

**APPENDIX G: ARKANSAS DEPARTMENT OF NATURAL  
HERITAGE COORDINATION**

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# The Department of Arkansas Heritage

Mike Beebe  
Governor

Cathie Matthews  
Director

Arkansas Arts Council

Arkansas Historic  
Preservation Program

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars  
Cultural Center

Old State House Museum



## Arkansas Natural Heritage Commission

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Date: February 7, 2007

Subject: DEIS, Proposed Conway Western Arterial Loop

ANHC No.: P-CF..-06-159

Mr. Todd Mueller  
Garver Engineers, LLC  
1010 Battery Street  
P.O. Box 50  
Little Rock, AR 72203-0050

# RECEIVED

FEB 12 2007

## GARVER ENGINEERS

Dear Mr. Mueller:

As requested, staff members of the Arkansas Natural Heritage Commission (ANHC) have reviewed excerpts that are planned to be included in the final Environmental Impact Statement (EIS) for the proposed Conway Western Arterial Loop. The following items were submitted for review:

1. The interim executive summary from the EIS
2. Applicable sections from Section 3 – Existing Conditions
3. Applicable sections from Section 4 – Environmental Impacts
4. Copy of Brent Baker's report to City of Conway

These sections include changes made to the draft EIS in response to comments submitted by this agency in March of 2004.

In our comments on the Draft EIS, we noted the potential for a state concern plant species, Arkansas twistflower (*Streptanthus maculatus* ssp. *obtusifolius*), on hillsides along Gold Creek within the corridors of proposed alternatives A, B, and D, and suggested additional evaluation should be conducted if any of these alternatives were adopted. The City of Conway has selected Alternative A as the preferred alternative. Because of this selection Brent Baker was contracted by the City to evaluate portions of the preferred alternative route for the presence of Arkansas twistflower (*Streptanthus maculatus* ssp. *obtusifolius*). During surveys conducted in April and early June of 2005 a population of Arkansas twistflower was discovered on a ridge just to the west of the community of Gold Creek. Another species of state conservation concern was also discovered during this survey, Wolf's spikerush (*Eleocharis wolfii*). This plant was recorded from a site located north of Round Mountain and north of the Cresthaven subdivisions. Route adjustments were made to avoid impacting these known occurrences. We appreciate the consideration given to reducing impacts to these sites.

It should be noted that although route adjustments were made to avoid known occurrences, it is possible that other locations within the preferred corridor may also support rare species. Whereas it may not be feasible to survey the entire project route for the presence of rare species, appropriate evaluation of habitat within the selected corridor can help reduce potential impacts as decisions on final route alignment are made. Sites that show few signs of

human disturbance (such as old growth forests, steep slopes, streams, seepage areas and wetlands) are more likely to support rare species than disturbed habitat. Avoiding or reducing impacts to these areas in the final alignment selection will help reduce overall adverse impacts to rare species.

We have the following recommended corrections to the text of the document:

- The scientific name for Arkansas twistflower has been misspelled or incorrectly capitalized in several places in the document. The proper spelling/capitalization is "*Streptanthus maculatus* ssp. *obtusifolius*." Other scientific names within the document should also be italicized.
- The State "threatened" designation has been improperly interpreted. In Arkansas there is not a state endangered or threatened designation that provides special protection for rare species beyond that provided under the federal Endangered Species Act. The designation, as it appears on material produced by this agency, is an administrative recognition that affords no special legal protection. Within the text of the EIS document, these species may more appropriately be termed "species of state conservation concern." It is to be noted that within Faulkner County, there are a total of 43 species of state conservation concern (a current Faulkner County Element list is attached). Although these species do not have special legal protection, they are important components of the state's natural diversity and it is appropriate that they be considered when evaluating environmental impacts.
- The habitat for tall cinquefoil (*Potentilla arguta*) has been described in Section 3.10.1.4 as "margins of stagnant swamps or wet, open areas." This is not accurate for Arkansas populations. All of the known Arkansas sites are from dry glade-like roadsides, cliffs/bluffs, and a tallgrass prairie remnant.

The opportunity to comment is appreciated.

