

ENDANGERED SPECIES WORKSHOP

Oklahoma Department of
Wildlife Conservation



INTRODUCTION: ODWC'S ROLE BEFORE A SPECIES IS LISTED

- ODWC's goal is to primarily keep a species from being listed and to retain it under state management authority; this provides greater flexibility with conservation efforts and cooperation with economic and industrial development
- ODWC provides data and comments pertinent to the various species at the appropriate point(s) during the listing evaluation process.
- Through State Wildlife Grants, ODWC can fund projects to gather information on the basic biology and distribution of the hundreds of species within Oklahoma that are not hunted or fished.

INTRODUCTION: ODWC'S ROLE AFTER A SPECIES IS LISTED

- ODWC can cooperate with U.S. Fish and Wildlife Service species recovery efforts through Section 6 funding
 - For species whose recovery, and in turn, ultimate de-listing seems realistic and attainable, we strive to meet that goal as expedient as possible.
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BACKGROUND:

ESA LISTINGS IN OKLAHOMA THROUGH TIME

- Original 4 listed species were Whooping Crane, Red-cockaded Woodpecker, Gray Bat, and Indiana Bat under Endangered Species Preservation Act
- After passing of Endangered Species Act (1973): the following species were listed within the decade:
 - Gray Bat (1976)
 - Ozark Big-eared Bat (1979)
 - Leopard Darter (1978)

ESA LISTINGS THROUGH TIME

- 1980 – 89
 - Ozark Cavefish (1984)
 - Piping Plover (1985)
 - Least Tern (1985)
 - Black-capped Vireo (1987)
 - Harperella (Plant) – 1988
 - Western Prairie Fringed Orchid (Plant) – 1989
 - American Burying Beetle (1989)
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ESA LISTINGS THROUGH TIME

- 1990 – 1999
 - Ouachita Rock Pocketbook Mussel (1991)
 - Neosho Madtom (1990)
 - Winged Mapleleaf (1991)
 - Arkansas River Shiner (1998)
-

ESA LISTINGS THROUGH TIME

- 2000's
 - Scaleshell Mussel (2001)
- **From 2002 – 2012, No federal-listing occurred.**
- **2013 – 2015, 5 Oklahoma species have been federally-listed:**
 - Neosho Mucket Mussel
 - Rabbitsfoot Mussel
 - Lesser Prairie-Chicken
 - Red Knot
 - Northern Long-eared Bat

FEDERALLY-LISTED SPECIES UPDATE

- For each species, we will provide an update on current Oklahoma distribution from USFWS **Information, Planning and Conservation (IPAC) Website**
- Past or current 5-year Status Reviews
- Current projects that ODWC is funding through Endangered Species (Section 6) or State Wildlife Grants to assist in endangered species recovery.

REVIEW OF FEDERALLY-LISTED SPECIES IN OKLAHOMA

- Currently 21 federally-listed species:

American Burying Beetle (E)

Black-capped Vireo (E)

Piping Plover (T)

Red-cockaded Woodpecker (E)

Ozark Big-eared Bat (E)

Northern Long-eared Bat (T)

Arkansas River Shiner (T)

Ozark Cave Fish (E)

Ouachita Rock Pocketbook (E)

Rabbitsfoot Mussel (T)

Neosho Mucket (E)

Lesser Prairie-Chicken (T)

Whooping Crane (E)

Red Knot (T)

Interior Least Tern (E)

Indiana Bat (E)

Gray Bat (E)

Leopard Darter (T)

Neosho Madtom (T)

Scaleshell Mussel (E)

Winged Mapleleaf (E)

AMERICAN BURYING BEETLE

(*NICROPHORUS AMERICANUS*)

- Federally-listed (endangered) since 1989
- Current USFWS range, including positive surveys and buffers, encompasses ~31 counties



AMERICAN BURYING BEETLE

(NICROPHORUS AMERICANUS)

- Slight Western range expansion from 2014 surveys
 - Positive surveys in northwest Lincoln County
 - Further expanded range buffer in Payne, Lincoln, Creek, and Kay Counties.
- Only change to the survey guidance from 2014 is recommendation of larger cover board for traps (Anita Barstow) for 2015 trapping

According to the USFWS, the American Burying Beetle will be undergoing a Species Status Assessment this summer, which should assist in developing a path toward down-listing or delisting.

