject the report

SU = possibly in peril in Louisiana, but status uncertain; need more information

SX = believed to be extirpated from Louisiana

SZ = transient species in which no specific consistent area of occurrence is identifiable

State of Louisiana



Dwight Landreneau
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

Kathleen Babineaux Blanco
Governor

Date April 12, 2004
Invoice Number 04040801
Project River Bend Nuclear Power Station
West Feliciana Parish, LA
Name Jim Becker
Company Battelle - Pacific Northwest National Laboratory
Street Address PO Box 999, MSIN K6-85
City, State, Zip Richland, Washington 99352
Number of Quads Reviewed 6
Total Due \$120.00

From:

Environmental Branch
Department of Wildlife and Fisheries
LA Natural Heritage Program

Payment should be made to "Louisiana Department of Wildlife & Fisheries" within 30 days of the date of this invoice. Please include the invoice number on your check and return a copy of this invoice with your remittance to the following address:

Louisiana Department of Wildlife & Fisheries
Attn: Nancy Hunter
P.O. Box 80399
Baton Rouge, LA 70898-0399

Should you have any questions regarding this invoice, for review of the Louisiana Natural Heritage database for information on known sensitive elements at a charge of \$20.00 per quad reviewed, please contact Jill Kelly at (225) 765-2643.

State of Louisiana



Dwight Landreneau
Secretary

Department of Wildlife & Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(225) 765-2800

Kathleen Babineaux Blanco
Governor

RETURN THIS COPY OF INVOICE WITH PAYMENT

Date April 12, 2004
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Trip Report for Grand Gulf Site Audit
Meeting with Mississippi Natural Heritage Program

Date: April 14, 2004

Attendees: Bill Johnson, Brad Young, Tom Mann, and Adrienne Clark (Mississippi Natural Heritage Program); Michael Masnik (U.S. Nuclear Regulatory Commission); Jim Becker and Amoret Bunn (Pacific Northwest National Laboratory)

Prepared by: Amoret Bunn

Conversation with Tom Mann:

Potamilus capax:

- found mussels south of Grand Gulf
- most concern for up- and downstream of Grand Gulf
- made lists and field notes (not published)

Fisheries

- National Heritage doesn't address fisheries
- consider contacting:
 - Jan Hover and Jack Kilgore, WES
 - Dennis Ricky and Bubba Hubbard, main office of Wildlife
 - can tell us about recent surveys of fisheries, recreational, commercial
 - Don Jackson - MSU, ichthyologist
 - have been recent sampling for HH parameters (fillet)
 - Tod Salik, lead ichthyologist here at National Heritage

Log of telephone call from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist) to John Rumancik (U.S. Army Corps of Engineers, Memphis, Tennessee District, least tern specialist)

Rumancik: (901) 544-3471

Date: November 8, 2004

On the Mississippi River, least terns utilize sandbars for nesting, foraging (primarily on shad), and loafing when the river has receded and sandbars are exposed. On the Mississippi River, surveys for interior least terns have been conducted since 1986 from Cape Girardeau, Missouri (River Mile 1,000) to Vicksburg, Mississippi (River Mile 435). The first intensive survey south of Vicksburg was first conducted in July 2004. The nearest areas occupied by terns upstream and downstream of the Grand Gulf site were at Yucatan Dikes (RM 409.8) (loafing area for 28 birds), Togo Island Dikes (RM 413.6) (nesting colony of 395 birds with confirmed chicks or eggs), and Below Bondurant Towhead Dikes (RM 393.0) (nesting colony of 59 birds with confirmed chicks or eggs).

Sandbars develop on the inside bends of the Mississippi River where currents are slower. Sandbars do not develop on the outside bend of the river where currents are swifter and where the river shoreline has been revetted (rip rap emplaced) to prevent erosion. Thus, the nearest potential tern nesting habitat is at about RM 402 on the Louisiana side of the Mississippi River.

Socioeconomics and Environmental Justice Contribution to Grand Gulf Trip Report 4-12-04 to 4-16-04

Meeting with Representatives of the Applicant: Morning April 13.

Mike Scott (PNNL) and Barry Zalzman (NRC) met with George Zinke from Entergy and two representatives of the ER subcontractor, Emily Tripe and Guy Caesar. Discussion involved specific missing items or points of clarification that are described elsewhere in the NRC trip report and will be provided to NRC by the applicant. A list of 24 items was discussed. Item 23 in that list does not require a response by the applicant. Two items have been added.

There was a short discussion with the applicant concerning the fact that the socioeconomic assumptions in the ER that are used to derive local population impacts are not consistent with similar assumptions made in the Early Site Permit Selection Committee Notebook, which is the only source of socioeconomic assumptions on the three alternative sites. No resolution was reached with the applicant on developing consistent estimates.

Meeting with Claiborne County Officials: Afternoon April 13.

Mike Scott (PNNL) and Barry Zalzman (NRC) met with a group of 17 Claiborne County government officials and other stakeholders at Cultural Crossroads, Port Gibson. The following were the individuals present at the meeting from the local community:

Meeting at Port Gibson, April 13, 2004		
Individual	Organization	Telephone Number
Judy Scruggs	Port Gibson Chamber of Commerce	601-437-4351
Shirley Hall	E 911 Coordinator	601-437-5509
Joseph C. Davis	NAACP	601-437-5315
A.C. Garner	NAACP	601-437-4690
Charles Shorts	President, Claiborne County Board of Supervisors	601-437-5216
Martha Lott	Claiborne County Board of Supervisors	601-437-5216
James Miller	Administrator, Claiborne County	601-437-5216
James Johnston	Claiborne County Board of Supervisors	601-437-5216

Paul Walker	Mississippi Development Authority	601-276-3089
Donald L. Carter	Mississippi Southern Bank, City President and Chamber of Commerce President	601-437-5111
Wanda Fleming	Claiborne County Hospital	601-437-5141
Amelda Arnold	Mayor, City of Port Gibson	601-437-4234
Edward Carter	City of Port Gibson	601-437-3461
Frank Davis	(Sheriff) Claiborne County Sheriff's Department	601-437-5161
Diane T. Duvaul	Tax Assessor/Collector, Claiborne County	601-437-5591
Gloria Dotson	Chancery Clerk, Claiborne County	601-437-4992
Bobbie M. Young (Late Arrival-left card)	Director, Port Gibson-Claiborne County Civil Defense	601-437-4684

Mr. Shorts spoke for the group in saying that they want to make sure that any new nuclear plant in the county brings with it the full tax benefits not available from the first because of the change made in Mississippi law. Mayor Arnold added that this tax benefit should be available to the local area if the plant is going to be a merchant plant selling electricity to the grid.