Sincerely,



Bill Holimon  
Chief of Research

## LEGEND

### STATUS CODES

#### FEDERAL STATUS CODES

- C** = Candidate species. The U.S. Fish and Wildlife Service has enough scientific information to warrant proposing this species for listing as endangered or threatened under the Endangered Species Act.
- LE** = Listed Endangered; the U.S. Fish and Wildlife Service has listed this species as endangered under the Endangered Species Act.
- LT** = Listed Threatened; the U.S. Fish and Wildlife Service has listed this species as threatened under the Endangered Species Act.
- PD** = Proposed for Delisting; the U.S. Fish and Wildlife Service has proposed that this species be removed from the list of Endangered or Threatened Species.
- PE** = Proposed Endangered; the U.S. Fish and Wildlife Service has proposed this species for listing as endangered.
- PT** = Proposed Threatened; the U.S. Fish and Wildlife Service has proposed this species for listing as threatened.
- T/SA** = Threatened (or Endangered) because of similarity of appearance.  
**E/SA**

#### STATE STATUS CODES

- INV** = Inventory Element; The Arkansas Natural Heritage Commission is currently conducting active inventory work on these elements. Available data suggests these elements are of conservation concern. These elements may include outstanding examples of Natural Communities, colonial bird nesting sites, outstanding scenic and geologic features as well as plants and animals, which, according to current information, may be rare, peripheral, or of an undetermined status in the state. The ANHC is gathering detailed location information on these elements.
- WAT** = Watch List Species; The Arkansas Natural Heritage Commission is not conducting active inventory work on these species, however, available information suggests they may be of conservation concern. The ANHC is gathering general information on status and trends of these elements. An "\*" indicates the status of the species will be changed to "INV" if the species is verified as occurring in the state (this typically means the agency has received a verified breeding record for the species).
- MON** = Monitored Species; The Arkansas Natural Heritage Commission is currently monitoring information on these species. These species do not have conservation concerns at present. They may be new species to the state, or species on which additional information is needed. The ANHC is gathering detailed location information on these elements.
- SE** = State Endangered; the Arkansas Natural Heritage Commission applies this term to native plant taxa which are in danger of being extirpated from the state.
- ST** = State Threatened; The Arkansas Natural Heritage Commission applies this term to native plant taxa which are believed likely to become endangered in Arkansas in the foreseeable future, based on current inventory information.

### DEFINITION OF RANKS

#### Global Ranks

- G1** = Critically imperiled globally. At a very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
- G2** = Imperiled globally. At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
- G3** = Vulnerable globally. At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
- G4** = Apparently secure globally. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5** = Secure globally. Common, widespread and abundant.
- GH** = Of historical occurrence, possibly extinct globally. Missing; known from only historical occurrences, but still some hope of rediscovery.
- GU** = Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.

- GX = Presumed extinct globally. Not located despite intensive searches and virtually no likelihood of rediscovery.
- GNR = Unranked. The global rank not yet assessed.
- GNA = Not Applicable. A conservation status rank is not applicable.
- T-RANKS= T subranks are given to global ranks when a subspecies, variety, or race is considered at the state level. The subrank is made up of a "T" plus a number or letter (1, 2, 3, 4, 5, H, U, X) with the same ranking rules as a full species.

**State Ranks**

- S1 = Critically imperiled in the state due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors making it vulnerable to extirpation.
- S2 = Imperiled in the state due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it vulnerable to extirpation.
- S3 = Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4 = Apparently secure in the state. Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 = Secure in the state. Common, widespread and abundant.
- SH = Of historical occurrence, with some possibility of rediscovery. Its presence may not have been verified in the past 20-40 years. A species may be assigned this rank without the 20-40 year delay if the only known occurrences were destroyed or if it had been extensively and unsuccessfully sought.
- SU = Unrankable. Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SX = Presumed extirpated from the state. Not located despite intensive searches and virtually no likelihood of rediscovery.
- SNR = Unranked. The state rank not yet assessed.
- SNA = Not Applicable. A conservation status rank is not applicable.

**General Ranking Notes**

- Q = A "Q" in the global rank indicates the element's taxonomic classification as a species is a matter of conjecture among scientists.
- RANGES= Ranges are used to indicate a range of uncertainty about the status of the element.
- ? = A question mark is used to denote an inexact numeric rank.
- B = Refers to the breeding population of a species in the state.
- N = Refers to the non-breeding population of a species in the state.

**Arkansas Natural Heritage Commission**  
**Department of Arkansas Heritage**  
**Inventory Research Program**  
**Faulkner County**

