ORIGINAL

JUL 1 9 2007

DOCKETING DIVISION

Public Utilities Commission of Ohio

July 6, 2007

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

RE: Docket No. CP07-208-000

> Rockies Express Pipeline LLC, Rockies Express Pipeline-East Project Supplemental Filing - Project Facility Changes

Dear Ms. Bose:

On April 30, 2007, Rockies Express Pipeline LLC (Rockies Express) filed with the Federal Energy Regulatory Commission (FERC or Commission) an application pursuant to Section 7(c) of the Natural Gas Act and Part 157 of the Commission's regulations, requesting a Certificate of Public Convenience and Necessity authorizing the construction and operation of:

- approximately 637.8 miles of new pipeline facilities from Audrain County, Missouri to a terminus in Monroe County, Ohio;
- 7 new compressor stations:
- 20 meter stations, including laterals and interconnects; and
- ancillary facilities consisting of 42 mainline valves, 4 temporary pig launchers, 4 temporary pig receivers, contractor/pipe yards, and access roads.

The project facilities are collectively referred to as the Rockies Express Pipeline-East (REX-East) Project.

Subsequent to filing its application on April 30, Rockies Express received permission to enter previously denied tracts of land to evaluate a number of route variations initiated by requests from landowners, local communities, and land management agencies, and to develop modifications to the original pipeline route where needed to improve the design of the pipeline for construction, engineering, safety and efficient operation (e.g., creating perpendicular feature crossings). Rockies Express has chosen to adopt a number of the route changes. The net effect of adopting the additional route changes is an increase in the total length of the pipeline by 1.3 miles, as listed in the

reproduction This is to certify that the





Route Revisions from April 30 Application to July 6, 2007 Supplemental F	
nental Filing	

Agriculture	Agriculture	Frankan County resignment	, <u>.</u>	307.0	367.2	rranklin	2
Forest, Existing right-of-way, and Agriculture	Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture Agriculture	Franklin County resignment	0.9	384.8	383.9	Franklin	5
Forest, Existing right-of-way, and Agriculture	Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture Agriculture	Franklin County realignment	0.5	383.7	383.2	Franklin	50
Forest, Existing right-of-way, and Agriculture	Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture  Agriculture	Franklin County realignment	0.2	380.5	380.3	Franklin	49
Forest, Existing right-of-way, and Agriculture	Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture  Agriculture	Franklin County realignment	0.6	378.2	377.6	Franklin	48
Forest, Existing right-of-way, and Agriculture	Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture  Agriculture	Franklin County realignment	=	377.2	376.1	Decatur/ Franklin	47
Agriculture and Forest fragment	Agriculture and Forest fragment Agriculture and Forest fragment	Improve alignment to lessen impacts at Lewis Creek crossing and new survey data resulted in route change for better construction conditions	3.2	357.4	354.2	Shelby	46
Agriculture and Forest fragment	Agriculture and Forest fragment Agriculture and Forest fragment	Johnson County realignment	0.4	344.6	344.2	Shelby	45
Agriculture and Forest fragment	Agriculture and Forest fragment	Johnson County realignment	0.2	343.6	343.4	Shelby	1
Agriculture and Forest fragment	Agriculture and Forest fragment	Johnson County realignment	0.2	340.3	340.1	Shelby	<b>4</b> 3
Agriculture and Forest fragment	Agriculture and Forest fragment	Johnson County realignment	6.1	339.2	333.1	Johnson	42
Agriculture and Forest fragment	Agriculture and Forest fragment   Agriculture and Forest fragment	Johnson County realignment	1.1	331.6	330.5	Johnson	*
Agriculture and Forest fragment	Agriculture and Forest fragment Agriculture and Forest fragment	Johnson County realignment	0.3	330.2	329.9	Johnson	6
Agriculture and Forest fragment	Agriculture and Forest fragment   Agriculture and Forest fragment	Johnson County realignment	ŭ	328.9	327.6	Johnson	39
Agriculture and Forest fragment	Agriculture and Forest fragment	Johnson County resignment	0.7	327.5	326.8	Johnson	38
Agriculture and Forest fragment	Agriculture and Forest fragment	Johnson County realignment	0.8	326.7	325.9	Johnson	37
Agriculture and Forest fragment	Agriculture and Forest fragment   Agriculture and Forest fragment	Johnson County realignment	1.1	324.6	323.5	Johnson	36
Agriculture and Forest fragment	Agriculture and Forest fragment	Johnson County realignment	4.8	323.3	318.5	Morgan/ Johnson	35
Agriculture and Forest tragment	Agriculture and Forest fragment	Johnson County realignment	1.2	318.4	317.2	Morgan	4
Agriculture and Forest tragment	and Forest fragment	Johnson County realignment	2.0	317.0	315.0	Morgan	33
Agriculture	Agriculture	Improve alignment to avoid impacting a subdivision	0.8	314.0	313.2	Morgan	ಜ
Agriculture and Forest fragment	edge	improve alignment and eliminate a point of intersection.	0.9	312.3	311.4	Morgan	91
Forest and Agriculture	Agriculture	Improve alignment to lessen impacts at White Lick Creek	2.4	309.5	309.1	Morgan	30
Agriculture		Improve alignment to avoid impacting a waterbody	0.5	307.3	306.B	Morgan	29
New Land Use	Previous Land Use	Reason	(miles)	End MP	Begin MP	County	Number
		Rouce Revisions from April 30 Application to July 6, 2007 Supplemental Hilling	XORCE NEW				







Route Revisions from April 30 Application to July 5, 2007 Suppli	Control of the second
, 2007 S	Ī

75 Monroe	74 Belmont	73 Noble	72 Noble	71 Noble	70 Guernsey	69 Guernsey	68 Muskingum	67 Muskingum	66 Muskingum	65 Perry	64 Fairfield	63 Pickaway	62 Warren	61 Warren	60 Warren	59 Butler/Warren	58 Butler	57 Butler	56 Butler	OHO	55 Franklin	54 Franklin		
636.8	631.2	616.0	613.6	613.1	608.6	599.7	585.4	574.4	573.9	550.9	533.4	509.0	457.9	442.5	437.7	436.2	428.6	426.3	420.3		393.5	392.2	388.0	Begin MP
638.4	631.4	617.0	614.0	613.4	608.8	601.3	585.8	575.5	574.1	551.4	534.0	509.8	459.0	144.4	439.6	436.9	429.1	426.5	420.7		395.7	392.5	389.0	End MP
1.6	0.2	1.0	0.4	0.3	0.2	1.6	0.4	1.1	0.2	0.5	9.0	0.8	1.1	1.9	.io	0.7	0.5	0.2	0.4		2.2	0.3	ë	(miles)
New survey data resulted in route change for better construction conditions	New survey data resulted in route change for better construction conditions	New survey data resulted in route change for better construction conditions	Improve alignment to avoid impacting a house	Improve alignment to avoid impacting a house	improve alignment to avoid impacting a water trough	Improve alignment because of steep and rugged terrain.	Improve alignment to avoid impacting an oil well	New survey data resulted in route change for better construction conditions	New survey data resulted in route change for better construction conditions	Improve alignment to avoid impacting a church	New survey data resulted in route change for better construction conditions	Improve alignment to facilitate Big Darby Creek crossing	Improve alignment to avoid multiple creek crossings	New survey data resulted in route change for better construction conditions	New survey data resulted in route change for better construction conditions	New survey data resulted in route change for better construction conditions	Improve alignment to avoid impacts to landfill area and allow for point of intersection	Improve alignment to allow for spoil storage and because of steep and rugged terrain.	Improve slignment to avoid deep ravine and power line X-over		Franklin County realignment	Franklin County realignment	Frankin County reasonment	Reason
Forest, Existing right-of-way, and Agriculture	Forest and Existing right-of-way Forest	Agriculture and Forest	Agriculture and Forest	Agriculture and Forest	Agriculture and Forest fragment   Agriculture and Forest fragment	Agriculture and Forest fragment	Agriculture and Open forest	Forest and Agriculture	Forest and Agriculture	Agriculture	Agriculture and Forest edge	Agriculture and River crossing	Agriculture and Forest	Agriculture	Agriculture and Residential	Agriculture and Residential	Agriculture	Agriculture	Forest		Agriculture and Forest	Agriculture	Agriculture	Previous Land Use
Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture	Forest	Agriculture and Forest	Agriculture and Forest	Agriculture and Forest	Agriculture and Forest fragment	Agriculture and Forest fragment	Agriculture and Forest	Forest and Agriculture	Forest and Agriculture	Agriculture	Agriculture and Forest edge	Agriculture and River crossing	Agriculture and Forest	Agriculture and Industrial	Agriculture and Forest fragment	Agriculture and Forest fragment	Agriculture	Agriculture	Forest		Agriculture and Forest fragment	Forest, Existing right-of-way, and Forest, Existing right-of-way, and Agriculture Agriculture	Agriculture  Agriculture	New Land Use





From:

Jeff Thommes

To:

"angela\_zimmerman@fws.gov"; "Mary\_M\_Knapp@fws.

gov":

CC:

Bart Jensen; Carly Lapin; Delia Kelly; "Vince Hand";

Subject:

REX-East Indiana bat mist net plan

Date:

Thursday, May 10, 2007 9:49:40 AM

Attachments:

NRG REX-East Bat Mist Net Survey Study Plan (2).doc

#### Angela-

Attached for your review is Rockies Express' proposed Indiana bat mist net and radiotelemetry study plan developed for the proposed REX-East project by BHE Environmental, Inc. Given recent pressure from the FERC to provide survey results by the end of July, we're a bit under the gun to get out and get these surveys started. We'll be focusing on the sites recommended by the four field offices for survey and will expand out to other sites following visits with the FWS and as additional forested areas are surveyed by habitat assessment crews.

The survey plan is based on the 1999 draft recovery plan for the Indiana bat and the recently revised mist net guidelines as well as our project-specific discussions. Surveys are currently scheduled to begin next Tuesday, May 15<sup>th</sup>. Rockies Express is requesting your concurrence with the attached guidelines in a timeframe that allows surveys to begin as close to that date as possible. I apologize for the short timeframe and appreciate any efforts on your part to help us meet the FERC scheduling crunch.

I will be out of the office until Tuesday beginning this afternoon. Therefore, please reply to all if you have questions or comments and we'll ensure the appropriate folks follow up with you.

Thanks again for your ongoing assistance with the project.

Best regards-

Jeff

## Rockies Express - East Pipeline Project Indiana Bat Mist Net and Radiotelemetry Survey Study Plan

3
4 Introduction

Rockies Express Pipeline LLC (Rockies Express) is proposing to construct and operate a new pipeline, including compressor and ancillary facilities to transport natural gas produced in the Rocky Mountain basins for delivery primarily to other pipelines and distribution customers located in the Midwest and eastern United States. The Rockies Express pipeline system consists of existing and new natural gas pipeline facilities extending from Rio Blanco County, Colorado to a terminus in Marion County, Ohio.

Pipeline construction will generally involve a 125-foot-wide construction right-of-way and is anticipated to begin in May 2008 with an expected in-service date of winter 2008. The Federal Energy Regulatory Commission (FERC) is the lead federal agency for the project.

Pursuant to 18 CFR 380.13, Rockies Express is acting as the FERC's non-federal representative for purposes of complying with section 7(a) of the Endangered Species Act (ESA). Rockies Express has retained Natural Resource Group, Inc. (NRG) to assist with various aspects of project development, including agency consultations, environmental field surveys, and preparation of an application to the FERC. NRG, on behalf of Rockies Express, will be preparing environmental review documents for the project.

Based on a review of public documents for the REX-East Pipeline, including lists of federally endangered or threatened species found on websites maintained by the FWS, and through discussions with the FWS, the Indiana bat was identified as potentially occurring within the general project area in Missouri, Illinois, Indiana, and Ohio.

BHE Environmental, Inc. (BHE) has developed the following *Indiana Bat Mist Net and Radiotelemetry Survey Study Plan* to describe survey efforts to determine presence or absence of Indiana bats within areas of suitable habitat along the proposed survey corridor. Survey methods are described in detail below.

-39

#### Mist Net Survey

The Draft Indiana Bat Recovery Plan (1999) and revised Indiana bat mist-netting guidelines issued by the Bloomington, Indiana Field Office of the FWS in 2006, recommend two mist net sites be sampled per square kilometer of forest in the proposed project area, or one mist net site be sampled per linear kilometer of forested right-of-way (ROW). During project-specific meetings, the FWS offices have indicated the importance of adhering to the mist net guidelines, but also agreed with Rockies Express representatives that focusing mist nets in the areas with the highest likelihood of capturing bats would be best, even if outside of the spacing guidelines. In accordance with the guidelines, and incorporating the guidance of affected FWS Field Offices, BHE plans to establish up to 100 mist net sites along the proposed

survey corridor. Mist net sites will be focused within those areas recommended for survey by the FWS based on review of data collected on forested stands present along the proposed project corridor.

Mist net locations will be selected in the field by a biologist experienced in capturing Indiana bats. Selection of mist net sites will be based upon presence of potential Indiana bat roost trees (dead or alive trees with exfoliating bark, split trunks or branches, or cavities), forest conditions (midstory density and canopy cover), and general proximity to a surface water resource. Access to the site by field vehicles will be considered. Netting over streams with riparian forest increases the probability of capturing bats due to the natural funneling action of the stream corridor. In addition to forested stream corridors, upland forest tracts within the proposed project area may be surveyed.

Mist netting will be conducted in accordance with FWS guidelines, as described below.

Each site will consist of two mist nets spaced no less than 100 feet apart. Both nets will be deployed for two calendar nights, resulting in four net-nights per site (one net-night = one net deployed for one night). Each night, netting will begin at sunset and continue for at least five hours. Nets will be monitored every 10 minutes. The location of mist net sites will be documented using GPS.

Mist nets will be constructed of black nylon with a mesh of approximately 1.5-inch spacing. Nets will extend approximately from water or ground level to tree canopy and will be bound by foliage on the sides. One net may be 18 - 30 feet tall and 18 - 60 feet wide, depending on dimensions of the survey site. Net width and height will be adjusted for the fullest possible coverage of the flight corridor at each site. To the extent possible, mist nets will be placed greater than 150 feet away from disturbance by vehicle and/or human traffic.

- 77 Netting will occur only if the following weather conditions are met:
- 78 a) Minimal precipitation,
- 79 b) Temperature > 10°C,
- 80 c) Wind speed still to calm, and
- d) Cloud cover, or moon less than half full if net site is not protected by the forest canopy.