A.C. Garner noted that the original tax distribution on Grand Gulf Unit 1 went to the county. He thinks about 30% does now. At first, there were 5 fire stations in the County; only 1 to 2 are operational now. There ensued a discussion of emergency planning responsibilities onsite and offsite, and difficulties the county has in meeting their responsibilities. However, they did not have any deficiencies noted in the last FEMA/state emergency exercise in September (2003). Mayor Arnold suggested that we talk to the civil defense director about this.

The Sheriff reported that they tried an emergency drill with the schools and that that had worked, also, but lack of manpower is an issue. He has to balance his Grand Gulf related responsibilities in the event of an emergency with evacuation responsibilities for traffic control and ordinary law enforcement, with only 9 deputies. They got no new dollars from Dept of Homeland Security, just for equipment upgrades.

Mr. Johnston (County Economic Development) reports that plant-related road upgrades are an issue. The widening of the road from the plant out to U.S. 61/18 has a local responsibility of 20%, plus \$8 million in cost increase. They are struggling to find the money.

Mr. Miller noted that the county was not prepared for the first Grand Gulf project. They have needs to deal with DHS, bioterrorism, and need access, technical assistance, and training. There was some discussion of the no-fly zone around the plant, the ability of jets to respond from New Orleans within ½ hour, and the adequacy of that response.

Employment statistics and the plant workforce: the group guessed that 50-100 people who work at the plant live in Claiborne County - maybe 7% to 8% of the workforce as opposed to the 14% claimed in the ER.

In the past there was not a good working relationship with Entergy. However, the community does want to partner now and increase the number of local people working at the plant. Barry made the point that they need not wait for the new plant, but could improve their relationship with the existing plant and train their workforce to work there.

They have talked some to other local governments that host nuclear plants; e.g. Perry County in Ohio. But they were not aware of the training programs at Vidalia Georgia that feed the Hatch nuclear plant workforce.

Health capabilities and issues. Citizen concern expressed in scoping meeting was somewhat misstated. The hospital is available 24/7 but does not have the full range of services available all of the time. In an emergency, they have the space, equipment and manpower to handle about 3 to 4 casualties at a time. They have one decontamination room (14 years old), not collocated with the emergency room. They are concerned that this is not enough. They believe that they need to upgrade, but their share of the county's funds from Grand Gulf is only \$750 per month. Also, they have responsibility to transport patients in the event of an evacuation, and are concerned they don't have access to sufficient vehicles. Communications by cell phone do not work well in the county, communications need upgrade. They do have verbal agreements and are in contact with other licensed facilities within 60 miles, believe that emergency responders will come to help from other counties, but would like to have much more capability under local control.

[There is a possibility here to obtain FEMA's letters to them on the most recent exercises to see what the issues were. The National Guard was apparently called in to assist on one, but had difficulty securing the plant.]

The group was asked what the impacts would be if 400 to 500 additional people moved into the county in association with a new nuclear plant. The mayor led this discussion and conceded that it would likely be a challenge. The hospital was built in 1951 and probably would need expansion. Housing is somewhat better. 48 to 50 units are currently being added, but there would have to be more, and there are some housing quality issues. Water and sewer systems could add people, but the old water and sewer lines need upgrading. They got a \$240K grant last year to do some sewer upgrades. Water upgrades would have to be done in bigger pieces and would take \$1.4 to \$1.5 million

The county is constrained on economic development revenues, so loss of Unit 1 would be a serious threat to the county finances. The county's entire budget before Unit 1 was only \$1.8

million.

They have one of the lowest millage rates in Mississippi at 66.15 mills. However, this is due to a perception that the taxpayers cannot afford more. Jefferson County, to the south but without access to significant Grand Gulf funds pays 130 mills.

The county does not have a comprehensive plan or land use plan, but is working on a comprehensive plan.

Jefferson County Meeting: Morning April 14.

Mike Scott (PNNL) and Barry Zalzman (NRC) met with a group of 21 Jefferson County government officials and other stakeholders at the Jefferson County Courthouse in Fayette, MS. The following individuals attended the meeting.

Meeting at Fayette, April 14, 2004		
Individual	Organization	Telephone Number
Wanda Parker	Jefferson County 911	601-786-0311
Arnold Clark, Jr.	City of Fayette (Alderman)	601-786-3682
Lizzie Hammett	City of Fayette (Alderwoman)	601-786-3682
Carolyn Walton	Alcorn State University-Extension Program- Home Economist	601-786-3131
Brenda Hammitte	Jefferson County Civil Defense	601-786-8422
Sandra Coley	Alcorn State University-Extension Program- Youth Agent	601-786-3131
Delorise Frye	Chancery Clerk	601-786-3021
Sherley B. Wyatt	Jefferson County Economic Development District	601-786-3772 (temporary)
Ray Perryman	Jefferson County Supervisor	601-786-0141
Brenda T. Buck	Alcorn State University-Center for Rural Life and Economic Development	601-877-6338

Rose Walters	Jefferson County Board of Supervisors - Receiving Clerk	601-786-8741
Helen L. Hunter	Jefferson County Board of Supervisors-Purchasing Clerk	601-786-8741
Delores Rankin	Jefferson County Department of Human Services	601-786-3571
Fred Oliver	Jefferson County Board of Supervisors -County Administrator	601-786-3021
Stella Gales	Mississippi State University-Extension Services	601-786-3131
Burnell Harris	Jefferson County Circuit Clerk	601-786-3422
Peter E. Walker	Jefferson County Sheriff	601-786-3403
Rogers W. King	City of Fayette (Mayor)	601-786-3682
Kenneth Coffie	City of Fayette (Alderman)	601-786-3682
Cynthia Allen	City of Fayette	601-786-6488
Claudine S. Middleton	City of Fayette Alderwoman	601-786-8059

Jefferson County receives only about \$4K per year from Grand Gulf as its share of the statewide distribution. The county is small and there are relatively few kWh sold (basis for the statewide distribution). Moreover part of the county is served by a non-Entergy utility.

