APPENDIX A
COORDINATION LETTERS

In the course of preparing this EIS, interaction efforts among state and federal agencies were necessary to discuss issues of concern or other interests that could be affected by the Proposed Action, obtain information pertinent to the environmental impact analysis of the Proposed Action, and initiate consultations or permit processes. Following are the coordination letters sent by various agencies for each of the four candidate sites.

A.1 MATTOON

The following agencies sent coordination letters:

- U.S. Fish and Wildlife Service
- Illinois Department of Natural Resources
- Coles County Highway Department
- Mattoon Township Highway Department
- Bureau of Indian Affairs
- Illinois Historic Preservation Agency

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Marion Illinois Suboffice (ES)
8588 Route 148
Marion, IL 62959
(618) 997-3344

April 14, 2006

Mr. Daniel Wheeler
Illinois Dept. of Commerce and
Economic Development
Office of Coal Development
620 East Adams Street
Springfield, Illinois 62701

Dear Mr. Wheeler:

The U.S. Fish and Wildlife Service has been requested to provide threatened and endangered species and critical habitat information associated with possible location of the proposed FutureGen power plant at a site identified as Mattoon – Dole #1 Site, located in Coles County, Illinois. To assist in our review, we have been provided township/section/range location information, an Illinois State Geological Survey map with the site identified, information regarding the land cover occurring on the site and a color infrared aerial photo of the site.

Our records do not indicate the known presence of any federally listed threatened or endangered species on the Mattoon – Dole #1 Site. County records indicate the potential presence of the endangered Indiana bat (*Myotis sodalis*) in Coles County. This species occupies caves and abandoned mines during the winter. During the remainder of the year, Indiana bats utilize trees with rough or exfoliating bark and/or cavities for roosting. Although Indiana bats will forage over open areas, they prefer to forage within the canopy of forests. Land cover on the Mattoon – Dole #1 Site consists of 100% cropland. Therefore, suitable habitat for this species is not present.

Finally, there is no designated critical habitat for federally listed threatened or endangered species in Coles County.

Thank you for the opportunity to provide information regarding threatened and endangered species. Please contact me at 618/997-3344, ext. 340, should you have any questions or require further assistance.

Sincerely,

Joyce A. Collins
Assistant Field Supervisor

cc: IDNR (Rettig)

Illinois Department of
Natural Resources
One Natural Resources Way • Springfield, Illinois 62702-1271
http://dnr.state.il.us

Rod R. Blagojevich, Governor
Sam Flood, Acting Director

September 13, 2006

Dan Wheeler
IL Department of Commerce & Economic Opportunity
620 East Adams Street
Springfield, IL 62701

Re: FutureGen Mattoon – Threatened or Endangered Species, Natural Area, And Wetland Review Updates
Project Number's: 0604520, 0604761, 0604762, 0604763, & 0703118

Dear Mr.Wheeler :

The Department has conducted a more detailed review, based on additional site specific information, for each of the projects identified above. This letter contains recommendations to avoid or minimize adverse impacts to threatened or endangered species and Natural Areas, as well as the wetland mitigation required under State law for potential impacts to wetlands.

Project Number 0604520 - Proposed Power Plant & C02 Sequestration Site (Dole Property)

The Department terminated the Consultation Process on April 11, 2006. There are no documented threatened species, endangered species or Natural Areas in the vicinity of this site.

The original review did not identify any state jurisdictional wetlands on this site. A wetland delineation identified a 0.066 acre State jurisdictional wetland on property adjacent to the northeast corner of this site. The mitigation ratio required for temporary impacts to this wetland is between 1.0:1 and 2.0:1. The mitigation ratio required for permanent impacts is between 1.5:1 and 3.0:1.

Project Number 0604761 – Primary Cooling Water Corridor

Upland Sandpiper (Endangered in Illinois), Kirtland's Snake (threatened in Illinois), Eastern Sand Darter (threatened in Illinois), and the Riley Creek Natural Area were identified as in the vicinity of this corridor. Upon further review, the Department has determined that the corridor is not in the vicinity of Upland Sandpiper habitat. The Riley Creek Natural Area supports the Eastern Sand Darter.

Erosion control is especially important to minimize the potential for sedimentation impacts from construction activities adjacent to the stream. The Department recommends that Riley Creek be directionally bored to minimize the potential for adverse impact to Riley Creek and the Eastern Sand Darter. Cassell Creek is a tributary to Riley Creek and may also support the Eastern Sand Darter. Cassell Creek should also be directionally bored. An Incidental Take Authorization for impacts to the Eastern Sand Darter may be required in addition to mitigation for impacts to the Riley Creek Natural Area if these creeks cannot be directionally bored. The Kirtland's Snake is known to occur at the western edge of Charleston. Even though there are no known records within this corridor, the corridor does contain habitat that could be occupied by the Kirtland's Snake. The following recommendations should be incorporated into the construction plans to minimize the potential for adverse impacts to the Kirtland's Snake.

- Construction crews should be educated as to what a Kirtland's snake look's like and allow them to move out of harms way if encountered.
- Trenches should be backfilled immediately after piping has been installed, if possible.
- If trenches must be left open, they should be covered with plywood or similar material at the end of the day. This material should be covered with enough dirt to keep snakes from getting under it.
- Trenches that have not been backfilled must be inspected for the presence of Kirtland's Snakes at the beginning of each day. The Department must be contacted to make arrangements for the a staff biologist to capture and relocate any Kirtland's Snakes trapped in the open trench.

The potential for impacts to the Kirtland's Snake, Eastern Sand Darter, and the Riley Creek Natural Area are considered minor and will not jeopardize the continued existence of the Eastern Sand Darter or Kirtland's Snake in the State, or result in the destruction of the Riley Creek Natural Area.

A wetland delineation identified six State jurisdictional wetlands within this corridor. Impacts to wetlands 1, 2, 3, and 6 can be mitigated at a 1.0:1 ratio if disturbed areas are restored to their original condition after piping has been installed. Temporary impacts to wetlands 4 and 5 may occur if the staging area for directional bores under Riley Creek and Cassell Creek must be located in the wetland. These impacts can be mitigated at a 1.0:1 ratio if disturbed areas are restored to their original condition after piping has been installed.

Project Number 0604762 – Secondary Source Cooling Water Corridor

The intake structure for this corridor will impact the Cooks Mill Segment of the Kaskaskia River Natural Area which supports the Spike Mussel (threatened in Illinois). The construction of the intake should be done during low flow conditions. Erosion control is especially important to minimize these impacts. A mussel survey of the intake footprint must be done prior to construction activities associated with the intake. An Incidental Take Authorization is required to move Spike mussels out of intake footprint to other suitable habitat. Impacts resulting from the construction and operation of the intake as a secondary

cooling water source are considered minor and will not jeopardize the continued existence of the Spike mussel in the State, or result in the destruction of the Cooks Mill segment of the Kaskaskia River Natural Area.

A wetland delineation identified two State jurisdictional wetlands in the area where the intake structure and pump house will be constructed. The larger forested wetland (0.308 acre) will not be impacted. Construction activities will result in permanent impacts to the smaller emergent wetland (0.068 acre). The mitigation ratio required for these impacts will be between 1.5:1 and 3.0:1.

Project Number 0604763 – 138kV Electric Gas Corridor

There are no documented threatened species, endangered species or Natural Areas within these corridors. The wetland delineation did not identify any State jurisdictional wetlands within these corridors.

Project 0703118 – 345kV Corridor

The preliminary review of this corridor identified the Bigeye Chub (endangered in Illinois), Kirtland's Snake (threatened in Illinois), and the Neoga Railroad Prairie Natural Area in the vicinity of this corridor. Upon further review, the Department has determined that the corridor is not in the vicinity of the Neoga Railroad Prairie Natural Area. The record documenting the presence of the Bigeye Chub in the Little Wabash River is very old (7-23-1950) and was collected in the middle of what is now Lake Mattoon. There are no other documented records of the Bigeye Chub within five miles of this corridor. The Kirtland's Snake is known to occur at the vicinity of Lake Paradise to the west of this corridor. Even though there are no known records within this corridor, the corridor does contain habitat that could be occupied by the Kirtland's Snake. The recommendations, made earlier in this letter, to minimize impacts to the Kirtland's Snake are appropriate for this corridor as well.

A wetland delineation identified eleven State jurisdictional wetlands within this corridor. Wetland impacts are avoidable if the existing 138kV corridor is utilized for the 345kV transmission lines. Impacts to these wetlands will not be avoidable if the 345kV corridor is located adjacent to the existing 138kV corridor. The mitigation ratios required for impacts to forested wetlands 12, 13, 14, 15, 19, and 21 along an adjacent corridor will be between 1.5 and 3.0:1. The mitigation ratios required for impacts to forested wetlands 16, 17, and 20 along an adjacent corridor will be between 2.5:1 and 5.5:1. Impacts to wetland 18 are unlikely if utility poles are not sited in this wetland. Wetland 22 will not be impacted.

Please do not hesitate to contact me at (217) 785-5500 if you should have any questions.

Michael Branham
Division of Ecosystems and Environment
217-785-5500

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Illinois Department of
Natural Resources
One Natural Resources Way • Springfield, Illinois 62702-1271
http://dnr.state.il.us

Rod R. Blagojevich, Governor
Sam Flood, Acting Director

October 24, 2006

Dan Wheeler
IL Department of Commerce & Economic Opportunity
620 East Adams Street
Springfield, IL 62701

Re: Follow-Up Questions on Diverting WWTP Effluents from Kickapoo and Cassell Creeks

Dear Mr.Wheeler :

The USDOE has requested additional information regarding the potential for impacts to Kickapoo and Cassell Creeks resulting from the diversion of the Mattoon and Charleston WWTP effluents. This effluent water would be the primary source of cooling water for the FutureGen project. The Department has reviewed the response prepared by Patrick Engineering (dated 10-24-06) and concurs with their findings. The diversion of this effluent water will also provide an opportunity to study the potential for beneficial impacts to three listed mussels not previously mentioned.

The Kidneyshell (*Ptychobranchus fasciolaris*) is endangered in Illinois and is only known to occur in Coles county. The Snuffbox (*Epioblasma triquetra*) is endangered in Illinois and is only known to occur in Coles and Douglas counties. The Little Spectaclecase (*Villosa lienosa*) is threatened in Illinois and known to occur in Coles, Douglas, Iroquois, and Vermilion counties. There are valid Coles county records for all three of these mussels in a reach of the Embarras River upstream of its confluence with Kickapoo Creek. The 7Q10 of the Embarras River in the vicinity of these records is between 2.0 cfs and 3.4 cfs. The relationship between the occurrence of specific listed species and the 7Q10 value, if any, is currently undocumented. The diversion of most of the Mattoon effluent should result in a 7Q10 of 3.4 cfs or less in the reach of the Embarras River located downstream of the Kickapoo Creek confluence.

The Embarrass River, downstream of the Kickapoo Creek confluence, should be monitored if Mattoon is selected for the FutureGen site to determine if these species ultimately populate this reach of the river. This data could be very valuable when considering if additional study of a relationship between 7Q10 values and specific species occurrence is worth pursuing. Please do not hesitate to contact me at (217) 785-5500 if you should have any questions.

Michael Branham
Division of Ecosystems and Environment

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Steven L. Newlin
Coles County Engineer , Acting

PHONE (217) 348-0527
FAX (217) 348-7322

Coles County Highway Department

COLES COUNTY COURTHOUSE
651 JACKSON STREET, ROOM 16
CHARLESTON, ILLINOIS 61920

8 September, 2006

Mr. David Wortman
City of Mattoon
Director of Public Works
208 North 19th Street
Mattoon, Illinois 61938

Subject: Status of County Highways

Dear Mr. Wortman:

The Coles County Highway Department currently maintains a Class II truck route along County Highway 18 (County Road 1000N) that begins at County Highway 13 (County Road 200E) and ends at U.S. Route 45(County Road 600E). The County also has an adjoining Class II truck route along County Highway 18 currently under construction. This section begins at U.S. Route 45(County Road 600E) and ends at (County Road 900E). This section includes a new interchange with Interstate 57. The estimated completion of this construction is June 1, 2008.

The remaining portion of County Highway 18 from County Road 200E to Illinois Route 121 west of the proposed FutureGen site is scheduled to be upgraded to a Class II truck route in fiscal year 2008(beginning July 1, 2007).

Upon completion of the current and proposed construction projects, County Highway 18 will be a non-stop Class II truck route from Interstate Route I-57 to Illinois Route 121.

Sincerely,

Steven L. Newlin
Coles County Engineer, Acting

cc: file

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Mike Diepholz

Phone: (217) 235-2712

MATTOON TOWNSHIP HIGHWAY DEPARTMENT
2679 E County Rd 600 N
Mattoon, IL 61938

September 13, 2006

David Wortman
Public Works Director
208 North 19th Street
Mattoon, IL 61938

Subject: Placement of Potable Water Pipeline on County Road 800N

David,

Mattoon Township has jurisdiction over CR 800N in the area near the FutureGen site. Mattoon Township will allow a potable water pipeline to be placed on the right-of-way of County Road 800 N to serve the FutureGen Plant.

Let me know if there is any other way Mattoon Township can assist in helping FutureGen come to our area.

Sincerely,

Mike Diepholz
Mattoon Township,
Road Commissioner

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United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Oklahoma Regional Office
P.O. Box 8002
Muskogee, OK 74402-8002

IN REPLY REFER TO:
Division of Environmental
Safety and Cultural Resources

Mr. Mark L. McKoy
U.S. Department of Energy
P. O. Box 880
Morgantown, West Virginia 26507-0880

JAN 2 2 2007

Dear Mr. McKoy:

On December 11, 2006, the Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), received an information request from the U.S. Department of Energy (USDOE) regarding significant impacts to archeological, religious or cultural sites from the construction and operation of a coal-fueled electric power and Hydrogen gas (H_2) production plant located in Illinois or Texas. The EORO has no comments regarding the project.

The projects in Illinois are within the jurisdictional area of the Bureau's Eastern Region and the projects in Texas are within the jurisdiction area of the Bureau's Southern Plains Region. Both Regions have been provided the notice by copy of this letter. As the other two Regions may have environmental and/or cultural resources concerns relating to the project, it is recommended that the USDOE coordinate directly with them on any of their concerns. The contact addresses are:

Franklin Keel, Regional Director
Eastern Regional Office
545 Marriott Drive, Suite 700
Nashville, Tennessee 37214

Dan Deerinwater, Regional Director
Southern Plains Regional Office
P.O. Box 368
Anadarko, Oklahoma 73005-0368

If any additional information is required, please contact Mr. Bob Coleman, Division Chief, Division of Environmental, Safety and Cultural Resources, EORO, at (918) 781-4660.

Respectfully,

Regional Director

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Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • Teletypewriter Only (217) 524-7128

Voice (217) 782-4836

www.illinois-history.gov

Coles County PLEASE REFER TO: IHPA LOG #011041106
Mattoon
Dole #1
Section 8, 9, 10, 11, 12, 13, 16, 21, 24 T12N R7E
Power Plant/FutureGen

January 30, 2007

Mr. Ronald Swager
Patrick Engineering, Inc.
300 West Edwards Street, Suite 200
Springfield, Illinois 62704-1907

Dear Sir:

Acre(s): 527 Site(s): 0
Archaeological Contractor: UMA/Finney

Thank you for submitting the results of the archaeological reconnaissance. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

Our staff has reviewed the archaeological Phase I reconnaissance report performed for the project referenced above. The Phase I survey and assessment of the archaeological resources appear to be adequate. Accordingly, we have determined, based upon this report, that no significant historic, architectural, and archaeological resources are located in the project area.

Please submit a copy of this letter with your application to the state or federal agency from which you obtain any permit, license, grant, or other assistance. Please retain this letter in your files as evidence of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

AEH

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A.2 TUSCOLA

The following agencies sent coordination letters:

- U.S. Fish and Wildlife Service
- Illinois Department of Natural Resources
- City of Arcola
- City of Tuscola
- Duke Energy Generation Services
- Urbana and Champaign Sanitary District
- Tuscola-Douglas County FutureGen Task Force
- Bureau of Indian Affairs
- Illinois Historic Preservation Agency

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Marion Illinois Suboffice (ES)
8588 Route 148
Marion, IL 62959
(618) 997-3344

April 14, 2006

Mr. Daniel Wheeler
Illinois Dept. of Commerce and
Economic Development
Office of Coal Development
620 East Adams Street
Springfield, Illinois 62701

Dear Mr. Wheeler:

The U.S. Fish and Wildlife Service has been requested to provide threatened and endangered species and critical habitat information associated with possible location of the proposed FutureGen power plant at a site identified as Tuscola – Pflum #2 Site, located in Douglas County, Illinois. To assist in our review, we have been provided township/section/range location information, an Illinois State Geological Survey map with the site identified, information regarding the land cover occurring on the site and a color infrared aerial photo of the site.

Our records do not indicate the known presence of any federally listed threatened or endangered species on the Tuscola – Pflum #2 Site. County records indicate the potential presence of the endangered Indiana bat (*Myotis sodalis*) in Douglas County. This species occupies caves and abandoned mines during the winter. During the remainder of the year, Indiana bats utilize trees with rough or exfoliating bark and/or cavities for roosting. Although Indiana bats will forage over open areas, they prefer to forage within the canopy of forests. Land cover on the Tuscola – Pflum #2 Site consists of 100% cropland. Therefore, suitable habitat for this species is not present.

Finally, there is no designated critical habitat for federally listed threatened or endangered species in Douglas County.