Bats will be live-caught in mist nets and released unharmed near the point of capture. For all bats captured during the mist net survey, species, capture location, age, gender, reproductive condition, right forearm length, and weight will be recorded. Distinguishing characteristics of captured Indiana bats will be photographed. Habitat near each mist net site will be characterized, and weather conditions during the survey will be recorded.

 91 Radiotelemetry

Mist net crews will attach a radiotransmitter on up to 20 juvenile or adult female Indiana bats captured (maximum of 2 Indiana bats per site) to allow for telemetry studies. Bats will be tracked during the day for up to 4 days or until a roost tree is located. If access to roost trees is not possible (on private property, etc.), roost locations will be estimated using telemetry bearings from at least two locations. Where possible, crews will gather the following information regarding roost trees: tree species, tree condition (living or dead), percent exfoliating bark, diameter at breast height (dbh), averaged percent overstory within stand, averaged percent understory/midstory within stand, and distances from the roost tree to centerline, nearest paved road, nearest body of water, and nearest four-lane highway. If possible, a photograph will be taken and the tree's location recorded with GPS.

If possible, emergence counts will be conducted for three nights at each roost tree to enumerate bats using the roost. Emergence counts will begin 30 minutes before dusk and will continue until at least one hour after sunset.

Schedule and Staffing

All field work will be conducted directly by, or under the direction of, BHE of Cincinnati, Ohio. Possible subcontractors to BHE include Ecotech Consultants, Inc., of Frankfort, Kentucky, and Jackson Environmental Consulting Services, LLC of Richmond, Kentucky.

If weather conditions permit, mist netting will be initiated on May 15<sup>th</sup> and will be concluded by July 15<sup>th</sup>, 2007.

From:

Angela Zimmerman@fws.gov

To:

Jeff Thommes;

CC:

Bart Jensen; Carly Lapin; Delia Kelly; Jeff Thommes;

Mary\_M\_Knapp@fws.gov; Vince Hand;

Subject:

RE: REX-East Indiana bat mist net plan

Date:

Friday, May 11, 2007 11:56:45 AM

Attachments:

#### Dear BHE Environmental and Eco-Tech Consultants:

This is in response to Natural Resource Group's May 10 email conveying the survey proposal and a request for an amendment to your Federal Fish and Wildlife Permits No. TE809227-18 (BHE) and TE810274-5 (Eco-Tech) to conduct surveys for the Indiana bat (Myotis sodalis) at the following 11 sites along the proposed REX-East pipeline corridor in Ohio:

Butler County: TEH-OH-5.0 and TEH-OH-7.0 Warren County: TEH-OH-10.3 and TEH-OH-10.7

Fairfield County: TEH-OH-20.0 Perry County: TEH-OH-21.0 Muskingum County: TEH-OH-30.0 Guernsey County: TEH-OH-32.6

Belmont County: TEH-OH-33.0, TEH-OH-37.0, and TEH-OH-39.0

The Service has reviewed your proposal for the Indiana bat surveys. The U.S. Fish and Wildlife Service Reynoldsburg, Ohio Field Office has no objection to the surveys as proposed. This notification serves as written concurrence that BHE Environmental and Eco-Tech Consultants are authorized to proceed with the Indiana bat surveys as described in your May request. Upon completion of the surveys, we request that you submit a copy of the survey results to this office for review. Please include the latitude and longitude coordinates for each survey site in the reports. If any Indiana bats are found during the survey, please notify this office within 48 hours. Furthermore, we recommend that any Indiana bats captured, especially reproductively active females, be monitored through radio-tracking to determine roost locations.

Please carry a copy of this site specific authorization and your Federal

permit while conducting the surveys. If you have questions, or if we may be of further assistance in this matter, please contact me.

Sincerely,
Angela Zimmerman
Endangered Species Coordinator for Ohio
U.S. Fish and Wildlife Service
6950 Americana Parkway, Suite H
Reynoldsburg, OH 43068
(614) 469-6923, ext. 22.
(614) 469-6919 FAX

"Jeff Thommes" <JRTHOMMES@nrginc

.com>

To

<Angela\_Zimmerman@fws.gov>, "Jeff

05/10/2007 02:37

Thommes" <JRTHOMMES@nrginc.com>

PM

cc

"Bart Jensen"

<BMJENSEN@nrginc.com>, "Carly

Lapin" <cnlapin@nrginc.com>, "Delia

Kelly" <drkelly@nrginc.com>,

<Mary\_M\_Knapp@fws.gov>, "Vince

Hand" < vhand@bheenvironmental.com>

Subject

RE: REX-East Indiana bat mist net

plan

Just the 11 so far. We'll pck up the others that require survey after we visit them with you.

Hope that helps.

Jeff Thommes 612.418.4614

(From my Motorola Q.)

----Original Message----

From: "Angela\_Zimmerman@fws.gov" < Angela\_Zimmerman@fws.gov>

To: "Jeff Thommes" <JRTHOMMES@nrginc.com>

Cc: "Bart Jensen" < BMJENSEN@nrginc.com>; "Carly Lapin"

<cnlapin@nrginc.com>; "Delia Kelly" <drkelly@nrginc.com>;

"Mary\_M\_Knapp@fws.gov" <Mary\_M\_Knapp@fws.gov>; "Vince Hand"

<vhand@bheenvironmental.com>

Sent: 5/10/2007 1:33 PM

Subject: Re: REX-East Indiana bat mist net plan

Jeff et. al:

On April 13, 2007, I made the following recommendations regarding Indiana bat survey sites:

I recommend mist-net surveys be conducted at the following 11 sites:

Butler County: TEH-OH-5.0 and TEH-OH-7.0 Warren County: TEH-OH-10.3 and TEH-OH-10.7

Fairfield County: TEH-OH-20.0 Perry County: TEH-OH-21.0

Muskingum County: TEH-OH-30.0

Guernsey: TEH-OH-32.6

Belmont County: TEH-OH-33.0, TEH-OH-37.0, and TEH-OH-39.0

I need more information on the following sites:

Fayette County: TEH-OH-12.0 This site is a narrow forested riparian corridor which could potential serve as a travel corridor for bats. I need a better sense of how this corridor is positioned on the landscape. Does it connect other forested tracts?

I recommend site visits for the following sites:

Pickaway County: TEH-OH-16.0

Fairfield County: TEH-OH-17.0, TEH-OH-18.0, and TEH-OH-19.0

Muskingum County: TEH-OH-29.0

Does this survey proposal you just sent me only cover the 11 Ohio sites that I listed in blue text or all of these sites listed above?

Sincerely, Angela

"Jeff Thommes"

<JRTHOMMES@nrginc</pre>

.com>

To

<angela\_zimmerman@fws.gov>,

05/10/2007 10:49

<Mary\_M\_Knapp@fws.gov>

**AM** 

CC

"Bart Jensen"

<BMJENSEN@nrginc.com>, "Carly

Lapin" <cnlapin@nrginc.com>, "Delia

Kelly" <drkelly@nrginc.com>, "Vince

Hand" < vhand@bheenvironmental.com>

Subject

REX-East Indiana bat mist net plan

#### Angela-

Attached for your review is Rockies Express' proposed Indiana bat mist net and radiotelemetry study plan developed for the proposed REX-East project by BHE Environmental, Inc. Given recent pressure from the FERC to provide survey results by the end of July, we're a bit under the gun to get out and get these surveys started. We'll be focusing on the sites recommended by the four field offices for survey and will expand out to other sites following visits with the FWS and as additional forested areas are surveyed

by habitat assessment crews.

The survey plan is based on the 1999 draft recovery plan for the Indiana bat and the recently revised mist net guidelines as well as our project-specific discussions. Surveys are currently scheduled to begin next Tuesday, May 15th. Rockies Express is requesting your concurrence with the attached guidelines in a timeframe that allows surveys to begin as close to that date as possible. I apologize for the short timeframe and appreciate any efforts on your part to help us meet the FERC scheduling crunch.

I will be out of the office until Tuesday beginning this afternoon. Therefore, please reply to all if you have questions or comments and we'll ensure the appropriate folks follow up with you.

Thanks again for your ongoing assistance with the project.

Best regards-

Jeff(See attached file: NRG REX-East Bat Mist Net Survey Study Plan (2).doc)

#### **Delia Kelly**

From:

Joyce\_Collins@fws.gov

Sent:

Thursday, May 17, 2007 2:26 PM

To:

jimt@caprockenvironmental.com; Jeff Thommes

Subject:

Rockies Express East Pipeline

Attachments:

Rockies Express East Indiana Bat Effects Analysis.doc



Rockies Express East Indiana B...

Jim/Jeff,

I've received the most recent set of aerial photos with the pipeline alignment and the information regarding the sites that Indiana bat habitat assessment data could not be collected because of access problems. For purposes of completing a biological assessment for Indiana bats, it would certainly be better to have information for more sites. However, given the access problem, I've been thinking about how to proceed with the assessment of impacts. I have the following recommendations.

- 1. I think that restricting tree clearing from April 1 to September 30 will certainly be a needed requirement to ensure that Indiana bats will not be directly taken (e.g., killed) by the project. In our previous conversations, I think I remember that you thought the schedule was such that this could be built in.
- 2. Assuming that the tree clearing restrictions are built into the schedule to preclude take of Indiana bats, the next question that needs to be answered is in regard to how significant or not significant the amount of habitat (e.g., forest) lost is to Indiana bats. To help address this part of the effects assessment, I recommend going through the process in the attached Word file. Basically it will involve developing some forest cover data, comparing the forest impacts associated with the project to the overall forest cover within the area, and answering some questions that relate to Indiana bat ecology. I took a shot a figuring out milepost markers as starting points for this analysis. Otherwise, I think the document is pretty straightforward. Information gathered from mist-netting will help answer some of the questions and reduce the number of assumptions that will have to be made. Where access is a problem, some assumptions will have to be made.
- 3. One thing that I don't recall talking about, but which should also be addressed, is the long-term maintenance of the pipeline route. Assuming pesticides are going to be used, the biological assessment should also evaluate potential impacts that may result from pesticide use, including any indirect effects. Also include any best management practices that are used to minimize the effects of pesticide use.
- 4. Putting all this information together should give you a pretty good basis for making your effects determination.

I hope this information is helpful. I've been in a rush to get through this since I'm going to be out of the office the next two weeks, so I hope it all makes sense. If anything is unclear or if you have questions or wish to discuss, I'll have email access next week and will be back in the office June 5th and will be happy to discuss this with you.

Joyce

(See attached file: Rockies Express East Indiana Bat Effects Analysis.doc)

Joyce A. Collins Assistant Field Supervisor U.S. Fish and Wildlife Service Marion Illinois Sub-Office 8588 Route 148 Marion, Illinois 62959 phone: 618/997-3344, ext. 340

fax: 618/997-8961 email: joyce\_collins@fws.gov

#### Rockies Express East - Illinois Indiana Bat Effects Analysis

Step 1: Compute the percent forest cover and acres of forest within a 3.5 km (2.2 mile) diameter circle around points of forest impact. The following are recommended mile posts to place the center of the circle for this analysis. These were developed based on locations of forested habitat to be crossed and to group as many of these crossings as possible within each circle (e.g., to be conservative and efficient in the analysis). It is assumed that the forested area riverside of the levee on the Illinois side of the Mississippi River will not be impacted due to the proposal to drill under the river and levee. Gaps between mileposts are a result of agricultural area crossings.

- 1. Center on MP 52.6, covers 50.4 to 54.8. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-1.0) in this area and mist-net surveys were recommended. Habitat suitability was rated as medium for this site.
- 2. Center on MP 57.0, covers 54.8 to 59.2.
- 3. Center on MP 61.4, covers 59.2 to 63.6. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-2.0) in this area and mist-net surveys were not recommended. Habitat suitability was rated as low.
- 4. Center on MP 65.8, covers 63.6 to 68.0. Habitat suitability data was collected for two sites (Indiana bat habitat ID TEH-IL-2.0 and TEH-IL-3.0) in this area but surveys were not recommended. Suitability was rated as low and medium, respectively for the two sites.
- 5. Center on MP 70.2, covers 68.0 to 72.4. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-4.0) in this area and mist net surveys were recommended. Habitat suitability was rated as high for this site.
- 6. Center MP 74.6, covers 72.4 to 76.8.
- 7. Center MP 79.0, covers 76.8 to 81.2. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-4.2) in this area and mist net surveys were recommended. Habitat suitability was rated as medium for this site.
- 8. Center MP 83.4, covers 81.2 to 85.6.
- 9. Center MP 87.8, covers 85.6 to 90.0.
- 10. Center MP 92.2, covers 90.0 to 94.4. Habitat suitability data was collected for one site (Indiana bat habitat ID THE-IL-4.4) in this area and mist net surveys were recommended. Habitat suitability was rated as high.
- 11. Center MP 96.6, covers 94.4 to 98.8. Habitat suitability data was collected for one site in this area (same site as in #10 above) and mist net surveys were recommended. Habitat suitability was rated as high.
- 12. Center MP 101.0, covers 98.8 to 103.2.
- 13. Center on MP 107.8, covers 105.6 to 110.0.
- 14. Center on MP 112.2, covers 110.0 to 114.4.
- 15. Center on MP 119.2, covers 117.0 to 121.4.
- 16. Center on MP 126.0, covers 123.8 to 128.2.
- 17. Center on MP 132.0, covers 129.8 to 134.2.
- 18. Center on MP 142.2, covers 140.0 to 144.4.

- 19. Center on MP 164.8, covers 162.6 to 167.0. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-5.0) in this area and mist net surveys were not recommended. Habitat suitability was rated as medium for this site.
- 20. Center MP 168.5, covers 166.3 to 170.7.
- 21. Center MP 175.5, covers 173.3 to 177.7.
- 22. Center MP 188.0, covers 185.8 to 190.2.
- 23. Center MP 193.5, covers 191.3 to 195.7.
- 24. Center MP 202.8, covers 200.6 to 205.0.
- 25. Center MP 212.6, covers 210.4 to 214.8. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-6.0) in this area and mist net surveys were recommended. Habitat suitability was rated as high.
- 26. Center MP 228.5, covers 226.3 to 230.7.
- 27. Center MP 233.5, covers 231.3 to 235.7. Habitat suitability data was collected for one site (Indiana bat habitat ID TEH-IL-7.0) in this area and mist net surveys were not recommended. Habitat suitability was rated as medium.
- 28. Center MP 237.0, covers 234.8 to 239.2

Step 2: Calculate the amount of forest impacted as part of the project within each of these 3.5 km circles.