When Grand Gulf Unit 1 was built, the county's public officials (reflecting the will of largely-fearful populace) refused to have anything to do with the plant. They have been largely excluded from any benefit for operations jobs or emergency planning assistance (many county residents worked in constructing the plant, since they had the requisite construction skills). They are beyond the 10 mile EP zone and have little in the way of early warning or evacuation plans and procedures.

They feel the need to set up a training program to begin to prepare residents to work for the new facility, but seem not to have considered this for the existing facility. This despite the presence of Alcorn State University in the county. They are working in a 5-county cluster with Alcorn extension to develop a training center.

The number of workers at the plant who are county residents is likely very small (less than 5%?)

Some participants believe that the county has a high rate of cancer deaths, especially among 18-45 year olds. This seems to not be corroborated by any studies (which they would like to see done) or by statistics out of the medical community (e.g. county vital stats). They could not point to any statistical evidence.

There was general belief that they could absorb 100 to 200 additional people related to the plant, maybe more.

Warren County Meeting: Afternoon April 14.

Mike Scott (PNNL) and Barry Zalzman (NRC) met with a group of 11 Warren County government officials and other stakeholders at the Warren County Chamber of Commerce in Vicksburg, MS. The following individuals attended the meeting.

Meeting at Vicksburg, April 14, 2004		
Individual	Organization	Telephone Number
Gwen Coleman	Warren County Emergency Management Agency	601-636-1544
Charles Selmon	Warren County Board of Supervisors	601-634-8073
James O. Bowman	Vicksburg Warren School District	601-661-0684
Patricia Simrall	Warren county Tax Collector's Office	601-634-8363
Phillip Clenderin	River Region Health System	601-883-5175
James Price	Vicksburg Warren Schools	601-638-5122
Martin Pace	Warren County Sheriff	601-636-1761
Cheryl Comans	President, Chamber of Commerce	601-630-3505
Wayne Mansfield	City of Vicksburg	601-634-4524
John C. Moss	President, Warren County Port Commission	601-638-7700
Jim Pilgrim	Vciksburg Warren County Economic Development Foundation	601-636-1012

Findings:

We discussed the capacity of the schools to accept the children of plant workers and the other new population associated with the plant (perhaps 400-500 students). Vicksburg Warren schools are currently full at the elementary level, but the district could reopen one currently-closed elementary school, and shift students between schools to accommodate K-6 children. There is sufficient capacity at middle school and high school level. With the anticipated lead times available, the schools believe they could handle the influx.

Housing: Several developments are in the planning stages. There are some local needs in low and middle income housing. For the temporary workers there is a mobile home park with 700 units on the south edge of Vicksburg, 1500-plus hotel rooms, 20-25 apartment complexes. There is a land use plan inside the city.

Note: the City of Vicksburg is "built out." No annexations have occurred for 14 years. However, the county has several large developments under way.

Water is not expected to be a problem. The city is adding 6 new water wells. There are 3 or 4 rural water districts that are planning new capacity. No creeks are 303B or Phase II limited.

Warren County has absorbed 1800 new jobs in the last 2 years; 500 from two Japanese companies.

Hospital and medical facilities have dealt successfully with the associated growth. Community hospital works successfully with emergency drills and the Grand Gulf plant. They have decontamination room and 24 hour nursing.

Emergency management: Have developed and have used an emergency management plan for 20 years. They expect about 1700 people will need sheltering in an emergency. They have identified space for 1630, plus 612 in two facilities. They have 300 certified, trained monitors. They gave us an EP map. They are a sheltering destination during hurricanes on the Gulf Coast.

Fire protection: City is Class V, and upgrading to Class IV. There are mutual aid agreements between the city and rural districts.

Transportation. They have 2 airports used by business (one in Tenasas Parish). I-20 is expected to be widened, 61 South is being widened to 4 lanes, they are widening routes 21 and 22. The big units of equipment would probably come in to the port and move by truck. Mississippi Department of Transportation is planning to straighten and widen the road from Route 61 to the plant site.

Economic Development. The chamber of commerce, port, Entergy, city, and county all work together to attract new industry. Entergy has funded a wage survey and computers in the schools. The economy is growing and diversified, with the large Corps of Engineers facilities, 3 industrial corridors with 30-40 industrial firms, and tourism (riverboat gaming, historical sites). They are pursuing projects larger than what is planned here. They actually believe they need more

construction hands in the county.

There are significant retraining opportunities through Hinds Community College and work-based learning (2 branches within 30 mi of site). There is no significant brain drain. Alcorn State U. has a good relationship with Hinds-they have opened a branch in Vicksburg.

Environmental Justice. The sense of the meeting was that people at the extreme low end of the income distribution are helped by development. Vicksburg has an average wage rate of \$30,000 vs. \$25-\$26,000 statewide. They also have lots of daily in-commuters (900 from Claiborne Co., 1000 from Tenasas Parish, 1600 from Hinds Co.).

Socioeconomics and Environmental Justice Contribution to Grand Gulf Alternative Sites Trip
Report 7-6-04 to 7-09-04.

Meeting with Plymouth County, MA Officials: Morning July 7, 2004.

Mike Scott from PNNL and Jim Wilson from NRC met with several local officials from Plymouth County at the Plymouth County Chamber of Commerce offices, Plymouth, MA.

The following were the individuals present at the meeting from the local community:

Meeting at Plymouth, MA, July 7, 2004		
Individual	Organization	Telephone Number
Tom Wallace	Pine Hills LLC (real estate development)	508-747-3447
Ed Santos	Plymouth Regional Economic Development Foundation	508-746-3962
Denis Hanks	Plymouth Regional Economic Development Foundation	508-830-4280
Kevin Dennehy	Cape Cod Times (newspaper)	508-888-5454
Mary Lampert	Pilgrim Watch (Massachusetts Citizens for Safe Energy)	781-934-0389
Lee Hartmann	Director of Planning, Town of Plymouth	508-830-4108
Bobbi Clark	Plymouth Center Steering Committee/WATD News	508-746-6284
Pam Nolan	Town Manager, Town of Plymouth	508-830-4000
Jeff Luce	NSTAR Electric	508-957-4502
Dennis Galvam	NSTAR Electric	508-732-4206
Gregg Gethard	Old Colony Memorial (newspaper)	508-746-5585 x 309
Bob Dawson	Plymouth Area Chamber of Commerce	508-830-1620

At the Plymouth meeting, there were several concerns expressed about the ability of the local community to absorb additional nuclear units at the Pilgrim site.