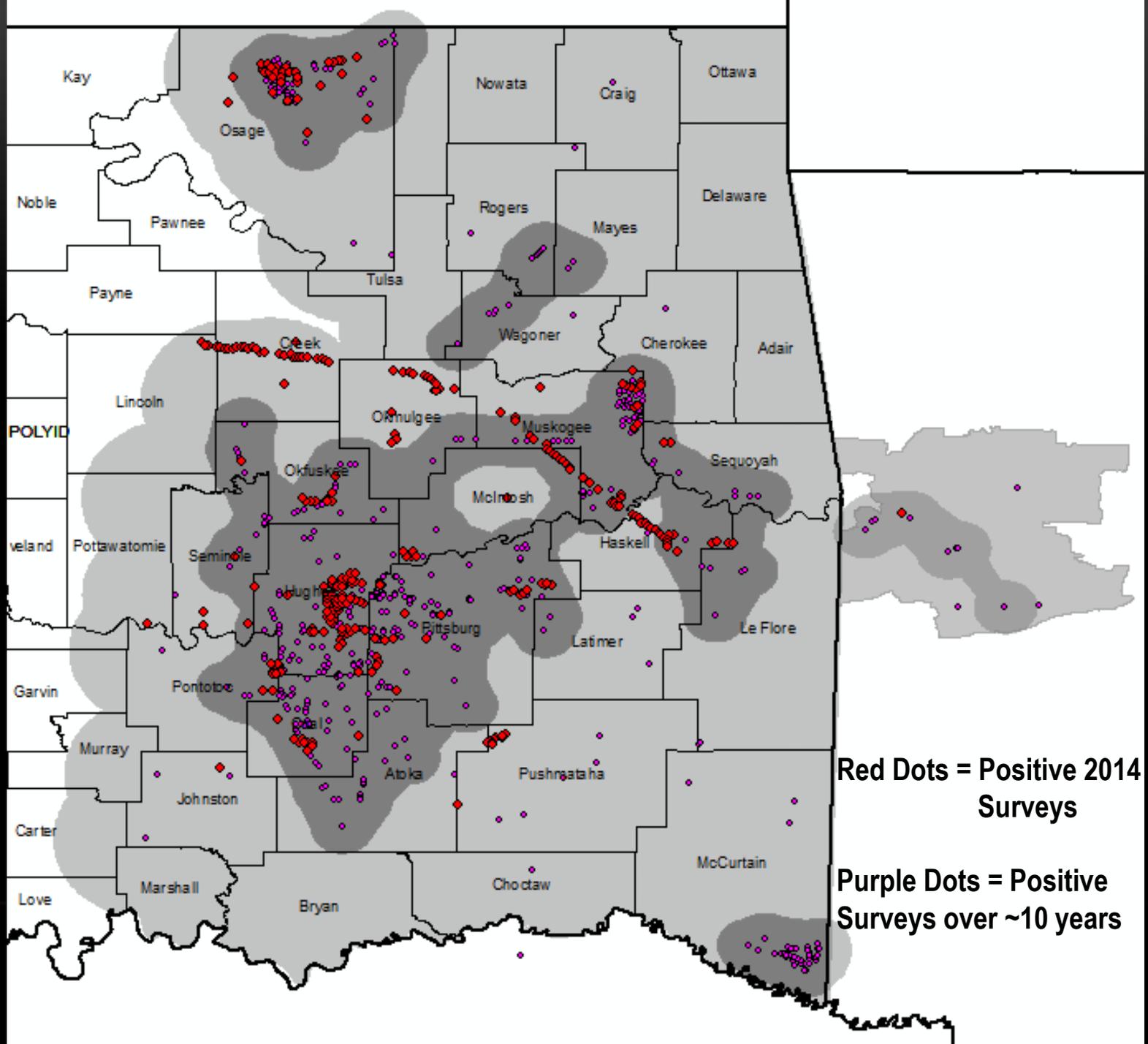
AMERICAN BURYING BEETLE: TIMELINE OF ODWC ACTIONS



- **April 15, 2013** – Submitted comment letter to Dan Ashe, Director of USFWS requesting revision of the recovery plan for the species; specifically, to revise and update the criteria for down-listing and delisting.
- **December 30, 2013** - Submitted letter to Dan Ashe requesting that survey protocols be changed to reinstate bait-away, trap and relocate, at least until completion of GCP.