Thank you for the opportunity to provide information regarding threatened and endangered species. Please contact me at 618/997-3344, ext. 340, should you have any questions or require further assistance.

Sincerely,

Joyce A. Collins
Assistant Field Supervisor

cc: IDNR (Rettig)

Illinois Department of
Natural Resources
One Natural Resources Way • Springfield, Illinois 62702-1271
http://dnr.state.il.us

Rod R. Blagojevich, Governor
Sam Flood, Acting Director

September 14, 2006

Dan Wheeler
IL Department of Commerce & Economic Opportunity
620 East Adams Street
Springfield, IL 62701

Re: FutureGen Tuscola – Threatened or Endangered Species, Natural Area, And Wetland Review Updates
Project Number's: 0604527, 0604748, 0604749, & 00604750

Dear Mr.Wheeler:

The Department has conducted a more detailed review, based on additional site specific information, for each of the projects identified above. This letter contains recommendations to avoid or minimize adverse impacts to threatened or endangered species and Natural Areas, as well as the wetland mitigation required under State law for potential impacts to wetlands.

Project Number 0604527 - Proposed Power Plant Site (Pflum Property)

The Department terminated the Consultation Process on April 11, 2006. There are no documented threatened species, endangered species or Natural Areas in the vicinity of this site.
The wetland delineation did not identify any State jurisdictional wetlands in the vicinity of this site.

Project Number 0604748 – 345kV Corridor

The preliminary review concluded that adverse impacts to threatened or endangered species and Natural Areas are unlikely. Upon further review, the Department has determined that portions of the corridor may provide habitat for the Kirtland's Snake (threatened in Illinois). The following recommendations should be incorporated into the construction plans to minimize the potential for adverse impacts to the Kirtland's Snake.

- Construction crews should be educated as to what a Kirtland's snake look's like and allow them to move out of harms way if encountered.
- Trenches should be backfilled immediately after piping has been installed, if possible.

- If trenches must be left open, they should be covered with plywood or similar material at the end of the day. This material should be covered with enough dirt to keep snakes from getting under it.
- Trenches that have not been backfilled must be inspected for the presence of Kirtland's Snakes at the beginning of each day. The Department must be contacted to make arrangements for a staff biologist to capture and relocate any Kirtland's Snakes trapped in the open trench.

The potential for impacts to the Kirtland's Snake are considered minor and will not jeopardize the continued existence of the Kirtland's Snake in the State.

A wetland delineation identified twelve State jurisdictional wetlands within this corridor. Impacts to wetlands 1, 2, 4, 6, 7, 8, 9, 10, 11, and 12 are unlikely if utility poles are not sited in wetland areas. The Department must be consulted regarding the appropriate mitigation if a utility pole must be sited in one or more wetland areas. The mitigation ratio required for the removal of any trees in the vicinity of wetland 3 will be between 1.5:1 and 3.0:1. The mitigation ratio required for impacts to forested wetland 5 will be between 2.5:1 and 5.5:1.

Project Number 0604749 – CO2 corridor and Injection Site

There are no documented threatened species, endangered species or Natural Areas within the CO2 corridor. There are no documented threatened species, endangered species or Natural Areas in the vicinity of the injection site.

A wetland delineation identified one State jurisdictional wetland (Area 15) within the CO2 corridor. Impacts to this wetland can be mitigated at a 1.0:1 ratio if disturbed areas are restored to their original condition after piping has been installed. Four State jurisdictional wetlands (Area 16, 17, 18, & 19) were identified within the plume area associated with the injection site. These wetlands will not be impacted.

Project Number 0604749 – Cooling Water Corridor

The preliminary review concluded that adverse impacts to threatened or endangered species and Natural Areas are unlikely. The Equistar chemical plant was identified as the provider of cooling water for the FutureGen site. At the time of the review the Department did not know that the source of Equistar's water was the Kaskaskia River. Equistar maintains the water level of a large on-site reservoir by pumping water from the Kaskaskia River. During times of low flow groundwater pumps located approximately 20 miles upstream are utilized to maintain sufficient water in the Kaskaskia River to meet Equistar's needs. The Kaskaskia River from the Douglas-Champaign county line to the Equistar intake has been identified as a high mussel diversity stream known as the Chicken Bristle Segment of Kaskaskia River Natural Area. The Department conducted a mussel survey August 30, 2006, to document the status of this Natural Area and verify if any listed species of mussels were present. Very few mussels were found and none of them were listed. This segment of the river is unlikely to maintain it's status as a Natural Area. Therefore,

Consultation regarding the cooling water source and the corridor to get it to the FutureGen site is terminated.

A wetland delineation identified two State Jurisdictional Wetlands in the vicinity of the Equistar Plant (Area 13) and the water intake (Area 14). Impacts to wetland 13 can be mitigated at a 1.0:1 ratio if disturbed areas are restored to their original condition after piping has been installed. There will be no impacts to wetland 14 associated with FutureGen.

Please do not hesitate to contact me at (217) 785-5500 if you should have any questions.

Michael Branham
Division of Ecosystems and Environment
217-785-5500

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City of Arcola

114 N. Locust Street
P.O. Box 215

Arcola, Illinois 61910

Phone: (217) 268-4966
Fax: (217) 268-4968

April 26, 2006

Patrick Engineering
300 West Edwards Street,
Suite 200
Springfield, IL 62704

RE: FutureGen Project

This letter is in reference to your investigation into the feasibility of Tuscola, IL as a site for the potential FutureGen Project. The City of Arcola in accordance with its zoning ordinance controls zoning 1.5 miles out from the municipal boundary.

> "25-2-1. Jurisdiction and compliance. The jurisdiction of this chapter shall include all lands and waters within the corporate limits of the municipality, and the area extending one and one-half miles beyond such corporate limits.
>
> All buildings erected hereafter, all uses of land or buildings established hereafter, all structural alterations or relocation of existing buildings occurring hereafter shall be subject to all regulations of this chapter which are applicable to the zoning districts in which such buildings, uses, or land shall be located."

Any development within the 1.5 miles boundary of the Arcola Municipal limits would only be required to obtain a building permit.

> "25-9-2. Permits.
> (a) No person shall erect, alter, remodel, move or remove any kind of a structure or building or part thereof without first securing a building permit therefore, provided no such permit shall be required for repairs, construction, reconstruction or alteration of a building where the size, basic configuration and location of the building remain the same.
> (b) Permit fees. Fees for building permits shall be as follows:
> (1) None for structures used for agricultural purposes within RD districts including residences of farm owners, tenants and members of the owners' immediate families.
> (2) Ten cents per square foot for the first 1,000 square feet of floor area and eight cents per square foot for floor area in excess of 1,000 square feet for all buildings, excluding buildings referred to in subparagraph (b) (1) of this section, provided that there shall be a minimum fee of twenty dollars for each permit.
> (c) Exhibits. Each application for a building permit and for an occupancy permit for the use of land shall be accompanied by the following exhibits unless waived by the Zoning Officer.

(1) Boundary survey of an area including the property in question and 100 feet beyond its outer boundaries showing existing utilities, lot boundaries and dimensions, buildings and easements. Foliage, topography, waterways and soil borings to be included if pertinent.
(2) Plot plan indicating location, size and placement of proposed structure and yards, parking and loading facilities, vehicular access and egress, and utility plant including surface drainage.
(d) Permit application procedure. Procedure for applying for a building permit and an occupancy permit shall be as follows:
(1) The property owner or his agent shall meet with the Zoning Officer to explain the situation, learn the procedures, and obtain an application form.
(2) The applicant shall file the completed application form together with the required exhibits with the Zoning Officer.
(3) The Zoning Officer shall issue a building permit and collect the required permit fee if the proposed project complies with the provisions of this chapter, and other relevant portions of this Code.
(e) Revocation of building permits. Where a building permit has been issued pursuant to the provisions of this chapter, such permit shall become null and void without further action by the Zoning Officer or City Council unless work thereon commences within 90 days from the date of granting such permit.
(f) Valuation. For purposes of valuation on the Zoning Officer's report, all residences and non-residences exclusive of garages and accessory buildings shall be valued at $75 per square foot of all floor area and all accessory buildings and garages shall be valued at $25 per square foot of all floor area.
(g) Penalty. It shall be unlawful for any contractor to erect, alter, remodel, move or remove any kind of a structure or building or part thereof without securing a building permit therefore. Any contractor violating this provision shall be subject to a penalty as follows: not less than $200 nor more than $500 for the first offense, not less than $300 nor more than $500 for the second offense, not less than $400 nor more than $500 for the third offense, and $500 for the fourth or subsequent offense."

Should you have any further questions, please do not hesitate to contact me.

Sincerely,

Bill Wagoner
City Administrator

BETH LEAMON
CITY CLERK

ALTA LONG
CITY TREASURER

DANIEL J. KLEISS
MAYOR

J. DREW HOEL
CITY ADMINISTRATOR

MEMBER OF ILLINOIS MUNICIPAL LEAGUE

City of Tuscola

214 NORTH MAIN STREET
TUSCOLA, ILLINOIS 61953-1486
TEL. (217) 253-2112
FAX (217) 253-5026

September 13, 2006

Futuregen Industrial Alliance
International Square
1875 I Street, N.W.
5th Floor
Washington , D.C. 20006
Att'n: Site Selection Team

RE: Tuscola, Illinois FutureGen Site

Dear Selection Team Members,

Please allow this letter to confirm the City of Tuscola staff position relative to zoning for the proposed FutureGen site west of the Tuscola City limits. Zoning is, potentially, a legislative process subject to consideration by the Tuscola City Council and the Tuscola Planning Commission. However, I do not anticipate that either of these entities will choose to pursue hearings or actions relative to the zoning on these parcels.

A portion of the proposed site does, in fact, lie within the one and one-half mile extra-territorial zoning jurisdiction of the City of Tuscola. However, the majority of the site does not lie within that jurisdiction. Further, the extra-territorial jurisdiction allowed pursuant to statute is permissive, rather than directive. In other words, the City of Tuscola has discretion to choose whether or not to implement its zoning authority in that jurisdiction.

Since the majority of the proposed site is outside of the jurisdiction, and since the proposed use is entirely consistent with the City's Comprehensive Land Use Plan, I am confident that the City of Tuscola will choose not to implement its zoning authority relative to the proposed FutureGen site.

Please feel free to contact me with any questions or comments. My staff and I stand ready to assist you in any that we can.

Sincerely,

J. Drew Hoel
City Administrator

cc: The Honorable Daniel J. Kleiss, Mayor
Mr. Steve Hettinger, Building Inspector
Mr. Brian Moody, Executive Director, TEDI

Duke Energy®
Generation Services

Brian A. Moody
Executive Director
Tuscola Economic Development, Inc.
214 N. Main Street
P.O. Box 145
Tuscola, IL 61953

Brian,

Here is an overview of how the water plant system works and the impact of "zero" discharge. This information provided is with the understanding that Duke is the owner/operators of the water treatment system and operates the waste treatment for Lyondell.

The Tuscola site obtains its raw water supply from the Kaskakia River. Through the use of a 18 acres 150 million gallon holding pond the site is able to run at the current rates for 30 to 45 days without pumping from the river if needed. During normal river flows the holding pond is pumped into on a regular basis. However during dryer periods the practice has been not to pump out of river to maintain the holding pond level but to wait for moderate to heavy rains to increase the river flow and pump at maximum rate to refill holding pond. During these high river flows the flow will get up to 477 million gallons a day plus. We also pump from the Bondville wells to supplement the river flow during dryer periods of time. One reasons for pumping from the Bondville wells is the discharge permit (NPDES permit) requires a 5:1 dilution ratio to discharge. With "zero" discharge pumping would no longer be need at the same rates if required at all.

Discussions have taken place over the years about going to "zero" discharge. One of the only draw backs could be the possibly of cycle up the metals in the holding pond. At present all metals are a less than the reporting limits but Zinc. Zinc was at .013 mg/l with a reporting limit of .010 mg/l. The cycling issue can be alleviated by putting in metals filtration. The overall cost in conjunction with a sizable project would be small (estimated at $300,000 or less). The site would be able to do this because of the 33 acres 51 million gallon of treatment ponds would then feed our holding pond at 1.5 million gallons a day on average. The site also has 15 acres 31 million gallons of diversion holding ponds. The primary need for these diversion holding ponds is that all runoff form the existing site go through this waste water treatment plant. This runoff can be as much as 8 million gallon a day coming in and must be held as to not over fill the oxidation ponds. On the Lyondell site they also have a 50 million gallon storm water basin in their north plant area that isn't part of the water system but could be added.

The site has installed water treatment facilities capable of producing 2400 gpm of sodium zeolite softened water and up to 900 gpm of reverse osmosis for boiler make-up water. The average current site demand for softened water is 1000 to 1400 gpm while the average RO system requirements are for 200 gpm to 620 gpm. There is adequate space

for softeners and RO's to be increased if needed. The remaining water treatment system is capable of treating 9 million gallon a day of make-up to the process water, softeners and RO's.

2003 Data

River Flow

Max.	345 Million Gallon Day
Min.	4.0 Million Gallon Day
Avg.	19 Million Gallon Day

Discharge Rates

Max.	5.81 Million Gallon Day
Min.	0.39 Million Gallon Day
Avg.	1.56 Million Gallon Day

Consumption Rates

Max.	3.0 Million Gallon Day
Min.	1.83 Million Gallon Day
Avg.	2.19 Million Gallon Day

2004 Data

River Flow

Max.	477 Million Gallon Day
Min.	5.0 Million Gallon Day
Avg.	36.59 Million Gallon Day

Discharge Rates

Max.	5.62 Million Gallon Day
Min.	0.44 Million Gallon Day
Avg.	1.73 Million Gallon Day

Consumption Rates

Max.	3.01 Million Gallon Day
Min.	1.69 Million Gallon Day
Avg.	2.01 Million Gallon Day

2005 Data

River Flow

Duke Energy®
Generation Services

Max.	487 Million Gallon Day
Min.	3.0 Million Gallon Day
Avg.	8.85 Million Gallon Day

Discharge Rates

Max.	8.54 Million Gallon Day
Min.	0.3 Million Gallon Day
Avg.	1.34 Million Gallon Day

Consumption Rates

Max.	2.6 Million Gallon Day
Min.	1.71 Million Gallon Day
Avg.	1.96 Million Gallon Day

Note: Consumption is taken out before we measure river flow. So if we are pumping at a 3.0 million gallon a day rate from the up steam the river flow will be less that 3.0 million rate. We have no metering on our river pumps.

Larry Behl

Larry Behl

Production Team Group Leader
Duke Energy Generating Services
625 E US Highway 36
Tuscola, Il 61953

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James Crane PE

From: "Mike Little" <MRLittle@U-CSD.Com>
To: "'James Crane PE'" <James.Crane@douglascountyhighway.org>
Sent: Friday, September 08, 2006 2:29 PM
Subject: RE: plant discharge information

Mr. Crane,
The following is the flow data you requested for the District's Southwest Treatment Plant:
Current Average Daily Discharge = 6 million gallons per day (MGD)
Available Capacity:
Average Daily Flow 7.98 MGD
Peak Average Flow 17.25 MGD
Maximum Daily Flow 27.25 MGD

This facility was expanded in the last year and no future expansions are anticipated before 2019.

Mike Little
Executive Director
Urbana & Champaign Sanitary District
217.367.3409x224

From: James Crane PE [mailto:James.Crane@douglascountyhighway.org]
Sent: Friday, September 08, 2006 1:36 PM
To: mrlittle@u-csd.com
Subject: plant discharge information
Importance: High

Mr. Little

Please see attached letter. Thank you for your help and information.

James E Crane PE
Douglas County Engineer

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Rueben Kaufman
363 E CR 200N
Arcola, IL 61910

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Kaufman,

Tuscola-Douglas County was recently selected as a finalist for FutureGen. FutureGen is a $1 billion public-private partnership to build the world's first coal-fueled, "near-zero emissions" power production plant. The FutureGen plant will use cutting-edge technologies to generate electricity while capturing and permanently storing carbon dioxide in geological formations. The plant will also produce hydrogen and byproducts for use by other industries.

The $1B FutureGen project will support significant employment across central Illinois. Preliminary employment estimates suggest that approximately 1300 construction jobs and 150 permanent jobs will be created as a result of this project being built. The potential economic impact to Douglas County and to the State of Illinois would be extraordinary if Tuscola-Douglas County is selected as the location for this project.

We have been gathering site specific information for the Department of Energy (Federal Government) over the past 3 months. The information gathered has ranged from information on the existing schools in the area to the presence of threatened or endangered species, both plants and animals. The Department of Energy has voiced a concern that this project is being considered within close proximity to the Amish Community and is concerned with what the community's concerns and opinion is concerning this project.

We have attached some information on the project for your review and have attached a questionnaire for you to fill out and send back to us. We would be more than happy to do a presentation on this project that outlines the details of the project and answer any specific questions that anyone may have, if it is wanted within the Amish Community.

Feel free to contact either Jim Crane (217-253-2113) or Brian Moody (217-253-2552) with any questions concerning this request.

Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Menno D. Miller
1822 N CR 280E
Arcola, IL 61910

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Miller,

Tuscola-Douglas County was recently selected as a finalist for FutureGen. FutureGen is a $1 billion public-private partnership to build the world's first coal-fueled, "near-zero emissions" power production plant. The FutureGen plant will use cutting-edge technologies to generate electricity while capturing and permanently storing carbon dioxide in geological formations. The plant will also produce hydrogen and byproducts for use by other industries.

