

## Meeting Minutes

**Re:** Caton Farm Road – Bruce Road Phase I Study  
Hine’s Emerald Dragonfly  
U.S. Fish & Wildlife Service Coordination Meeting

**Date:** February 16, 2011

**Location:** U.S. Fish & Wildlife Service  
Chicago Field Office

**Time:** 10:00 A.M.

**Attendees:** See attached roster

The purpose of this meeting was to update the U.S. Fish & Wildlife Service (USFWS) on the project, discuss the results of the Hine’s Emerald Dragonfly (HED) studies that have been completed to date for this project, obtain concurrence to proceed with detailed geometric studies in the river valley, and to discuss the Section 7 Consultation Process.

### Project Status

Ms. Young gave a brief status of the project. The purpose of the project is to provide a new bridge over the Des Plaines River valley along with approach roadways to provide regional mobility. The project commences at the intersection of U.S. Route 30/Caton Farm Road/Gaylord Road and ends at the intersection of IL Route 7 (159<sup>th</sup> Street) and Cedar Road. Historically, eight river valley crossings were considered for the project, with various potential approach roadways east of the river valley, to the intersection of Cedar Road and IL Route 7 (159<sup>th</sup> Street). The project is following the NEPA/404 Merger Process and Concurrence Point #2 (Alternatives Carried Forward) has been completed. The project is now moving toward Concurrence Point #3 (Selected Alternative).

Two Public Information Meetings were held in June of 2007 to present the Alternatives Carried Forward, which included the Caton Farm – Bruce Road and Caton Farm – Oak Avenue alternatives. The results of the public meetings indicated that there was no strong public opposition or support for any specific alternative. The Caton Farm – Oak – Bruce – Middle alignment was selected as the locally preferred alternative and was officially endorsed by the Will County Board in July of 2009. This is the most southern alignment of the Alternatives Carried Forward. It has been designed to move the roadway as far south of the HED Critical Habitat as is feasible.

### Summary of Completed HED Studies

Mr. Matkovic summarized the three HED studies conducted by Daniel Soluk (University of South Dakota) for the project corridor. The 2004 studies (2005 report) were designed to determine if adult or larval HED use areas within or near the proposed bridge alignment at the

Des Plaines River crossing. During this study, adults were observed on both the east and west banks. One HED larva was found in a streamlet on the west bank of the river near the Crest Hill Treatment Plant. No probable larval habitat was observed along the east bank. The 2007 HED field studies were performed to provide additional information on HED adult activity within or near the proposed bridge alignment on the west bank of the river. In 2009, HED studies focused on the presence of adult species on the east bank of the river, north of the proposed alignment as well as on the island in the river. Adult activity was observed on both the island and the east bank.

### **Preliminary Preferred Alignment and Profile**

Based on the NEPA/404 process, coordination with the public, and the regulatory and resource agencies, there are no other options for crossing the river valley. The project team has delayed starting the detailed studies in order to obtain preliminary concurrence from USFWS on the preferred alternative. Mr. Lah and Mr. Cirton agreed that the river crossing alignment studies conducted to date have been extensive and reflective of the objective to avoid/minimize impacts to adult HED and their habitat, with the locally preferred alternative being as far south as practicable. On this basis, Mr. Lah and Mr. Cirton agreed that the river crossing alignment for the locally preferred alternative appears to be the most viable and Will County can proceed with development of detailed engineering plans.

Mr. Matkovic stated that to proceed with detailed studies of the bridge, structural borings will need to be performed on the island. Mr. Brooks stated that he spoke with ISGS and that it is unlikely that there is HED larval habitat on the island. Mr. Lah stated that he cannot discount the potential for habitat. Mr. Brooks will coordinate a field visit for Mr. Lah and a representative from ISGS to assess the island for potential HED larval habitat. The field visit is to be scheduled for May 2011, pending weather. Mr. Lah also stated that the borings could be performed prior to the assessment with the provision that the borings be conducted under his supervision.

Mr. Matkovic gave an overview of the preliminary profile. The profile is driven by the clearances for the waterways. The required clearances are approximately 48 feet at the I&M Canal, 35 feet at the island, and 15 to 20 feet over the Des Plaines River. The profile cannot be lowered over the Des Plaines River or the I&M Canal. Based on follow-up studies near I-355 over the river valley, it appears that the HED avoids shaded areas and thus does not fly under the bridge. Consideration should be given in the bridge design to increase lighting under the bridge.

### **HED Impacts and Section 7 Consultation**

Mr. Lah discussed other projects in the river valley and the cumulative affects they could have on the HED. Because of the number of projects and the potential impacts to the HED, at some point, the overall impacts could eventually result in a "jeopardy" determination. However, there are steps that could be taken to reduce the potential for a "jeopardy" determination as a result of this project.