Housing: Bob Dawson mentioned that during outages at the existing facility, some workers literally live in tents. Housing for a large influx of workers was characterized as “very haphazard.” There is no surplus of housing and 200 extra hotel rooms is the “best they can do.”

Residential construction is currently in the spotlight in the community, in part because they have some of the highest numbers of new units being constructed in the state. They are trying to use “smart growth” techniques to keep some control of the situation.

The cost of housing is high in the area (\$100 to \$1200 per month for a 2-bedroom apt) and would be higher if the population influx associated with a new nuclear plant were to occur. The cost of housing affects who transfers and affects the composition of the community. No complexes are being built [to accommodate outage workers—and by extension, any temporary work force], nor is there any interest in doing that. This is a regulatory issue for zoning. There is a bit more flexibility in the housing market in the winter.

The current plant has once-through cooling. For environmental reasons, they have to avoid outages in March, which limits when they can take the plant down, and makes it more difficult to use the tourist off-season. They still see 10,000-12,000 summer rentals but it's a fragmented market.

One idea to house the construction workforce is that Entergy might be able build their own on site. This would have the additional value that, because road access to the site is difficult, less additional pressure would be put on the nearby road net. Several intersections on State Routes 3A and 3 are level of service (LOS) F now. The company has 1600 acres at the site. Residential could be developed. There is a 10-year restriction in place (6 years left). The compound could be safety issue (releases at the site). They would like to see the buffer stay. Much of the land is in Ch. 61 Forestry-Managed Woodland designation, which gets them a 60-70% tax reduction.

Tax base. When Massachusetts deregulated, about 25% of the tax base went away. The tax base represented by the current merchant plant is \$15 million, which actually is part of a negotiated payment in lieu of taxes agreement. Annual payments are about \$1 million. The base represented by the existing plant begins to decline in 2008. Any new taxes would also have to be negotiated under a PILT, and the local people did not seem to like their chances in such a negotiation.

Schools. The Plymouth school system has about 9,000 enrolled students, which exceeds the capacity of the system. Adding the population associated with the new plant workforce of 400 or so with 2.1 children per family would require a whole new school, as well as most of the undeveloped land in the south part of town to house the families. State funding for schools has been cut.

Water and sewer. Many people are on septic treatment or have their own water supply. The

Town serves an area of 104 square miles, and its water supply (from wells) is limited.

Growth issues. Southeast Massachusetts is a very fast growing area, due to increasing suburbanization of Boston and growth on Cape Cod. There is increasing sharing of emergency services with Cape Cod and Kingston. Smart growth approaches are being used to try to keep some control over sprawl. Sen. Marc Pacheco of the Massachusetts State Senate had three days of hearings on the question. Said that resources are inadequate for Police/Fire/Emergency. There is unprecedented commercial growth in the Plymouth area, with all industrial parks full. Commercially “developable” land is a constraint. They always have a backlog of 25 to 30 companies that would like to locate in the area. Retail has seen a big change over the past few years. The Cape Cod Commission prevents development on the Cape, so forces development into southern Plymouth County.

Their preferred economic growth would be in bioscience and biotech, but this hasn't happened yet (not close enough to Boston).

One large development is The Pine Hills, south of the main Plymouth downtown area. It is 3000 acres, 3000 homes, and 1.2 M square feet of office space. It has been largely an Empty nesters community (just 5 children in 500 homes). It is worth about \$1 B and is now the second largest taxpayer.

Role of a new nuclear power plant. South Shore area would not look favorably on a new plant at Pilgrim. They regard such a facility as a target for terrorism. They are concerned that both property values and tourism would drop off. Tourism in particular is “touchy.” Disruption due to construction and negative publicity would be issues. Seabrook had months of demonstrators who were not shoppers.

Minority/low income. The Plymouth area has a very small minority population; the area is 98% white. Low income: affordable housing was available. Gap between low income rents and upper income decreasing as market tightens, leaving less affordable housing

Economy generally (Remarks by Dennis Galvam). Unemployment rate is currently ½ point below the state average. 5% of the labor force commutes north into the Boston area. 55% both live and work in the area, and family incomes are increasing. Assessor's report showed a \$1.5 B increase in value, roughly \$50,000 per house. Average taxes were up by \$400, although the tax rate fell. This also resulted in the loss of state aid.

Fishing, recreational and commercial Cooling towers would be proposed at the site. This is a Clean Water Act issue (pollution). EPA sets those limits.

West Feliciana Parish Meeting: Morning April 15

Mike Scott (PNNL) and Cristina Guerro (NRC) met with a group of 6 West Feliciana Parish government officials and other stakeholders at the St. Francisville Town Hall in St. Francisville, LA. The following individuals attended the meeting.

Meeting at St. Francisville, April 15, 2004		
Individual	Organization	Telephone Number
W.D. Spillman	Assessor	225-635-3350
Rucker Leake	St. Francisville Town Alderman	225-635-6149
Randy Richie	West Feliciana Assessor	225-635-3350
Wendell C. Fontendt	Chief of Police, Town of St. Francisville	225-635-4177
Stephen Jones	CDF	225-635-6767
Ivy Cutrer	West Feliciana Parish Sheriff's Department	225-635-3241

Findings:

Our estimate for them was that approximately 100-150 new people might move to the Parish as a result of a new plant being built at River Bend. This low number is because the applicant assumed a high proportion of jobs would be filled by existing residents, and that there would be extensive commuting from Baton Rouge.

They believe that infrastructure would be adequate. Highway 61 is being widened. To the north, which allows more people to commute into the area.

Housing: They were able to handle housing impacts during the construction of Unit 1 and have better zoning ordinances now. Baton Rouge is about a 20-min drive. Suburbanization of Baton Rouge is going on. Commercial lots 5-10 acres are going for about \$50K in Baton Rouge, but only \$6-\$20K in W. Feliciana Parish. 100 or so homes recently absorbed, plenty are platted. City is "built out," so new developments are out in the suburbs.

Related econ development: Two new shopping centers under development. The Community Development Foundation acts as a coordinator and communicator for agency-agency interaction. It's been very successful.

Education: among the lowest student teacher ratios in the state. They are 38-42% minority but in a (close) 3rd in the state on test scores. Town of Zachary in East Baton Rouge Parish would see quite a bit of the impact. Zachary has split its schools from the East Baton Rouge Parish school system. A lot of people moved into West Feliciana Parish because of the good school system. Parochial schools are a large part of local education in Louisiana.