Step 3: Answer the following questions related to Indiana bat habitat loss.

Question 1 – Will an Indiana bat primary roost tree be destroyed or made unsuitable as a result of the project? The mist-net survey information and habitat assessment information will be useful for answering this question in some locations. For sites where access is a problem, some conservative assumptions may have to be made as to whether a primary roost tree may be impacted. Factors to consider for making these assumptions include: 1) proximity to known occurrences of Indiana bat maternity colonies; and 2) percent forest cover within the area.

Answers - Yes, No, Likely, Not Likely

Question 2 – Will the forested landscape be altered? Given that some amount of forest will be impacted as a result of the project, the answer to this question should be yes. However, the significance of the alteration will depend upon the amount of forest impacted compared to the amount of forest occurring with the 3.5 km circles (as a percentage).

Answers - No, Yes-Significant, Yes-Insignificant

Question 3 – Will an adequate number of currently suitable roost trees be maintained during and after implementation of the project?

Answers - Yes, No, Unchanged

Question 4 - Will the appropriate species of trees be maintained at adequate densities?

Answers - Yes, No, Unchanged

Question 5 - Will a continuous supply of future suitable roost trees be available following the project?

Answers - Yes, No, Unchanged

Question 6 - Will access to drinking water be disrupted?

Answers - Yes, No, Unchanged

Question 7 - Will appropriate sized trees be maintained?

Answers - Yes, No, Unchanged

Question 8 - Will the roosting area provide suitable microclimate diversity?

Answers - Yes, No, Unchanged

Question 9 - Will connectivity between roosting and foraging areas be retained?

Answers - Yes, No, Unchanged

Step 4 – Completing Steps 1-3 in conjunction with consideration of any conservation measures proposed to be implemented (e.g., tree clearing time period limitations, any forest habitat mitigation proposed) should provide a good foundation for making an effects determination for Indiana bats.

From:

Bart Jensen

To:

"Gramke, Robert MVS"; "Doyle Brown"; "Robert Stout";

Mike Flaspohler; "heidi\_kuska@fws.gov";

CC:

"Charles Bertram"; "Jim Thompson"; Scott Horner; Jeff

Thommes; Bart Jensen;

Subject:

Rockies Express Pipeline - East Project

Date:

Thursday, May 24, 2007 9:52:27 PM

Attachments:

Dredge Plan May 2007.pdf

As discussed during our last multi-agency meeting, Rockies Express will be seeking authorization to dredge a small volume of sediment (up to 4.500 cubic yards) in order to access Blackburn Island and set up the horizontal directional drilling equipment (see attached dredge plan). In order to transport equipment and personnel onto the island after the approach is dredged, Rockies Express is planning to install a temporary flexi-float bridge or staging barge to allow safe transfer of cargo and passengers to the island. All equipment brought to Blackburn Island will be removed when construction and restoration activities are complete.

The Wayne B. Smith, Inc. Quarry is planning on reusing the dredge material as a beneficial fill (Rockies Express is also investigating the possibility of disposing drilling mud at the quarry). Based on recent mussel surveys completed within the dredge footprint, the sediment consists primarily of coarse grained sediments (sand, gravel) in addition to silts and clays. No state or federally listed mussels were identified within the dredge footprint during the mussel survey.

After you have had an opportunity to review the dredge plan, Rockies Express would like to meet in person to discuss dredging, restoration, mitigation, and any other issues that may be of concern. During past meetings, we discussed seeding and planting trees on Blackburn Island following construction. In addition, we discussed opportunities for the beneficial reuse of dredge material on Conservation Area property (or elsewhere). Perhaps there are other dredging needs or mitigation opportunities in the area that Rockies Express could assist with.

Ideally, Rockies Express would like to meet by the middle of June in order to

incorporate mitigation plans into permit applications and project documents. Please let me know what dates would work. We are certainly available to meet at Ted Shanks (It is a beautiful spot and has worked out nicely during past meetings), Jefferson City or St. Louis. We understand that it is the busy field season, but we would certainly appreciate the opportunity to continue the face-to-face dialogue.

Thanks in advance. As always, if you have any questions, please feel free to contact me at (612) 359-5696.

-Bart



## **ROCKIES EXPRESS PIPELINE COMPANY LLC**

# ROCKIES EXPRESS PIPELINE – EAST PROJECT DREDGE PLAN

May 2007

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#### 1.0 INTRODUCTION

Rockies Express Pipeline LLC (Rockies Express) proposes to construct and operate a natural gas pipeline, compression, and ancillary facilities to transport natural gas produced in the Rocky Mountain basins for delivery primarily to other pipelines and distribution customers located in the upper Midwest and Eastern United States. The project, referred to as the Rockies Express-East (REX-East) Project, will consist of:

- approximately 637.8 miles of new pipeline facilities in Missouri, Illinois, Indiana, and Ohio;
- five new compressor stations located along the REX-East Project pipeline route, one new compressor station located along Rockies Express' REX-West pipeline route, and one new compressor station located along Rockies Express' REX-Entrega pipeline route; and
- ancillary facilities consisting of approximately 42 mainline valves, 20 meter stations and interconnects, 4 temporary pig launchers, and 4 temporary pig receivers.

Rockies Express proposes to commence construction of the REX-East Project in spring of 2008. The pipeline and its related facilities are expected to be in-service by December 2008 with the exception of two compressor stations (Arlington and Chandlersville), which will be inservice by June 2009.

#### 2.0 REASON FOR DREDGING

At the Missouri/Illinois border, the pipeline will cross the Mississippi River (near river mile 284.5), and the Salt River at pipeline milepost 43.1 (see Appendix A, Figure 1). Rockies Express proposes to install the pipeline under these waterbodies using the horizontal directional drill (HDD) construction technique. The HDD equipment will be set up on Blackburn Island between the Mississippi River and the Salt River. From Blackburn Island, Rockies Express will drill to the east beneath the Mississippi River, after which, it will turn the equipment around and drill beneath the Salt River.

To conduct the HDD operations from Blackburn Island, the necessary drilling equipment will need to be moved via barges to and from the east side of the island where the proposed landing area is shallow. In order for the barges to land on the east side of the island, Rockies Express will be required to dredge an area approximately 200 feet along the shore, by 100 feet into the river to a depth of 10 feet. Rockies Express anticipates dredging up to 4,500 cubic yards of material from the river.

#### 3.0 DESCRIPTION OF DREDGING ACTIVITIES

To conduct the dredging activities, Rockies Express plans to contract with a local dredge and quarry operator (Wayne B. Smith, Inc.) with facilities located less than 3 miles downstream of the proposed river crossing (see Appendix A, Figure 2). Equipment that may be used during the dredging operation includes: towboats, a 9225 American clamshell crane, a spud barge, barges for excavated material, and a Fuch hydraulic crane for unloading the dredge material. The operator proposes to use a spud barge-mounted crane with an hydraulically driven clamshell

bucket. The dredged material will be brought to the surface and deposited onto an adjacent barge.

The dredged material will be transported via barge to the Wayne B. Smith, Inc. Barge Terminal and quarry site (located at river mile 282, less than 3 miles south of the dredge site), where the material will be unloaded and used as beneficial fill.

#### 4.0 DREDGING AND DISPOSAL SCHEDULE

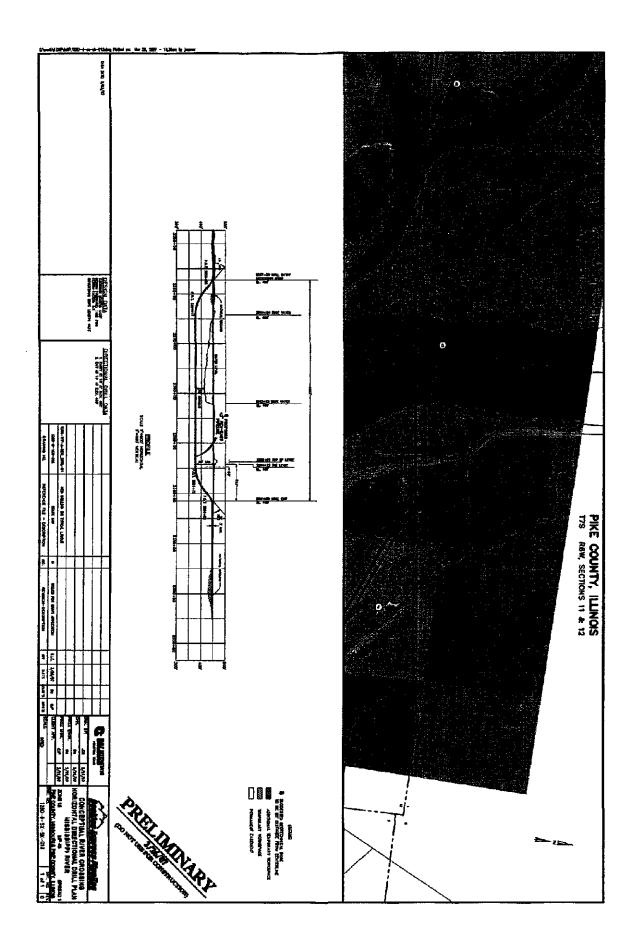
The dredging and disposal operations described above are scheduled to occur during the second quarter of 2008. The entire dredging operation, including barge and equipment mobilization and demobilization, is anticipated to take less than 1 week to complete.

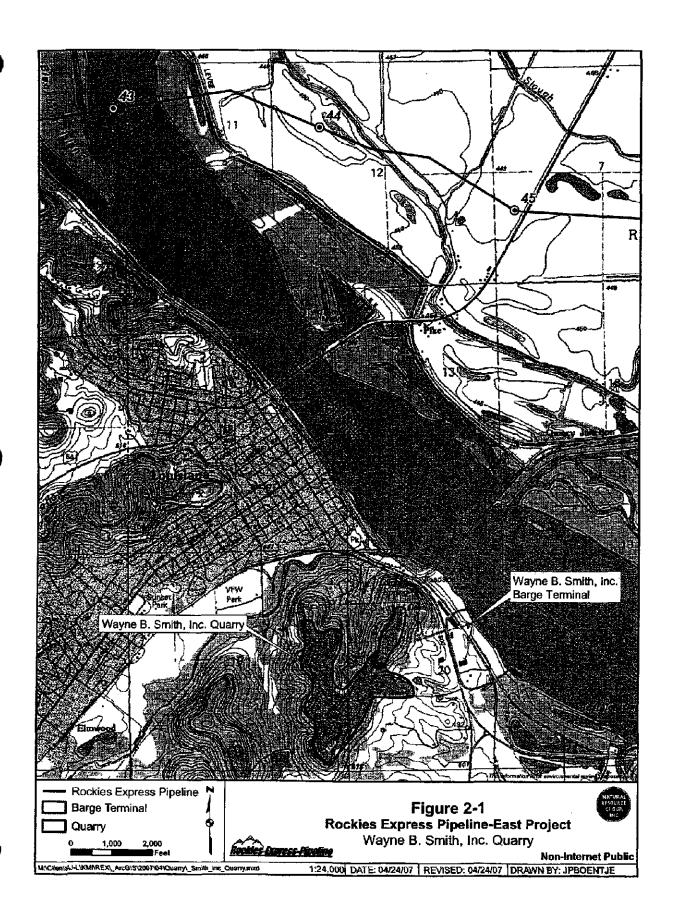
### **APPENDIX A**

Figure 1, Conceptual River Crossing Horizontal Directional

Drill Plan Mississippi River

Figure 2, Rockies Express Pipeline-East Project,
Wayne B. Smith Quarry





From:

Heidi Kuska@fws.gov

To:

Jeff Thommes;

CC:

Melanie Gregory; Carly Lapin; Bart Jensen; Delia Kelly;

Vince Hand;

Subject:

Re: REX-East Indiana bat mist net survey plan

Date:

Friday, May 25, 2007 10:59:31 AM

Attachments:

pic07124.gif

NRG REX-East Bat Mist Net Survey Study Plan\_Missouri.pdf

#### Hello Jeff,

We don't have any objections to mist netting the site that we haven't reviewed yet. Like we discussed earlier, this would be erring on the side of caution and it is likely a site that would be recommended for survey later anyway.

Have a great Memorial Day weekend! Heidi

Heidi Kuska
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Missouri Ecological Services Field Office
101 Park DeVille Drive, Suite A
Columbia MO 65203-0057

Ph: 573-234-2132 Fax: 573-234-2181

Email: heidi\_kuska@fws.gov

"Jeff Thommes"
<JRTHOMMES@nrginc

.com>

To

<Heidi\_Kuska@fws.gov>

05/25/2007 08:54

AM

"Melanie Gregory"

<mgregory@bheenvironmental.com>,
"Carly Lapin" <cnlapin@nrginc.com>,
"Bart Jensen"

<BMJENSEN@nrginc.com>, "Delia
Kelly" <drkelly@nrginc.com>, "Vince
Hand" <vhand@bheenvironmental.com>,
<Charlie\_Scott@fws.gov>, "Jeff
Thommes" <JRTHOMMES@nrginc.com>
Subject
REX-East Indiana bat mist net
survey plan

Heidi-

Good morning! Hope all goes well in Columbia!

I've attached for your review Rockies Express' proposed mist net and radiotelemetry study plan for Missouri. This document was prepared by BHE Environmental, Inc. for the project. There are two things that I would like you to keep in mind as you review the plan.

First, BHE prepared the plan based on the information we provided you in the bat "binder" and that you responded to during our meeting and via e-mail. The sites included for mist net survey at this time are those that you recommended we survey. Since our meeting and your e-mail with mist net recommendations and questions regarding other sites, our habitat assessment field crews have visited the remaining forested areas along the route, with one minor exception (we still can not obtain access to the parcel). These additional field assessments have resulted in the identification of an additional area that will likely receive a quality ranking of medium or high, and thus warrant mist netting. However, we have not yet finalized the habitat unit map preparation. I'd like to be able to have BHE go ahead and mist net the area per attached study plan. Do you have any objections

to us proactively netting the site even though it hasn't undergone FWS review yet?

Second, BHE has crews available to conduct the mist netting effort in Missouri next week. In order to allow the necessary time to acquire access to the survey parcels, feedback from you on the plan, and question above, by the end of the day today would be greatly appreciated. I apologize for the quick turnaround request, but we're attempting to maintain some level of efficiency and complete the necessary surveys in a timely manner. Any help you can provide would be super.