AMERICAN BURYING BEETLE: ODWC EFFORTS

- ODWC currently funding State Wildlife Grant project with Oklahoma State University conducting American Burying Beetle surveys on Wildlife Management Areas
- ODWC funded Section 6 project (early 1990's) focused on habitat use, genetic characterization and variability in the American Burying Beetle.
- ODWC funded Section 6 project (mid 1990's) focused on both training ODWC employees to conduct ABB surveys and conducting actual surveys on Wildlife Management Areas.



Red Dots = Positive 2014 Surveys

Purple Dots = Positive Surveys over ~10 years

LESSER PRAIRIE-CHICKEN

(*TYMPANUCHUS PALLIDICINTUS*)

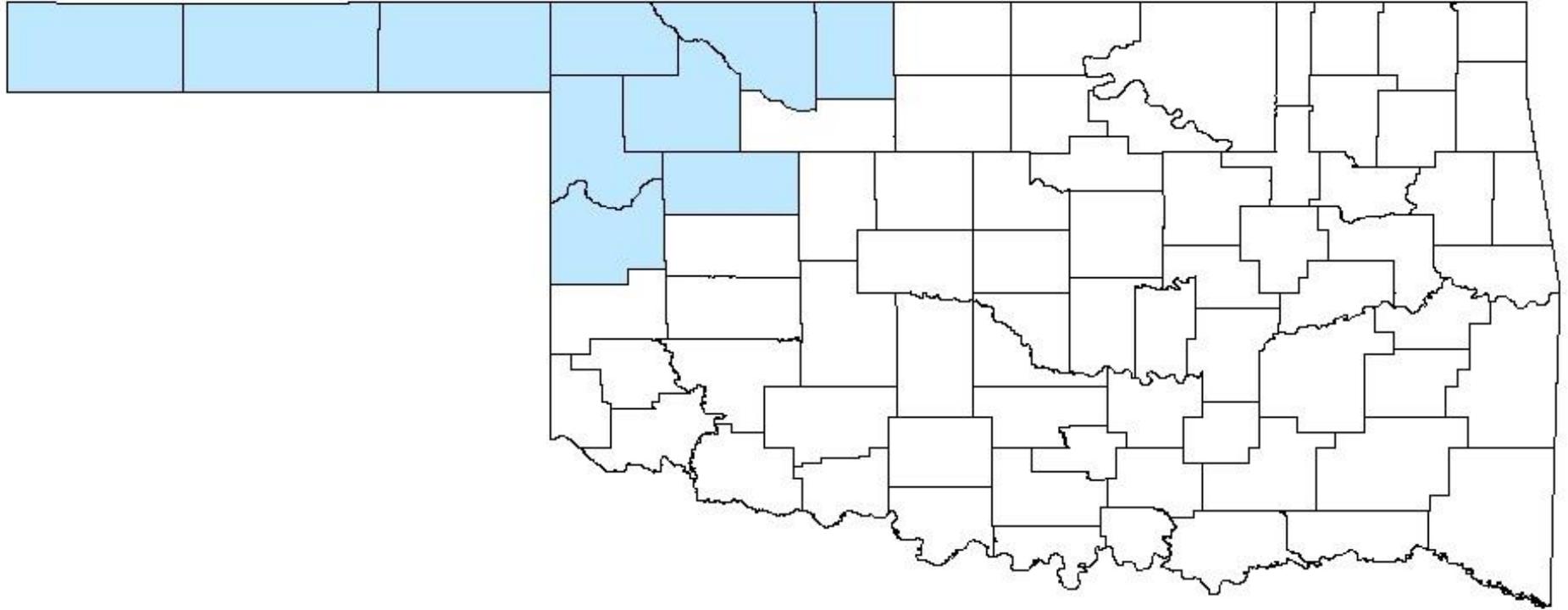


- Federally-listed (threatened) since April 2014
- Western Associated of Fish and Wildlife Agencies (WAFWA) recently took full-control of the LEPC Rangewide Plan
 - Over 1,800,000 industry acres have been enrolled within Mixedgrass Prairie Region (includes OK, TX, KS)
 - Oklahoma has currently enrolled ~2,000 conservation acres on offset side.