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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Edwin Kaufman
485 E CR 200N
Arcola, IL 61910

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Kaufman,

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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Daniel Otto
260 N CR 425E
Arthur, IL 61911

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Otto,

Tuscola-Douglas County was recently selected as a finalist for FutureGen. FutureGen is a $1 billion public-private partnership to build the world's first coal-fueled, "near-zero emissions" power production plant. The FutureGen plant will use cutting-edge technologies to generate electricity while capturing and permanently storing carbon dioxide in geological formations. The plant will also produce hydrogen and byproducts for use by other industries.

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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Andy Ray Mast
348 E CR 300N
Arthur, IL 61911

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Mast,

Tuscola-Douglas County was recently selected as a finalist for FutureGen. FutureGen is a $1 billion public-private partnership to build the world's first coal-fueled, "near-zero emissions" power production plant. The FutureGen plant will use cutting-edge technologies to generate electricity while capturing and permanently storing carbon dioxide in geological formations. The plant will also produce hydrogen and byproducts for use by other industries.

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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Jake Stutzman
423 N CR 400E
Arcola, IL 61910

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Stutzman,

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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Sam Schrock
615 N CR 300E
Tuscola, IL 61953

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. Schrock,

Tuscola-Douglas County was recently selected as a finalist for FutureGen. FutureGen is a $1 billion public-private partnership to build the world's first coal-fueled, "near-zero emissions" power production plant. The FutureGen plant will use cutting-edge technologies to generate electricity while capturing and permanently storing carbon dioxide in geological formations. The plant will also produce hydrogen and byproducts for use by other industries.
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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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TUSCOLA-DOUGLAS COUNTY
FUTUREGEN TASK FORCE
C/O Douglas County Highway Department
200 S. Prairie Street
Tuscola, IL 61953

December 19, 2006

Mr. Joe A. Mast
2589 E CR 1450N
Humbolt, IL 61931

Re: Tuscola-Douglas County FutureGen Site
Questionnaire for select Amish Bishops concerning FutureGen Project

Dear Mr. NAME,

Tuscola-Douglas County was recently selected as a finalist for FutureGen. FutureGen is a $1 billion public-private partnership to build the world's first coal-fueled, "near-zero emissions" power production plant. The FutureGen plant will use cutting-edge technologies to generate electricity while capturing and permanently storing carbon dioxide in geological formations. The plant will also produce hydrogen and byproducts for use by other industries.

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Sincerely,

James E. Crane, PE
Douglas County Engineer

Brian Moody
Tuscola Economic Development, Inc.

Cc: file
Lucy Swartz, Battelle Memorial Institute

Enc.

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United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Oklahoma Regional Office
P.O. Box 8002
Muskogee, OK 74402-8002

IN REPLY REFER TO:
Division of Environmental
Safety and Cultural Resources

Mr. Mark L. McKoy
U.S. Department of Energy
P. O. Box 880
Morgantown, West Virginia 26507-0880

JAN 2 2 2007

Dear Mr. McKoy:

On December 11, 2006, the Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), received an information request from the U.S. Department of Energy (USDOE) regarding significant impacts to archeological, religious or cultural sites from the construction and operation of a coal-fueled electric power and Hydrogen gas (H_2) production plant located in Illinois or Texas. The EORO has no comments regarding the project.

The projects in Illinois are within the jurisdictional area of the Bureau's Eastern Region and the projects in Texas are within the jurisdiction area of the Bureau's Southern Plains Region. Both Regions have been provided the notice by copy of this letter. As the other two Regions may have environmental and/or cultural resources concerns relating to the project, it is recommended that the USDOE coordinate directly with them on any of their concerns. The contact addresses are:

Franklin Keel, Regional Director
Eastern Regional Office
545 Marriott Drive, Suite 700
Nashville, Tennessee 37214

Dan Deerinwater, Regional Director
Southern Plains Regional Office
P.O. Box 368
Anadarko, Oklahoma 73005-0368

If any additional information is required, please contact Mr. Bob Coleman, Division Chief, Division of Environmental, Safety and Cultural Resources, EORO, at (918) 781-4660.

Respectfully,

Regional Director

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Illinois Historic
Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • Teletypewriter Only (217) 524-7128
Voice (217) 782-4836
www.illinois-history.gov

Douglas County PLEASE REFER TO: IHPA LOG #012041106
Tuscola
Pflum #2
Section 29, 30, 31, 32 T16N R8E, Section 36 T16N R7E
Section 5, 8, 17, 20, 29, 32 T15N R8E, Section 5, 8 T14N R8E
Power Plant/FutureGen

January 30, 2007

Mr. Ronald Swager
Patrick Engineering, Inc.
300 West Edwards Street, Suite 200
Springfield, Illinois 62704-1907

Dear Sir:

Acre(s): 532 Site(s): 0
Archaeological Contractor: UMA/Finney

Thank you for submitting the results of the archaeological reconnaissance. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

Our staff has reviewed the archaeological Phase I reconnaissance report performed for the project referenced above. The Phase I survey and assessment of the archaeological resources appear to be adequate. Accordingly, we have determined, based upon this report, that no significant historic, architectural, and archaeological resources are located in the project area.

Please submit a copy of this letter with your application to the state or federal agency from which you obtain any permit, license, grant, or other assistance. Please retain this letter in your files as evidence of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

AEH

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A.3 JEWETT

The following agencies sent coordination letters:

- U.S. Fish and Wildlife Service
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Texas Historical Commission
- Limestone County Office of Road and Bridge Department
- U.S. Department of Energy
- Bureau of Indian Affairs

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
(512) 490-0057

January 8, 2002

Nellie Frisbee
Northwestern Resources Co.
P.O. Box 915
Jewett, Texas 75846

Consultation #: 2-15-97-F-396

Dear Ms. Frisbee:

This is a response to your letter dated July 30, 2001 requesting that the U.S. Fish and Wildlife Service (Service) concur with your determination that sites DX2, DX4, DX5, M7, and M25 in the 1998-2003 Permit 32E survey area are not suitable habitat for *Spiranthes parksii*. According to the information provided in the 1999 Re-survey Report (Report) for potential *Spiranthes parksii* sites on the Jewett Mine (Mine), sites DX2, DX4, and DX5 were surveyed in 1995 by Hicks and Company, Inc. and in 1997 by Horizon Environmental Services. Although these surveys indicated that *Spiranthes parksii* occurred on two other sites within the DX area (DX1 and DX3), no individuals of this species were found on DX2, DX4, and DX5. The Report also stated that site M7 was surveyed in 1991, 1992, 1993, and 1995 and site M25 was surveyed in 1991, 1992, and 1998. No *Spiranthes parksii* individuals were observed during any of the surveys conducted in these areas.

Although we cannot concur that no suitable habitat exists in the DX2, DX4, DX5, M7 and M25 areas, based on the results of the surveys conducted, the Service has determined that it is unlikely that individuals of *Spiranthes parksii* occur on these sites. Therefore, compensation for these sites is unnecessary.

In a telephone conversation dated December 13, 2001, you requested our concurrence that no further mitigation for sites M43, M44, and M45 were necessary. According to our files, the Service provided this concurrence on April 24, 2000 in response to a letter sent to our office by Horizon Environmental Services, Inc., which was dated April 18, 2000.

Also during the December 13, 2001 telephone conversation, you expressed concern for our acceptance of the "Interior Least Tern 2003 RCT Permit Term Management Plan (Plan) for the Jewett Surface Mine". We consider the Plan, dated July 2001 to be complete and the Mine to be in compliance with the Service's Biological Opinion, dated April 29, 1999. The Plan will serve as the standard operating procedure for managing interior least terns (*Sterna antillarum athalassos*) within the Permit 32E area of the Mine.

cc: Joel
Nellie
File-ouis

132B-28

We would like to commend the Jewett Mine and Northwestern Resources Co. for their continued concern for endangered species and other natural resources. If you have any questions about these comments, please contact Paige Najvar (512) 490-0057, ext. 229.

Sincerely,

for David C. Frederick
Supervisor

United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
(512) 490-0057

January 23, 2002

Patsy Turner
PBS&J
206 Wild Basin Road, Suite 300
Austin, Texas 78746

Consultation #: 2-15-97-F-0396

Dear Ms. Turner:

This is a response to your January 11, 2002 letter requesting that the U.S. Fish and Wildlife Service (Service) provide information regarding federally listed or proposed threatened and endangered species and designated Critical Habitat that may occur in the Jewett Mine Permit 32E area in Leon, Limestone, and Freestone Counties, Texas.

Endangered and Threatened Species
According to our information, the Jewett Mine Permit 32E area is not located within designated Critical Habitat for any federally listed species. The list of federally endangered and threatened species, species proposed for listing, and species of concern that are known to occur in Leon, Limestone, and Freestone Counties is attached to this letter for your review.

Bald Eagle (*Haliaeetus leucocephalus*)--This large, threatened bird of prey, our Nation's symbol, may be found in almost any Texas county during migration. Preferred nesting habitat in Texas is undisturbed coastal regions, or along river systems or lake shores with large, tall (40-120 feet) trees for nesting and roosting. Nests are usually located within 1-2 miles of large bodies of water, such as lakes, reservoirs, or rivers, and are often located in the ecotone or edge between forest and marsh or water. Wintering habitat is characterized by abundant, readily available food sources. Most wintering areas are associated with open water, where eagles feed on fish, waterfowl, and turtles. The closest documented bald eagle sightings to the Jewett Mine Permit 32E area come from nearby Lake Limestone which lies immediately adjacent to the Mine's western permit boundary in Limestone County. Freestone County is within the bald eagles' known wintering range.

Large-Fruited Sand-Verbena (*Abronia macrocarpa*)--This rare plant is a perennial herb that stands up to 20-inches tall. The leaves are usually rounded, and the foliage is sticky from glandular hairs. The magenta flowers are grouped into rounded heads composed of 20-75 individual flowers. As of 1996, approximately 3,000 individuals existed within 3 populations

found in Leon, Freestone, and Robertson County. This plant occurs on nearly level to gently sloping terrain within the post-oak savannah region. It is found in deep sandy, well drained soils with no or very light vegetative cover of grasses and colonizing herbaceous species. This species flowers in March through June and occasionally again in the fall following periods of high rainfall. Field investigations conducted on the Mine site in 1992 identified 25 potential habitat areas based on soils and other characteristics. Surveys conducted on these areas during this species' blooming seasons in1992 and 1995 yielded negative results.

Houston toad (*Bufo houstonensis*)--This non-glamorous but important endangered species is currently known to occur in just a handful of counties in east-central Texas. It is a terrestrial amphibian associated with deep sandy soils within the Post Oak Savannah vegetational area. Since it is a poor burrower, it requires loose, friable soils for burrowing in order to seek underground protection from cold winter temperatures and hot, dry summer conditions. Habitat conditions in currently occupied areas consist of pine or oak woodlands or savannahs with large areas of deep sandy soils. These toads require still or slow-flowing bodies of water, such as ephemeral pools, flooded fields, blocked drainages of upper creek reaches, wet areas associated with seeps or springs, or more permanent ponds for breeding and egg and tadpole development. This species has been extirpated from much of its former range in the Houston area due to habitat loss and degradation. Surveys for the Houston toad were conducted at almost 70 potentially suitable habitat areas at the Mine from January 30-April 9, 1992. No Houston toads were found in any of the surveys.

Interior Least Tern (*Sterna antillarum*)-- Interior least terns are the smallest North American terns. They breed inland along the Missouri, Mississippi, Colorado, Arkansas, Red, and Rio Grande River systems. Interior least terns prefer bare or sparsely vegetated sand, shell, and gravel beaches, sandbars, islands, or salt flats associated with rivers and reservoirs for nesting habitat. For feeding, these birds need shallow water with an abundance of small fish. They have been known to use sand and gravel pits, ash disposal areas of power plants, reservoir shorelines, and other manmade sites as natural nesting sites have become scarce. The normal operation of the bucketwheel excavator has created an area suitable for nesting and foraging of interior least terns within the Permit 32E area. This species was first noted in the area in July 1994 and have returned every year since, with the exception of 1998. Northwestern Resources has developed the "Interior Least Tern 2003 RCT Permit Term Management Plan for the Jewett Surface Mine", which will serve as the standard operating procedure for managing interior least terns within the Permit 32E area of the Jewett Mine.

Navasota ladies'- tresses (*Spiranthes parksii*)-- This orchid is an erect, slender-stemmed perennial growing 8-15 inches tall. The linear leaves form a rosette but are absent at the time of flowering. White flowers are arranged spirally on the stalk and have conspicuously white-tipped bracts that appear beneath each flower. Flowers are about one-quarter-of-an-inch long with rounded petals. Side petals have a distinct green stripe and extend past the central petals. The lower central petal is ragged. Buds appear in early to late October, and flowering occurs from

mid-October to mid-November. Vegetatively, *Spiranthes* plants are very hard to discern in their habitat, and therefore, surveys are not recommended except during the blooming season. In addition, this species is very similar to two other species that can occur in the same area. Positive identification can only be made during flowering. Blooming is strongly dependent on adequate soil moisture. Navasota ladies'- tresses occur in Brazos, Burleson, Freestone, Fayette, Grimes, Jasper, Leon, Madison, Robertson, and Washington Counties.

Two populations of Navasota ladies'- tresses have been found within the Permit 32E area (sites DX1 and DX3). These occupied sites along with other areas the Service considered potential or supporting habitat sites within the Permit 32E area have been destroyed and compensated by Northwestern Resources with a monetary contribution to the National Fish and Wildlife Foundation to fund habitat conservation in perpetuity for the Navasota ladies'- tresses.

We thank you for your concern for threatened and endangered species and other natural resources. If we can be of further assistance or if you have questions about these comments, please contact Paige Najvar at the Service's Austin Office at (512) 490-0057. Please refer to the Service Consultation listed above in any future correspondence with this office regarding the Jewett Mine Permit 32E area.

Sincerely,

E. Dawn Whitehead

for David C. Frederick
Supervisor

Enclosures

Federally Listed as Threatened and Endangered Species of
Leon, Limestone, & Freestone Counties in Texas
January 18, 2002

DISCLAIMER

This County by County list is based on information available to the U.S. Fish and Wildlife Service at the time of preparation, date on page 1. This list is subject to change, without notice, as new biological information is gathered and should not be used as the sole source for identifying species that may be impacted by a project.

Edwards Aquifer species: (Edwards Aquifer County) refers to those six counties within the Edwards Aquifer region. The Edwards Aquifer underlies portions of Kinney, Uvalde, Medina, Bexar, Hays, and Comal Counties (Texas). The Service has expressed concern that the combined current level of water withdrawal for all consumers from the Edwards Aquifer adversely affects aquifer-dependent species located at Comal and San Marcos springs during low flows. Deterioration of water quality and/or water withdrawal from the Edwards Aquifer may adversely affect eight federally-listed species.

Comal Springs riffle beetle	(E)	*Heterelmis comalensis*
Comal Springs dryopid beetle	(E)	*Stygoparnus comalensis*
Fountain darter	(E w/CH)	*Etheostoma fonticola*
Peck's cave amphipod	(E)	*Stygobromus (=Stygonectes) pecki*
San Marcos gambusia	(E w/CH)	*Gambusia georgei*
Texas wild-rice	(E w/CH)	*Zizania texana*
Texas blind salamander	(E)	*Typhlomolge rathbuni*
San Marcos salamander	(T □w/CH)	*Eurycea nana*

* The Barton Springs salamander is found in Travis County but may be affected by activities within the Barton Springs Segment of the Edwards Aquifer, which includes portions of Northern Hays County.

Migratory Species Common to many or all Counties: Species listed specifically in a county have confirmed sightings. If a species is not listed they may occur as migrants in those counties.

Least tern	(E ~)	*Sterna antillarum*
Whooping crane	(E w/CH)	*Grus americana*
Bald eagle	(T)	*Haliaeetus leucocephalus*
Piping plover	(T w/P/CH)	*Charadrius melodus*
Loggerhead shrike	(SOC)	*Lanius ludovicianus*
White-faced ibis	(SOC)	*Plegadis chihi*

Leon County

Least tern	(E ~)	*Sterna antillarum*
Houston toad	(E w/CH)	*Bufo houstonensis*
Large-fruited sand-verbena	(E)	*Abronia macrocarpa*
Navasota ladies'-tresses	(E)	*Spiranthes parksii*
Bald eagle	(T)	*Haliaeetus leucocephalus*
Loggerhead shrike	(SOC)	*Lanius ludovicianus*
Bachman's sparrow	(SOC)	*Aimophila aestivalis*
Alligator snapping turtle	(SOC)	*Macroclemys temmincki*
Texas horned lizard	(SOC)	*Phrynosoma cornutum*

Golden wave tickseed	(SOC)	*Coreopsis intermedia*
Small-headed pipewort	(SOC)	*Eriocaulon kornickianum*
Umbrella sedge	(SOC)	*Cyperus grayioides*

Limestone County

Bald eagle	(T)	*Haliaeetus leucocephalus*
Least tern	(E ~)	*Sterna antillarum*
Mountain plover	(P/T)	*Charadrius montanus*
Bachman's sparrow	(SOC)	*Aimophila aestivalis*
Loggerhead shrike	(SOC)	*Lanius ludovicianus*
Texas horned lizard	(SOC)	*Phrynosoma cornutum*
Rough-seeded flameflower	(SOC)	*Talinum rugospermum*
Small-headed pipewort	(SOC)	*Eriocaulon kornickianum*

Freestone County

Least tern	(E ~)	*Sterna antillarum*
Large-fruited sand-verbena	(E)	*Abronia macrocarpa*
Navasota ladies'-tresses	(E)	*Spiranthes parksii*
Bald eagle	(T)	*Haliaeetus leucocephalus*
Loggerhead shrike	(SOC)	*Lanius ludovicianus*
White-faced ibis	(SOC)	*Plegadis chihi*
Alligator snapping turtle	(SOC)	*Macroclemys temmincki*
Texas garter snake	(SOC)	*Thamnophis sirtalis annectans*
Texas horned lizard	(SOC)	*Phrynosoma cornutum*
Golden wave tickseed	(SOC)	*Coreopsis intermedia*
Small-headed pipewort	(SOC)	*Eriocaulon kornickianum*
Umbrella sedge	(SOC)	*Cyperus grayioides*
Warner's hawthorn	(SOC)	*Crataegus warneri*

INDEX

Statewide or areawide migrants are not included by county, except where they breed or occur in concentrations. The whooping crane is an exception; an attempt is made to include all confirmed sightings on this list.

