

Little Rock District

Appendix C

Endangered Species Act Compliance

Federal and State Lists of Threatened and Endangered Species and Arkansas Natural Heritage Commission Species of Conservation Concern

for

Beaver Lake
Proposed Land Acquisition Study

July 2023



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Arkansas Ecological Services Field Office 110 South Amity Suite 300 Conway, AR 72032-8975 Phone: (501) 513-4470 Fax: (501) 513-4480

In Reply Refer To: June 07, 2023

Project Code: 2023-0090631

Project Name: Beaver Lake Proposed Land Acquisition

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

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evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Official Species List

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OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office 110 South Amity Suite 300 Conway, AR 72032-8975 (501) 513-4470

PROJECT SUMMARY

Project Code: 2023-0090631

Project Name: Beaver Lake Proposed Land Acquisition

Project Type: Acquisition of Lands

Project Description: The purpose of the Beaver Lake Proposed Land Acquisition Study is to

develop and evaluate alternatives to address the frequent inundation of

private property during normal lake elevations.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@36.200353,-94.01643154091602,14z



Counties: Arkansas

ENDANGERED SPECIES ACT SPECIES

There is a total of 16 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Ozark Big-eared Bat <i>Corynorhinus</i> (= <i>Plecotus</i>) townsendii ingens No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7245	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME **STATUS** Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Threatened No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477 Piping Plover Charadrius melodus Threatened Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039 Threatened Red Knot Calidris canutus rufa There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864 Whooping Crane *Grus americana* Experimental Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, Population, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) Non-No critical habitat has been designated for this species. Essential Species profile: https://ecos.fws.gov/ecp/species/758 **REPTILES NAME STATUS** Alligator Snapping Turtle *Macrochelys temminckii* Proposed No critical habitat has been designated for this species. Threatened Species profile: https://ecos.fws.gov/ecp/species/4658 **FISHES** NAME **STATUS** Ozark Cavefish Amblyopsis rosae Threatened No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6490 **CLAMS NAME STATUS** Neosho Mucket *Lampsilis rafinesqueana* Endangered There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3788 Rabbitsfoot Quadrula cylindrica cylindrica Threatened There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5165 Snuffbox Mussel *Epioblasma triquetra* Endangered No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/4135

INSECTS

NAME STATUS

Monarch Butterfly Danaus plexippus

Candidate

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743

FLOWERING PLANTS

NAME STATUS

Missouri Bladderpod *Physaria filiformis*

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5361

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Army Corps of Engineers

Name: Craig Hilburn

Address: 700 West Capitol Avenue

Address Line 2: P.O. Box 867 City: Little Rock

State: AR

Zip: 72203-0867

Email david.c.hilburn@usace.army.mil

Phone: 5013245735

Arkansas Natural Heritage Commission Division of Arkansas Heritage Department of Parks, Heritage and Tourism Elements of Special Concern within Five-mile Radius Beaver Lake, Arkansas