If you have any questions regarding the proposed survey plan, please direct those to Melanie Gregory directly (513-326-1500). Questions regarding the project in general or our question above should come to me at the number listed below.

Thanks again for your ongoing cooperation with the project. I look forward to hearing from you.

Best regards-

Jeff

(Embedded image Jeff Thommes moved to file: jrthommes@nrginc.com pic07124.gif)NRG 612.359.5678 Direct Logo 612.418.4614 Cell 612.347.6780 Fax

(See attached file: NRG REX-East Bat Mist Net Survey Study Plan\_Missouri.pdf)

From:

Jeff Thommes

To:

"Forest Clark@fws.gov";

CC:

"Melanie Gregory"; Delia Kelly; Jeff Thommes;

Subject:

Indiana bat mist net plan

Date:

Monday, June 04, 2007 9:56:58 AM

Attachments:

NRG REX-East Bat Mist Net Survey Study Plan\_Indiana.doc

#### Forest-

Please review the attached mist net survey plan. It was prepared by BHE Environmental and requires approval to validate their permit. It basically says we'll do what you told us to do in your May 24 letter. A couple things that aren't addressed in the attached plan:

- 1) You mention in your letter that it would be good if mist net sites could be placed outside of the corridor immediately surrounding the proposed pipeline route (you state within 0.5 mile). We have struggled to gain survey access within a fairly narrow corridor along the route and will have our right-of-way agents focused on notifying landowners of the upcoming surveys. They will be unable to attempt to contact new landowners to seek additional access. Therefore, our mist net sites will need to remain within the previously approved survey corridor (generally 250 feet wide).
- 2) As the habitat assessment crews are working through new areas In Indiana (primarily those areas previously denied or reroutes), additional Indiana bat habitat units may be identified. As we discussed, those that are considered medium or high quality will be included for mist netting. That's the most conservative approach. Those considered low quality will be provided to you for review. However, we did not discuss what to do if additional forested areas are identified near an existing habitat unit. If the existing unit already requires mist netting, our preference would be to incorporate the new forested stand(s) into the existing unit and add more mist net sites as necessary. If the existing stand was low quality but new stands may raise that rating, we'll submit those to you for review. Existing stands rated as medium or high quality will not have those ratings lowered by the addition of new forested stands without your review. Can we add

new sites to existing units and increase the mist netting effort, if necessary?

I will be following up with you on your letter and your analysis in that letter to ensure we use it appropriately. For now, I would appreciate your quick review of the mist net survey plan so the crews can plan to mobilize in Indiana later this week.

Thanks as always for your ongoing cooperation.

Best regards-

Jeff



Jeff Thommes jrthommes@nrginc.com 612.359.5678 Direct

612.359.5678 Direc 612.418.4614 Cell 612.347.6780 Fax

# Rockies Express - East Pipeline Project Indiana Bat Mist Net and Radiotelemetry Survey Study Plan

#### Introduction

Rockies Express Pipeline LLC (Rockies Express) is proposing to construct and operate a new pipeline, including compressor and ancillary facilities to transport natural gas produced in the Rocky Mountain basins for delivery primarily to other pipelines and distribution customers located in the Midwest and eastern United States. The Rockies Express pipeline system consists of existing and new natural gas pipeline facilities extending from Rio Blanco County, Colorado to a terminus in Marion County, Ohio.

Existing pipeline facilities are being extended this summer under a Federal Energy Regulatory Commission (FERC) Certificate of Public Convenience and Necessity (Certificate), CP04-413-000. This project, referred to as the REX-Entrega Project, involves the completion of a 326-mile-long segment from Rio Blanco County, Colorado to Weld County, Colorado. A second segment, REX-West, will extend approximately 713 miles from Weld County, Colorado to Audrain County, Missouri. An application for a Certificate has been filed with the FERC (Docket No. CP06-354-000). A third segment, REX-East, will continue for another 622 miles from Audrain County, Missouri, to Monroe County, Ohio. Rockies Express has filed an application for this project as well (Docket No. CP07-208-000).

Each project, while connected, will serve separate markets. The REX-East Project is the subject of this study plan.

In addition to the pipeline, REX-East will include construction of some aboveground facilities including compressor stations, block valves, and metering/regulation facilities. With the exception of compressor stations, aboveground facilities will be located within or adjacent to existing facilities or largely within the permanent right-of-way of the proposed project. These facilities will be sited to avoid impacts on special status species and sensitive vegetation communities. Pipeline construction will generally involve a 125-foot-wide construction right-of-way and is anticipated to begin in May 2008 with an expected in-service date of winter 2008. The Federal Energy Regulatory Commission (FERC) is the lead federal agency for the project.

Pursuant to 18 CFR 380.13, Rockies Express is acting as the FERC's non-federal representative for purposes of complying with section 7(a) of the Endangered Species Act (ESA). Rockies Express has retained Natural Resource Group, Inc. (NRG) to assist with various aspects of project development, including agency consultations, environmental field surveys, and preparation of an application to the FERC. NRG, on behalf of Rockies Express, will be preparing environmental review documents for the project.

Based on a review of public documents for the REX-East Pipeline, including lists of federally endangered or threatened species found on websites maintained by the FWS, and through discussions with the FWS, the Indiana bat was identified as

potentially occurring within the general project area in Missouri, Illinois, Indiana, and Ohio.

NRG has developed the following Indiana Bat Mist Net and Radiotelemetry Survey Study Plan to describe survey efforts to determine presence or absence of Indiana bats within areas of suitable habitat along the proposed survey corridor. The results of mist net surveys and radiotelemetry will be used to develop a determination of effect of the project on Indiana bats. Survey methods are described in detail below.

#### Mist Net Survey

The Draft Indiana Bat Recovery Plan (2007) recommends two mist net sites be sampled per square kilometer of forest in the proposed project area, or one mist net site be sampled per linear kilometer of forested habitat. Habitat assessment of the pipeline right-of-way (ROW) in Indiana identified 20 forested areas ("Habitat Units") along the ROW that contain potential habitat for the Indiana bat, with a combined total length of 41.009 kilometers (see attached table). May 2007 discussions between NRG (Jeff Thommes) and USFWS, Bloomington Field Office (Forest Clark), and guidance provided in a letter from USFWS to NRG dated 30 May 2007, resulted in the identification of 41 potential bat mist net sites within 15 of these Habitat Units (see attached table). The USFWS, Bloomington Field Office, also identified 14 additional sites for investigation (not included in the total of 41 sites described above). If during field reconnaissance additional Indiana bat Habitat Units are identified at these sites, they will also be evaluated and surveyed at a rate of one mist net site per linear kilometer of forested habitat (minimum of one mist net site per unit).

Exact mist net locations will be selected in the field by a biologist experienced in capturing Indiana bats. Selection of mist net sites will be based upon forest conditions (e.g., tree density, canopy cover), presence and size of flowing streams, and presence of an open flyway. Access to the site by field vehicles will be considered. Netting over streams with riparian forest increases the probability of capturing bats due to the natural funneling action of the stream corridor. In addition to forested stream corridors, upland forest tracts within the proposed project area may be surveyed. Mist net sites may be located up to 0.5 mile from the proposed pipeline centerline, if promising site locations are identified and site access allows.

Mist netting will be conducted in accordance with FWS guidelines, as described below. Each site will consist of two mist nets spaced no less than 100 feet apart. Both nets will be deployed for two calendar nights, resulting in four net-nights per site (one net-night = one net deployed for one night). Each night, netting will begin at sunset and continue for at least five hours. Nets will be monitored every 10 minutes. The location of mist net sites will be documented using GPS.

Mist nets will be constructed of black nylon with a mesh of approximately 1.5 inches. Nets will extend approximately from water or ground level to tree canopy and will be bounded by foliage on the sides. One net may be 18 - 30 feet tall and 18 - 60 feet wide, depending on dimensions of the survey site. Net width and height will be

adjusted for the fullest possible coverage of the flight corridor at each site. To the extent possible, mist nets will be placed greater than 150 feet away from disturbance by vehicle and/or human traffic.

Netting will occur only if the following weather conditions are met:

- a) Minimal precipitation,
- b) Temperature > 10°C,
- c) Wind speed still to calm, and
- d) Cloud cover, or moon less than half full if net site is not protected by the forest canopy.

Bats will be live-caught in mist nets and released unharmed near the point of capture. Species, capture location, age, gender, reproductive condition, right forearm length, and weight of bats captured during the mist net survey will be recorded. Distinguishing characteristics of captured indiana bats will be photographed. Habitat near each mist net site will be characterized, and weather conditions during the survey will be recorded.

#### Radiotelemetry

Mist net crews will attach a radiotransmitter on juvenile or adult female Indiana bats captured (maximum of two Indiana bats per site, no more than 20 across entirety of the project) to allow for telemetry studies. Bats will be tracked during the day until a roost tree is located, or up to five days. If access to roost trees is not possible (on private property, etc.), roost locations will be estimated using telemetry bearings from at least two locations. Where possible, crews will gather the following information regarding roost trees: tree species, tree condition (living or dead), percent exfoliating bark, dbh, averaged percent overstory within stand, averaged percent understory/midstory within stand, and distances from the roost tree to centerline, nearest paved road, nearest body of water, and nearest four-lane highway. If possible, a photograph will be taken and the tree's location recorded with GPS.

Emergence counts will be conducted for three nights at each roost tree to enumerate bats using the roost. Emergence counts will begin 15 minutes before dusk and will continue for at least one hour.

#### Schedule and Staffing

All field work will be conducted directly by, or under the direction of, BHE Environmental, Inc., of Cincinnati, Ohio. Possible subcontractors to BHE include Ecotech Consultants, Inc., of Frankfort, Kentucky, and Jackson Environmental Consulting Services, LLC of Richmond, Kentucky.

If weather conditions permit, mist netting will be initiated upon receipt of your office's concurrence with this study plan, and will be concluded by August 15<sup>th</sup>, 2007.

Table 1. Indiana bat Habitat Units along the proposed REX-East pipeline in Indiana.

rable i. indiana ba	L Madital Units	atong the p	roposea KE	x-cast pipeline	in indiana.					
	Bat Habitat	Crossing	Area of	Area of	Number					
County	ID	Length	Unit	Unit	of					
	עו <u></u>	(km)	(acres)	(km²)	Mist Net Sites*					
Parke	TEH-IN-1.0	0.228	4.30	0.017	0					
Parke	TEH-IN-3.0	0.457	8.61	0.035	1					
Parke	TEH-IN-4.0	0.609	11.48	0.046	1					
Parke	TEH-IN-7.0	0.246	4.59	0.019	1					
Parke	TEH-IN-8.0	1.249	23.53	0.095	1					
Parke	TEH-IN-9.0	0.274	5.17	0.021	1					
Parke	TEH-IN-10.0	2.795	52.63	0.213	1					
Parke & Putnam	TEH-IN-11.0	11.722	220.73	0.893	8					
Putnam	TEH-IN-18.0	0.259	4.88	0.020	1					
Hendricks	TEH-IN-20.0	0.304	5.74	0.023	1					
Hendricks	TEH-IN-22.0	0.030	0.20	•	0					
Hendricks & Morgan	TEH-IN-23.0	1.036	19.51	0.079	1					
Morgan	TEH-IN-27.0	0.396	7.46	0.030	1					
Shelby	TEH-IN-28.0	0.061	1.15	0.005	0					
Decatur	TEH-IN-29.0	0.152	2.87	0.012	1					
Decatur	TEH-IN-30.0	0.396	7.46	0.030	1					
Franklin	TEH-IN-32.0	19.812	373.05	1.510	20					
Franklin	TEH-IN-37.0	0.594	11.19	0.045	1					
Franklin	TEH-IN-38.0	0.015	0.29	0.001	0					
Franklin	TEH-IN-39.0	0.213	4.02	0.016	0					
Total Length of Habitat: 41 009 km. Total Area: 3 12 km <sup>2</sup> . Total Number of Sites: 41										

Total Length of Habitat: 41.009 km Total Area: 3.12 km<sup>2</sup> Total Number of Sites: 41 Number of sites determined during discussions with USFWS, and following suggestions of Forest Clark.

Forest\_Clark@fws.gov

To:

Jeff Thommes;

CC:

Subject:

Re: Indiana bat mist net plan

Date:

Tuesday, June 05, 2007 3:17:04 PM

Attachments:

Jeff,

I am reviewing your letter today and will likely finish tomorrow morning.

in reference to number 1 below, I am concerned about the predicament of staying within the 250 foot wide corridor. I understand your situation, but if suitable conditions to net do not exist within the 250 foot corridor, then we cannot expect a valid survey effort at that location. If as would often seem the case, the same landowner owns the land surrounding the 250 foot wide survey corridor, we would expect BHE, Ecotech or Jackson Environmental Consulting to make every effort to work with that landowner to gain access to suitable sites outside the 250 wide corridor, when necessary. If the consultant is not able to identify suitable mist net sites at any particular location, we will have to develop an alternative course of action.

In reference to number 2 below, we agree with your proposed approach. The mist net effort on new sites should be 1 per linear kilometer unless the additional stands are low quality in which case fewer mist net sites may be requested.

Best regards,

**Forest** 

Forest Clark U.S. Fish and Wildlife Service 620 South Walker Street Bloomington, Indiana 47403 (812) 334- 4261 ext. 206 "Jeff Thommes"
<JRTHOMMES@nrginc.com>

06/04/2007 10:56 AM

To <Forest\_Clark@fws.gov>

cc "Melanie Gregory"

<mgregory@bheenvironmental.com>, "Delia
Keily" <drkeily@nrginc.com>, "Jeff Thommes"

<JRTHOMMES@nrginc.com>

Subject Indiana bat mist net plan

#### Forest-

Please review the attached mist net survey plan. It was prepared by BHE Environmental and requires approval to validate their permit. It basically says we'll do what you told us to do in your May 24 letter. A couple things that aren't addressed in the attached plan:

- 1) You mention in your letter that it would be good if mist net sites could be placed outside of the corridor immediately surrounding the proposed pipeline route (you state within 0.5 mile). We have struggled to gain survey access within a fairly narrow corridor along the route and will have our right-of-way agents focused on notifying landowners of the upcoming surveys. They will be unable to attempt to contact new landowners to seek additional access. Therefore, our mist net sites will need to remain within the previously approved survey corridor (generally 250 feet wide).
- 2) As the habitat assessment crews are working through new areas in Indiana (primarily those areas previously denied or reroutes), additional Indiana bat habitat units may be identified. As we discussed, those that are considered medium or high quality will be included for mist netting. That's the most conservative approach. Those considered low quality will be provided to you for review. However, we did not discuss what to do if additional forested areas are identified near an existing habitat unit. If the existing unit already requires mist netting, our preference would be to incorporate the new forested stand(s) into the existing unit and add more mist net sites as necessary. If the existing stand was low quality but new stands may raise that rating, we'll submit those to you for review. Existing stands

rated as medium or high quality will not have those ratings lowered by the addition of new forested stands without your review. Can we add new sites to existing units and increase the mist netting effort, if necessary?