Water: would have to upgrade some of their distribution lines from 6" up to 8", but they are doing that anyway. They have a great aquifer, and a complete parish-wide water system set up 20-25 years ago. This was one of the benefits of Unit 1 tax base.

Sewage: The Parish regulates, but there are individual sewage districts.

Fire: Inside the city, the rating is III, rural rating is V. There is a full time chief in town, with rural substations. They also have a training facility.

Entergy is 90% of the local tax base. Their tax rate is the lowest in the state (70 mills); elsewhere in the state they are 100-130 mills, with a few up to 200. For schools, the state reduces allocation for education standard as the locals provide more. In West Feliciana Parish, the state provides nothing, but the local district spends much more per student than the state average.

Emergency response/law enforcement. Very low crime rate and a new 9-1-1 center within 6 months. Every building in the Parish will be on GPS, with onboard maps and directions for emergency vehicles, law enforcement, school transportation, tax assessor.

Again a benefit of the plant tax base.

New recreation center featured in March 2004 issue of Landscape Design. Another tax benefit.

Tourism is a big draw in the Parish. E.g. bicycling.

Hospitals/Medical Lane hospital is <15 min away. There is also a large regional hospital.

Transportation: Many transportation upgrades in the state over the last few years for economic development were part of the TIME program (\$ cent gas tax). Part of highway 61 "accidentally" got left off the list of projects, but is now being worked. Other projects: a new Mississippi bridge on Route 10 to link I-55 to I-49 (st. Francisville approx. to New Roads, LA). Would link West Baton Rouge Parish. Start in 2010 (?)

Benefits to low Income/Minority in Last 10 years:

Better employment opportunities

Parish-wide water system

Black-topping of nearly all roads

More service agencies (recent St. Francisville town council \$3K donation to abused children intervention)

Grandkids (who had the benefits of plant) take care of the grandparents (who did not)

Note: West Feliciana Parish census and employment figures are warped by the presence

of 5000 prison inmates within the Parish.

East Feliciana Parish Meeting: Afternoon April 15

Mike Scott (PNNL) and Cristina Guerro (NRC) met with a group of 2 East Feliciana Parish government officials and other stakeholders at the Clinton Town Hall in Clinton, LA. The following individuals attended the meeting.

Meeting at Clinton, April 15, 2004		
Individual	Organization	Telephone Number
Carol Shirley	Main Street [Economic Development]	225-683-5241
Leann Lindsey	Department of Health and Human Services/Office of Public Health	225-683-8551

Findings:

Major industry in East Feliciana Parish is forest products and major state facilities 1) East Feliciana Mental Health, 2) Feliciana Forensics Facility (the 2 together have about 2000 residents), and 3) Dixon Correctional Facility (3000 inmates).

They see the new facility as a positive impact (numbers of workers expected to be very small, possibly 50 or so - probably around Jackson at the west edge of the parish). No tax benefits. Infrastructure would be able to handle.

Meeting with Oswego County, NY Officials: Morning July 8, 2004.

Mike Scott from PNNL and Jim Wilson from NRC met with several local officials from Plymouth County at the County Legislative Office Building, Oswego, NY.

The following were the individuals present at the meeting from the local community:

Meeting at Oswego, NY July 8, 2004		
Name	Affiliation	Contact or Email Address
Brian M. Frazier	Oswego County Department of Planning and Community Development	bfrazier@co.oswego.ny.us
Pam Caraccioli	Operation Oswego County	pcaraccioli@oswego county.org
Steven W. Thomas	Business owner (and developer)	peppercornsinc@aol.com
Corte Spencer	Oswego Health	cspencer@oswegohealth.org
Nancy Bellow	SUNY Oswego	nbellow@oswego.edu , 315-312-3492
Reuel A. Todd	Osewgo County Sheriff	MTodd@oswegoco.com
Joe Roszak	OCO Inc. (Oswego County Opportunity)	jroszak@oco.org
George Joyce	Operation Oswego County	315-387-2764
Russ N. Johnson	Osewgo County Legislative Chairman	315-349-8230
Ted Jerrett	Clerk, Oswego County Legislature	315-349-8247
David Bottar	Central New York (CNY) Regional Planning and Development Board	315-422-8276
Paul A.. Forestiere II	Cornell Cooperative Extension of Oswego County	315-963-7286

Comments made at the meeting follow:

Housing and Commercial Real Estate: (Steve Thomas, with help from Nancy Bellow, George Joyce, and others). There has been a decline in rental rates, with a "soft" housing market for some period of time. Cutting section 108 subsidies have been cut. There were about 600 people, but some have dropped off the waiting list. Construction personnel could help firm up this market. Transient/student populations occupy some of this space. During the original construction period the workers rented during the week.

Hotels are the part of the housing market most affected by outages at the existing plants. The outages are planned for the "shoulder season." There is a noticeable sales tax spike and increase in the restaurant trade. Hotels in the area do a lot of weekly rentals, but that market has been soft since about 1993, and below the national average. They have lost 70 units in Fulton, and several of the complexes with 20 units or under are not operating.

Construction workers occupied these spaces during the original construction, as well as rooms in homes. Expansion of RV parks is also possible.

There is a significant amount of real estate on the market. At below \$100K, the market is "wide open," i.e. houses are readily available for sale. At \$100K to \$250K it is tight; above \$250K it is again "wide open." Average housing price is probably about \$80K, versus \$250K in New England.

The communities do have comprehensive plans, and are adding water and sewer service.

Taxes.

They would expect an increase in sales taxes with a new plant, as well as sales taxes from vendors.

Expansion of the tax base would be considerable, but property taxes would depend on a negotiated PILT (payment in lieu of Taxes). An incentive would be required instead of a straight assessed value agreement. The existing plant PILT agreement goes to 2010, and also provides for low-cost power. There is also a production incentive, based on 95%-100% of production, which goes to the county.

Services.

(Corte Spencer) The hospital has a major upgrade and expansion of capacity (\$28 M expansion) underway. Annually have 4500 admissions. They have average hospital population of 700, with 150 in a nursing home. They are a full-service community hospital. The other community service hospital is in Fulton. Major work such as cardiological surgery go to Syracuse.

The town of Scriba is "going strong" on water and sewer development. The County has a water

facilitation committee.