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Animals-Invertebrates					
Amblyscirtes belli	Bell's Roadside-Skipper	-	INV	G3G4	S3S4
Autochton cellus	Golden Banded-Skipper	-	INV	G4	S2S3
★ Caecidotea macropropoda	bat cave isopod	-	INV	G2G3	S2
★ Caecidotea steevesi	an isopod	-	INV	G3G4	S1
★ Caecidotea stiladactyla	an isopod	-	INV	G3G4	S3
Chlosyne gorgone	Gorgone Checkerspot	-	INV	G5	S3
Crosbyella roeweri	a cave obligate harvestman	-	INV	G1G2	S1
Dendrocoelopsis americana	a cave obligate planarian	-	INV	G2G3	S1
★ Faxonius longidigitus	Longpincered Crayfish	-	INV	G3G4	S3S4
Faxonius meeki brevis	Meek's Short Pointed Crayfish	-	INV	G4T3	S3
★ Faxonius nana	Midget Crayfish	-	INV	G3	S3
Faxonius williamsi	Williams Crayfish	-	INV	G3	S3
Fusconaia ozarkensis	Ozark Pigtoe	-	INV	G3G4	S3
★ Gastrocopta rogersensis	a land snail	-	INV	G3G4	S2
★ Heterosternuta sulphuria	Sulphur Springs diving beetle	-	INV	G1?	S1?
Ligidium elrodii	an isopod	-	INV	G4G5	S2
Pleurobema sintoxia	Round Pigtoe	-	INV	G4G5	S3
Polygonia progne	Gray Comma	-	INV	G5	S2S3
Ptychobranchus occidentalis	Ouachita Kidneyshell	-	INV	G3G4	S3
★ Stygobromus ozarkensis	Ozark cave amphipod	-	INV	G4	S2
Theliderma cylindrica	Rabbitsfoot	LT	SE	G3G4	S3
Toxolasma lividum	Purple Lilliput	-	INV	G3	S3
Trigenotyla parca	a cave obligate millipede	-	INV	G1G2	S1
Venustaconcha pleasii	Bleedingtooth Mussel	-	INV	G3G4	S3
Villosa iris	Rainbow	-	INV	G5	S3
Animals-Vertebrates					
★ Ambystoma annulatum	Ringed Salamander	-	INV	G4	S3
★ Carpiodes velifer	highfin carpsucker	-	INV	G4G5	S3
Centronyx henslowii	Henslow's Sparrow	-	INV	G4	S1B,S2N
★ Crotaphytus collaris	Eastern Collared Lizard	-	INV	G5	S2
★ Crystallaria asprella	crystal darter	-	INV	G3	S2
★ Cyprinella camura	bluntface shiner	-	INV	G5	SH
★ Etheostoma autumnale	autumn darter	-	INV	G4	S3
★ Etheostoma mihileze	sunburst darter	-	INV	G4	S3
★ Etheostoma teddyroosevelt	highland darter	-	INV	GNR	S3
★ Eurycea spelaea sp. A	Grotto Salamander, Eastern Clade	-	INV	G4TNR	S3
★ Haliaeetus leucocephalus	Bald Eagle	-	INV	G5	S3B,S4N
Lithobates areolatus	Crawfish Frog		INV	G4	S2

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
∕ ★ Lithobates sylvaticus	Wood Frog	-	INV	G5	S3
'★ Myotis grisescens	gray bat	LE	SE	G4	S2S3
Myotis lucifugus	little brown bat	-	SE	G3	S1
∕ ★ Myotis septentrionalis	northern long-eared bat	LT	SE	G1G2	S1S2
∕ ★ Myotis sodalis	Indiana bat	LE	SE	G2	S1
Nocomis asper	redspot chub	-	INV	G4	S3
∕ ★ Notropis ozarcanus	Ozark shiner	-	INV	G3	S3
∕ ★ Percina evides	gilt darter	-	INV	G4	S3
∕★ Percina nasuta	longnose darter	-	INV	G3	S3
∕ ★ Plestiodon obsoletus	Great Plains Skink	-	INV	G5	S1
∕★ Polyodon spathula	paddlefish	-	INV	G4	S3
Setophaga cerulea	Cerulean Warbler	-	INV	G4	S3B
Sorex longirostris	southeastern shrew	-	INV	G5	S2
Terrapene ornata	Ornate Box Turtle	-	INV	G5	S2
Thryomanes bewickii	Bewick's Wren	-	INV	G5	S1B,S1S2N
∕ ★ Troglichthys rosae	Ozark cavefish	LT	SE	G3	S1
Plants-Vascular					
∕ ★ Acer saccharum var. nigrum	black maple	-	INV	G5T5	S1S2
Allium canadense var. lavendulare	tall pink glade onion	-	INV	G5TNR	S2
Allium cernuum	nodding wild onion	-	INV	G5	SH
∕ ★ Amorpha canescens	lead-plant	-	INV	G5	S1
Androsace occidentalis	rock-jasmine	-	INV	G5	S1
∕★ Arabis hirsuta var. adpressipilis	hairy rockcress	-	INV	G5T4Q	S1?
∕ ★ Argyrochosma dealbata	powdery cloak fern	-	INV	G4G5	S2
Artemisia ludoviciana ssp. mexicana	white sagebrush	-	INV	G5T5?	S1S2
Asarum canadense var. acuminatum	taper-tip wild ginger	-	INV	G5TNR	S2
Asclepias incarnata ssp. incarnata	swamp milkweed	-	INV	G5T5	S2
Asclepias stenophylla	narrow-leaf milkweed	-	INV	G4G5	S1
Asplenium pinnatifidum	lobed spleenwort	-	INV	G4	S3
Asplenium x kentuckiense	Kentucky spleenwort	-	INV	GNA	SH
∕ ★ Brickellia grandiflora	tassel-flower	-	INV	G5	S2
Bromus nottowayanus	satin brome	-	INV	G4G5	S2
Callirhoe bushii	Bush's poppy-mallow	-	INV	G3	S3
Calopogon oklahomensis	Oklahoma grass-pink	-	INV	G3	S2
Carex aggregata	cluster sedge	-	INV	G5	S1
Carex buxbaumii	brown bog sedge	-	INV	G5	S1
Carex careyana	Carey's sedge	-	INV	G4G5	S3
Carex conjuncta	soft fox sedge	-	INV	G4G5	S1
Carex conoidea	open-field sedge	-	INV	G5	S1
Carex emoryi	Emory's sedge	-	INV	G5	S1
Carex gracilescens	slender wood sedge	-	INV	G5?	S2
Carex hirtifolia	hairy sedge	-	INV	G5	S3
Carex hitchcockiana	Hitchcock's sedge	-	INV	G5	S1S2
Carex opaca	opaque prairie sedge	-	SE	G4	S2S3
Carex prasina	drooping sedge	-	INV	G4	SH