LESSER PRAIRIE-CHICKEN: ODWC EFFORTS

- Oklahoma Candidate Conservation Agreement with Assurances (CCAA)
 - ODWC Enrolled over 390,000 acres of private land
- ODWC Assisted in development and implementation of WAFWA LEPC Rangewide Plan, and previously, Oklahoma LEPC Conservation Plan.
- ODWC has assisted with implementation of NRCS's Lesser Prairie Chicken Initiative
- ODWC has provided opportunities for cost-sharing of land management practices through the Oklahoma LEPC Habitat Conservation Program
- ODWC is currently providing cost share to CCAA-enrolled landowners through the Landowner Incentive Program.

LESSER PRAIRIE-CHICKEN RANGE (IPAC)



BLACK-CAPPED VIREO

(*VIREO ATRICAPILLA*)

- Federally listed (endangered) since 1987
- Occurs in southwest Oklahoma; uses primarily hardwood trees of short-stature in rocky areas with shallow soils
- Majority of population within state occurs on Wichita Mountains Wildlife Refuge and Ft. Sill Military Reservation



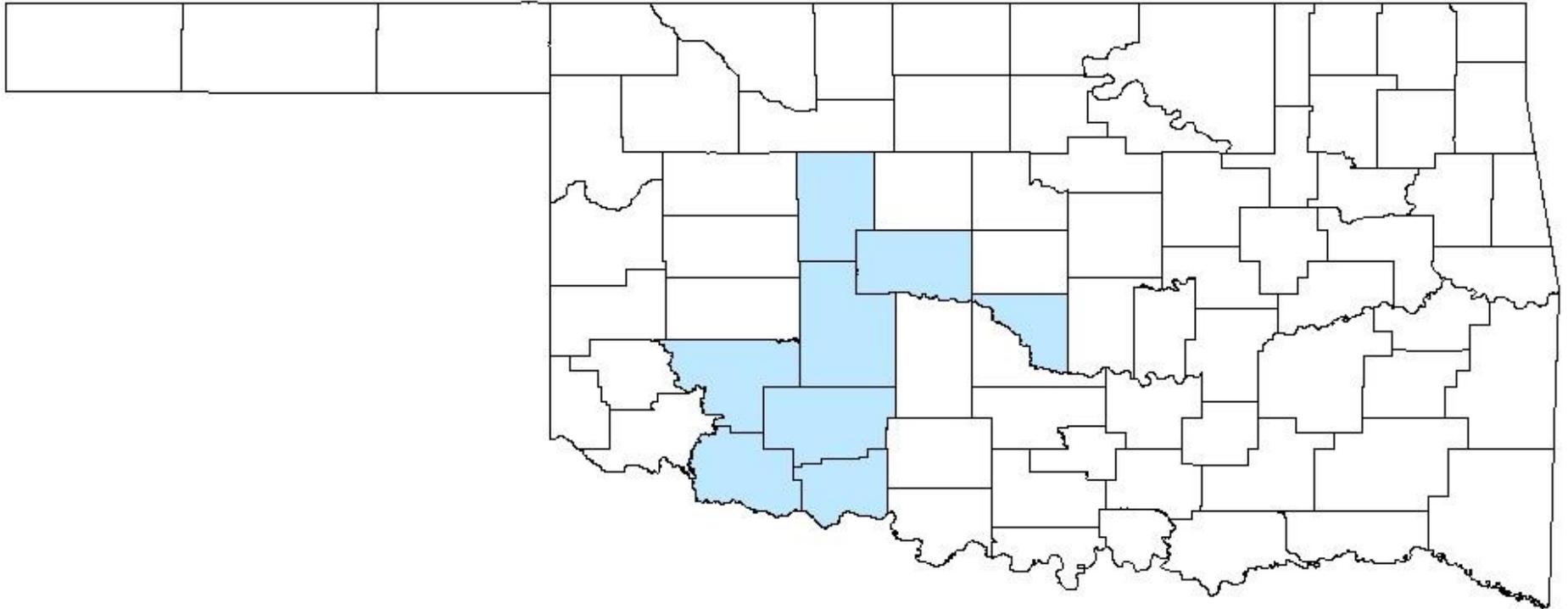
BLACK-CAPPED VIREO

- Last 5-year review initiated in 2005
- With success of Wichita Mountains Wildlife Refuge population, down listing could be justified.