Oswego and Mexico school systems are well rated (top 10 in New York). They are moving out of their temporary buildings at the high school and middle school. There are 9 school districts in the county, each with a high school. Most have middle schools. The Board of Cooperative Educational Service provides Vocational, technical, and adult education.

County and School budgets are separate.

SUNY Oswego provides post-secondary education. Cayuga Community college is a host site in community college cooperative agreements in the area of workforce education that target the energy industry (3 nuclear plants and a cogeneration facility). Community colleges also work on nursing with the hospitals. There are several large primary care clinics in the area as well. They graduate about 20 students/yr.

Community Action and Economic Development

There are about 40-50,000 people in "Greater Oswego." They have 9 % (8.8%) unemployment, and would like to see more family-based (family income?) jobs developed. They believe they need more diversity of industry to accommodate about 2,000 school graduates per year and employ at least the population commuting out of the area for employment. They have lost several large manufacturing plants, Nestle most recently. . For each lost 350-person plant, they need 10 startups with 1-35 people.) They believe that the plant closures have stabilized (they gained 1,200 jobs last year, and expect another 500 in 3 to 5 years). This would replace Nestle, and add an increase. They have significant vacant land and a number of brownfield sites that can be developed.

The workforce board and economic development agency believe they have viable clusters in energy, health care, manufacturing (agribusiness), and hospitality/leisure. They are trying to figure out how to market the area to the Generation X group: what comes out in focus groups is outdoor recreation, short commute times, 40 minutes from a major airport, low cost of living, low on diversity (but good ethnic/tolerance level).

Development plans include telecommunications. Optical fiber is in the ground(much of it "dark." The problem is not one of supply of broadband, but of users, redundancy, and price.

Low Income and Minorities

The energy companies provide about 1/3 of local United Way donations. Plus, they provide soft dollars and talent. Company personnel sit on the boards of directors of the civic clubs and help all of these agencies with loaned executives and volunteers

Alcan Aluminum for one (probably other manufacturers) would welcome the mobility involved

in having other large employers. [Less of a problem for HR departments for spousal employment.]

Traffic Issues.

County Route 1 has recently been renovated. They are “trying to slow them down” through Lycoming through education and enforcement. Routes into the plant area include county route 29, Route 1, Route 104, Route 3 and Interstate 81. Route 104e is due to be redone to relieve congestion. In 2005, Route 6 to New Haven is being upgraded. In 2007, Routes 3 to Mexico, NY will be upgraded. The road system has been steadily improved and made much better for heavy duty trucks. The Port Authority renewed interest in the cross-lake ferry to Oswego.

Summary.

They see no downside from a new plant. They have a large commuting population, and a total population in Oswego, Onondaga, and nearby counties of about 800,000. There are people who work at the plant from as far away as Rochester and Watertown.

The entire lake corridor is what New York calls an “Empire Zone” (special economic development zone) which can make locating there attractive.

Log of telephone call from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist) to Margaret Snow (Entergy Services, Inc., Environmental Support Specialist)

Snow: (501) 377-5924

Date: December 2, 2004

It is highly unlikely that there is any information available, since construction of Grand Gulf Nuclear Station Unit 1, on Federal and State listed species and on any special habitats (such as wetland and floodplains, etc.) along the Baxter Wilson and Franklin transmission corridors.

Log of telephone call from Jim Becker (Pacific Northwest National Laboratory, Terrestrial Ecology Scientist) to Margaret Snow (Entergy Services, Inc., Environmental Support Specialist)

Snow: (501) 377-5924

Date: December 7, 2004

Right-of-way maintenance practices along the transmission line corridors (Baxter Wilson and Franklin lines) of Grand Gulf Nuclear Station Unit 1 consist of bush hogging on an as-needed basis.

From: David_Soileau@fws.gov
Sent: Tuesday, November 09, 2004 1:52 PM
To: Becker, James M
Cc: deborah_fuller@fws.gov
Subject: Re: FW: LBB questions

Hey Jim,

I finally had a chance to review your questions, and hopefully you'll find my answers helpful.

Question #1: "Approximately how far is the reintroduction area from the southern border of Claiborne County, Mississippi?"

Answer: The northern boundary of the LBB "repatriation complex" is about 45 miles from the southwest corner of Claiborne County, MS

Question #2: "When did the repatriation/restoration begin?"

Answer: The first bears were released in the repatriation complex in March 2001.

Question #3: "About how many bears have been reintroduced to date?"

Answer: My records indicate that, to date, we have reintroduced 16 adult females and 40 cubs as part of the repatriation project.

Question #4: "Are these bears breeding?"

Answer: It is likely that breeding is now occurring in the repatriation complex, but we have not collected any specific data to document this.

Question #5: "Are they known to use (I assume the bears are telemetered), or are they projected to use, the Mississippi River corridor north of the reintroduction area (i.e., that would include Claiborne County [where the Grand Gulf site is located])?"

Answer: The bears have dispersed throughout the Repatriation Complex, and some have left the Complex "proper". According to my records, none of the repatriated bears have gone as far north as Vidalia, LA.

Question #6: "Could you please provide a reference for the above information I'm asking for on the repatriation/restoration."

Answer: Sorry, the project is on-going and a summary document has not been compiled yet. My information is based on e-mails, field notes, brief written updates, and telephone conversations. You can either reference "USFWS. Unpublished data." or "David Soileau and Debbie Fuller (USFWS), pers. comm., 2004."

Question #7: "The Tensas River Basin contains an estimated 60 to 100 bears (FWS 1995). Are these numbers still correct and is there a more recent reference to use (FWS 1995 is the recovery plan)?"

Answer: The most recent estimates that I am aware of are by Boerson (2001) and Beausoleil (1999). Boerson (2001) estimated that there are 115 total bears on Tensas River NWR, and Beausoleil (1999) estimated 45 bear total for the Deltic lands. This would yield a total of about 160 bears for the Tensas River Basin. References: Beausoleil, R. A. 1999. Population and spatial ecology of the Louisiana

black bear in a fragmented bottomland forest. M. S. Thesis, University of Tennessee, Knoxville. 122 pp.

Boersen, M.R. 2001. Abundance and density of Louisiana black bears on the Tensas River National Wildlife Refuge. M.S. Thesis, University of Tennessee, Knoxville. 89 pp.

Question #8: "The upper and coastal units of the Atchafalaya River Basin combined support a

subpopulation of 30 to 60 bears (FWS 1995). Are these numbers still correct and is there a more recent reference to use?"