E	=	Species in danger of extinction throughout all or a significant portion of its range.
T	=	Species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
C	=	Species for which the Service has on file enough substantial information to warrant listing as threatened or endangered.
CH	=	Critical Habitat (in Texas unless annotated ‡)
P/	=	Proposed ...
P/E	=	Species proposed to be listed as endangered.
P/T	=	Species proposed to be listed as threatened.
TSA	=	Threatened due to similarity of appearance.
SOC	=	Species for which there is some information showing evidence of vulnerability, but not enough data to support listing at this time. These species are afforded no formal protection under the Endangered Species Act of 1973, as amended, but may be protected under other state or federal laws.
□	=	with special rule

‡ = CH designated (or proposed) outside Texas

~ = protection restricted to populations found in the "interior" of the United States. In Texas, the least tern receives full protection, except within 50 miles (80 km) of the Gulf Coast.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
(512) 490-0057

June 20, 2002

Bonnie Lister
PBS&J
206 Wild Basin Road, Suite 300
Austin, Texas 78746

Consultation #:2-15-02-F-0214

Dear Ms. Lister:

This responds to your April 2, 2002 letter requesting that the U.S. Fish and Wildlife Service (Service) concur with your determination that sites M3/HC21, M5, M30, HC11a, HC12, HC18, HC28, and HC29 within the Jewett Mine Permit 47 survey area are unlikely to contain Navasota ladies'-tresses (*Spiranthes parksii*), and that sites M2/HC20, M16, M36, HC13, and HC23 are not suitable habitat for this plant species. According to the information provided in the 2001 Survey Report for potential *Spiranthes parksii* sites on the Jewett Mine, these thirteen sites were surveyed in three or more years.

Although we cannot concur that no suitable habitat exists in the M2/HC20, M16, M36, HC13, and HC23 areas, based on the results of the surveys conducted on each of the thirteen above mentioned sites, the Service has determined that it is unlikely that individuals of *Spiranthes parksii* occur on these sites. Therefore, we concur that additional surveys on these sites are unnecessary.

Your letter also states that Northwestern Resources Co. (Northwestern) wishes to provide monetary compensation for two sites (M28 and M41) that appear to have been altered either directly or indirectly by mining activities prior to the performance of a sufficient number of Navasota ladies'-tresses surveys. Northwestern would like to compensate for a total of 7.0 acres of potential habitat at sites M28 and M41 at a ratio of 3/4:1 at fair market value. Although an estimated contribution of $8,855 was suggested in your letter, we calculated that a contribution of $6,641.25 would be consistent with a compensation ratio of 3/4:1. Payments should be made to the National Fish and Wildlife Foundation for *Spiranthes parksii* habitat conservation initiatives.

We would like to commend the Jewett Mine and Northwestern Resources Co. for their continued concern for endangered species and other natural resources. If you have any questions about these comments, please contact Paige Najvar (512) 490-0057, ext. 229.

Sincerely,

for William Seawell
Acting Field Supervisor

cc: Joel
Nellie
Dave Simpson
Jake

FILE COPY

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
(512) 490-0057

March 31, 2003

Kathy Calnan
PBS&J
206 Wild Basin Road, Suite 300
Austin, Texas 78746

Consultation #: 2-15-02-F-0214

Dear Ms. Calnan:

This responds to your March 12, 2003, letter requesting that the U.S. Fish and Wildlife Service (Service) concur with your determination that sites M6/HC24, M9/HC8, M10/HC7, M11/HC6, M13, M15/HC5, M17/HC4, M34, M35, M39, HC3, HC10, and HC11 within the Jewett Mine Permit 32E and 47 survey area are unlikely to contain Navasota ladies'-tresses (*Spiranthes parksii*), and that sites M29, M32, M40, M14, M23, M48, M49, M18, and M37 are not suitable habitat for this plant species. According to the information provided in the 2002 Survey Report for potential *Spiranthes parksii* sites on the Jewett Mine, these twenty-two sites were surveyed in three or more years, with the exception of sites M29, M32, and M40.

Although we cannot concur that no suitable habitat exists in the M29, M32, M40, M14, M23, M48, M49, M18, and M37 areas, based on the results of the surveys conducted on each of the twenty-two above mentioned sites, the Service has determined that it is unlikely that individuals of *Spiranthes parksii* occur on these sites. We agree with Horizon that one year of surveys is sufficient to demonstrate probable absence for sites M29, M32, and M40. Therefore, we concur that additional surveys on these sites are unnecessary.

Your letter also states that Northwestern Resources Co. (Northwestern) wishes to provide monetary compensation for one site (M12) that appears to have been altered either directly or indirectly by mining activities prior to a sufficient number of Navasota ladies'- tresses surveys. Northwestern would like to compensate for a total of 7.6 acres of potential habitat at site M12 at a ratio of 3/4:1 at fair market value. Although an estimated contribution of $7,211.50 was suggested in your letter, we calculated that a contribution of $7,210.50 would be consistent with the compensation ratio agreed upon for this site. We agree that total compensation of $7,210.50 is sufficient to offset potential impacts at site M12.

Northwestern also proposes to compensate for impacts to known existing habitat for Navasota ladies'-tresses at sites M1/HC1 (including M1/HC1/HC20), M4/HC22a, and M4/HC22b. We agree that the total compensation for these three sites of $34,155.00 is sufficient to offset potential impacts to this species.

030331

We concur that total compensation to be made to the National Fish and Wildlife Foundation for *Spiranthes parksii* habitat conservation initiatives equaling $41,366.50 is sufficient to offset incidental impacts to Navasota ladies'-tresses due to mine construction activities.

Thank you for you continued concern for endangered species and other natural resources. If you have any questions about these comments, please contact Jana Milliken (512) 490-0057, extension 243.

Sincerely,

E Dawn Whitehead

for Robert T. Pine
Supervisor

CC: Joel
Nellie
Dave Simpson
File

United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
512 490-0057

JAN 2 0 2004

Shannon Dorsey
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, Texas 78716

Consultation #: 2-15-02-F-0214

Dear Mr. Dorsey:

This responds to your December 23, 2003, request that the U.S. Fish and Wildlife Service (Service) concur with your review of potential Navasota ladies'-tresses (*Spiranthes parksii*) habitat sites in advance of mining as agreed in our 1999 and 2002 consultations for the Northwestern Resources Company (Northwestern) Jewett Mine (Mine) in Freestone, Limestone, and Leon counties, Texas.

According to the information provided in the 2003 Horizon Survey Report for potential Navasota ladies'-tresses sites on the Mine, site M38 (within the Permit 32E area) was surveyed for four seasons (1991, 1992, 2002, and 2003); site HC9 (within the Permit 47 area) was surveyed for five seasons (1993, 1994, 1995, 2002, and 2003); and PBS&J 1 and 2 (within the newly acquired 162-acre (66-hectare) study area) were surveyed for two seasons (2002 and 2003). We agree that all survey seasons listed above (except 1993) had the appropriate climatic conditions for determining presence/absence of Navasota ladies'-tresses.

You determined that sites M38, and sites PBS&J 1 and 2 are unlikely to support the endangered Navasota ladies'-tresses. Although we cannot concur that no suitable habitat exists in the M38 and PBS&J 1 and 2 areas, based on the results of the surveys and site-specific conditions, the Service believes it is unlikely that Navasota ladies'-tresses occur on these sites. Therefore, we concur that additional surveys are unnecessary and no further action is necessary for impacts to these sites.

We understand that two small groups of Navasota ladies'-tresses were discovered in the vicinity of the HC9 survey area in 2002 by PBS&J biologists. These two groups are located approximately 300 to 400 feet (91 to 122 meters) south/southwest of the original HC9 survey area, based on approximate geographic coordinates and site descriptions provided by the PBS&J. They are identified as HC9 sites A, B, C, and D, and each site is approximately 0.06 acres (0.02 hectares) in size. It is unclear exactly which site (A, B, C, or D) the two groups were found on, or how many individual plants were identified. No

Mr. Dorsey

Navasota ladies'-tresses were found at the original HC9 site. Northwestern wishes to provide monetary compensation for sites A, B, C, and D, pursuant to the ratios agreed to in the Service's Biological Opinions for Permit 32E area (April 29, 1999) and Permit 47 Area (May 2, 2002). Northwestern wants to compensate for the 0.25 acres (0.1 hectares) of occupied habitat at a ratio of 2:1 at fair market value. In addition, Northwestern would like to compensate for a total of 0.5 acres (0.2 hectares) of supporting habitat at ratio of 1:1. We agree that a contribution of $1,265.00 would be consistent with the compensation ratio agreed upon for this site and is sufficient to offset potential impacts at site HC9. No further surveys are necessary for this site. We request receipt of payment to the National Fish and Wildlife Foundation prior to disturbance activities on this site.

Thank you for you continued concern for endangered species and other natural resources. If you have any questions about these comments, please contact Jana Milliken (512) 490-0057, extension 243.

Sincerely,

Robert T. Pine
Supervisor

cc: Richard Lowe, U.S. Army Corps of Engineers
Rob Blair, Railroad Commission of Texas
Nellie Frisbee, Northwestern Resources

United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
512 490-0057
FAX 490-0974

OCT 20 2006

Mr. James Wiersema
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, Texas 78716

Consultation Number 21450-2007-TA-0024

Dear Mr. Wiersema:

This is in response to your letter dated October 6, 2006, requesting review on the proposed site locations for the FutureGen project. Your conversation with my staff on October 16, 2006, clarified the level of review you were requesting. Our review did not result in any additional information other than that obtained from our web site (see below for address). Enclosed is a list of the U.S. Fish and Wildlife Service (Service) threatened and endangered species by county that the FutureGen project may impact if implemented. This list is organized by the counties you have indicated as potential sites for the project. We are providing this information to assist you in assessing and avoiding impacts to federally listed threatened and endangered species, their habitat, and designated wetlands. Further consultation with us may be necessary should this project go forward.

Federally listed species

The proposed project site is not located within designated critical habitat of any federally listed threatened or endangered species. You may access a list of federally listed or proposed species by county of occurrence in Texas at http://ifw2es.fws.gov/EndangeredSpecies/lists/. A searchable database with information related to the life history and ecology of each of these species can be found at http://endangered.fws.gov/.

Generally, the Service believes that the first step in determining impacts to endangered species is presence/absence surveys conducted within the project area by persons with appropriate biological expertise. Often, absence of endangered species is determined and the project can then proceed without additional responsibilities under the Endangered Species Act of 1973, as amended (Act). If assessments indicate that suitable habitat is likely to be affected either directly or indirectly, we recommend that you consult with us further. If any endangered species or their habitats are present, the project can often be modified to avoid all impacts. Please send any completed surveys or habitat assessments to our office for assistance in evaluating potential effects.

If impacts cannot be avoided, we recommend the Department of Energy (DOE) pursue formal consultation through section 7 of the Act. Section 7 requires that all Federal agencies consult with the Service to ensure that the actions authorized, funded, or carried out by such agencies do not jeopardize the continued existence of any threatened or endangered species or adversely modify or destroy critical habitat of such species. It is the primary responsibility of DOE, as the Federal action agency, to determine whether any action it authorizes, funds, or carries out may affect a federally listed or proposed species.

Candidate Species

We also recommend that you review the potential for your project to affect candidates. Candidate species are those that are being considered for possible addition to the threatened and endangered species list. There is sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but higher priority listings currently preclude issuance of a proposed rule for those species. Candidate species currently have no legal protection. If you find your project may potentially impact these species, the Service would like to provide technical assistance to help avoid or minimize adverse effects. Addressing these species at this stage could better provide for overall ecosystem health in the local area and may avert potential future listing.

State-listed species

The State of Texas also protects certain species of plants and animals. Contact the Texas Parks and Wildlife Department (Endangered Resources Branch), Fountain Park Plaza Building, Suite 100, 3000 South IH-35, Austin, Texas 78704 (512-912-7011) for information concerning fish, wildlife, and plants of State concern.

Wetlands and Native Habitats

If your project will involve filling, dredging, or trenching of a wetland or riparian area it may require a Section 404 permit from the U.S. Army Corps of Engineers. For permitting requirements under Section 404 of the Clean Water Act, please contact the Fort Worth District, Permits Section, CESWF-EV-0, P.O. Box 17300, Fort Worth, Texas, 76102-0300, 817-978-2681.

Wetlands and riparian zones provide valuable fish and wildlife habitat as well as contribute to flood control, water quality enhancement, and groundwater recharge. Wetland and riparian vegetation provides food and cover for wildlife, stabilizes banks, and decreases soil erosion. These areas are inherently dynamic and very sensitive to changes caused by such activities as overgrazing, logging, major construction, or earth disturbance. Construction activities near such areas should be carefully designed to minimize impacts. If vegetation clearing is needed in riparian areas, these areas should be revegetated with native wetland and riparian vegetation to prevent erosion or loss of habitat. We recommend minimizing the area of soil scarification and initiating incremental reestablishment of herbaceous vegetation at the proposed work sites. Denuded and/or disturbed areas should be revegetated with a mixture of native legumes and

grasses. Species commonly used for soil stabilization are listed in the Texas Department of Agriculture's (TDA) Native Tree and Plant Directory, available from TDA at P.O. Box 12847, Austin, Texas, 78711.

We also urge you to take all precautions to ensure sediment loading does not occur to receiving streams in the project area. To prevent and/or minimize soil erosion and compaction associated with construction activities, avoid any unnecessary clearing of vegetation, and follow established rights-of-way whenever possible. All machinery and petroleum products should be stored outside the floodplain and/or wetland area during construction to prevent possible contamination of water and soils. No permanent structures should be placed in the 100-year floodplain.

We thank you for your concern for endangered and threatened species and other natural resources, and we appreciate the opportunity to comment on the proposed project. If we can be of further assistance or answer questions about these comments, please contact William Amy at 512-490-0057, extension 234. Please refer to the Service Consultation number listed above in any future correspondence regarding this project.

Sincerely,

Robert T. Pine
Supervisor

Enclosures

Federally Listed as Threatened and Endangered Species of Texas
September 27, 2006

This list represents species that may be found in counties throughout the Austin Ecological Services office's area of responsibility. Please contact the Austin ES office (U.S. Fish and Wildlife Service, 10711 Burnet Rd., Suite 200, Austin, Texas 78758, 512/490-0057) if additional information is needed.

DISCLAIMER

This list is based on information available to the U.S. Fish and Wildlife Service at the time of preparation. This list is subject to change, without notice, as new biological information is gathered and should not be used as the sole source for identifying species that may be impacted by a project.

Migratory Species Common to many or all Counties: Species listed specifically in a county have confirmed sightings. If a species is not listed they may occur as migrants in those counties.

Least tern	(E ~)	*Sterna antillarum*
Whooping crane	(E w/CH)	*Grus americana*
Bald eagle	(T)	*Haliaeetus leucocephalus*
Piping plover	(T w/CH)	*Charadrius melodus*

Andrews County

Sand dune lizard	(C)	*Sceloporus arenicolus*

Freestone County

Least tern	(E ~)	*Sterna antillarum*
Large-fruited sand-verbena	(E)	*Abronia macrocarpa*
Navasota ladies'-tresses	(E)	*Spiranthes parksii*
Bald eagle	(T)	*Haliaeetus leucocephalus*

Leon County

Least tern	(E ~)	*Sterna antillarum*
Houston toad	(E w/CH)	*Bufo houstonensis*
Large-fruited sand-verbena	(E)	*Abronia macrocarpa*
Navasota ladies'-tresses	(E)	*Spiranthes parksii*
Bald eagle	(T)	*Haliaeetus leucocephalus*

Limestone County

Bald eagle	(T)	*Haliaeetus leucocephalus*
Least tern	(E ~)	*Sterna antillarum*
Navasota ladies'-tresses (E)	*Spiranthes parksii*	

Pecos County

Black-capped vireo	(E)	*Vireo atricapilla*
Pecos gambusia	(E)	*Gambusia nobilis*
Leon Springs pupfish	(E w/CH)	*Cyprinodon bovinus*
Pecos (=puzzle) sunflower	(T)	*Helianthus paradoxus*
Pecos assiminea snail	(E w/CH)	*Assiminea pecos*
DiamondY Spring snail	(C)	*Tryonia adamantina*
Gonzales springsnail	(C)	*Tryonia stocktonensis*

Winkler County
Sand dune lizard (C) *Sceloporus arenicolus*

INDEX

E = Species in danger of extinction throughout all or a significant portion of its range.
T = Species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
C = Species for which the Service has on file enough substantial information to warrant listing as threatened or endangered. These species currently have no legal protection. However, addressing these species at this stage could better provide for overall ecosystem health in the local area and may avert potential future listing.
CH = Critical Habitat (in Texas unless annotated ‡)
P/ = Proposed ...
P/E = Species proposed to be listed as endangered.
P/T = Species proposed to be listed as threatened.
TSA = Threatened due to similarity of appearance. Protections of the Act, such as consultation requirements for Federal agencies under section 7, and recovery planning provisions under section 4(f), do not apply to species listed under similarity of appearance provisions.
□ = with special rule
‡ = CH designated (or proposed) outside Texas
~ = protection restricted to populations found in the "interior" of the United States. In Texas, the least tern receives full protection, except within 50 miles (80 km) of the Gulf Coast.