I will be following up with you on your letter and your analysis in that letter to ensure we use it appropriately. For now, I would appreciate your quick review of the mist net survey plan so the crews can plan to mobilize in Indiana later this week.

Thanks as always for your ongoing cooperation.

Best regards-

Jeff



Jeff Thommes Plan\_Indiana.doc" de jrthommes@nrglnc.com Clark/R3/FWS/DOI]

612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax [attachment "NRG REX-East Bat Mist Net Survey Study Plan\_Indiana.doc" deleted by Forest Clark/R3/FWS/DOI]

Jeff Thommes

To:

"Angela\_Zimmerman@fws.gov"; "Bankey, Mindy";

CC:

"Charles Howard"; Delia Kelly; Carly Lapin; Bart

Jensen;

Subject:

**REX-East mussel surveys** 

Date:

Jeff

Wednesday, June 06, 2007 2:47:50 PM

Attachments:

REX Methods change letter CSH.pdf

#### Angela and Mindy-

Malacologists from Ecological Specialists, Inc. (ESI) have been conducting surveys for mussels in perennial waterbodies in Ohio for the last week or so. During those efforts, they've noted that many of the features on the table of waterbodies requiring survey are unlikely to actually support mussels. The attached letter from ESI, addressed to me, explains this issue in more detail and includes a recommendation for eliminating certain waterbodies from consideration. The suggestion seems logical to me, but before I ask ESI to change their survey approach, I need the FWS and ODNR to review and approve the change.

With this e-mail, and the attached letter, Rockies Express is requesting FWS and ODNR concurrence that certain waterbodies, as specified in the letter, do not warrant survey for protected mussel species. Providing your response in a timely manner will allow ESI to focus survey resources on those waterbodies with the best potential to contain mussels.

As always, we appreciate your ongoing cooperation on this project. Please let me know if you need additional information to consider this request.

Best regards-		



Jeff Thommes jrthommes@nrginc.com 612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax



# **ECOLOGICAL SPECIALISTS, INC**

OHIO OFFICE

470-A Schrock Road • Columbus, OH 43229 p: 614.430.3780 • F: 636.430.3781 MISSOURI OFFICE 1417 Hoff Industrial Drive • O'Fallon, MO 63366 P: 636.281,1982 • F: 636.281.0973

www.ecologicalspecialists.com



05 June 2007

Mr. Jeff Thommes
Sr. Natural Resource Specialist
Natural Resource Group, Inc.
80 S. 8th St.
1000 IDS Center
Minneapolis, MN 55402

Dear Mr. Thommes:

Ecological Specialists, Inc. (ESI) has been conducting massel surveys of waterbodies in Ohio crossed by the proposed Rockies Express (REX) Pipeline. Initial surveying methods used aerial and topographic maps to determine crossings of permanent waterbodies and their respective stream widths (Table I). Table I also summarizes the results of a number of surveys completed to date. After direct field observation of numerous stream crossings to date, I have realized that many of the estimated stream widths are 2-3 times the actual wet width (likely near low-flow conditions) (see Table I). In general, streams less than 10ft wide (wet-width) appear far too small to support unionid mussels. Their permanence is suspect in some cases, and influence from adjacent land-use (i.e., agricultural fields) is likely an additional factor prohibiting mussels from inhabiting these streams. Given these observations and long-term experience, I believe that it is extremely unlikely that unionid mussels will inhabit streams <10ft wide wet width (assume <20ft full channel width). Additionally, it is even more unlikely that mussels would inhabit small "streams" (a.k.a. drainage ditches) without an innet riparian zone (i.e., trees and vegetation along the banks) and bounded by agricultural fields.

Therefore, I am recommending that future mussel surveying efforts for this project should be restricted to streams with estimated full-channel widths \$20ft (see Table I). This limitation would eliminate 78 mussel surveys at waterbody crossings, which would reduce the total number of surveys from 154 to 76 (see Table I; note; some streams <20ft already surveyed). This recommendation to a change in methods should be evaluated and approved by the Ohio Department of Natural Resources (ODNR) and U.S. Fish and Wildlife Service (USFWS) before a change in surveying methods are implemented. I would be happy to discuss this issue with the ODNR if you wish. ESI will continue surveying for mussels using the approved methods unless otherwise directed by the ODNR, USFWS, NRG, and REX.

Respectfully yours,

Charles S. Howard

Malacologist / Ohio Office Director

EXPERTISE · SERVICE · INTEGRITY



# United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (\$12) 334-4261 Fax: (\$12) 334-4273

June 7, 2007

Mr. Jeff Thommes Natural Resources Specialist Natural Resources Group, Inc. 1000 IDS Center 80 South Eighth Street Minneapolis, Minnesota 55402

Dear Mr. Thommes:

This letter is in response to your email dated 4 June 2007, which includes the attached Rockies Express – East Pipeline Project Indiana Bat Mist Net and Radiotelemetry Survey Study Plan, requesting authorization to conduct bat trapping and radio telemetry of the Federally endangered Indiana bat (Myotis sodalis).

Specifically, this request covers summer mist net survey and telemetry for the Rockies Express East Pipeline project in Vermillion, Parke, Putnam, Hendricks, Morgan, Johnson, Shelby, Decatur, and Franklin Counties, Indiana. This work would be conducted under federal permits held by BHE Environmental, Inc. (permit # TE809227-18), Ecotech Consultants, Inc. (permit # TE80927-18), and Jackson Environmental Consulting Services, LLC (working under permit # TE809227-18 while permit # TE102292-1 is amended). All activities must be carried out with strict adherence to permit conditions and authorizations specified in federal permits. All contractors should be reminded of the need to amend their State permits, if appropriate, for this project.

Sufficient information was provided to process this request. This letter serves as your authorization to conduct the bat surveys and telemetry at the sites specified in the FWS letter to you dated 24 May 2007 (with attachments) and your 4 June 2007 email (with attachment). Your contractors must carry this letter with their federal permits when conducting work at the identified sites.

Contractors should strive to identify the best available net sites at each location (inside or where necessary, outside the 250 foot wide pipeline corridor). At any location where contractors are able to identify only sub-optimal net sites (e.g., no defined corridor, corridor that is too wide, absence of overhanging canopy), please advise them that they should immediately contact Forest Clark via phone at the Bloomington Field Office at 812-334-4261 ext, 206 to discuss how to

Page 2 of 2

proceed. If Mr. Clark does not respond within 48 hours of their contact, they can resume the survey using the best available net site at that location.

If you have questions, please contact Forest Clark at 812-334-4261, extension 206.

Sincerely,

Scott E. Pruitt Field Supervisor

Nichald. Literin

cc: Catherine Gremillion-Smith, Indiana Department of Natural Resources

Angela Zimmerman@fws.gov

To:

Jeff Thommes;

CC:

Bart Jensen; Charles Howard; Carly Lapin; Delia Kelly;

Bankey, Mindy;

Subject:

Re: REX-East mussel surveys

Date:

Friday, June 08, 2007 9:57:26 AM

Attachments:

pic00041.gif

Jeff,

I am okay with the proposed changes.

Sincerely,

Angela Zimmerman

"Jeff Thommes"

<JRTHOMMES@nrginc</pre>

.com>

To

<Angela\_Zimmerman@fws.gov>,

06/06/2007 03:47

"Bankey, Mindy"

PM

<Mindy.Bankey@dnr.state.oh.us>

cc

"Charles Howard"

<choward@ecologicalspecialists.com>

, "Delia Kelly"

<drkelly@nrginc.com>, "Carly Lapin"

<cnlapin@nrginc.com>, "Bart Jensen"

<BMJENSEN@nrginc.com>

Subject

**REX-East mussel surveys** 

#### Angela and Mindy-

Malacologists from Ecological Specialists, Inc. (ESI) have been conducting surveys for mussels in perennial waterbodies in Ohio for the last week or so. During those efforts, they've noted that many of the features on the table of waterbodies requiring survey are unlikely to actually support mussels. The attached letter from ESI, addressed to me, explains this issue in more detail and includes a recommendation for eliminating certain waterbodies from consideration. The suggestion seems logical to me, but before I ask ESI to change their survey approach, I need the FWS and ODNR to review and approve the change.

With this e-mail, and the attached letter, Rockies Express is requesting FWS and ODNR concurrence that certain waterbodies, as specified in the letter, do not warrant survey for protected mussel species. Providing your response in a timely manner will allow ESI to focus survey resources on those waterbodies with the best potential to contain mussels.

As always, we appreciate your ongoing cooperation on this project. Please let me know if you need additional information to consider this request.

Best regards-

Jeff

(Embedded image moved to Jeff Thommes file: pic00041.gif)NRG jrthommes@nrginc.com
Logo 612.359.5678 Direct
612.418.4614 Cell

612.418.4614 Cell 612.347.6780 Fax

[attachment "REX\_Methods\_change\_letter\_CSH.pdf" deleted by Angela Zimmerman/R3/FWS/DOI]

Jeff Thommes

To:

"Forest Clark@fws.gov";

CC:

Delia Kelly; Bart Jensen; Jeff

Thommes:

Subject:

REX-East: New bat unit in Indiana

Date:

Monday, June 18, 2007 7:16:04 AM

Attachments:

TEH-IN-27.5.pdf

#### Forest-

As the field crews continue to work through their first pass of some of the forested tracts, we have real data continuing to trickle in. We, in turn, are using that data, along with aerial photos and professional judgment, to continue to assess habitat quality and determine if new Indiana bat habitat units should be developed along the proposed REX-East route. If you recall, the habitat units are what we provided you in the binder earlier this year.

One group of data provided by the subs does seem to warrant a stand alone unit being created. Between mileposts 328 and 329 in Johnson County, there were several small, fragmented forest stands bisected by the route that were reviewed for potential roost trees. Based on the data collected at these stands as well as the overall position of the stands in the landscape, we believe that the unit qualifies as low quality. Per our earlier discussions and agreement, units that we designate as low quality require your review and approval. If you agree that the unit is low quality, we will propose to not conduct mist net surveys there. If that is not the case and you reason that the site is higher quality, then we will add it to the list of areas to be mist netted.

As crews are currently in the field in Indiana conducting the mist net surveys, your prompt attention to this matter would be appreciated. If mist netting is necessary, it would be extremely beneficial to have the crews survey the area while in the vicinity in the very near future.

If you have any questions or would like to discuss this unit, please let me know.

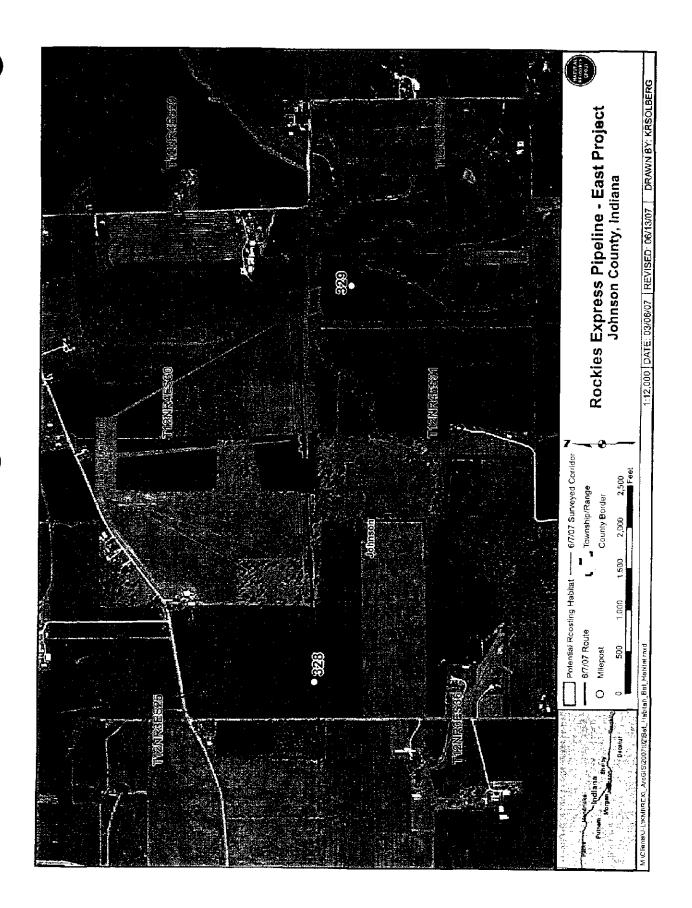
Best regards-

Jeff



### Jeff Thommes jrthommes@nrginc.com

612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax



#### Rockies Express Pipeline – East Project Indiana Bat Quantitative Field Survey Data Sheet

Unique Site 10: 1EH-1N-327-AH	
State: 15 Courts: 30 Tract(s) #: 15/10/26/200	
Approximate United	
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Connected to other forested areas (# <0.5 mile; please describe with directionality):	
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Procee describe water resource(s) with	
directionally: And to North	
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Understary Denocky (IT >60% Circle 50-75% >75%	
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Class 4 Class 5 Class 6	
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Rockies Express - East Use Only	
Remais of Habitat Survey: Test - IN - 27.5  All moderately Sized live. Shankark hickon. Stand is Small	
brunning in about that lunds and war stream. 3 sites in habitat	
Assessment of Habitat Quality: Low & Medium High	

ANS 6/5/07



Rockies Express Pipeline – East Project			
SITE ID (directionality)	TEH-IN-327-AAA-LENE	Date: 05/29/2007	
DESCRIPTION / NOTES	17 Shagbark Hickories within forested pasture with pond to no	orth.	