Answer: The most recent estimate that I am aware of is by Triant (2001). She estimated 52 bears in the upper Atchafalaya Basin and 92 in Louisiana's coastal subpopulation.

Reference:

Triant, D. A. 2001. Estimating population size and genetic diversity of two populations of black bears in south central Louisiana. M.S. Thesis. Louisiana State University, Baton Rouge. 66 pp.

Question #9: "The LBB is primarily restricted to large tracts of heavily wooded bottomland hardwoods and swamps, although the range would also include adjacent upland habitat types (Final Mississippi River Bridge EA [March 2003]). What can be said, in addition to the foregoing statement, about the relative value of upland hardwood forests that are located adjacent to bottomland hardwood forests (such as those on the Loess Bluffs located adjacent to the MS River bottomlands, both on the Grand Gulf site). Are the two habitat types (when located adjacent to each other) equally likely to be used by LBBs and are they generally of equal value to LBBs? If you could provide anything of substance in addition to what's provided in the Final Mississippi River Bridge EA (March 2003) and a reference, it would be much appreciated."

Answer: As best I can recall, all "preferred habitat" descriptions for Louisiana black bears focus on bottomland hardwood forests. Upland forests generally are not considered "prime" habitats for Louisiana black bears. Hence the significant population decline in LBBs directly correlated to the massive, past conversion of bottomland hardwood forests to agriculture. No such conversion of uplands has occurred in Louisiana, but we really don't have many bears in upland forests (like Kisatchie National Forest, for example). Bears are somewhat nomadic (with very large ranges) and it would be reasonable to assume that they would periodically use upland forests that were adjacent to bottomland hardwoods. [Sorry, no reference for this discussion. I think the statement from the Final Miss River Bridge EA is accurate.]

Question #10: "The Mississippi Department of Wildlife, Fisheries, and Parks (DWFP) has reported occurrences of the Florida panther in the vicinity of the Grand Gulf Early Site Permit site. However, Dave stated in April during my visit to the River Bend site that these are certainly mountain lions (*Puma concolor*) moving eastward from the western United States, not Florida panthers. I completely trust you on this Dave, but could you please provide me a better reference for this statement."

Answer: We have very few confirmations of panthers in Louisiana. A scientific group has been logging these panther occurrences and have posted their findings on the web at <http://www.easterncougarnet.org/> When I expressed that it appeared that most occurrences in Louisiana are from an expanding western population, it was based on information that I read on that webpage. The Louisiana Dept of Wildlife and Fisheries (LDWF) performs much of the endangered species monitoring/tracking in our state. According to LDWF, their records indicate that there have only been three confirmed cougar occurrences in Louisiana (1965, Caddo Parish; 1977, Concordia Parish, and 2002, Iberia Parish). Regarding the 2002 record, we do know that this was a North American cougar but no information is available to determine if it was a Florida panther (*Puma concolor coryi*). There are no records for the Riverbend area. Furthermore, they state that their records indicate that we do not have a wild population of these animals.

I hope that this answers your questions.

FYI: We have written an EA for the LBB repatriation project, but I did not include a copy because the project is pretty dynamic and some of the information in the EA is, therefore, not currently accurate (I'm specifically referencing the numbers of bears that are moved each year - - - the EA presents an estimate/goal, but actual numbers are slightly variable). We are currently revising the EA, and the new information will include revisions that reflect the actual number of

bears that have been relocated each year.

Good luck,
David Soileau, Jr.
U.S. Fish and Wildlife Service
646 Cajundome Blvd., Suite 400
Lafayette, Louisiana 70506
(337) 291-3109

"Becker, James
M" To: david_soileau@fws.gov, deborah_fuller@fws.gov
<james.becker@pn i.gov> cc:
Subject: FW: LBB questions

11/03/2004 01:21
PM

Dave and Debbie,

The Mississippi Department of Wildlife, Fisheries, and Parks (DWFP) has reported occurrences of the Florida panther in the vicinity of the Grand Gulf Early Site Permit site. However, Dave stated in April during my visit to the River Bend site that these are certainly mountain lions (*Puma concolor*) moving eastward from the western United States, not Florida panthers. I completely trust you on this Dave, but could you please provide me a better reference for this statement.

Thanks again very much,

Jim

-----Original Message-----

From: Becker, James M
Sent: Tuesday, November 02, 2004 2:43 PM
To: 'deborah_fuller@fws.gov'; 'david_soileau@fws.gov'
Subject: LBB questions

Debbie, Dave,

Could you please answer the following with regard to the repatriation/restoration of LBBs into the Red River/Three Rivers area of east-central Louisiana:

Approximately how far is the reintroduction area from the southern border of Claiborne County, Mississippi?
When did the repatriation/restoration begin?
About how many bears have been reintroduced to date?
Are these bears breeding?
Are they known to use (I assume the bears are telemetered), or are they projected to use, the Mississippi River corridor north of the reintroduction area (i.e., that would include Claiborne County [where the Grand Gulf site is located])?

Could you please provide a reference for the above information I'm asking for on the repatriation/restoration.

In addition, could you please address the following questions.

The Tensas River Basin contains an estimated 60 to 100 bears (FWS 1995). Are these numbers still correct and is there a more recent reference to use (FWS 1995 is the recovery plan)?

The upper and coastal units of the Atchafalaya River Basin combined support a subpopulation of 30 to 60 bears (FWS 1995). Are these numbers still correct and is there a more recent reference to use?

The following is a most important question.

The LBB is primarily restricted to large tracts of heavily wooded bottomland hardwoods and swamps, although the range would also include adjacent upland habitat types (Final Mississippi River Bridge EA [March 2003]). What can be said, in addition to the foregoing statement, about the relative value of upland hardwood forests that are located adjacent to bottomland hardwood forests (such as those on the Loess Bluffs located adjacent to the MS River bottomlands, both on the Grand Gulf site). Are the two habitat types (when located adjacent to each other) equally likely to be used by LBBs and are they generally of equal value to LBBs? If you could provide anything of substance in addition to what's provided in the Final Mississippi River Bridge EA (March 2003) and a reference, it would be much appreciated.

Thanks very much Debbie and Dave for your help,

Jim Becker

Grand Gulf Trip Report: Historic and Cultural Resources Meetings

**Darby C. Stapp
Pacific Northwest National Laboratory
Meetings: April 2004
Prepared: January 11, 2005**

I arrived in Mississippi on April 14, 2004 and had a project meeting that night.