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January 23, 2002

TEXAS PARKS & WILDLIFE

Ms. Patsy Turner, Sr. Staff Ecologist
PBS&J
206 Wild Basin Road, Suite 300
Austin, Texas 78746

Dear Ms. Turner:

This letter is in response to your request, dated January 11, 2002, for confirmation that the most recent information on rare and threatened and endangered (T&E) species was collected from our maps by Bonnie Lister on January 4, 2002.

The current revision date for the County Lists of Rare Resources for Freestone, Leon, and Limestone counties is still 8/26/99, the same Revised Date appearing on the lists when copied by Bonnie. Without being able to see the maps and notes prepared by Bonnie, I can only use the list of occurrence printouts you noted to me by fax; however, general "Houston Toad habitat" notations on our maps will not have any accompanying printouts. After reviewing the list of rare resources noted from the 7.5' topographic quadrangles of interest (Donie, Farrar, Dew, Jewett, Buffalo, Round Prairie, and Lanely), I found that "Houston Toad habitat" in general should be noted on all the quads. This may have been noted by Bonnie on your maps, but since there is no accompanying printout you may not have included this notation with the list of printouts you supplied me. The Lanely quad had a record of Coreopsis intermedia, but this plant is not a listed species and the printout likely not collected, based on your parameters of getting printouts for only listed species. On your fax, you note on the Lanely quad "Bufo houstonensis habitat" but do not separately note the documented occurrence of Bufo houstonensis (Houston Toad) appearing on that quad. This may simply be semantics, but a record of occurrence for Houston Toad (printout attached) and general Houston Toad habitat both appear on the Lanely quad.

While data depicted on our maps represents the most recent public information available and processed into the data system, the following disclaimer still applies:

Given the small proportion of public versus private land in Texas, the TPWD Biological and Conservation Data System (BCD) does not include a representative inventory of rare resources in the state. Although it is based on the best data **available** to TPWD regarding rare species, the data from the BCD do not provide a definitive statement as to the presence, absence, or condition of special species, natural communities, or other significant features in your project area. These data cannot substitute for an on-site evaluation by your qualified biologists. The BCD information is intended to assist you in avoiding harm to species that may occur on your site.

I hope this fulfills your need for confirmation of collection of the most recent information available on January 4, 2002, and apparently remains current today, January 23, 2002.

Sincerely,

Dorinda Scott, Information System Manager
Texas Biological and Conservation Data System
Wildlife Diversity Branch, Wildlife Division

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512-389-4800
www.tpwd.state.tx.us

Enclosure

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
23 JAN 2002

N. .: BUFO HOUSTONENSIS
COMMON NAME: HOUSTON TOAD
OTHER NAME:
FEDERAL STATUS: LE
GLOBAL RANK: G1
IDENTIFIED: Y TRACK: Y
COUNTY: Freestone

STATE STATUS: E
STATE RANK: S1
SENSITIVITY:

USGS TOPO MAPS:
LANELY

TOPO QUAD:
3109651

MARGIN #:
3

ELEMENT OCCURRENCE NUMBER: 016
PRECISION: S
OCCURRENCE RANK:
SURVEY COMMENTS:

DATE LAST OBSERVED: 1990-10-16
DATE FIRST OBSERVED: 1990
DATE SURVEYED: 1990-10-16

MANAGED AREAS:

CONTAINED:

DIRECTIONS:
APPROXIMATELY 8 KILOMETERS SOUTH AND 5 KILOMETERS EAST OF LANELY BY COUNTY ROADS, EAST SIDE OF COUNTY ROAD AND EAST SIDE OF TRIANGLE DRIVEWAY

DESCRIPTION:
POST-OAK AND SANDJACK WOODLAND

QUALITATIVE/QUANTITATIVE DATA:

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:
A SINGLE FEMALE TAKEN AT 1215 HOURS; SPECIMEN PRESERVED (TO BE DEPOSITED AT TMM) AFTER H, L, K, M TISSUES TAKEN FOR ELECTROPHORESIS

SOURCE OF INFORMATION:
YANTIS, JAMES H. 1990. PERSONAL COMMUNICATION.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
12 FEB 2002

NAME: ABRONIA MACROCARPA
COMMON NAME: LARGE-FRUITED SAND-VERBENA
OTHER NAME:
FEDERAL STATUS: LE
STATE STATUS: E
GLOBAL RANK: G2
STATE RANK: S2
IDENTIFIED: Y
TRACK: Y
SENSITIVITY:
COUNTY: Leon

USGS TOPO MAPS:
ROUND PRAIRIE
TOPO QUAD:
3109633
MARGIN #:
1

ELEMENT OCCURRENCE NUMBER: 004
PRECISION: S
OCCURRENCE RANK:
SURVEY COMMENTS:
DATE LAST OBSERVED: 1994
DATE FIRST OBSERVED: 1994
DATE SURVEYED:

MANAGED AREAS:
CONTAINED:

DIRECTIONS:
1.4 MILES NORTH ON HIGHWAY 1146 FROM THE JUNCTION OF HIGHWAY 1146 AND UNNAMED EASTBOUND COUNTY ROAD IN LONG HOLLOW; PLANTS CA. 1300 FEET EAST OF ROAD

DESCRIPTION:

QUALITATIVE/QUANTITATIVE DATA:
100 PLANTS

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:

SOURCE OF INFORMATION:
YANTIS, JIM. NO DATE. ROUTE 1, BOX 611, HEARNE, TEXAS 77859; 409/279-2048.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
12 FEB 2002

NAME: ABRONIA MACROCARPA
COMMON NAME: LARGE-FRUITED SAND-VERBENA
OTHER NAME:
FEDERAL STATUS: LE STATE STATUS: E
GLOBAL RANK: G2 STATE RANK: S2
IDENTIFIED: Y TRACK: Y SENSITIVITY:
COUNTY: Freestone

USGS TOPO MAPS:	TOPO QUAD:	MARGIN #:
LANELY	3109651	3

ELEMENT OCCURRENCE NUMBER: 003 DATE LAST OBSERVED: 1996-04
PRECISION: S DATE FIRST OBSERVED: 1990
OCCURRENCE RANK: DATE SURVEYED:
SURVEY COMMENTS:

MANAGED AREAS: CONTAINED:

DIRECTIONS:
5.5 MILES SOUTH OF LANELY, TEXAS ON COUNTY ROAD 1848, THEN 2.8 AIR MILES EAST OF CONCORD

DESCRIPTION:
OPEN SAND FIELD WITH LIGHT COVER OF SLENDER THREE-AWN GRASS (ARISTIDA LONGESPICA); FLAT SAND, NOT DUNE SAND

QUALITATIVE/QUANTITATIVE DATA:
PERSONAL COMMUNICATION FROM JIM YANTIS; "THOUSANDS OF PLANTS"; 1996, ESTIMATED POPULATION 3000-4000

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:
THREATENED BY CONVERSION TO COASTAL BERMUDA (CYNODON DACTYLON); IN GENETIC STUDY, 5 SUBPOPULATIONS SAMPLED (10 INDIVIDUALS EACH)

SOURCE OF INFORMATION:
YANTIS, JAMES H. 1990. PERSONAL COMMUNICATION. TEXAS PARKS & WILDLIFE DEPARTMENT, ROUTE 1, BOX 611, HEARNE, TEXAS 77859, PHONE: 409/279-2048.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
12 FEB 2002

NAME: HALIAEETUS LEUCOCEPHALUS
COMMON NAME: BALD EAGLE
OTHER NAME:
FEDERAL STATUS: LT-PDL
STATE STATUS: T
GLOBAL RANK: G4
STATE RANK: S3B,S3N
IDENTIFIED: Y
TRACK: Y
SENSITIVITY: Y
COUNTY: Limestone

USGS TOPO MAPS:
FARRAR
TOPO QUAD:
3109643
MARGIN #:
1

ELEMENT OCCURRENCE NUMBER: 026
PRECISION: G
OCCURRENCE RANK:
DATE LAST OBSERVED: 1990
DATE FIRST OBSERVED: 1981
DATE SURVEYED:
SURVEY COMMENTS:

MANAGED AREAS:
CONTAINED:

DIRECTIONS:
LIMESTONE RESERVOIR, LIMESTONE COUNTY

DESCRIPTION:
LAKE SHORE, FORESTED

QUALITATIVE/QUANTITATIVE DATA:
NEST #147-1A: 1982-1983 INACTIVE, 1984 NEST FELL; NEST #147-1B: 1987-1989 INACTIVE, 1990 NEST FELL

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:

SOURCE OF INFORMATION:
MITCHELL, MARK. 1997. MEMO TO SHANNON BRESLIN OF 30 JULY 1997 PROVIDING BALD EAGLE NESTING DATA, INCLUDING COUNTY MAPS WITH ESTIMATED TERRITORIES.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
12 FEB 2002

NAME: HALIAEETUS LEUCOCEPHALUS
COMMON NAME: BALD EAGLE
OTHER NAME:
FEDERAL STATUS: LT-PDL
GLOBAL RANK: G4
IDENTIFIED: Y TRACK: Y
COUNTY: Robertson
Leon

STATE STATUS: T
STATE RANK: S3B,S3N
SENSITIVITY: Y

USGS TOPO MAPS:
ROUND PRAIRIE

TOPO QUAD:
3109633

MARGIN #:
2

ELEMENT OCCURRENCE NUMBER: 041
PRECISION: S
OCCURRENCE RANK:
SURVEY COMMENTS:

DATE LAST OBSERVED: 1999
DATE FIRST OBSERVED: 1994
DATE SURVEYED:

MANAGED AREAS:

CONTAINED:

DIRECTIONS:
NORTHEAST OF ROUND PRAIRIE

DESCRIPTION:

QUALITATIVE/QUANTITATIVE DATA:
ONE BALD EAGLE NEST, WITH NESTING BALD EAGLES IN 1994; NEST #198-3A: 1994 ACTIVE NEST PRODUCED 2 YOUNG, 1995 ACTIVE NEST PRODUCED 3 YOUNG, 1996-1997 ACTIVE NEST PRODUCED 2 YOUNG, 1998 ACTIVE NEST PRODUCED 3 YOUNG, 1999 ACTIVE NEST PRODUCED 2 YOUNG

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:
THE MARATHON OIL COMPANY HAS CHOSEN AN ALTERNATIVE SITE FOR ITS OPERATION; THE NEW SITE IS OUTSIDE THE ONE-MILE MANAGEMENT ZONE FOR THE NESTING BALD EAGLES; TPWD NEST #198-3A

SOURCE OF INFORMATION:
MITCHELL, MARK. 1999. PROJECT NO. 30: BALD EAGLE NEST SURVEY AND MANAGEMENT. PERFORMANCE REPORT. AUGUST 31, 1999.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
12 FEB 2002

NAME: SPIRANTHES PARKSII
COMMON NAME: NAVASOTA LADIES'-TRESSES
OTHER NAME:
FEDERAL STATUS: LE
GLOBAL RANK: G3
IDENTIFIED: Y TRACK: Y
COUNTY: Freestone

STATE STATUS: E
STATE RANK: S3
SENSITIVITY:

USGS TOPO MAPS:	TOPO QUAD:	MARGIN #:
DONIE	3109642	2

ELEMENT OCCURRENCE NUMBER: 097
PRECISION: S
OCCURRENCE RANK:
SURVEY COMMENTS:

DATE LAST OBSERVED: 1991
DATE FIRST OBSERVED:
DATE SURVEYED:

MANAGED AREAS: CONTAINED:

DIRECTIONS:
CA. 2600 FEET (BY AIR) NORTH OF STATE ROUTE 164, CA. 4.3 ROAD MILES EAST OF RAILROAD TRACKS ON EAST SIDE OF DONIE; JUST SOUTHWEST OF TANK MARKED ON TOPO; ALSO ON NORTHWEST SIDE OF DRAIN ON WEST SIDE OF SAME TANK

DESCRIPTION:
OPENING IN POST OAK WOODLAND; ALSO ON SEEP ZONE ON SOUTHWEST SIDE OF TANK, WHERE IT OCCURS WITH ERIOCAULON SP., ETC.

QUALITATIVE/QUANTITATIVE DATA:
28 PLANTS SEEN BY SEVERINSON IN 1991; THREE GROUPS OF 3 PLANTS EACH ON NORTHWEST SIDE OF DRAIN - TYPICAL; 19 PLANTS IMMEDIATELY SOUTHWEST OF TANK ON SEEPAGE SLOPE WITH ERIOCAULON; ERIOCAULON KOERNICKIANUM AT 400 FEET NEARBY

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:

SOURCE OF INFORMATION:
SEVERINSON, D. 1992. PERSONAL COMMUNICATION. CONVERSATION WITH J. POOLE AND W.R. CARR, 29 JANUARY 1992.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
30 JAN 2002

NAME: CYPERUS GRAYIOIDES
COMMON NAME: MOHLENBROCK'S UMBRELLA-SEDGE
OTHER NAME:
FEDERAL STATUS: STATE STATUS:
GLOBAL RANK: G3 STATE RANK: S3
IDENTIFIED: Y TRACK: W SENSITIVITY:
COUNTY: Freestone

USGS TOPO MAPS: TOPO QUAD: MARGIN #:
DONIE 3109642 1

ELEMENT OCCURRENCE NUMBER: 011 DATE LAST OBSERVED: 1988-07-11
PRECISION: S DATE FIRST OBSERVED:
OCCURRENCE RANK: DATE SURVEYED: 1988-07-11
SURVEY COMMENTS:

MANAGED AREAS: CONTAINED:

DIRECTIONS:
JUST NORTH OF OLD ZION CEMETERY, CA. 0.4 MILE SOUTH OF TX164 AT A POINT 6.2 MILES WEST OF BUFFALO (LEON COUNTY) ALONG HEADWATERS OF RENA BRANCH

DESCRIPTION:
SANDHILL WOODLAND-BARRENS

QUALITATIVE/QUANTITATIVE DATA:

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:
ORZELL #7347 (ILL, NCU, SMU, TEX)

SOURCE OF INFORMATION:
BRIDGES, E.L. AND S.L. ORZELL. 1989. ADDITIONS AND NOTEWORTHY VASCULAR PLANT COLLECTIONS FROM TEXAS AND LOUISIANA, WITH HISTORICAL, ECOLOGICAL, AND GEOGRAPHIC NOTES. PHYTOLOGIA 66(1):12-69.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
30 JAN 2002

NAME: COREOPSIS INTERMEDIA
COMMON NAME: GOLDEN WAVE TICKSEED
OTHER NAME:
FEDERAL STATUS:
GLOBAL RANK: G3
IDENTIFIED: Y TRACK: W
COUNTY: Leon

STATE STATUS:
STATE RANK: S3
SENSITIVITY:

USGS TOPO MAPS:
DONIE

TOPO QUAD:
3109642

MARGIN #:
3

ELEMENT OCCURRENCE NUMBER: 030
PRECISION: S
OCCURRENCE RANK:
SURVEY COMMENTS:

DATE LAST OBSERVED: 1989-06-08
DATE FIRST OBSERVED:
DATE SURVEYED:

MANAGED AREAS:

CONTAINED:

DIRECTIONS:
JUST NORTH OF GRAVEL ROAD CROSSING OF NEEDHAM MARSH BRANCH, 3.5 MILES NORTH OF U.S. 79 AT JEWETT VIA DIVISION STREET

DESCRIPTION:
XERIC BLUEJACK OAK-POST OAK SANDHILL WOODLANDS/SAND BARRENS; GEOLOGY - CARRIZO SAND (EOCENE)

QUALITATIVE/QUANTITATIVE DATA:

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:

SOURCE OF INFORMATION:
ORZELL, S.L. AND E.L. BRIDGES. (#10502). 1989. SPECIMEN # NONE TEX-LL.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
30 JAN 2002

NAME: COREOPSIS INTERMEDIA
COMMON NAME: GOLDEN WAVE TICKSEED
OTHER NAME:
FEDERAL STATUS:
GLOBAL RANK: G3
IDENTIFIED: Y TRACK: W
COUNTY: Freestone

STATE STATUS:
STATE RANK: S3
SENSITIVITY:

USGS TOPO MAPS:
DONIE

TOPO QUAD:
3109642

MARGIN #:
4

ELEMENT OCCURRENCE NUMBER: 036
PRECISION: S
OCCURRENCE RANK: B
SURVEY COMMENTS:

DATE LAST OBSERVED: 1995-08-19
DATE FIRST OBSERVED: 1995-08-19
DATE SURVEYED: 1995-08-19

MANAGED AREAS:

CONTAINED:

DIRECTIONS:
FROM JUNCTION OF STATE ROUTES 80 AND 164 AT DONIE, GO EAST 4.5 MILES ON 164, PLANTS ON NORTH SIDE OF ROAD

DESCRIPTION:
ROADSIDE FLAT SANDHILL; BLUEJACK OAK-POSTOAK-BLACKJACK OAK; RIGHT-OF-WAY AND ADJACENT LAND

QUALITATIVE/QUANTITATIVE DATA:
< 100 PLANTS IN FLOWER AND FRUIT ON 19 AUGUST 1995

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:

SOURCE OF INFORMATION:
SINGHURST, JASON RAY. 1996. MASTER'S THESIS. THE STATUS OF NINE ENDANGERED PLANTS OF EAST TEXAS: HISTORICAL, ECOLOGICAL, AND PHYTOGEOGRAPHICAL NOTES. STEPHEN F. AUSTIN STATE UNIVERSITY, AUGUST 1996.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
30 JAN 2002

NAME: ERIOCAULON KOERNICKIANUM
COMMON NAME: SMALL-HEADED PIPEWORT
OTHER NAME:
FEDERAL STATUS: STATE STATUS:
GLOBAL RANK: G2 STATE RANK: S1
IDENTIFIED: Y TRACK: Y SENSITIVITY:
COUNTY: Leon
Freestone

USGS TOPO MAPS: TOPO QUAD: MARGIN #:
DONIE 3109642 5

ELEMENT OCCURRENCE NUMBER: 004 DATE LAST OBSERVED: 1984?
PRECISION: G DATE FIRST OBSERVED:
OCCURRENCE RANK: X? DATE SURVEYED:
SURVEY COMMENTS: PROBABLY DESTROYED BY STRIP MINING

MANAGED AREAS: CONTAINED:

DIRECTIONS:
JEWETT MINE SITE

DESCRIPTION:
HILLSIDE BOGS - SEEPAGE SLOPES WITH PARTIALLY OPEN POST OAK CANOPY

QUALITATIVE/QUANTITATIVE DATA:
TWO POPULATIONS OBSERVED, PROBABLY DESTROYED BY STRIP MINE ACTIVITIES

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:

SOURCE OF INFORMATION:
AJILVSGI, GEYATA. 1984. DISCUSSION WITH TINA ALLDAY-BONDY, JULY 25, 1984.