#### Rockies Express Pipeline – East Project Indiana Bat Quantitative Field Survey Data Sheet

Unique Size 10: TEH-/N-327-ASB
State: 1 County: 10 Tracts #: 11/0 262 000
Approximate Linear DC4 MP Range S27, 8 Peast crossed: DC4 (Entry-Edg): 327, 8
Connection to other forested areas (If <0.5 male: please seed the with directionally):
Proximity to Water Resource(s): < // mile
Present describe water resource(a) with Para do No Para to No Eq. 5
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Understory Density (If >00% Circle 50-76% >75%
DBH Stee Class Tally: Class 1 Class 2 Class 3 >8.12"
Chies 4 Cines 6 Cines 6
×12-16" ×16-20" ×20"
Associated Photo(s): IDE: Description:
KOR: Description:
Dit
De: Description:
Signature: BRH SJBR Date: 5/29/07
<u>Drawing</u>
Main Size Class)
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+=Directionality (Math North Mark)
-include nearby speds and/or isodimarka
Consent : Carra Conto
Carrya Crota
Rockies Express - East Use Only
Results of Hebital Survey: TEH-IN-27-5
and some the Shanton bickom in small forest frament in agricultural
Assessment of Habitat Quality: Low X Medium High
-

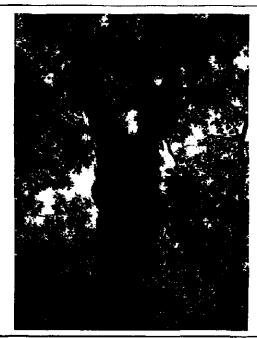


Rockies Express Pipeline – East Project			
SITE ID (directionality)	TEH-IN-327-BBB-LW	Date: 05/29/2007	
DESCRIPTION / NOTES	ESCRIPTION / NOTES 1 Shagbark Hickory within woodlot with perennial waterbody to east.		

Rockies Express Pipoline — Ésat Project Indiana Bat Quantitative Field Survey Data Sheet

Unique Size Do 11 307-CCC
States: 1N Commer 10 Traction #: 1NIO 263.000
Actified Photo Approximate Linear 2011 MA Range Prop is Gross - Exig. 327. 8
Connected to other forested sneat (if <0.5 miles; please deachts with directionality);
Proximity to Visitor Resource(s): (Visitor VIII mile >5 mile
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Add-story Ocnsity (IF >50% Carde One):
Understony Density (il >50% Circle 50-75% >75%
DBH Size Class Tate: Class 1 Class 2 Class 3 >3-12
Class 6   Class 5   Class 6   >12-16"   >20"
Associated Photo(s): (DR: Cestription:
Chit Cestription:
ID# Description:
Signature: BRHJJBR Description: 5/25/67
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@ = Dead Tree (Mith Size Class)  Pedge of Current)
+ Directoristry
(With North Mark)
THOUSE TRANSPORT (TENS)
andler leadmants
Commence / Carya ovata
Rockies Express - East Use Only
Results of Habitat Survey: TEH-(N-27.5)  Day Turge for Shootheart bickering in rigurium sprinter. Rigarian ratio.  15 agraphic and Surveyable by applicational fields. 3 Sites in Indicate:
Assessment of Hisbitat Quality: Low Medium High

ANS 6/5/07



Rockies Express Pipeline – East Project			
SITE ID (directionality)	TEH-IN-327-CCC-LS	Date: 05/29/2007	
DESCRIPTION / NOTES	1 Shagbark Hickory within forested comidor with	h perennial waterbody within ¼ mile.	

Jeff Thommes

To:

"Joyce Collins@fws.gov";

CC:

Delia Kelly; Bart Jensen;

Subject:

REX-East Indiana bat mist net plan

Date:

Wednesday, June 20, 2007 7:20:03 AM

Attachments:

IL NRG REX-East Bat Mist Net Survey Study Plan 6-19-07.

doc

#### Joyce-

Please review the attached mist net survey plan. It was prepared by BHE Environmental and requires approval to validate their permit. The survey plan is based on the 1999 draft recovery plan for the Indiana bat and the recently revised mist net guidelines as well as our project-specific discussions.

A couple of additional things to keep in mind:

- 1) As the habitat assessment crews worked through new areas in Illinois (primarily those areas previously denied or reroutes), an additional Indiana bat habitat unit was identified. The area was considered high quality and is included in the table in the attached plan as proposed for mist netting. It is unit TEH-IL-6.5. We are not requesting your review of that site as we are moving forward with a conservative approach of netting the area.
- 2) As habitat assessment crews were able to get access to forested stands near existing units, additional data became available. An additional forested stand near TEH-IL-4.4 was found to contain potential roost trees. After reviewing the area and noting it's proximity to TEH-IL-4.4, we added the stand to that habitat unit. The unit was already proposed for mist netting and the additional area will be considered for mist net sites when the net crews reach that area.

We'll be keeping you posted as the surveys progress, but for now, I would appreciate your review of (and concurrence with) the mist net survey plan so the crews can plan to mobilize in Illinois in the next week or so. Please also let me know if you have any objections to the

items above.

Just so you're aware, we've caught one Indiana bat in Ohio and eight in Missouri thus far. No maternal roost trees have been identified on the right-of-way. We haven't mist netted the forested areas along and within (On the island) the Mississippi River yet.

Thanks as always for your ongoing cooperation.

Best regards-

Jeff



Jeff Thommes jrthommes@nrginc.com 612 359 5678 Direct

612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax

# Rockies Express Pipeline - East Project Indiana Bat Mist Net and Radiotelemetry Survey Study Plan

#### Introduction

Rockies Express Pipeline LLC (Rockies Express) is proposing to construct and operate a new pipeline, including compressor and ancillary facilities to transport natural gas produced in the Rocky Mountain basins for delivery primarily to other pipelines and distribution customers located in the Midwest and eastern United States. The Rockies Express pipeline system consists of existing and new natural gas pipeline facilities extending from Rio Blanco County, Colorado to a terminus in Marion County, Ohio.

Existing pipeline facilities are being extended this summer under a Federal Energy Regulatory Commission (FERC) Certificate of Public Convenience and Necessity (Certificate), CP04-413-000. This project, referred to as the REX-Entrega Project, involves the completion of a 326-mile-long segment from Rio Blanco County, Colorado to Weld County, Colorado. A second segment, REX-West, will extend approximately 713 miles from Weld County, Colorado to Audrain County, Missouri. An application for a Certificate has been filed with the FERC (Docket No. CP06-354-000). A third segment, REX-East, will continue for another 622 miles from Audrain County, Missouri, to Monroe County, Ohio. Rockies Express has filed an application for this project as well (Docket No. CP07-208-000).

Each project, while connected, will serve separate markets. The REX-East Project is the subject of this study plan.

In addition to the pipeline, REX-East will include construction of some aboveground facilities including compressor stations, block valves, and metering/regulation facilities. With the exception of compressor stations, aboveground facilities will be located within or adjacent to existing facilities or largely within the permanent right-of-way of the proposed project. These facilities will be sited to avoid impacts on special status species and sensitive vegetation communities. Pipeline construction will generally involve a 125-foot-wide construction right-of-way and is anticipated to begin in May 2008 with an expected in-service date of winter 2008. The Federal Energy Regulatory Commission (FERC) is the lead federal agency for the project.

Pursuant to 18 CFR 380.13, Rockies Express is acting as the FERC's non-federal representative for purposes of complying with section 7(a) of the Endangered Species Act (ESA). Rockies Express has retained Natural Resource Group, Inc. (NRG) to assist with various aspects of project development, including agency consultations, environmental field surveys, and preparation of an application to the FERC. NRG, on behalf of Rockies Express, will be preparing environmental review documents for the project.

Based on a review of public documents for the REX-East Pipeline, including lists of federally endangered or threatened species found on websites maintained by the FWS, and through discussions with the FWS, the Indiana bat was identified as

potentially occurring within the general project area in Missouri, Illinois, Indiana, and Ohio.

NRG has developed the following Indiana Bat Mist Net and Radiotelemetry Survey Study Plan to describe survey efforts to determine presence or absence of Indiana bats within areas of suitable habitat along the proposed survey corridor. The results of mist net surveys and radiotelemetry will be used to develop a determination of effect of the project on Indiana bats. Survey methods are described in detail below.

#### Mist Net Survey

The Draft Indiana Bat Recovery Plan (2007) recommends two mist net sites be sampled per square kilometer of forest in the proposed project area, or one mist net site be sampled per linear kilometer of forested habitat. Habitat assessment of the pipeline right-of-way (ROW) identified five forested areas ("Habitat Units") along the ROW that contain potential habitat for the Indiana bat, with a combined total length of approximately 1.13 kilometer (see attached table). We propose to establish one mist net site within each distinct bat Habitat Unit along the proposed pipeline ROW, for a total of five mist net sites. If during field reconnaissance additional Indiana bat Habitat Units are identified, they will also be surveyed at a rate of one mist net site per linear kilometer of forested habitat (minimum of one mist net site per unit).

Exact mist net locations will be selected in the field by a biologist experienced in capturing Indiana bats. Selection of mist net sites will be based upon forest conditions (e.g., tree density, canopy cover), presence and size of flowing streams, and presence of an open flyway. Access to the site by field vehicles will be considered. Netting over streams with riparian forest increases the probability of capturing bats due to the natural funneling action of the stream corridor. In addition to forested stream corridors, upland forest tracts within the proposed project area may be surveyed.

Mist netting will be conducted in accordance with FWS guidelines, as described below.

Each site will consist of two mist nets spaced no less than 100 feet apart. Both nets will be deployed for two calendar nights, resulting in four net-nights per site (one net-night = one net deployed for one night). Each night, netting will begin at sunset and continue for at least five hours. Nets will be monitored every 10 minutes. The location of mist net sites will be documented using GPS.

Mist nets will be constructed of black nylon with a mesh of approximately 1.5 inches. Nets will extend approximately from water or ground level to tree canopy and will be bounded by foliage on the sides. One net may be 18 - 30 feet tall and 18 - 60 feet wide, depending on dimensions of the survey site. Net width and height will be adjusted for the fullest possible coverage of the flight corridor at each site. To the extent possible, mist nets will be placed greater than 150 feet away from disturbance by vehicle and/or human traffic.

Netting will occur only if the following weather conditions are met:

- a) Minimal precipitation,
- b) temperature at or above 10°C,
- c) no strong winds, and
- d) cloud cover, or moon less than half full if net site is not protected by the forest canopy.

Bats will be live-caught in mist nets and released unharmed near the point of capture. Species, capture location, age, gender, reproductive condition, right forearm length, and weight of bats captured during the mist net survey will be recorded. Distinguishing characteristics of captured Indiana bats will be photographed. Habitat near each mist net site will be characterized, and weather conditions during the survey will be recorded.

#### Radiotelemetry

Mist net crews will attach a radiotransmitter on juvenile or adult female Indiana bats captured (maximum of two Indiana bats per site, no more than 20 across entirety of the project) to allow for telemetry studies. Bats will be tracked during the day until a roost tree is located, or up to four days. If access to roost trees is not possible (on private property, etc.), roost locations will be estimated using telemetry bearings from at least two locations. Where possible, crews will gather the following information regarding roost trees: tree species, tree condition (living or dead), percent exfoliating bark, dbh, averaged percent overstory within stand, averaged percent understory/midstory within stand, and distances from the roost tree to centerline, nearest paved road, nearest body of water, and nearest four-lane highway. If possible, a photograph will be taken and the tree's location recorded with GPS.

Emergence counts will be conducted for three nights at each roost tree to enumerate bats using the roost. Emergence counts will begin 15 minutes before dusk and will continue for at least one hour.

#### Schedule and Staffing

All field work will be conducted directly by, or under the direction of, BHE Environmental, Inc., of Cincinnati, Ohio. Possible subcontractors to BHE include Ecotech Consultants, Inc., of Frankfort, Kentucky, and Jackson Environmental Consulting Services, LLC of Richmond, Kentucky.

If weather conditions permit, mist netting will be initiated upon receipt of your office's concurrence with this study plan, and will be concluded by August 15<sup>th</sup>, 2007.

Table 1. Indiana bat Habitat Units along the proposed REX-East pipeline in Illinois.

State/County	Bat Habitat ID	Crossing Length (km)	Area of Unit (acres)	Area of Unit (km²)	Number of Mist Net Sites
IL/Pike	TEH-IL-1.0	0.152	2.87	0.011	1
IL/Pike	TEH-IL-4.0	0.366	6.89	0.028	1
IL/Scott	TEH-IL-4.2	0.213	4.02	0.016	1
IL/Morgan	TEH-IL-4.4	0.300	5.74	0.023	1
IL/Douglas	TEH-IL-6.0	0.304	5.74	0.023	1
IL/Edgar	TEH-IL-6.5	0.900	18.53	0.075	1
Total	Length of Habita	t: 2.235 km	<u></u>	Total N	umber of Sites: 6

Joyce\_Collins@fws.gov

To:

Jeff Thommes;

CC:

Bart Jensen; Delia Kelly;

Subject:

Re: REX-East Indiana bat mist net plan

Date:

Thursday, June 21, 2007 3:05:05 PM

Attachments:

pic00041.gif

Jeff,

I have no objections to items 1 and 2 below. Also, I've reviewed the mist net survey plan and you have my concurrence.

Thanks, Joyce

Joyce A. Collins
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Marion Illinois Sub-Office
8588 Route 148

Marion, Illinois 62959

phone: 618/997-3344, ext. 340

fax: 618/997-8961

email: joyce\_collins@fws.gov

"Jeff Thommes" <JRTHOMMES@nrgin

c.com>

To

<Joyce\_Collins@fws.gov>

06/20/2007 07:20

cc

AM

"Delia Kelly" <drkelly@nrginc.com>,
"Bart Jensen" <BMJENSEN@nrginc.com>

Subject

REX-East Indiana bat mist net plan

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Thanks as always for your ongoing cooperation.

Best regards-

Jeff

(Embedded image moved to Jeff Thommes file: pic00041.gif)NRG jrthommes@nrginc.com
Logo 612.359.5678 Direct
612.418.4614 Cell

612.347.6780 Fax

[attachment "IL NRG REX-East Bat Mist Net Survey Study Plan\_6-19-07.doc" deleted by Joyce Collins/R3/FWS/DOI]



# United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES) 620 South Walker Street Bloomington, IN 47403-2121 Phone: (812) 334-4261 Fax: (812) 334-4273

June 26, 2007

Jeff Thommes
Natural Resource Specialist
Natural Resource Group, Inc.
1000 IDS Center
80 South Eighth Street
Minneapolis, Minnesota 55402

Dear Mr. Thommes:

The U.S. Fish and Wildlife Service (FWS) has reviewed the information provided in your Draft Habitat Assessment of the Federally Listed Species: Indiana bat (*Myotis sodalis*) (Draft Habitat Assessment) dated March 2007 relevant to the proposed Rockies Express East project (FERC Docket No. CP07-208-000) crossing multiple counties in Indiana.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, as amended, and the U.S. Fish and Wildlife Service's Mitigation Policy.