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
<b>Animals-Invertebrates</b>					
<i>Cicindela hirticollis</i>	Beach-dune Tiger Beetle	-	INV	G5	S2S3
<i>Lampsilis satura</i>	Sandbank Pocketbook	-	INV	G2	S2
<i>Pleurobema rubrum</i>	Pyramid Pigtoe	-	INV	G2	S2
<i>Speyeria diana</i>	Diana	-	INV	G3G4	S2S3
<b>Animals-Vertebrates</b>					
<i>Atractosteus spatula</i>	Alligator Gar	-	INV	G3G4	S2?
<i>Deirochelys reticularia miaria</i>	Western Chicken Turtle	-	INV	G5T5	S3
<i>Haliaeetus leucocephalus</i>	Bald Eagle	LT-PD	INV	G5	S2B,S4N
<i>Hyla avivoca</i>	Bird-voiced Treefrog	-	INV	G5	S3
<i>Pandion haliaetus</i>	Osprey	-	INV	G5	S1B,S4N
<i>Pseudacris streckeri</i>	Strecker's Chorus Frog	-	INV	G5	S2
<i>Regina septemvittata</i>	Queen Snake	-	INV	G5	S2
<i>Sterna antillarum athalassos</i>	Interior Least Tern	LE	INV	G4T2Q	S2B
<i>Thryomanes bewickii</i>	Bewick's Wren	-	INV	G5	S2B,S3N
<b>Plants-Vascular</b>					
<i>Allium stellatum</i>	glade onion	-	INV	G5	S3
<i>Asclepias obovata</i>	savannah milkweed	-	INV	G5?	S2
<i>Bulbostylis capillaris</i>	a hairsedge	-	INV	G5	S1
<i>Carex opaca</i>	a caric sedge	-	SE	G5T4	S2S3
<i>Castanea pumila</i> var. <i>ozarkensis</i>	Ozark chinquapin	-	INV	G5T3	S3S4
<i>Claytonia caroliniana</i>	Carolina spring beauty	-	INV	G5	S2S3
<i>Draba aprica</i>	open-ground whitlow-grass	-	ST	G3	S2
<i>Eleocharis wolfii</i>	Wolf's spike rush	-	INV	G3G4	S2
<i>Eupatorium hyssopifolium</i> var. <i>hyssopifolium</i>	hyssop-leaved boneset	-	INV	G5T5	S3
<i>Gymnopogon brevifolius</i>	shortleaf skeletongrass	-	INV	G5	S2
<i>Heuchera villosa</i> var. <i>arkansana</i>	Arkansas alumroot	-	INV	G5T3Q	S3
<i>Krigia occidentalis</i>	western dwarf dandelion	-	INV	G5	S3
<i>Marsilea vestita</i>	prairie water-clover	-	INV	G5	S3
<i>Minuartia drummondii</i>	a sandwort	-	INV	G5	S2S3
<i>Mitreola petiolata</i>	lax hornpod	-	INV	G5	S3
<i>Nemastylis nuttallii</i>	Nuttall's pleat-leaf	-	INV	G4	S2
<i>Neviusia alabamensis</i>	Alabama snow wreath	-	ST	G2	S1S2
<i>Paronychia virginica</i>	nailwort	-	INV	G4	S2
<i>Phacelia gillioides</i>	hairy scorpionweed	-	INV	G5	S2S3
<i>Philadelphus hirsutus</i>	mock orange	-	INV	G5	S2S3
<i>Pilularia americana</i>	American pillwort	-	INV	G5	S2
<i>Platanthera peramoena</i>	purple fringeless-orchid	-	ST	G5	S2
<i>Podostemum ceratophyllum</i>	riverweed	-	INV	G5	S3
<i>Potentilla arguta</i>	tall cinquefoil	-	ST	G5	S1S2
<i>Quercus coccinea</i>	scarlet oak	-	INV	G5	S2S3
<i>Rhynchospora cephalantha</i>	capitate beakrush	-	INV	G5	SH
<i>Rudbeckia maxima</i> —	giant coneflower	-	INV	G4?	S3
<i>Sacciolepis striata</i>	American cupscale	-	INV	G5	S2S3
<i>Saxifraga virginiana</i>	early saxifrage	-	INV	G5	S3

**Faulkner County (cont.)**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>
<i>Scleria pauciflora</i>	fewflower nutsedge	-	INV	G5	S3
<i>Streptanthus maculatus</i> ssp. <i>obtusifolius</i>	Arkansas twistflower	-	INV	G3T3	S3
<i>Valerianella ozarkana</i>	Ozark cornsalad	-	INV	G3	S3
<b>Special Elements-Natural Communities</b>					
<i>Juniper-hardwood woodland</i>		-	INV	GNR	S4
<i>Upland headwater stream-Arkansas Valley</i>		-	INV	GNR	SNR
<b>Special Elements-Other</b>					
<i>Colonial nesting site</i>	water birds	-	INV	GNR	SNR

**Garver Engineers, LLC**

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**GARVER ENGINEERS**

October 6, 2006

Thomas Foti  
Chief of Research  
Arkansas Natural Heritage Commission  
1500 Tower Building  
323 Center Street  
Little Rock, AR 72201

Dear Mr. Foti:

In a letter to Garver Engineers dated March 31, 2004, staff members of the Arkansas Natural Heritage Commission provided comments on the Draft Environmental Impact Statement (DEIS) for the proposed Conway Western Arterial Loop. The letter was referenced with Conway Western Arterial Loop – P-CF-04-012. The staff members identified a state threatened/endangered species of twist flower (*streptanthus maculates* ssp. *obtusifolius*) that was possibly present along the corridors of possible route alignments identified as Alternatives A, B and C. Since that time, the City of Conway has chosen Alternative A as the preferred alternative. As a result of the comments from your staff, the City of Conway contracted Brent Baker, 1621 N. 2<sup>nd</sup>. Street, Dardanelle, Arkansas, to conduct post DEIS field investigations and determine if additional state concern species are present in the preferred alternative corridor. He reported the presence of a twist flower and a sedge grass. Considerations of these species have been included in the environmental assessment.

Although work continues on completing the final Environmental Impact Statement (EIS) the Preferred Alternative within the area of concern has been tentatively established. Garver Engineers request you review excerpts that are planned to be included in the EIS. Comments provided by your agency can then be considered in the EIS. The following items are submitted:

1. The interim executive summary from the EIS.
2. Applicable sections from Section 3 – Existing Conditions.
3. Applicable sections from Section 4 – Environmental Impacts.
4. Copy of Brent Baker's report to City of Conway.

You may contact Todd Mueller or Bert Parker at Garver Engineers with questions or comments.

Sincerely,

GARVER ENGINEERS, LLC



Todd Mueller  
Project Engineer

Enclosure

Cc: Ronnie Hall, City of Conway; Randal Looney, FHWA; Lynn Malbrough, AHTD; HJP; TEM; File;  
Reading

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# The Department of Arkansas Heritage

Mike Huckabee, Governor  
Cathie Matthews, Director

- Arkansas Arts Council
- Arkansas Historic Preservation Program
- Arkansas Territorial Restoration
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## Arkansas Natural Heritage Commission

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Post-it® Fax Note 7671		Date 5/24/00	# of pages 2
To Howard Sapiro	From Frank Turina		
Co./Dept. CH2M Hill	Co. CH2M Hill		
Phone #	Phone #		
Fax #	Fax #		

Date: May 15, 2000  
Subject: Elements of Special Concern  
Conway West Arterial Bypass Project  
ANHC No.: P-CF...-00-043

Mr. Frank Turina  
CH2M Hill  
100 Inverness Terrace East  
Englewood, CO 80112-5313

Dear Mr. Turina:

Staff members of the Arkansas Natural Heritage Commission have reviewed our files for records indicating the occurrence of rare plants and animals, outstanding natural communities, natural or scenic rivers, or other elements of special concern within or near the study area for the proposed Conway West Arterial Bypass project. The results of this search are presented on the enclosed map and data summary. A legend is provided to help you interpret the codes on this print-out.

Our records indicate the occurrence of twelve species of special concern within the project area. None of these species are listed as endangered or threatened by the U.S. Fish and Wildlife Service. They are considered to be rare or uncommon in Arkansas. The status of the colonial bird nesting site listed for Section 15, Township 5N, Range 14W (map dot number 8) is uncertain. The rookery was bulldozed two years ago, but recent reports indicate birds are trying to nest at a nearby location. It should be noted that the absence of sensitive species in this area may reflect a lack of inventory and not the absence of elements of special concern. A Faulkner County Element List is enclosed for your reference. Represented on this list are elements for which we have records in this county. Please refer to the enclosed legend for assistance interpreting the codes on this list.

This agency is concerned about the placement of the study area. The original map provided to us defined a study area further north, within a more developed region of Conway. The map faxed to us later, and a map received from Garver Engineers announcing the Agency Scoping meeting, showed a more southern placement through a relatively undeveloped area with steep terrain. Placement of a main artery through this area could have significant adverse environmental impacts, and would further promote urban sprawl.

Please keep in mind that the project area may contain important natural features of which we are unaware. Staff members of the Arkansas Natural Heritage Commission have not conducted a field survey of the project site. Our review is based on data available to the program at the time of the request. It should not be regarded as a final statement on the elements or areas under consideration, nor should it be substituted for on-site surveys required for environmental assessments. Because our files are updated constantly, you may want to check with us again at a later time.

Thank you for consulting us. It has been a pleasure to work with you on this study.

Sincerely,

*Thomas Foti*

Thomas Foti  
Chief of Research

- Enclosures: Study Area Map with Elements of Special Concern
- Data Summary
- Legend
- Faulkner County Element List
- Invoice

HERITAGE



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