TEXAS BIOLOGICAL AND CONSERVATION DATA SYSTEM
TEXAS PARKS AND WILDLIFE DEPARTMENT
30 JAN 2002

NAME: ULMUS AMERICANA-CELTIS SPP SERIES
COMMON NAME: AMERICAN ELM-HACKBERRY SERIES
OTHER NAME: CONFLUENCE OF BUFFALO AND LINN CREEK
FEDERAL STATUS: STATE STATUS:
GLOBAL RANK: G4 STATE RANK: S4
IDENTIFIED: Y TRACK: Y SENSITIVITY:
COUNTY: Freestone

USGS TOPO MAPS:	TOPO QUAD:	MARGIN #:
DEW	3109652	1

ELEMENT OCCURRENCE NUMBER: 003 DATE LAST OBSERVED:
PRECISION: G DATE FIRST OBSERVED:
OCCURRENCE RANK: DATE SURVEYED:
SURVEY COMMENTS: USF&WS PRIORITY 3

MANAGED AREAS: CONTAINED:

DIRECTIONS:
CONFLUENCE OF BUFFALO AND LINN CREEKS ABOUT 2 MILES WEST OF INTERSTATE 45 AND 3 MILES NORTH OF HIGHWAY 164

DESCRIPTION:
SOME GOOD OLD GROWTH WATER OAK-BASSWOOD-AMERICAN ELM-SUGARBERRY-PECAN WITH UPLAND POST OAK INCLUSIONS; MAY BE PECAN-SUGARBERRY

QUALITATIVE/QUANTITATIVE DATA:
TRINITY RIVER SYSTEM

MANAGEMENT COMMENTS:

PROTECTION COMMENTS:

OTHER COMMENTS:
BASED ON JIM NEAL'S USF&WS BOTTOMLAND HARDWOOD REPORT; NEEDS FIELD CHECKING

SOURCE OF INFORMATION:
USF&WS, USDOI. 1985-05. TEXAS BOTTOMLAND HARDWOOD PRESERVATION PROGRAM: FINAL CONCEPT PLAN. USF&WS, ALBUQUERQUE, NM.

	Federal Status	State Status
*****AMPHIBIANS *****		
Houston Toad (*Bufo houstonensis*) - endemic; species sandy substrate, water in pools, ephemeral pools, stock tanks; breeds in spring especially after rains; burrows in soil when inactive; breeds February-June; found associated with soils of the Carrizo, Goliad, Queen City, Recklaw, Sparta, Willis, and Weches geologic formations	LE	E
***** BIRDS *****		
Arctic Peregrine Falcon (*Falco peregrinus tundrius*) - due to similar field characteristics, treat all Peregrine Falcons as federal listed Endangered; potential migrant	DL	T
Bald Eagle (*Haliaeetus leucocephalus*) - found primarily near seacoasts, rivers, and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	LT-PDL	T
Henslow's Sparrow (*Ammodramus henslowii*) - wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking		
Interior Least Tern (*Sterna antillarum athalassos*) - nests along sand and gravel bars within braided streams and rivers; also known to nest on man-made structures	LE	E
Whooping Crane (*Grus americana*) - potential migrant	LE	E
Wood Stork (*Mycteria americana*) - forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960		T
***** MAMMALS *****		
Plains Spotted Skunk (*Spilogale putorius interrupta*) - catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) - roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures		T
Southeastern Myotis (*Myotis austroriparius*) - roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures		
***** REPTILES *****		
Texas Garter Snake (*Thamnophis sirtalis annectens*) - wet or moist microhabitats are conducive to the species occurrence, but is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August		
Texas Horned Lizard (*Phrynosoma cornutum*) - open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September		T
Timber/Canebrake Rattlesnake (*Crotalus horridus*) - swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; limestone bluffs, sandy soil or black clay; prefers dense ground cover, i.e. grapevines or palmetto		T

FREESTONE COUNTY

	Federal Status	State Status
***** VASCULAR PLANTS *****		
Large-fruited sand verbena (*Abronia macrocarpa*) - endemic; deep, somewhat excessively drained sandy soils in openings in post oak woodlands, sometimes in active sand blowouts; flowering April-June (-October)	LE	E
Navasota ladies'-tresses (*Spiranthes parksii*) - endemic; margins of and openings within post oak woodlands in sandy loams along intermittent tributaries of rivers; flowering late October-early November	LE	E

LE, LT - Federally Listed Endangered/Threatened
PE, PT - Federally Proposed Endangered/Threatened
E/SA, T/SA - Federally Endangered/Threatened by Similarity of Appearance
C1 - Federal Candidate, Category 1; information supports proposing to list as endangered/threatened
DL ,PDL - Federally Delisted/Proposed Delisted
E, T - State Endangered/Threatened
"blank" - Rare, but with no regulatory listing status

Species appearing on these lists do not share the same probability of occurrence. Some species are migrants or wintering residents only, or may be historic or considered extirpated.

	Federal Status	State Status
*****AMPHIBIANS *****		
Houston Toad (*Bufo houstonensis*) - endemic; species sandy substrate, water in pools, ephemeral pools, stock tanks; breeds in spring especially after rains; burrows in soil when inactive; breeds February-June; found associated with soils of the Carrizo, Goliad, Queen City, Recklaw, Sparta, Willis, and Weches geologic formations	LE	E
***** BIRDS *****		
Arctic Peregrine Falcon (*Falco peregrinus tundrius*) - due to similar field characteristics, treat all Peregrine Falcons as federal listed Endangered; potential migrant	DL	T
Bald Eagle (*Haliaeetus leucocephalus*) - found primarily near seacoasts, rivers, and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	LT-PDL	T
Henslow's Sparrow (*Ammodramus henslowii*) - wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking		
Whooping Crane (*Grus americana*) - potential migrant	LE	E
Wood Stork (*Mycteria americana*) - forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960		T
***** MAMMALS *****		
Plains Spotted Skunk (*Spilogale putorius interrupta*) - catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) - roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures		T
Southeastern Myotis (*Myotis austroriparius*) - roosts in cavity trees of bottomland hardwoods, concrete culverts, and abandoned man-made structures		
***** REPTILES *****		
Texas Garter Snake (*Thamnophis sirtalis annectens*) - wet or moist microhabitats are conducive to the species occurrence, but is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August		
Texas Horned Lizard (*Phrynosoma cornutum*) - open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September		T
Timber/Canebrake Rattlesnake (*Crotalus horridus*) - swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; limestone bluffs, sandy soil or black clay; prefers dense ground cover, i.e. grapevines or palmetto		T

LEON COUNTY

	Federal Status	State Status
***** VASCULAR PLANTS *****		
Large-fruited sand verbena (*Abronia macrocarpa*) - endemic; deep, somewhat excessively drained sandy soils in openings in post oak woodlands, sometimes in active sand blowouts; flowering April-June (-October)	LE	E
Navasota ladies'-tresses (*Spiranthes parksii*) - endemic; margins of and openings within post oak woodlands in sandy loams along intermittent tributaries of rivers; flowering late October-early November	LE	E
Parks' jointweed (*Polygonella parksii*) - endemic; deep loose sands of Carrizo and similar Eocene formations, including disturbed areas; flowering spring-summer		
Sandhill woolywhite (*Hymenopappus carrizoanus*) - endemic; open areas in deep sands derived from Carrizo and similar Eocene formations, including disturbed areas; flowering late spring-fall		
Small-headed pipewort (*Eriocaulon koernickianum*)- wet acid sands of upland seeps and bogs, often on sphagnum mats with little other vegetative cover; flowering/fruiting late May-late June		

LE, LT - Federally Listed Endangered/Threatened
PE, PT - Federally Proposed Endangered/Threatened
E/SA, T/SA - Federally Endangered/Threatened by Similarity of Appearance
C1 - Federal Candidate, Category 1; information supports proposing to list as endangered/threatened
DL ,PDL - Federally Delisted/Proposed Delisted
E, T - State Endangered/Threatened
"blank" - Rare, but with no regulatory listing status

Species appearing on these lists do not share the same probability of occurrence. Some species are migrants or wintering residents only, or may be historic or considered extirpated.

LIMESTONE COUNTY

	Federal Status	State Status
***** BIRDS *****		
Arctic Peregrine Falcon (*Falco peregrinus tundrius*) - due to similar field characteristics, treat all Peregrine Falcons as federal listed Endangered; potential migrant	DL	T
Bald Eagle (*Haliaeetus leucocephalus*) - found primarily near seacoasts, rivers, and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	LT-PDL	T
Henslow's Sparrow (*Ammodramus henslowii*) - wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking; likely to occur, but few records within this county		
Interior Least Tern (*Sterna antillarum athalassos*) - nests along sand and gravel bars within braided streams and rivers; also known to nest on man-made structures	LE	E
Migrant Loggerhead Shrike (*Lanius ludovicianus migrans*) - open and semi-open grassy areas with scattered trees and brush; breeding March-late August		
Western Burrowing Owl (*Athene cunicularia hypugaea*) - open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows		
White-faced Ibis (*Plegadis chihi*) - prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats		T
Whooping Crane (*Grus americana*) - potential migrant	LE	E
*****FISHES*****		
Smalleye shiner (*Notropis buccula*) - endemic to upper Brazos River system and its tributaries; apparently introduced into adjacent Colorado River drainage; medium to large prairie streams with sandy substrate and turbid to clear warm water; presumably eats small aquatic invertebrates		
***** MAMMALS *****		
Cave Myotis Bat (*Myotis velifer*) - colonial and cave-dwelling; also roosts in rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (*Hirundo pyrrhonota*) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum cave of Panhandle during winter; opportunistic insectivore		
Plains Spotted Skunk (*Spilogale putorius interrupta*) - catholic; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie		
***** REPTILES *****		
Texas Garter Snake (*Thamnophis sirtalis annectens*) - wet or moist microhabitats are conducive to the species occurrence, but is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March-August		
Texas Horned Lizard (*Phrynosoma cornutum*) - open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September		T

LIMESTONE COUNTY

	Federal Status	State Status
Timber/Canebrake Rattlesnake (*Crotalus horridus*) - swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland, limestone bluffs; sandy soil or black clay; prefers dense ground cover, i.e. grapevines or palmetto		T

VASCULAR PLANTS

Small-headed pipewort (*Eriocaulon koernickianum*) – wet acid sands of upland seeps and bogs, often on sphagnum mats with little other vegetative cover, usually associated with post oak woodlands; also in native prairies or along stream banks; flowering/fruiting late May-late June

LE, LT - Federally Listed Endangered/Threatened
PE, PT - Federally Proposed Endangered/Threatened
E/SA, T/SA - Federally Endangered/Threatened by Similarity of Appearance
C1 - Federal Candidate, Category 1; information supports proposing to list as endangered/threatened
DL ,PDL - Federally Delisted/Proposed Delisted
E, T - State Endangered/Threatened
"blank" - Rare, but with no regulatory listing status

Species appearing on these lists do not share the same probability of occurrence. Some species are igrants or wintering residents only, or may be historic or considered extirpated.

TEXAS PARKS & WILDLIFE

November 10, 2006

Mr. James M. Wiersema
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, Texas 78716

Dear Mr. Wiersema:

Regarding the proposed FutureGen Heart of Brazos Project I would like to offer addition information concerning the construction plans.

You need to be aware that the proposed carbon dioxide pipelines will be routed through some of the best remaining wildlife habitat corridors in that part of northern Leon and southern Freestone Counties. In addition, the pipeline will cross 15 properties under wildlife management plans and bisect the Friendship Community Wildlife Management Association.

It is vital that proper consideration be given to the possible adverse effects of this construction on wildlife habitat in order to minimize or mitigate these effects.

Thank you for the opportunity to review and comment on this project. If you have any additional questions, please let me know.

Sincerely,

David Sierra
District 5 Leader
Wildlife Division

4200 SMITH SCHOOL ROAD
AUSTIN, TEXAS 78744-3291
512.389.4800

www.tpwd.state.tx.us

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Jim Wiersema

From: Beth Helms Seaton [BSeaton@tceq.state.tx.us]
Sent: Friday, October 13, 2006 4:39 PM
To: Jim Wiersema
Cc: Earl Lott; L'oreal Stepney
Subject: FutureGen

Dear Mr. Wiersema,

Thank you for your letters dated October 6, 2006, requesting information concerning resources that could be utilized to determine existing contamination in aquatic plants and animals on the proposed Heart of Brazos and Odessa proposed developement sites for the proposed FutureGen Project. Your letter stated that you reviewed the TCEQ 2004 Texas 303 (d) list and the TCEQ 2004 Water Quality Assessment for Individual Water Bodies as resources listing existing contamination in aquatic plants and animals within the 5-mile region of influence of the proposed power plant sites. You requested the disclosure of any additional potential resources concerning existing contamination that was not listed in your letter. The Water Quality Division uses the 303(d) list referenced above for information regarding contamination in aquatic plants and animals and does not have any additional site specific information. No 303(d) listing issues have been identified in the general vicinity of these proposed sites.

In a phone conversation with you on 10/11/06, you indicated that no effluent discharge is being proposed at this time. If it becomes apparent that an effluent discharge is necessary, a discharge permit may be required and the applicant would need to determine the point of discharge, the amount of wastewater expected to be discharged, and the types of wastewater expected to be discharged. Permit limits for oxygen demanding substances (i.e. Carbonaceous BOD_5 and Ammonia-Nitrogen) should be expected for wastewater streams containing potentially elevated concentrations of these constituents. This could include process wastewater as well as cooling tower blowdown if treated domestic wastewater is used as makeup water. Information on the expected concentrations of these constituents, and any other pollutants used in the process water would need to be estimated and submitted during the permit application process so that modeling can be performed to assess the impact of the wastewater on dissolved oxygen concentrations in any streams receiving this effluent. In addition, the waters that the discharge would enter would need to be characterized. To do this the applicant would need to determine the point of discharge and identify the unclassified water bodies along the course (discharge route) for at least three miles downstream and determine the classified segment that the discharge would eventually meet. If the discharge is directly to a classified segment, then the aquatic life uses will be defined by that segment. Next, the applicant should characterize the unclassified water bodies (streams, lakes, or ponds) along the discharge route. This involves determining whether streams in the discharge route are perennial, intermittent with perennial pools, or intermittent. In any of these water bodies, for sites where available information indicates that the presumed uses and criteria in the standards for unclassified streams may be inappropriate, additional data may be obtained by the TCEQ or the applicant in the form of a "receiving water assessment."

Please let me know if you need additional information. As stated above, if it becomes apparent that an effluent discharge is necessary, we would be happy to meet with you if needed to discuss any permitting issues, process, or the application if needed.

Sincerely,

Beth Seaton, Special Assistant
Water Quality Division
512-239-2526

TEXAS HISTORICAL COMMISSION

The State Agency for Historic Preservation

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

October 31, 2006

Russ Brownlow
Cultural Resources Director
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, TX 78716

Re: Project review under Section 106 of the National Historic Preservation Act of 1966
FutureGen Project, Proposed Heart of Brazos Site Areas of New Construction (DOE)

Dear Mr. Brownlow:

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the proposed federal undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Bill Martin, has examined our records. We concur with your assessment that archeological surveys are unnecessary for the Waterline Corridors east and west of the plant. We also concur with your recommendations for the proposed CO_2 Pipeline Corridors. Specifically, we concur that no cultural resources surveys are required for segments A-C and B-C. We also concur that all remaining segments (C-D, D-E, D-F, F-G, F-H, and H-I) require cultural resources surveys.