The proposed Rockies Express East project would construct a pipeline, compressor stations, and ancillary facilities extending over 622 miles from Audrain County, Missouri to Monroe County, Ohio. The FWS was provided a General Location Map in July 2006 and subsequently a shapefile of the proposed route with a cover letter dated 9 October 2006. The information available to us shows the proposed pipeline entering Indiana in Vermillion County then traversing Parke, Putnam, Hendricks, Morgan, Johnson, Shelby, and Decatur Counties before exiting Indiana at Franklin County.

The purpose of this letter is to make recommendations for the collection of additional data (mist net surveys) at each habitat assessment site based on our review of the Draft Habitat Assessment. In an email dated 4 May 2007 we requested any additional sites that may have been evaluated and not included in the Draft Habitat Assessment to facilitate our review of the proposed site ranking. We received digital information in response to our request in an email dated 7 May 2007 from Delia Kelly that provided two additional assessment sites and delineated polygons identified as Indiana bat habitat. In total the BFO reviewed 20 areas (TEH-IN-: 1.0, 3.0, 4.0, 7.0, 8.0, 9.0, 10.0, 11.0, 18.0, 20.0, 22.0, 23.0, 27.0, 28.0, 29.0, 30.0, 32.0, 37.0, 38.0, and 39.0).

Each of these Indiana Bat Habitat ID areas had one to multiple sites within them. TEH-IN-11.0 in Putnam County, Indiana, for example, had 24 individual habitat sites within it.

Our review and specific comments on the Indiana Bat Habitat sites is contained in Attachment 1 - REX East Indiana Bat Habitat Assessment Comments Indiana Segment May 2007 (Attachmenet 1) and multiple attached maps labeled by the Indiana Counties that contain the assessment sites. The FWS provided a draft version of Attachment 1, with our preliminary review, in our 4 May 2007 email.

In summary, we recommend mist net surveys at 15 of the 20 Indiana Bat Habitat ID areas that you identified. Note that at least two of these areas (TEH-IN-11.0 and TEH-IN-32.0) would require multiple net sites. The BFO also recommends evaluation and possible survey of 14 additional sites (one of which, the alternate route around the Big Walnut Creek natural area, may require multiple sites). We do not have digital data of the alternate route that would permit more specific recommendations in this area. In general, in areas where the habitat was sufficiently continuous to require multiple net sites, we followed guidance provided in appendix 5 of the *Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision* (http://www.fws.gov), which indicates one net site per kilometer of linear project. Where the remotely sensed data and data provided indicated that fewer net sites would provide sufficient information upon which to evaluate potential take of the Indiana bat, the attachments reflect recommendation of fewer mist net sites. If tree clearing could be avoided during the Indiana bat reproductive season, 15 April to 15 September, we would reevaluate our recommendations for mist net surveys with some sites likely addressed through seasonal tree clearing..

We require that surveyors adhere to the guidelines in appendix 5 of the Draft Recovery Plan in order for mist net survey results to be accepted for purposes of Section 7 consultation. In addition, we recommend that surveyors not limit the location of mist net sites to the pipeline corridor, but move off the line up to 0.5 mile to trap at the best physical location possible. Because of the potential net site constraints, however, we also strongly recommend use of acoustic sampling to monitor survey sites. At this time, Anabat (Titley Enterprises, LLC) is the only acoustical sampling equipment capable of discerning between species of bats to an acceptable confidence level. The BFO can provide additional guidance for the proper use of Anabat in conjunction with mist netting.

The FWS requests radio telemetry of all reproductive female or juvenile Indiana bats captured during the survey. Radio telemetry will provide vital data regarding home range, roosting habitat, and foraging behavior for use during the consultation process. A qualified biologist must track all radio-tagged bats to their diurnal roosts for at least 5 consecutive days and must conduct evening emergence counts at identified roost trees at least twice during that period. If radio telemetry shows roost trees exist in areas that are off of the permit area, the adjacent landowner(s) must be contacted and the landowner(s) must grant access to those areas prior to conducting these activities. If access is denied, roost tree locations should be determined using triangulation. The BFO can provide additional guidance for the proper use radio telemetry.

With respect to federal agencies, it is the policy of this office to assume the presence of Indiana bats in suitable habitat unless mist net surveys conducted according to accepted protocols fail to capture Indiana bats.

Finally, we reiterate that low quality reproductive habitat (not identified as critical for mist netting) could potentially provide suitable foraging habitat and should be evaluated in the overall assessment of habitat impacts to the Indiana bat.

This endangered species information is provided for technical assistance only, and does not fulfill the requirements of Section 7 of the Endangered Species Act

We appreciate the level of detail and overall quality of the information provided to the FWS and opportunity to comment on it. Please contact Forest Clark in the Bloomington Field Office at 812-334-4261 ext. 206 to discuss our comments.

Sincerely yours,

Scott E. Pruitt Field Supervisor

cc: Christie Stanifer, IDNR, Division of Fish and Wildlife, Indianapolis, IN Laura L. Turner, FERC, 888 1st Street, NE, Washington, DC 20426 Jeff Gosse, RO

ES: FClark/June 26, 2007/RockiesExpressIndianaBatHabAssessCommentsFY2007

Heidi Kuska@fws.gov

To:

Jeff Thommes;

CC:

Charlie Scott@fws.gov;

Subject:

RE: Schedule

Date:

Wednesday, June 27, 2007 3:19:44 PM

Attachments:

Jeff,

We agree that surveys are not necessary for gray bat and decurrent false aster.

For bald eagle, is it possible to discuss this a little futher in a couple of weeks? I initially didn't think surveys would be necessary, but I would like to get a little more information from you as far as what data you are looking at and how current it is, as well as what exactly was surveyed. I will get in touch with you as soon as I get back in the office, the week of July 6th. I hope this is timely for you. I just want to make sure our bases are covered - we don't want to be in the construction phase and then come upon a nest.

Thanks, Heidi

Heidi Kuska
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Missouri Ecological Services Field Office
101 Park DeVille Drive, Suite A
Columbia MO 65203-0057

Ph: 573-234-2132 Fax: 573-234-2181

Email: heidi\_kuska@fws.gov

"Jeff Thommes"

<JRTHOMMES@nrginc</pre>

.com>

To

<Heidi\_Kuska@fws.gov>

06/25/2007 08:53

CC

AM

"Bart Jensen"

<BMJENSEN@nrginc.com>, "Delia

Kelly" <drkelly@nrginc.com>

Subject

RE: Schedule

#### Heidi-

I thought we were all caught up, but something that just came to my attention was a need to get concurrence from your office that surveys are not required for gray bat, bald eagle, and decurrent false aster. We plan to rely on the results from state surveys for bald eagles and suitable habitat for the other two species doesn't occur along the route. During our meeting earlier this spring, I think we landed on the need for Indiana bat surveys and surveys for mussels in the Mississippi River where dredging is planned, but we didn't discuss the other species. Based on that lack of discussion, we presumed that no other surveys were necessary. However, it seems like we need to ask the question just to be sure. Is this something that you can ponder over the next couple of days and get back to me on before you leave or do you need additional information?

Other than that, I don't believe we have any outstanding issues. I appreciate you keeping the project in mind though. It's that cooperative approach that will make the process continue to go smoothly.

Thanks-

Jeff

Jeff Thommes jrthommes@nrginc.com 612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax

----Original Message----

From: Heidi\_Kuska@fws.gov [mailto:Heidi Kuska@fws.gov]

Sent: Monday, June 25, 2007 8:24 AM

To: Jeff Thommes Subject: Schedule

#### Hello Jeff,

I just wanted to let you know that I will be out of the office quite a bit over the next few weeks (Annual Leave, meetings and some fieldwork) so I might be hard to get a hold of. I will be here today and Wednesday of this week and then out until the 2nd week of July. Is there anything coming up soon that we need to take care of before I go or make arrangements for?

#### Thanks, Heidi

Heidi Kuska
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Missouri Ecological Services Field Office
101 Park DeVille Drive, Suite A

Columbia MO 65203-0057

Ph: 573-234-2132 Fax: 573-234-2181

Email: heidi\_kuska@fws.gov

#### **Delia Kelly**

From:

Jeff Thommes

Sent:

Thursday, June 28, 2007 5:36 AM

To:

'Angela\_Zimmerman@fws.gov'

Cc:

Delia Kelly; Bart Jensen; Jeff Thommes

Subject:

**REX-East:** heron rookeries

Follow Up Flag: Follow up Flag Status:

Red

#### Angela-

Does the FWS maintain records of great blue heron rookeries in Ohio? At a public meeting earlier this year, landowners mentioned that they have seen a "breeding pair" of great blue herons near our proposed crossings of Dry Fork Whitewater River and Caesar Creek. I'm reluctant to term a single breeding pair a rookery, but FERC has asked us to contact the agencies to confirm known rookeries in the project area and to determine the distance of the project route from those rookeries. If you don't have records for rookeries, do you know if the state maintains them?

Without confirmation that a known rookery is nearby the project corridor, I'm inclined to label these as what they are, pairs of blue heron in the vicinity of the route. Also, for your information, Rockies Express will be crossing both of those waterbodies using the horizontal direction drill method and will not affect riparian forest adjacent to those systems.

Any insight you can provide is appreciated.

Best regards-

Jeff



**Jeff Thommes** jrthommes@nrginc.com 612.359.5678 Direct 612.418,4614 Cell 612.347.6780 Fax



# Missouri Department of Conservation

2901 West Truman Boulevard, P.O. Box 180 Jefferson City, MO 65102-0180 Telephone: 573/751-4115

John D. Hoskins, Director

May 31, 2007

Jeff Thommes, Natural Resource Specialist Natural Resource Group, Inc. 1000 IDS Center 80 South Eighth Street Minneapolis, MN 55402

RE: REX-EAST Pipeline Project—Conservation Opportunity Areas (COAs)

Dear Mr. Thommes:

The Missouri Department of Conservation (MDC) appreciates your response letter related to the approach and methods proposed by Rockies Express-East (REX-EAST) within the two Conservation Opportunity Areas (COAs) impacted by the pipeline construction and restoration. The efforts by REX-EAST to further minimize impacts to streams, wetlands and other natural communities are appreciated and commendable. COAs are a cornerstone to Missouri's Wildlife Action Plan and MDC is encouraging everyone to do their part to conserve and protect the biological potential of these areas.

MDC concurs with the best management practices suggested, including the control and abatement of invasive and noxious plant species. Take particular care with equipment (barges, boats) working in or near rivers and streams, not to introduce aquatic nuisance species, like the zebra mussel. Check your equipment at the point of origin, prior to use and periodically re-check to ensure no populations have occurred. The Mississippi River has known populations of zebra mussels throughout its length and every precaution needs to be taken to prevent its spread.

MDC will continue to convey its concerns and interest to REX-EAST related to the Mississippi River and the workspace on Blackburn Island. MDC appreciates the willingness of all interested stakeholders, including REX-EAST to have open and frequent exchanges related to the pipeline project.

Sincerely,

DOYLE F. BROWN POLICY COORDINATOR



## Missouri Department of Conservation

Headquarters 2901 West Truman Boulevard, P.O. Box 180 Jefferson City, MO 65102-0180

John D. Hoskins, Director

May 31, 2007

Jeff Thommes, Natural Resource Specialist Natural Resource Group, Inc. 1000 IDS Center 80 South Eighth Street Minneapolis, MN 55402

RE: REX-EAST Pipeline Project—Greater Prairie Chicken

Dear Mr. Thommes:

I apologize for a late response to your letter dated January 15, 2007 related to potential impacts to the Greater Prairie Chicken (GPC) along the pipeline route. According to our natural heritage database and confirmed by your letter, there may be potential for a population between milepost 1.1 and 6.9 and between 16.5 and 17.4.

The last MDC survey was done in 2001 and the last record of GPC was 1994 at those locations. Due to land cover changes, it is not believed that active leks still exist in the area; however, MDC does not know if any remnant GPC remains.

To facilitate an answer for REX-WEST regarding GPC, a set of questions were developed and the consultant contacted property owners by phone along the specific segment of the pipeline. MDC would suggest you do a similar procedure and provide the responses for MDC for a response letter to REX-EAST. The questions are the following:

1. Do you know what a greater prairie chicken looks like?

2. Have you seen a prairie chicken on your property in the past 5 years?

3. Have you observed prairie chicken feathers or droppings on your property?

4. Have you observed or heard breeding prairie chickens or young on your property?

a. If yes, how many and when?

Reference: http://www.mdc.mo.gov/nathis/birds/chickens/ Missouri Department of Conservation

If you have questions, please call me at (573) 522-4115 ext 3355 or by e-mail Doyle.brown@mdc.mo.gov.

Sincerely,

DOYLE F. BROWN POLICY COORDINATION

Stanifer, Christie

To:

Jeff Thommes:

CC:

Fisher, Brant; Bart Jensen; Delia Kelly; Carly Lapin; Rebecca

Winterringer;

Subject:

RE: REX- East Project aquatic resource surveys

Date:

Monday, May 21, 2007 3:41:36 PM

Attachments:

Jeff,

Brant said the plan looked fine on Friday morning. Sorry to just now get back to you. I was out on Friday and was busy with some other stuff today. Is this email response good enough for you, or do you need anything further from our end?

Thanks.

Christie L. Stanifer
Environmental Coordinator
Indiana Department of Natural Resources
402 West Washington St., Room W264
Indianapolis, IN 46204-2641
(317) 232-4160

Toll free: 1-877-928-3755 Fax: (317) 233-4579

From: Jeff Thommes [mailto:JRTHOMMES@nrqinc.com]

**Sent:** Tuesday, May 08, 2007 11:46 PM

To: Stanifer, Christie

Cc: Fisher, Brant; Bart Jensen; Delia Kelly; Carly Lapin; Rebecca Winterringer;

Jeff Thommes

Subject: REX- East Project aquatic resource surveys

Christie-

Attached please find a description of Rockies Express' proposed aquatic resource survey protocol for Sugar and Salt Creeks in Indiana. The protocol was developed by Ecological Specialists, Inc. (ESI) based on their experience with the waterbody features in the general project vicinity and their expertise with the species potentially occurring along the project corridor (and in discussions with Brant).