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Carex scoparia var. scoparia	pointed broom sedge	-	INV	G5T5	S1S2
Carex sparganioides	bur-reed sedge	-	INV	G5	S3
Carex timida	timid sedge	-	INV	G2G4	S2S3
Caulophyllum thalictroides	blue cohosh	-	INV	G5	S2
Collinsia verna	blue-eyed Mary	-	INV	G5	S1
Crataegus palmeri	Palmer's hawthorn	-	INV	GNR	SNR
Crataegus phaenopyrum	Washington hawthorn	-	INV	G4?	S1
Cuscuta glomerata	rope dodder	-	INV	G5	S1
Cypripedium kentuckiense	Kentucky lady's-slipper	-	INV	G3	S2
Delphinium treleasei	Trelease's larkspur	-	INV	G3	S3
Diaperia prolifera var. prolifera	big-head rabbit-tobacco	-	INV	G5TNR	S1S3
Dichanthelium roanokense	Roanoke rosette grass	-	INV	G4?	S1
Dirca decipiens	Ozark leatherwood	-	INV	G1G2	S1?
Echinacea paradoxa var. paradoxa	yellow coneflower	-	ST	G3T3	S2
Eleocharis wolfii	Wolf's spike-rush	-	INV	G3G5	S3
Elymus churchii	Church's wild rye	-	INV	G2G3	S2?
Elymus glaucus ssp. mackenzii	Mackenzie's blue wild rye	-	INV	G5TNR	S1
Elymus riparius	river-bank wild rye	-	INV	G5	S1S2
Erysimum capitatum var. capitatum	western wallflower	-	INV	G5T5	S2
Erythronium mesochoreum	prairie trout-lily	-	INV	G4G5	S1S2
Euphorbia missurica	Missouri spurge	-	INV	G5	S2
Gentiana alba	pale gentian	-	INV	G4	S1
Gentiana puberulenta	downy gentian	-	INV	G4G5	S2
Gillenia trifoliata	Bowman's-root	-	INV	G4G5	S1
Glandularia bipinnatifida var. bipinnatifida	Dakota vervain	-	INV	G5T5	S2
Helianthus occidentalis ssp. occiden	talis naked-stem sunflower	-	INV	G5T5	S1S2
r Heuchera villosa var. arkansana	Arkansas alumroot	-	INV	G5T3Q	S3
Humulus lupulus var. pubescens	wild hop	-	INV	G5T4?	S1S2
Juglans cinerea	butternut	-	INV	G3	S3
Koeleria macrantha	prairie June grass	-	INV	G5	S2
Liatris punctata var. mucronata	dotted gayfeather	-	INV	G5T5	S2
Liatris punctata var. punctata	bottle-brush gayfeather	-	INV	G5T5	SH
Liatris scariosa var. nieuwlandii	northern blazing-star	-	INV	G5?T3T5	S2?
Limnodea arkansana	Ozark grass	-	INV	G4?	S1
Malvastrum hispidum	yellow false mallow	-	INV	G3G5	S2
Mentzelia oligosperma	stick-leaf	-	INV	G4	S1
Mimulus floribundus	yellow monkey-flower	-	INV	G5	S2S3
Minuartia michauxii	rock sandwort	-	INV	G5	S1
Muhlenbergia bushii	nodding muhly	-	INV	G5	S2
Muhlenbergia glabrifloris	inland muhly	-	INV	G4?	S1
Nemastylis nuttallii	Nuttall's pleat-leaf	-	INV	G4	S2
Opuntia engelmannii var. lindheimer	Texas prickly-pear	-	INV	G5T4?	S1
Osmorhiza claytonii	hairy sweet-cicely	-	INV	G5	S1S3
Pediomelum esculentum	large Indian-breadroot	-	INV	G5	S2
	showy beardtongue		INV	G4	S3