The work should meet the minimum archeological survey standards posted on-line at www.thc.state.tx.us. A report of investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. In addition, any buildings 50 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. You may obtain lists of archeologists in Texas on-line at: www.counciloftexasarcheologists.org or www.rpanet.org. Please note that other potentially qualified archeologists not included on these lists may be used.

Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Bill Martin at 512/463-5867.**

Sincerely,

William A. Martin

for
F. Lawerence Oaks, State Historic Preservation Officer

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TEXAS HISTORICAL COMMISSION

The State Agency for Historic Preservation

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

October 31, 2006

Russ Brownlow
Cultural Resources Director
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, TX 78716

Re: Project review under Section 106 of the National Historic Preservation Act of 1966
FutureGen Project, Proposed Heart of Brazos Sequestration Reservoirs (DOE)

Dear Mr. Brownlow:

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the proposed federal undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Bill Martin, has examined our records. We concur with your assessment that archeological surveys are needed for both the Northern and the Southern Sequestration Reservoirs.

The work should meet the minimum archeological survey standards posted on-line at www.thc.state.tx.us. A report of investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. In addition, any buildings 50 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. You may obtain lists of archeologists in Texas on-line at: www.counciloftexasarcheologists.org or www.rpanet.org. Please note that other potentially qualified archeologists not included on these lists may be used.

Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Bill Martin at 512/463-5867.**

Sincerely,

William A. Martin

for
F. Lawerence Oaks, State Historic Preservation Officer

FLO/wam

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Office of
Road and Bridge Department
Engineer - T. L. KANTOR, P. E.

P. O. Box 101
Groesbeck, Texas 76642
Office - 254-729-5513

STATE OF TEXAS

Limestone County

GROESBECK, TEXAS

May 22, 2006

Scott W. Tinker, Ph.D.
Director
Bureau of Economic Geology
The University of Texas at Austin
University Station, Box X
Austin, Texas 78713-8924

Subject: Heart of Brazos Site Flood Hazard clarification

Dear Dr. Tinker,

Per your request, I have reviewed the proposed FutureGen site as it relates to potential floodplain conflicts. The site in question is located in Limestone, Freestone, and Leon Counties.

I have reviewed the most recent Flood Hazard Boundary Maps available for Limestone County and for Freestone County. Interpretation of said maps reveals that no areas of the proposed site that are situated in Limestone or Freestone Counties lie within the area of a 100 year flood.

The area of Leon County in which a portion of the subject site is located is currently unmapped with regard to Flood Hazard Boundary Maps. Floodplain determination, therefore, must be made via alternate methods.

In this case, consultation of the NRCS Soil Survey for Leon County shows that the soils on the subject site all having a flooding frequency class of "none". The definition of said flooding frequency class is that of having 0% chance of flooding in any given year, or less than 1 time in 500 years. Based upon this information, it is my opinion that no areas of the proposed site that are situated in Leon County lie within the area of the 100 year flood.

If you have any questions regarding my determination, please feel free to give me a call.

Sincerely,

Ted Kantor, 05/22/2006

Ted L. Kantor, P.E.
Limestone County Engineer
Limestone County Floodplain Administrator

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December 6, 2006

, Chief
Tribal
Address
City, state, zip

Re: Executive Memo (4/29/1994): "Government to Government Relations"
Executive Order 13175 (11/6/2000): Consultation and Coordination with Indian Tribal Governments,
Section 106 of the National Historic Preservation Act and
NAGPRA Consultation for the Environmental Impact Statement for Implementation of the FutureGen Project

Dear :

The U.S. Department of Energy (DOE) is preparing an Environmental Impact Statement (EIS) for the proposed FutureGen Project, which would receive Federal cost-share funding for up to $700 million on a $950 million (total, in 2004 dollars) project. The project would comprise the planning, design, construction and operation of a research and development power plant by the FutureGen Alliance, Inc. (a not-for-profit organization). A Notice of Intent to prepare the EIS was published in the Federal Register / Vol. 71, No. 145 / Friday, July 28, 2006. The FutureGen Project would feature a coal-fueled electric power and hydrogen gas (H_2) production plant integrated with carbon dioxide (CO_2) capture and geologic sequestration of the captured gas. Four sites have been identified as reasonable alternatives: (1) Mattoon, Illinois; (2) Tuscola, Illinois; (3) Jewett, Texas; and (4) Odessa, Texas.

In accordance with the referenced Executive Orders and Acts, DOE would like to solicit your input on the project to determine if your tribe has any concerns or issues about the project. In particular, we are interested in learning whether or not this project has the potential to impact any significant archeological, religious or cultural sites. DOE is requesting that you (or your designated representative) submit to my office any concerns or issues you may have or notify my office if you are aware of any significant archeological, religious, or cultural sites within the areas of potential impact.

To assist in your review, the enclosed maps illustrate the potential areas where construction impacts may occur. Impacts to archeological resources (if present) could occur as a result of site development and other land-disturbing activities from the project. In addition, DOE is considering the potential for impacts related to visual or atmospheric resources associated with potential air emissions. The following discussion provides a more detailed description of the project.

FutureGen Project Processes

The 275-MW FutureGen power plant would employ advanced coal gasification technology integrated with combined cycle electricity generation, H_2 production, CO_2 capture, and sequestration of the captured gas in geologic repositories. The gasification process would combine coal, oxygen (O_2), and steam to produce a H_2-rich ''synthesis gas.'' After exiting the conversion reactor, the composition of the synthesis gas would be ''shifted'' to produce additional H_2. The product stream would consist mostly of H_2, steam, and CO_2. Following separation of these three gas components, the H_2 would be used to generate electricity in a gas turbine and/or fuel cell. Some of the H_2 could be used as a feedstock for chemical plants or petroleum refineries or as a transportation fuel. Steam from the process could be condensed, treated, and recycled into the gasifier or added to the plant's cooling water circuit. CO_2 from the process would be sequestered in deep underground geologic formations that would be monitored to verify the permanence of CO_2 storage.

Technology Alternatives

As a research and development project, FutureGen would incorporate cutting-edge and emerging technologies ready for full-scale or subscale testing prior to their commercial deployment. Identification of technology alternatives is currently in progress for key components: gasification, O_2 production, H_2 production, synthesis gas cleanup, H_2 turbines, CO_2 capture, byproduct utilization, and others. Decisions on incorporation of specific technologies would be made by the Alliance consistent with the overall project goal of proving the technical and economic feasibility of the near-zero emissions concept. It is expected that sequestration would be accomplished using existing state-of-the-art technologies for both transmission and injection of the CO_2 stream. Various technologies would be considered for monitoring at the injection sites.

We are very interested in receiving your concerns about possible effects of the project on archeological, religious, or cultural sites that are considered significant to your tribe. If you have questions, please do not hesitate to call, (304-285-4426).

In addition, please sign the signature line below and return a signed copy to my attention if you (or your designated representative) want to continue to receive information about the project or if you wish to provide review comments on the Section 106 or NEPA documents. DOE would appreciate your response by January 4, 2007.

Sincerely,

Mark L. McKoy
NEPA Document Manager
U.S. DOE

Attachments:
Maps of alternative sites
Notice of Intent

RESPONSE REQUESTED:

__ Yes, we wish to continue to receive information and participate in the consultation process.

__ No we do not wish to continue to receive information or participate in the consultation process.

By: _____

Title: _____

Date: _____

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United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Southern Plains Regional Office
P.O. Box 368
Anadarko, Oklahoma 73005

IN REPLY REFER TO:
Natural Resources

DEC 2 9 2006

Mark L. McKoy
NEPA Document Manager
U.S. DOE
National Energy Technology Laboratory
3610 Collins Ferry Road
Morgantown, WV 26507-0880

Dear Mr. McKoy:

Thank you for the opportunity to review the documentation describing the proposed FutureGen Project. The closest alternative sites where this office might have some input are the Jewett and Odessa, Texas sites.

A review of the maps of these project alternative locations indicates that there are no tribal or Individual Indian trust lands within the areas of potential effect. The Bureau of Indian Affairs has no jurisdiction within the alternative project areas in the Jewett or Odessa areas. However, Tribes that have historic ties to the area may have some concern if the project has a potential to impact sites of importance in their histories or cultural traditions. We recommend that you contact the Kiowa Tribe of Oklahoma, the Comanche Nation, the Wichita and Affiliated Tribes, and the Mescalero Apache Tribe regarding the Odessa alternative and the Alabama-Coushatta Tribe of Texas, and the Caddo Nation regarding the Jewett alternative.

Sincerely,

Acting Regional Director

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United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Oklahoma Regional Office
P.O. Box 8002
Muskogee, OK 74402-8002

IN REPLY REFER TO:
Division of Environmental
Safety and Cultural Resources

Mr. Mark L. McKoy
U.S. Department of Energy
P. O. Box 880
Morgantown, West Virginia 26507-0880

JAN 2 2 2007

Dear Mr. McKoy:

On December 11, 2006, the Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), received an information request from the U.S. Department of Energy (USDOE) regarding significant impacts to archeological, religious or cultural sites from the construction and operation of a coal-fueled electric power and Hydrogen gas (H_2) production plant located in Illinois or Texas. The EORO has no comments regarding the project.

The projects in Illinois are within the jurisdictional area of the Bureau's Eastern Region and the projects in Texas are within the jurisdiction area of the Bureau's Southern Plains Region. Both Regions have been provided the notice by copy of this letter. As the other two Regions may have environmental and/or cultural resources concerns relating to the project, it is recommended that the USDOE coordinate directly with them on any of their concerns. The contact addresses are:

Franklin Keel, Regional Director
Eastern Regional Office
545 Marriott Drive, Suite 700
Nashville, Tennessee 37214

Dan Deerinwater, Regional Director
Southern Plains Regional Office
P.O. Box 368
Anadarko, Oklahoma 73005-0368

If any additional information is required, please contact Mr. Bob Coleman, Division Chief, Division of Environmental, Safety and Cultural Resources, EORO, at (918) 781-4660.

Respectfully,

Regional Director

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A.4 ODESSA

The following agencies sent coordination letters:

- U.S. Fish and Wildlife Service
- Texas Parks and Wildlife Department
- Texas Commission on Environmental Quality
- Texas Historical Commission
- U.S. Department of Energy
- Bureau of Indian Affairs

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758
512 490-0057
FAX 490-0974

OCT 20 2006

Mr. James Wiersema
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, Texas 78716

Consultation Number 21450-2007-TA-0024

Dear Mr. Wiersema:

This is in response to your letter dated October 6, 2006, requesting review on the proposed site locations for the FutureGen project. Your conversation with my staff on October 16, 2006, clarified the level of review you were requesting. Our review did not result in any additional information other than that obtained from our web site (see below for address). Enclosed is a list of the U.S. Fish and Wildlife Service (Service) threatened and endangered species by county that the FutureGen project may impact if implemented. This list is organized by the counties you have indicated as potential sites for the project. We are providing this information to assist you in assessing and avoiding impacts to federally listed threatened and endangered species, their habitat, and designated wetlands. Further consultation with us may be necessary should this project go forward.

Federally listed species

The proposed project site is not located within designated critical habitat of any federally listed threatened or endangered species. You may access a list of federally listed or proposed species by county of occurrence in Texas at http://ifw2es.fws.gov/EndangeredSpecies/lists/. A searchable database with information related to the life history and ecology of each of these species can be found at http://endangered.fws.gov/.

Generally, the Service believes that the first step in determining impacts to endangered species is presence/absence surveys conducted within the project area by persons with appropriate biological expertise. Often, absence of endangered species is determined and the project can then proceed without additional responsibilities under the Endangered Species Act of 1973, as amended (Act). If assessments indicate that suitable habitat is likely to be affected either directly or indirectly, we recommend that you consult with us further. If any endangered species or their habitats are present, the project can often be modified to avoid all impacts. Please send any completed surveys or habitat assessments to our office for assistance in evaluating potential effects.

If impacts cannot be avoided, we recommend the Department of Energy (DOE) pursue formal consultation through section 7 of the Act. Section 7 requires that all Federal agencies consult with the Service to ensure that the actions authorized, funded, or carried out by such agencies do not jeopardize the continued existence of any threatened or endangered species or adversely modify or destroy critical habitat of such species. It is the primary responsibility of DOE, as the Federal action agency, to determine whether any action it authorizes, funds, or carries out may affect a federally listed or proposed species.

Candidate Species

We also recommend that you review the potential for your project to affect candidates. Candidate species are those that are being considered for possible addition to the threatened and endangered species list. There is sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but higher priority listings currently preclude issuance of a proposed rule for those species. Candidate species currently have no legal protection. If you find your project may potentially impact these species, the Service would like to provide technical assistance to help avoid or minimize adverse effects. Addressing these species at this stage could better provide for overall ecosystem health in the local area and may avert potential future listing.

State-listed species

The State of Texas also protects certain species of plants and animals. Contact the Texas Parks and Wildlife Department (Endangered Resources Branch), Fountain Park Plaza Building, Suite 100, 3000 South IH-35, Austin, Texas 78704 (512-912-7011) for information concerning fish, wildlife, and plants of State concern.

Wetlands and Native Habitats

If your project will involve filling, dredging, or trenching of a wetland or riparian area it may require a Section 404 permit from the U.S. Army Corps of Engineers. For permitting requirements under Section 404 of the Clean Water Act, please contact the Fort Worth District, Permits Section, CESWF-EV-0, P.O. Box 17300, Fort Worth, Texas, 76102-0300, 817-978-2681.

Wetlands and riparian zones provide valuable fish and wildlife habitat as well as contribute to flood control, water quality enhancement, and groundwater recharge. Wetland and riparian vegetation provides food and cover for wildlife, stabilizes banks, and decreases soil erosion. These areas are inherently dynamic and very sensitive to changes caused by such activities as overgrazing, logging, major construction, or earth disturbance. Construction activities near such areas should be carefully designed to minimize impacts. If vegetation clearing is needed in riparian areas, these areas should be revegetated with native wetland and riparian vegetation to prevent erosion or loss of habitat. We recommend minimizing the area of soil scarification and initiating incremental reestablishment of herbaceous vegetation at the proposed work sites. Denuded and/or disturbed areas should be revegetated with a mixture of native legumes and

grasses. Species commonly used for soil stabilization are listed in the Texas Department of Agriculture's (TDA) Native Tree and Plant Directory, available from TDA at P.O. Box 12847, Austin, Texas, 78711.

We also urge you to take all precautions to ensure sediment loading does not occur to receiving streams in the project area. To prevent and/or minimize soil erosion and compaction associated with construction activities, avoid any unnecessary clearing of vegetation, and follow established rights-of-way whenever possible. All machinery and petroleum products should be stored outside the floodplain and/or wetland area during construction to prevent possible contamination of water and soils. No permanent structures should be placed in the 100-year floodplain.

We thank you for your concern for endangered and threatened species and other natural resources, and we appreciate the opportunity to comment on the proposed project. If we can be of further assistance or answer questions about these comments, please contact William Amy at 512-490-0057, extension 234. Please refer to the Service Consultation number listed above in any future correspondence regarding this project.

Sincerely,

Robert T. Pine
Supervisor

Enclosures

Federally Listed as Threatened and Endangered Species of Texas
September 27, 2006

This list represents species that may be found in counties throughout the Austin Ecological Services office's area of responsibility. Please contact the Austin ES office (U.S. Fish and Wildlife Service, 10711 Burnet Rd., Suite 200, Austin, Texas 78758, 512/490-0057) if additional information is needed.

DISCLAIMER

This list is based on information available to the U.S. Fish and Wildlife Service at the time of preparation. This list is subject to change, without notice, as new biological information is gathered and should not be used as the sole source for identifying species that may be impacted by a project.

Migratory Species Common to many or all Counties: Species listed specifically in a county have confirmed sightings. If a species is not listed they may occur as migrants in those counties.

Least tern	(E ~)	*Sterna antillarum*
Whooping crane	(E w/CH)	*Grus americana*
Bald eagle	(T)	*Haliaeetus leucocephalus*
Piping plover	(T w/CH)	*Charadrius melodus*

Andrews County

Sand dune lizard	(C)	*Sceloporus arenicolus*

Freestone County

Least tern	(E ~)	*Sterna antillarum*
Large-fruited sand-verbena	(E)	*Abronia macrocarpa*
Navasota ladies'-tresses	(E)	*Spiranthes parksii*
Bald eagle	(T)	*Haliaeetus leucocephalus*

Leon County

Least tern	(E ~)	*Sterna antillarum*
Houston toad	(E w/CH)	*Bufo houstonensis*
Large-fruited sand-verbena	(E)	*Abronia macrocarpa*
Navasota ladies'-tresses	(E)	*Spiranthes parksii*
Bald eagle	(T)	*Haliaeetus leucocephalus*

Limestone County

Bald eagle	(T)	*Haliaeetus leucocephalus*
Least tern	(E ~)	*Sterna antillarum*
Navasota ladies'-tresses (E)	*Spiranthes parksii*	

Pecos County

Black-capped vireo	(E)	*Vireo atricapilla*
Pecos gambusia	(E)	*Gambusia nobilis*
Leon Springs pupfish	(E w/CH)	*Cyprinodon bovinus*
Pecos (=puzzle) sunflower	(T)	*Helianthus paradoxus*
Pecos assiminea snail	(E w/CH)	*Assiminea pecos*
DiamondY Spring snail	(C)	*Tryonia adamantina*
Gonzales springsnail	(C)	*Tryonia stocktonensis*

Winkler County
Sand dune lizard (C) *Sceloporus arenicolus*

INDEX

E = Species in danger of extinction throughout all or a significant portion of its range.
T = Species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
C = Species for which the Service has on file enough substantial information to warrant listing as threatened or endangered. These species currently have no legal protection. However, addressing these species at this stage could better provide for overall ecosystem health in the local area and may avert potential future listing.
CH = Critical Habitat (in Texas unless annotated ‡)
P/ = Proposed ...
P/E = Species proposed to be listed as endangered.
P/T = Species proposed to be listed as threatened.
TSA = Threatened due to similarity of appearance. Protections of the Act, such as consultation requirements for Federal agencies under section 7, and recovery planning provisions under section 4(f), do not apply to species listed under similarity of appearance provisions.
□ = with special rule
‡ = CH designated (or proposed) outside Texas
~ = protection restricted to populations found in the "interior" of the United States. In Texas, the least tern receives full protection, except within 50 miles (80 km) of the Gulf Coast.