With this e-mail, Rockies Express is requesting your review and approval of the survey plan. Upon receipt of your concurrence or after addressing any questions you may have with the plan, ESI will begin the survey effort. Results will be provided to the DNR upon completion of the survey efforts. If listed species are identified during surveys, Rockies Express will coordinate with the DNR to develop measures to avoid or minimize adverse impacts on those species.

Also, we're currently working on a response to your April 13, 2007 letter. We hope to have that out in the next couple of weeks.

As always, thank you for your ongoing cooperation with the project.

Best regards-

Jeff

Jeff Thommes

To:

"Angela Zimmerman@fws.gov"; "Bankey, Mindy";

CC:

"Charles Howard"; Delia Kelly; Carly Lapin; Bart

Jensen;

Subject:

**REX-East mussel surveys** 

Date:

Wednesday, June 06, 2007 2:47:50 PM

Attachments:

REX\_Methods\_change\_letter\_CSH.pdf

### Angela and Mindy-

Malacologists from Ecological Specialists, Inc. (ESI) have been conducting surveys for mussels in perennial waterbodies in Ohio for the last week or so. During those efforts, they've noted that many of the features on the table of waterbodies requiring survey are unlikely to actually support mussels. The attached letter from ESI, addressed to me, explains this issue in more detail and includes a recommendation for eliminating certain waterbodies from consideration. The suggestion seems logical to me, but before I ask ESI to change their survey approach, I need the FWS and ODNR to review and approve the change.

With this e-mail, and the attached letter, Rockies Express is requesting FWS and ODNR concurrence that certain waterbodies, as specified in the letter, do not warrant survey for protected mussel species. Providing your response in a timely manner will allow ESI to focus survey resources on those waterbodies with the best potential to contain mussels.

As always, we appreciate your ongoing cooperation on this project. Please let me know if you need additional information to consider this request.

Jeff



## Jeff Thommes jrthommes@nrginc.com 612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax



## **ECOLOGICAL SPECIALISTS, INC**

OHIO OFFICE 470-A Schrock Road • Columbus, OH 43229 P: 614.430.3780 • F: 636.430.3781 MISSOURI OFFICE 1417 Hoff Industrial Drive • O'Fallon, MO 63366 P: 636,281,1982 • F: 636,281,0973

www.ecologicalspecialists.com



05 June 2007

Mr. Jeff Thommes
Sr. Natural Resource Specialist
Natural Resource Group, Inc.
80 S. 8th St.
1000 IDS Center
Minneapolis, MN 55402

Dear Mr. Thorames:

Ecological Specialists, Inc. (ESI) has been conducting mussel surveys of waterbodies in Ohio crossed by the proposed Rockies Express (REX) Pipeline. Initial surveying methods used aerial and topographic maps to determine crossings of permanent waterbodies and their respective stream widths (Table I). Table I also summarizes the results of a number of surveys completed to date. After direct field observation of numerous stream crossings to date, I have realized that many of the estimated stream widths are 2-3 times the actual wet width (likely near low-flow conditions) (see Table I). In general, streams less than 10ft wide (wet-width) appear far too small to support unionid mussels. Their permanence is suspect in some cases, and influence from adjacent land-use (i.e., agricultural fields) is likely an additional factor prohibiting mussels from inhabiting these streams. Given these observations and long-term experience, I believe that it is extremely unlikely that unionid mussels will inhabit streams <10ft wide wet width (assume <20ft full channel width). Additionally, it is even more unlikely that mussels would inhabit small "streams" (a.k.a. drainage ditches) without an intact riparian zone (i.e., trees and vegetation along the banks) and bounded by agricultural fields.

Therefore, I am recommending that future mussel surveying efforts for this project should be restricted to streams with estimated full-channel widths \$\geq 20ft\$ (see Table 1). This limitation would eliminate 78 mussel surveys at waterbody crossings, which would reduce the total number of surveys from 154 to 76 (see Table 1; note; some streams \$\geq 20ft\$ already surveyed). This recommendation to a change in methods should be evaluated and approved by the Ohio Department of Natural Resources (ODNR) and U.S. Fish and Wildlife Service (USFWS) before a change in surveying methods are implemented. I would be happy to disease this issue with the ODNR if you wish. ESI will continue surveying for mussels using the approved methods unless otherwise directed by the ODNR, USFWS, NRG, and REX.

Respectfully yours,

Charles S. Howard

Malacologist / Ohio Office Director

Expertise · Service · Integrity

Bankey, Mindy

To:

Jeff Thommes;

CC:

Subject:

FW: REX-East mussel surveys

Date:

Thursday, June 14, 2007 6:16:18 AM

Attachments:

On behalf of the ODNR, the Division of Wildlife reviewed this material and informed me that they do not object to the proposed changes in the protocol for determining the streams involved with the REX pipeline that will be surveyed for mussels.

Please do not hesitate to contact me if anything further is necessary!

Sincerely,

Mindy Bankey
Environmental Administrator
ODNR, Division of Real Estate and Land Management

#### **Delia Kelly**

From:

Jeff Thommes

Sent:

Thursday, June 28, 2007 12:47 PM

To:

'Bankey, Mindy'

Cc:

Delia Kelly; Bart Jensen

Subject: FW: REX-East: heron rookeries

Mindy-

I meant to copy you on the message below as well. I'd appreciate your thoughts as well.

Thanks-

Jeff

#### **Jeff Thommes**

jrthommes@nrginc.com 612.359.5678 Direct 612.418.4614 Cell 612.347.6780 Fax

From: Jeff Thommes

Sent: Thursday, June 28, 2007 7:36 AM
To: 'Angela\_Zimmerman@fws.gov'
Cc: Delia Kelly; Bart Jensen; Jeff Thommes
Subject: REX-East: heron rookeries

#### Angela-

Does the FWS maintain records of great blue heron rookeries in Ohio? At a public meeting earlier this year, landowners mentioned that they have seen a "breeding pair" of great blue herons near our proposed crossings of Dry Fork Whitewater River and Caesar Creek. I'm reluctant to term a single breeding pair a rookery, but FERC has asked us to contact the agencies to confirm known rookeries in the project area and to determine the distance of the project route from those rookeries. If you don't have records for rookeries, do you know if the state maintains them?

Without confirmation that a known rookery is nearby the project corridor, I'm inclined to label these as what they are, pairs of blue heron in the vicinity of the route. Also, for your information, Rockies Express will be crossing both of those waterbodies using the horizontal direction drill method and will not affect riparian forest adjacent to those systems.

Any insight you can provide is appreciated.

Best regards-

Jeff

Jeff Thommes jrthommes@nrginc.com 612.359.5678 Direct 612.418.4614 Cell

6/28/2007



612.347.6780 Fax

# Rockies Express Pipeline-East Project Agency Correspondence Index

Agency/Date	Сопевропаелся
U.S. Fish and Wildlife	
5-17-07	Email from Ms. Collins, Marion Illinois Sub-Office, Providing Recommendations for Review of Indiana Bat Habitat
5-24-07	Email From Mr. Jensen to Ms. Kuska, Columbia Missouri Field Office, and Mr. Brown, Missouri Department of Conservation, Requesting Approval of the Mississippi River Dredge Plan
5-24-07	Email from Mr. Clark, Bloomington Indiana Field Office, Providing Clarification Regarding the Indiana Bat Survey Procedures
5-25-07	Email from Ms. Kuska, Columbia Missouri Field Office, Providing Approval of the Indiana Bat Mist Net Survey Plan
6-4-07	Email from Ms. Thommes to Mr. Clark, Bloomington Indiana Field Office, Requesting Approval of the Indiana Bat Mist Net Survey Protocol
6-5-07	Email from Mr. Clark, Bloomington Indiana Field Office, Providing Preliminary Response to the Indiana Bat Mist Net Plan
6-6-07	Email from Mr. Thommes to Ms. Zimmerman, Reynoldsburg Ohio Field Office, and Ms. Bankey, Ohio Department of Natural Resources, Requesting Approval of Changes to the Mussel Survey Protocol
6-7-07	Letter from Mr. Clark, Bloomington Indiana Field Office, Providing Approval of the Indiana Bat Mist Net Survey Protocol
6-8-07	Email from Ms. Zimmerman, Reynoldsburg Ohio Field Office, Approving Changes Made to the Mussel Survey Protocol
6-18-07	Email from Mr. Thommes to Mr. Clark, Bloomington Indiana Field Office, Requesting Review of Additional Potential Indiana Bat Habitat
6-20-07	Email to Ms. Collins from Mr. Thommes Requesting Approval of the Indiana Bat Mist Net Protocol
6-21-07	Email from Ms. Collins, Marion Illinois Sub-Office, Providing Approval of the Indiana Bat Mist Net Survey Protocol
6-26-07	Letter from Mr. Pruitt, Bloomington Indiana Field Office, Providing Comments on the Indiana Bat Habitat Assessment
6-27-07	Email from Ms. Kuska, Columbia Missouri Field Office, Providing Follow Up Response to Listed Species Issues
6-28-07	Email from Mr. Thornmes to Ms. Zimmerman Regarding Known Nests for Great Blue Heron
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5-31-07	Letter from Mr. Brown, MDC, Response Regarding Conservation Opportunity Areas
5-31-07	Letter from Mr. Brown, MDC, Response Regarding Greater Prairie Chicken
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6-6-07	Email from Mr. Thommes to Ms. Zimmerman, Reynoldsburg Ohio Field Office, and Ms. Bankey, Ohio Department of Natural Resources, Requesting Approval of Changes to the Mussel Survey Protocol
6-14-07	Email from Ms. Bankey Providing Approval for Changes to the Mussel Survey Protocol
6-28-07	Email from Mr. Thommes to Ms. Bankey Regarding Known Nests for Great Blue Heron

Joyce Collins@fws.gov

To:

jimt@caprockenvironmental.com; Jeff Thommes;

CC:

Heidi\_Kuska@fws.gov; Forest\_Clark@fws.gov;

Angela\_Zimmerman@fws.gov; Laura.Turner@ferc.gov;

Subject:

Rockies Express East Pipeline

Date:

Friday, April 13, 2007 2:05:51 PM

Attachments:

#### Jim/Jeff,

I've reviewed the draft Indiana bat Habitat Assessment for the Illinois portion of the project which you provided in our April 2nd meeting.

As a whole, I have no issues or concerns with the habitat quality rating applied to each of the 9 sites.

Based on my review, I recommend mist-net surveys be conducted at each of the following sites:

Site ID TEH-IL-51-A, habitat quality rating Medium - The discription of potential roost trees (PRT's) is not clear for this site, however, it appears that a relatively high number of PRT's are present (e.g., average about 5.0 per acre) and includes some snags, one of which is in the 12-16" dbh size class. This site is also located along Six Mile Creek and is adjacent to the Mississippi River floodplain. For these reasons a mist-net survey is recommended.

Site ID TEH-IL-69-A, habitat quality rating High - This site is part of a larger forested area and contains a high number of PRT's, including snags. Additionally, Indiana bats have been documented 6-7 miles south of the site.

Site ID TEH-IL-80-AA, habitat quality rating Medium - This site contains a high number of PRT's, including some snags >16" dbh. It is part of a well connected forest system with an open understory. This site is also within 4-6 miles of a documented maternity colony site.

Site ID TEH-IL-94-AA, habitat quality rating High - This site contains a high number of PRT's, mostly shagbark hickories, close to a riparian

corridor. Part of a larger forested area.

Site ID TEH-IL-210-A, habitat quality rating High - This site contained 5 PRT's within a 1/4 acre area. Primarily shagbark hickory, but also 1 snag >16-20" dbh. This site is within 6 miles of a state management area and is a tributary to the Embarass River.

As to the rest of the sites rated as Medium in quality, I did not consider them as needing mist-net surveys given the types/numbers of PRT's and the location on the landscape (e.g., primarily agricultural). Given staffing limitations in this office, I don't think I'll be able to schedule site visits to any of these sites. However, if you have any questions/concerns about the areas recommended for mist-net surveys, give me a call and we can discuss.

Once I've received the latest aerial photos with the alignment indicated and the identification of sites where access was not allowed, I will review that information and provide further feedback as necessary.

Call if you have any questions or concerns. Thanks,
Joyce

Joyce A. Collins
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Marion Illinois Sub-Office
8588 Route 148
Marion, Illinois 62959
phone: 618/997-3344, ext. 340

fax: 618/997-8961

email: joyce\_collins@fws.gov

Angela Zimmerman@fws.gov

To:

jimt@caprockenvironmental.com; Jeff Thommes;

CC:

Mary M Knapp@fws.gov;

Subject:

REX East Pipeline - draft Indiana bat Habitat Assessment for

Ohio

Date:

Friday, April 13, 2007 2:57:47 PM

Attachments:

Jim/Jeff,

I have reviewed the draft Indiana bat Habitat Assessment for Ohio. I recommend mist-net surveys be conducted at the following sites:

**Butler County:** 

TEH-OH-5.0

**TEH-OH-7.0** 

Warren County:

**TEH-OH-10.3** 

**TEH-OH-10.7** 

Fairfield County:

**TEH-OH-20.0** 

Perry County:

**TEH-OH-21.0** 

Muskingum County:

**TEH-OH-30.0** 

Guernsey:

**TEH-OH-32.6** 

Belmont County:

**TEH-OH-33.0** 

TEH-OH-37.0

TEH-OH-39.0

I need more information on the following sites:

Fayette County:

TEH-OH-12.0 This site is a narrow forested riparian corridor which could potential serve as a travel corridor for bats. I need a better sense of how this corridor is positioned on the landscape. Does it connect other forested tracts?

I recommend site visits for the following sites:

Pickaway County:

TEH-OH-16.0

Fairfield County:

TEH-OH-17.0

TEH-OH-18.0

TEH-OH-19.0

Muskingum County:

TEH-OH-29.0

Thank you for the opportunity to review this document.

Sincerely,
Angela Zimmerman
U.S. Fish and Wildlife Service
6950 Americana Parkway, Suite H
Reynoldsburg, OH 43068
(614) 469-6923 ext.22
(614) 469-6919 FAX
angela\_zimmerman@fws.gov