On April 13, 2004, we all went to the Grand Gulf facility and had a series of discussions and a site tour. Following the site tour, we all started revising our sections. I then went to visit the prehistoric burial mound (22-Cb-522), located in an open setting near the weather station. It still had a locked chain link fence around it. It is heavily overgrown, and does not look like much remains.

I then went to the site of the Callendar House. The area where the house once stood had been totally excavated out to obtain soil for a construction project. No evidence of the house remains. A large early twentieth century barn still stood adjacent to the house location. I also observed the nearby fields. Nevertheless, the site integrity is gone and I do not believe it would be considered eligible for the National Register of Historic Places.

I then went to see the remnant of the historic railroad. Only a raised rail bed remained. Not very interesting.

On April 14, 2004, I went to the Grand Gulf Military Park and met with T.W. (Bud) Ross (Executive Director, Grand Gulf Military Monument), Claire May (Administrative Assistant, Grand Gulf Military Park), and Catherine Williams. Joining me were Cristina Guerrero (NRC) and Dave Anderson (PNNL). We discussed the early site permit process for Grand Gulf and ask for their thoughts on siting a new plant there. They expressed interest in Grand Gulf Nuclear Plant having a visitor center where people go and be reassured of the safety aspects. It would be nice for the image of the park.

I asked about whether they were concerned about possible visual effects from a proposed cooling tower. They were not concerned about the visual aspects, because a person would only be able to see it if they were down by the river or up on the viewing stand.

They indicated very few people stay away from the park because of concern over the nuclear plant.

On April 14, 2004, I went to the Mississippi Historic Preservation Office and conducted a records search, assisted by Cliff Jenkins and David Abbott. I then met with Jim Woodrick (Mississippi Department of Archives and History). We discussed the historic railroad that passed through the present-day Grand Gulf Military Park. He indicated that the railroad was important, however, if it came to assessing the effect of the Grand Gulf project on the segment of the railroad that exists within the plant boundaries, his opinion is there would be no effect. The state's approach to linear features such as this is to identify a segment where the integrity is excellent, and work to preserve that. The segment within the park would not be that segment.

On April 15, we went to the River Bend facility.

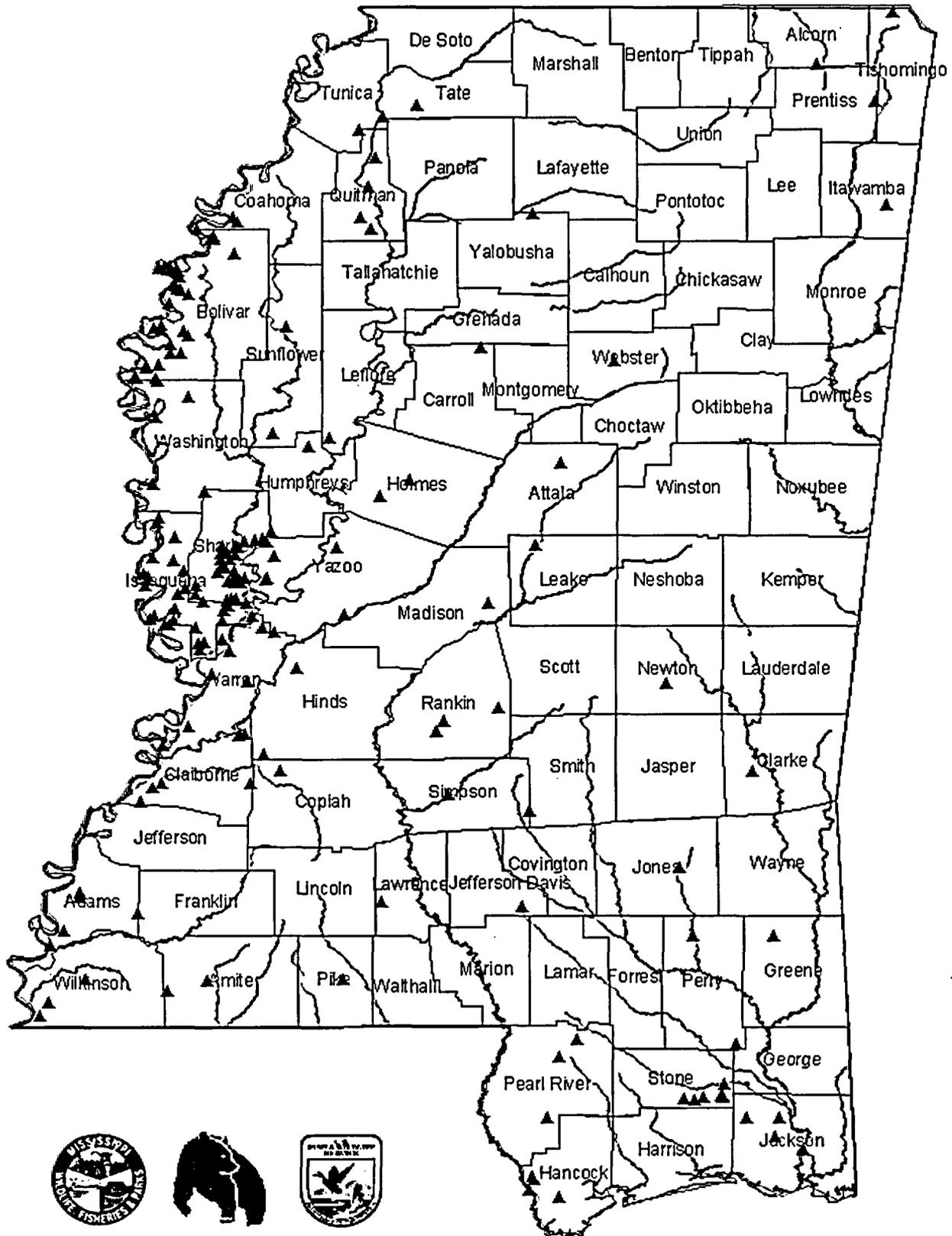
Cristina Guerrero was my NRC escort while at Grand Gulf. Barry Zalzman was my NRC contact while at Riverbend.

Notes found on Darby Stapp Laboratory Notebook for Grand Gulf (L21-150, pp.4 - 7).

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Mississippi Black Bear Sightings 1996 - 2004



Updated: August 2004