The HED population appears to be declining in the last 12 years. Of the ten HED sites that are within the southern recovery unit (Illinois), only two sites have population data. Mr. Lah stated that additional population surveys need to be conducted. If the project team uses existing data

collected to date, the Biological Opinion could result in a “jeopardy” determination. Mr. Lah recommended that the project team consider funding additional HED population surveys. Mr. Brooks stated that the population surveys could be a part of the “conservation effort” in the Biological Assessment. Mr. Brooks stated that whether population surveys are completed or not, the scope of the project would not change. The Biological Assessment and Biological Opinion are based on best available data. Mr. Lah suggested that several agencies partner together to conduct the population surveys. Mr. Brooks stated that this project doesn’t affect the critical habitat that is outlined in the Federal Register. Mr. Lah stated that the USFWS will look at other factors such as whether the roadway widening on either side of the river valley affects the recharge area, will salt spray affect the critical habitat or species, etc.

The impacts to the HED and its critical habitat must be considered in the Biological Assessment. Mr. Lah read the attached document, which is Section 7(a)(2) that requires Federal agencies to ensure that activities will not jeopardize the HED. If the activities may affect the HED or its critical habitat, then formal consultation should occur. Ways to avoid, minimize and conserve the HED could include Best Management Practices that allow infiltration, bridge deck options to allow sunlight to pass through, and/or barriers or other methods to keep the HED off of the proposed roadway.

### **Project Schedule and Processing**

Mr. Fuller stated that the project is being processed as an Environmental Assessment, not an Environmental Impact Statement. If the Biological Opinion comes back as “jeopardy” determination, then the project will not move forward. The project is targeting a September Concurrence Point #3 Meeting. The Public Hearing is scheduled for late 2011. Section 7 Consultation must be closed before the Public Hearing. Mr. Brooks stated that he will develop the Biological Assessment. Mr. Lah stated that a Draft should be submitted for initial review/comments/response before the Formal Consultation process is initiated.

### **Summary of Decisions and Action Items**

- Mr. Lah to assist in determining the location of the structural borings on the island. Coordination must occur with Mr. Lah before beginning the work.
- USFWS concurred that the County can proceed with further detailed studies of the locally preferred alternative.
- USFWS will complete an assessment of the island for potential larval habitat. Mr. Brooks and ISGS to assist.
- CBBEL to send CAD Shape files for the Des Plaines River Valley Environmental Resources Plan, and the plan and profile to USFWS.
- Mr. Brooks will develop the Biological Assessment and send a Draft to USFWS prior to formal consultation.
- Subsequent to the meeting, Mr. Hamer stated that since the HED is both a state and federal listed species, if it is determined that the project will result in a “take” of the species, then application for an ITA (state) must be submitted to the IDNR. This process can take as long as six months. It does not jeopardize the alignment selection already agreed upon.

The meeting was adjourned at 11:45 A.M.

7(a)(2) requires Federal agencies to consult with the FWS to ensure that actions they fund, authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or destroy or adversely modify designated critical habitat (adverse modification).

If the Federal action agency determines that a project *may adversely affect* a listed species or designated critical habitat, formal consultation is required. No formal consultation is required if the action agency finds, with the Services written concurrence that the proposed action “may affect, but is not likely to adversely affect” listed species or critical habitat. This finding can only be made if ALL of the reasonably expected effects of the proposed action will be beneficial, insignificant, or discountable. There is a designated period of time in which to consult (90 days), and beyond that, another set period of time for the FWS to prepare a biological opinion (45 days). The determination of whether or not the proposed action would be likely to jeopardize the species or adversely modify its critical habitat is contained in the biological opinion. If a *jeopardy* or *adverse modification* determination is made, the biological opinion must identify any *reasonable and prudent alternatives* that could allow the project to move forward.

If the FWS issues either a *nonjeopardy* opinion or a jeopardy opinion that contains reasonable and prudent alternatives, it may include an incidental take statement. “Take” is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting or attempting to engage in any such conduct. (“Harm” is further defined to include significant habitat modification or degradation that results in death or injury to a listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.) “Incidental take” is defined as take that is incidental to, and not the purpose of, an otherwise lawful activity. The Service has to anticipate the take that may result from the proposed project and, providing such take will not jeopardize the listed species and describe that take in the incidental take statement. The latter contains clear terms and conditions designed to reduce the impact of the anticipated take to the species; these terms are binding on the action agency.

Jeopardize the continued existence of – an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of the species.

Adverse modification - destroy or adversely modify critical habitat. To determine adverse modification an analysis has to be made to determine the impacts on the primary constituent elements of the species critical habitat.

Reasonable and Prudent Alternatives – recommended alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction, that are economically and technologically feasible, and that the Director of the Service believes would avoid the likelihood of jeopardizing the continued existence of listed species or the destruction or adverse medication of designated critical habitat.