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
∕ ★ Perideridia americana	eastern yampah	-	INV	G4	S2
Phlox amplifolia	broad-leaf phlox	-	INV	G3G5	S1
∕ ★ Phlox bifida	sand phlox	-	INV	G5?	S3
Phyllanthus polygonoides	knotweed leaf-flower	-	INV	G5	S1
∕ ★ Physalis missouriensis	Missouri ground-cherry	-	INV	G5?	S1
Physalis pumila	prairie ground-cherry	-	INV	G5	S1
∕ ★ Physaria filiformis	Missouri bladderpod	LT	INV	G3	S1
Polygala incarnata	pink milkwort	-	INV	G5	S1S2
Prenanthes alba	white rattlesnake-root	-	INV	G5	S1S2
Prenanthes aspera	prairie rattlesnake-root	-	INV	G4?	S2S3
Scleria muehlenbergii	Muhlenberg's nut-rush	-	INV	G5	S1S2
Silene ovata	ovate-leaf catchfly	-	ST	G3	S3
′ Silene regia	royal catchfly	-	ST	G3	S2
Silphium integrifolium var. laeve	rosinweed	-	INV	G5T4?	S1
′ Solidago gattingeri	Gattinger's goldenrod	-	INV	G3?Q	S1
Solidago ptarmicoides	white flat-top goldenrod	-	INV	G5	S1S2
Spiranthes magnicamporum	Great Plains ladies'-tresses	-	INV	G3G4	S1S2
Stenanthium gramineum	featherbells	-	INV	G4G5	S3
Symphyotrichum pilosum var. pringlei	Pringle's aster	-	INV	G5T5	S1
Symphyotrichum sericeum	silvery aster	-	INV	G5	S2
Tradescantia ozarkana	Ozark spiderwort	_	INV	G3	S3
Trichophorum planifolium	bashful bulrush	_	INV	G4G5	S1
Tridens muticus var. elongatus	slim tridens	-	INV	G5T4?	S1
Trillium ozarkanum	Ozark trillium	_	INV	G3	S3
′★ Ulmus thomasii	rock elm	_	INV	G5	S2
Urtica gracilis	slender nettle	-	INV	G5	S1
Utricularia subulata	zigzag bladderwort	-	INV	G5	S2
′★ Valerianella ozarkana	Ozark cornsalad	-	INV	G3	S3
′★ Veratrum woodii	Wood's false hellebore	-	INV	G5	S3
Vitis rupestris	rock grape	-	INV	G3	S1
Special Elements-Natural Communiti	ies				
Central Interior Highlands Calcareous Glade and Barrens		-	INV	GNR	S3
Southwest Ozark Prairie and Woodland		-	INV	GNR	S1
Special Elements-Other					
∕★ Colonial nesting site, water birds		-	INV	GNR	SNR

^{★ -} These elements of special concern have been recorded on Corps managed land at Beaver Lake

 $[\]checkmark$ - These elements of special concern have been recorded within a one-mile radius of Beaver Lake