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19 October 2006

Mr. James M. Wiersema
Vice President
Horizon Environmental Services
P. O. Box 162017
Austin, TX 78716

Dear Mr. Wiersema,

I have reviewed the information you provided on the proposed FutureGen Project. Your examination of Texas Parks and Wildlife Department and US Fish and Wildlife Service records should have provided you with the most current information available. It is my opinion based upon the location and scope of work to be completed that there will be no negative impacts to threatened or endangered species of wildlife or their habitats.

I appreciate the opportunity to comment on this proposed project and the material provided by Horizon Environmental Services.

Thank You,

Philip Dickerson

Philip Dickerson
District Wildlife Biologist
Texas Parks and Wildlife
4500 W. Illinois Ste 203
Midland, TX 79703
432-520-1581

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Jim Wiersema

From: Beth Helms Seaton [BSeaton@tceq.state.tx.us]
Sent: Friday, October 13, 2006 4:39 PM
To: Jim Wiersema
Cc: Earl Lott; L'oreal Stepney
Subject: FutureGen

Dear Mr. Wiersema,

Thank you for your letters dated October 6, 2006, requesting information concerning resources that could be utilized to determine existing contamination in aquatic plants and animals on the proposed Heart of Brazos and Odessa proposed developement sites for the proposed FutureGen Project. Your letter stated that you reviewed the TCEQ 2004 Texas 303 (d) list and the TCEQ 2004 Water Quality Assessment for Individual Water Bodies as resources listing existing contamination in aquatic plants and animals within the 5-mile region of influence of the proposed power plant sites. You requested the disclosure of any additional potential resources concerning existing contamination that was not listed in your letter. The Water Quality Division uses the 303(d) list referenced above for information regarding contamination in aquatic plants and animals and does not have any additional site specific information. No 303(d) listing issues have been identified in the general vicinity of these proposed sites.

In a phone conversation with you on 10/11/06, you indicated that no effluent discharge is being proposed at this time. If it becomes apparent that an effluent discharge is necessary, a discharge permit may be required and the applicant would need to determine the point of discharge, the amount of wastewater expected to be discharged, and the types of wastewater expected to be discharged. Permit limits for oxygen demanding substances (i.e. Carbonaceous BOD_5 and Ammonia-Nitrogen) should be expected for wastewater streams containing potentially elevated concentrations of these constituents. This could include process wastewater as well as cooling tower blowdown if treated domestic wastewater is used as makeup water. Information on the expected concentrations of these constituents, and any other pollutants used in the process water would need to be estimated and submitted during the permit application process so that modeling can be performed to assess the impact of the wastewater on dissolved oxygen concentrations in any streams receiving this effluent. In addition, the waters that the discharge would enter would need to be characterized. To do this the applicant would need to determine the point of discharge and identify the unclassified water bodies along the course (discharge route) for at least three miles downstream and determine the classified segment that the discharge would eventually meet. If the discharge is directly to a classified segment, then the aquatic life uses will be defined by that segment. Next, the applicant should characterize the unclassified water bodies (streams, lakes, or ponds) along the discharge route. This involves determining whether streams in the discharge route are perennial, intermittent with perennial pools, or intermittent. In any of these water bodies, for sites where available information indicates that the presumed uses and criteria in the standards for unclassified streams may be inappropriate, additional data may be obtained by the TCEQ or the applicant in the form of a "receiving water assessment."

Please let me know if you need additional information. As stated above, if it becomes apparent that an effluent discharge is necessary, we would be happy to meet with you if needed to discuss any permitting issues, process, or the application if needed.

Sincerely,

Beth Seaton, Special Assistant
Water Quality Division
512-239-2526

TEXAS HISTORICAL COMMISSION

The State Agency for Historic Preservation

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWERENCE OAKS, EXECUTIVE DIRECTOR

October 31, 2006

Russ Brownlow
Cultural Resources Director
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, TX 78716

Re: Project review under Section 106 of the National Historic Preservation Act of 1966
FutureGen Project, Proposed Odessa Site Areas of New Construction (DOE)

Dear Mr. Brownlow:

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the proposed federal undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Bill Martin, has examined our records. We concur with your assessment that archeological surveys are necessary for the CO_2 Pipeline Corridors east of the Injection Site and west of the Injection Site, and that no archeological survey is needed for the CO_2 Pipeline Corridor near the plant. We also concur that the Potential Transmission Line Corridor north of the plant does not need to be surveyed, but that all other Potential Transmission Line Corridors and Waterline Corridors will require cultural resources surveys.

The work should meet the minimum archeological survey standards posted on-line at www.thc.state.tx.us. A report of investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. In addition, any buildings 50 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. You may obtain lists of archeologists in Texas on-line at: www.counciloftexasarcheologists.org or www.rpanet.org. Please note that other potentially qualified archeologists not included on these lists may be used.

Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Bill Martin at 512/463-5867.**

Sincerely,

for
F. Lawerence Oaks, State Historic Preservation Officer

FLO/wam

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TEXAS HISTORICAL COMMISSION

The State Agency for Historic Preservation

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October 31, 2006

Russ Brownlow
Cultural Resources Director
Horizon Environmental Services, Inc.
P.O. Box 162017
Austin, TX 78716

Re: Project review under Section 106 of the National Historic Preservation Act of 1966
FutureGen Project, Proposed Odessa Site Sequestration Reservoirs (DOE)

Dear Mr. Brownlow:

Thank you for your correspondence describing the above referenced project. This letter serves as comment on the proposed federal undertaking from the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission.

The review staff, led by Bill Martin, has examined our records. We concur with your assessment that an archeological survey is necessary. We believe that a professional archeologist should survey the study area, paying particular attention to areas within 100 m of the drainages.

The work should meet the minimum archeological survey standards posted on-line at www.thc.state.tx.us. A report of investigations should be produced in conformance with the Secretary of the Interior's Guidelines for Archaeology and Historic Preservation, and submitted to this office for review. In addition, any buildings 50 years old or older that are located on or adjacent to the tract should be documented with photographs and included in the report. You may obtain lists of archeologists in Texas on-line at: www.counciloftexasarcheologists.org or www.rpanet.org. Please note that other potentially qualified archeologists not included on these lists may be used.

Thank you for your cooperation in this federal review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions concerning our review or if we can be of further assistance, please contact Bill Martin at 512/463-5867.**

Sincerely,

for
F. Lawerence Oaks, State Historic Preservation Officer

FLO/wam

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December 6, 2006

, Chief
Tribal
Address
City, state, zip

Re: Executive Memo (4/29/1994): "Government to Government Relations"
Executive Order 13175 (11/6/2000): Consultation and Coordination with Indian Tribal Governments,
Section 106 of the National Historic Preservation Act and
NAGPRA Consultation for the Environmental Impact Statement for Implementation of the FutureGen Project

Dear :

The U.S. Department of Energy (DOE) is preparing an Environmental Impact Statement (EIS) for the proposed FutureGen Project, which would receive Federal cost-share funding for up to $700 million on a $950 million (total, in 2004 dollars) project. The project would comprise the planning, design, construction and operation of a research and development power plant by the FutureGen Alliance, Inc. (a not-for-profit organization). A Notice of Intent to prepare the EIS was published in the Federal Register / Vol. 71, No. 145 / Friday, July 28, 2006. The FutureGen Project would feature a coal-fueled electric power and hydrogen gas (H_2) production plant integrated with carbon dioxide (CO_2) capture and geologic sequestration of the captured gas. Four sites have been identified as reasonable alternatives: (1) Mattoon, Illinois; (2) Tuscola, Illinois; (3) Jewett, Texas; and (4) Odessa, Texas.

In accordance with the referenced Executive Orders and Acts, DOE would like to solicit your input on the project to determine if your tribe has any concerns or issues about the project. In particular, we are interested in learning whether or not this project has the potential to impact any significant archeological, religious or cultural sites. DOE is requesting that you (or your designated representative) submit to my office any concerns or issues you may have or notify my office if you are aware of any significant archeological, religious, or cultural sites within the areas of potential impact.

To assist in your review, the enclosed maps illustrate the potential areas where construction impacts may occur. Impacts to archeological resources (if present) could occur as a result of site development and other land-disturbing activities from the project. In addition, DOE is considering the potential for impacts related to visual or atmospheric resources associated with potential air emissions. The following discussion provides a more detailed description of the project.

FutureGen Project Processes

The 275-MW FutureGen power plant would employ advanced coal gasification technology integrated with combined cycle electricity generation, H_2 production, CO_2 capture, and sequestration of the captured gas in geologic repositories. The gasification process would combine coal, oxygen (O_2), and steam to produce a H_2-rich ''synthesis gas.'' After exiting the conversion reactor, the composition of the synthesis gas would be ''shifted'' to produce additional H_2. The product stream would consist mostly of H_2, steam, and CO_2. Following separation of these three gas components, the H_2 would be used to generate electricity in a gas turbine and/or fuel cell. Some of the H_2 could be used as a feedstock for chemical plants or petroleum refineries or as a transportation fuel. Steam from the process could be condensed, treated, and recycled into the gasifier or added to the plant's cooling water circuit. CO_2 from the process would be sequestered in deep underground geologic formations that would be monitored to verify the permanence of CO_2 storage.

Technology Alternatives

As a research and development project, FutureGen would incorporate cutting-edge and emerging technologies ready for full-scale or subscale testing prior to their commercial deployment. Identification of technology alternatives is currently in progress for key components: gasification, O_2 production, H_2 production, synthesis gas cleanup, H_2 turbines, CO_2 capture, byproduct utilization, and others. Decisions on incorporation of specific technologies would be made by the Alliance consistent with the overall project goal of proving the technical and economic feasibility of the near-zero emissions concept. It is expected that sequestration would be accomplished using existing state-of-the-art technologies for both transmission and injection of the CO_2 stream. Various technologies would be considered for monitoring at the injection sites.

We are very interested in receiving your concerns about possible effects of the project on archeological, religious, or cultural sites that are considered significant to your tribe. If you have questions, please do not hesitate to call, (304-285-4426).

In addition, please sign the signature line below and return a signed copy to my attention if you (or your designated representative) want to continue to receive information about the project or if you wish to provide review comments on the Section 106 or NEPA documents. DOE would appreciate your response by January 4, 2007.

Sincerely,

Mark L. McKoy
NEPA Document Manager
U.S. DOE

Attachments:
Maps of alternative sites
Notice of Intent

U.S. Department of Energy

National Energy Technology Laboratory

December 6, 2006

Arturo Senclair, Governor
Ysleta del Sur Pueblo
P.O. Box 17579 – Ysleta Station
El Paso, TX 79917

Re: Executive Memo (4/29/1994): "Government to Government Relations"
Executive Order 13175 (11/6/2000): Consultation and Coordination with Indian Tribal Governments,
Section 106 of the National Historic Preservation Act and
NAGPRA Consultation for the Environmental Impact Statement for Implementation of the FutureGen Project

Dear Governor Senclair:

The U.S. Department of Energy (DOE) is preparing an Environmental Impact Statement (EIS) for the proposed FutureGen Project, which would receive Federal cost-share funding for up to $700 million on a $950 million (total, in 2004 dollars) project. The project would comprise the planning, design, construction and operation of a research and development power plant by the FutureGen Alliance, Inc. (a not-for-profit organization). A Notice of Intent to prepare the EIS was published in the Federal Register / Vol. 71, No. 145 / Friday, July 28, 2006. The FutureGen Project would feature a coal-fueled electric power and hydrogen gas (H_2) production plant integrated with carbon dioxide (CO_2) capture and geologic sequestration of the captured gas. Four sites have been identified as reasonable alternatives: (1) Mattoon, Illinois; (2) Tuscola, Illinois; (3) Jewett, Texas; and (4) Odessa, Texas.

In accordance with the referenced Executive Orders and Acts, DOE would like to solicit your input on the project to determine if your tribe has any concerns or issues about the project. In particular, we are interested in learning whether or not this project has the potential to impact any significant archeological, religious or cultural sites. DOE is requesting that you (or your designated representative) submit to my office any concerns or issues you may have or notify my office if you are aware of any significant archeological, religious, or cultural sites within the areas of potential impact.

To assist in your review, the enclosed maps illustrate the potential areas where construction impacts may occur. Impacts to archeological resources (if present) could occur as a result of site development and other land-disturbing activities from the project. In addition, DOE is considering the potential for impacts related to visual or atmospheric resources associated with potential air emissions. The following discussion provides a more detailed description of the project.

cc: Javier Loera, Capitan

3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507-0880 □ 626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236-0940
REPLY TO: Morgantown Office • @netl.doe.gov • Voice (304) 285-4426 • Fax (304) 285-4403 • www.netl.doe.gov

Technology Alternatives

As a research and development project, FutureGen would incorporate cutting-edge and emerging technologies ready for full-scale or subscale testing prior to their commercial deployment. Identification of technology alternatives is currently in progress for key components: gasification, O_2 production, H_2 production, synthesis gas cleanup, H_2 turbines, CO_2 capture, byproduct utilization, and others. Decisions on incorporation of specific technologies would be made by the Alliance consistent with the overall project goal of proving the technical and economic feasibility of the near-zero emissions concept. It is expected that sequestration would be accomplished using existing state-of-the-art technologies for both transmission and injection of the CO_2 stream. Various technologies would be considered for monitoring at the injection sites.

We are very interested in receiving your concerns about possible effects of the project on archeological, religious, or cultural sites that are considered significant to your tribe. If you have questions, please do not hesitate to call, (304-285-4426).

In addition, please sign the signature line below and return a signed copy to my attention if you (or your designated representative) want to continue to receive information about the project or if you wish to provide review comments on the Section 106 or NEPA documents. DOE would appreciate your response by January 4, 2007.

Sincerely,

Mark L. McKoy

Mark L. McKoy
NEPA Document Manager
U.S. DOE

Attachments:
Maps of alternative sites
Notice of Intent

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Southern Plains Regional Office
P.O. Box 368
Anadarko, Oklahoma 73005

IN REPLY REFER TO:
Natural Resources

DEC 2 9 2006

Mark L. McKoy
NEPA Document Manager
U.S. DOE
National Energy Technology Laboratory
3610 Collins Ferry Road
Morgantown, WV 26507-0880

Dear Mr. McKoy:

Thank you for the opportunity to review the documentation describing the proposed FutureGen Project. The closest alternative sites where this office might have some input are the Jewett and Odessa, Texas sites.

A review of the maps of these project alternative locations indicates that there are no tribal or Individual Indian trust lands within the areas of potential effect. The Bureau of Indian Affairs has no jurisdiction within the alternative project areas in the Jewett or Odessa areas. However, Tribes that have historic ties to the area may have some concern if the project has a potential to impact sites of importance in their histories or cultural traditions. We recommend that you contact the Kiowa Tribe of Oklahoma, the Comanche Nation, the Wichita and Affiliated Tribes, and the Mescalero Apache Tribe regarding the Odessa alternative and the Alabama-Coushatta Tribe of Texas, and the Caddo Nation regarding the Jewett alternative.

Sincerely,

Acting Regional Director

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United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Oklahoma Regional Office
P.O. Box 8002
Muskogee, OK 74402-8002

IN REPLY REFER TO:
Division of Environmental
Safety and Cultural Resources

Mr. Mark L. McKoy
U.S. Department of Energy
P. O. Box 880
Morgantown, West Virginia 26507-0880

JAN 2 2 2007

Dear Mr. McKoy:

On December 11, 2006, the Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), received an information request from the U.S. Department of Energy (USDOE) regarding significant impacts to archeological, religious or cultural sites from the construction and operation of a coal-fueled electric power and Hydrogen gas (H_2) production plant located in Illinois or Texas. The EORO has no comments regarding the project.

The projects in Illinois are within the jurisdictional area of the Bureau's Eastern Region and the projects in Texas are within the jurisdiction area of the Bureau's Southern Plains Region. Both Regions have been provided the notice by copy of this letter. As the other two Regions may have environmental and/or cultural resources concerns relating to the project, it is recommended that the USDOE coordinate directly with them on any of their concerns. The contact addresses are:

Franklin Keel, Regional Director
Eastern Regional Office
545 Marriott Drive, Suite 700
Nashville, Tennessee 37214

Dan Deerinwater, Regional Director
Southern Plains Regional Office
P.O. Box 368
Anadarko, Oklahoma 73005-0368

If any additional information is required, please contact Mr. Bob Coleman, Division Chief, Division of Environmental, Safety and Cultural Resources, EORO, at (918) 781-4660.

Respectfully,

Regional Director

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