Reasonable and Prudent Measures – Actions the Director of the Service believes necessary or appropriate to minimize the impacts, i.e. amount or extent, of incidental take.

Terms and Conditions – Set out the specific methods by which the reasonable and prudent measures are to be accomplished. Terms and conditions of an incidental take statement must include reporting and monitoring requirements that assure adequate action agency oversight of any incidental take. The monitoring must be sufficient to determine if the amount or extent of take is approached or exceeded, and the reporting must assure that the Service knows when that happens.

Conservation Measures –are actions to benefit or promote the recovery of listed species that are included by the Federal agency as an integral part of the proposed action. These actions will be taken by the Federal agency or applicant, and serve to minimize or compensate for, project effects on the species under review. These may include actions taken prior to the initiation of consultation, or actions which the Federal agency or applicant have committed to complete in a biological assessment or similar document.

Jeopardize the continued existence of – an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species... We look to the species recovery criteria to determine jeopardy. For Hine's emerald dragonfly the recovery criteria are: 1. Each of the two Recovery Units contains a minimum of three populations composed of at least three subpopulations. Each subpopulation contains a minimum of 500 reproductive adults for 10 consecutive years; 2. Within each subpopulation, there are at least two breeding habitat areas, each fed by separate seeps and/or springs; and, 3. For each population, the habitat supporting at least three subpopulations should be legally or formally protected and managed for Hine's emerald dragonfly, using long-term protection mechanisms such as watershed protection, deed restrictions, land acquisition, or nature preserve dedication. In addition, mechanisms protecting the up gradient groundwater watershed will also be in place within 5 years.

The sites in the lower DesPlaines River Valley in Illinois represent one of the 3 populations needed in the southern recovery unit and currently we know. Another population is represented in Missouri. However, the population structure in the lower DesPlaines River Valley may only consist of 2 subpopulations but genetic research is ongoing. This research has shown that the population structure is however, different than what was hypothesized in the recovery plan. Most Hine's emerald dragonfly sites in IL are legally protected with the exception of the habitat on HMS land. The population size of the one subpopulation that is represented is not well understood as population surveys have not been completed and all known sites and therefore available data may reflect an artificially low population size. Available data does suggest that the population size has been in a downward trajectory over the last 12 years.

To determine adverse modification an analysis has to be made to determine the impacts on the primary constituent elements of the species critical habitat. For each PCE, describe baseline conditions and analyze project effects. Hines Emerald Dragonfly Primary Constituent Elements (PCEs):

Larval PCEs: 1. Organic soils (histosols, or with organic surface horizon) overlying calcareous substrate (predominantly dolomite and limestone bedrock); 2. Calcareous water from intermittent seeps and springs and associated shallow, small, slow flowing streamlet channels, rivulets, and/or sheet flow within fens; 3. Emergent herbaceous and woody vegetation for emergence facilitation and refugia; 4. Occupied burrows maintained by crayfish for refugia; and, 5. Prey base of aquatic macroinvertebrates, including mayflies, aquatic isopods, caddisflies, midge larvae, and aquatic worms.

Adult PCEs: 6. Natural plant communities near the breeding/larval habitat which may include fen, marsh, sedge meadow, dolomite prairie, and the fringe (up to 328 ft (100m)) of bordering shrubby and forested areas with open corridors for movement and dispersal; and, 7. Prey base of small flying insect species (e.g., dipterans).

Additional guidance is available on our section 7 webpage at <http://endangered.fws.gov/section7>.



**Caton Farm - Bruce Road  
US Route 30 to Illinois Route 7  
Will County - SN: 00-00074-20-ES**

**Project Coordination Meeting  
USFWS Office in Barrington - 1250 South Grove Avenue  
February 16, 2011 - 10:00 a.m.**

	Name	Agency/Office	Email
1	MIKE MATKOVIC	CBBEL	M.MATKOVIC@CBBEL.COM
2	Dennis Bachman	FHWA	dennis.bachman@dot.gov
3	Matt Fuller	FHWA	matt.fuller@dot.gov
4	Shawn Cirton	USFWS	shawn_cirton@fws.gov
5	Mary Young	Civiltech	myoung@civiltechinc.com
6	Joel Christell	Civiltech	jchristell@civiltechinc.com
7	Tom Brooks	IDOT - BDE	thomas.brooks@illinois.gov
8	James Skvarla	IDOT - BLRS (Consu/Hand)	JAMES.SKVARLA@ILLINOIS.GOV
9	Mel Mangoba	IDOT - BLRS Field Eng	Melchor.Mangoba@illinois.gov
10	Kris LAH	FWS	kristopher.lah@fws.gov
11	Pete Knysz	CBBEL	pknysz@cbbel.com
12	Jan Piland	FHWA - Spfld	janis.piland@dot.gov
13	Steve Hamer	IDNR	steve.hamer@illinois.gov
14			
15			
16			
17			
18			
19			