BLACK-CAPPED VIREO: ODWC EFFORTS

- ODWC has funded several Black-capped Vireo population monitoring and survey projects over the last several years through Section 6.
- Currently funding Section 6 project involving surveys for population expansion in and around the Wichita Mountains in response to 2011 wildfire that created potentially suitable habitat.

BLACK-CAPPED VIREO RANGE (IPAC)



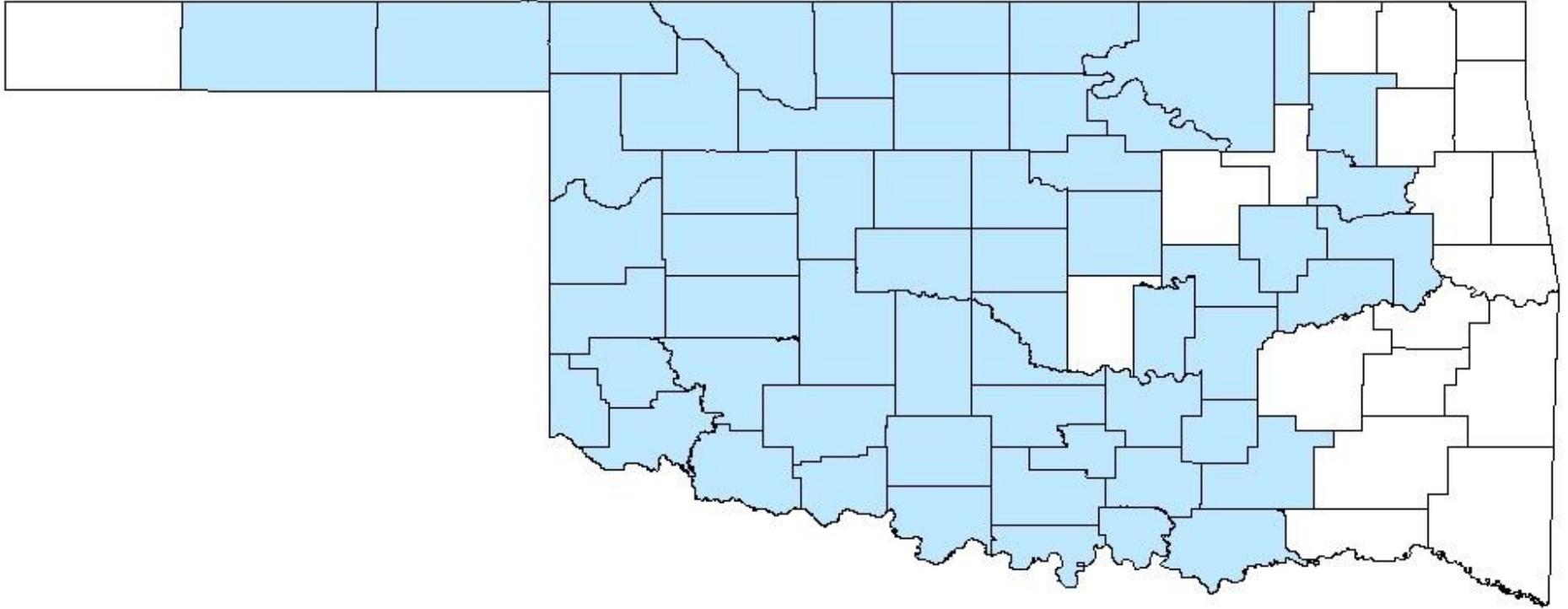
WHOOPING CRANE

(*GRUS AMERICANA*)

- Federally-listed (endangered) since 1967 (Pre-dated ESA)
- No 5-year Review currently underway
- ODWC receives a handful of reports annually during spring and fall migration
- Designated Critical Habitat (Salt Plains Nat'l Wildlife Refuge)



WHOOPING CRANE RANGE (IPAC)



INTERIOR LEAST TERN

(*STERNA ANTILLARUM*)

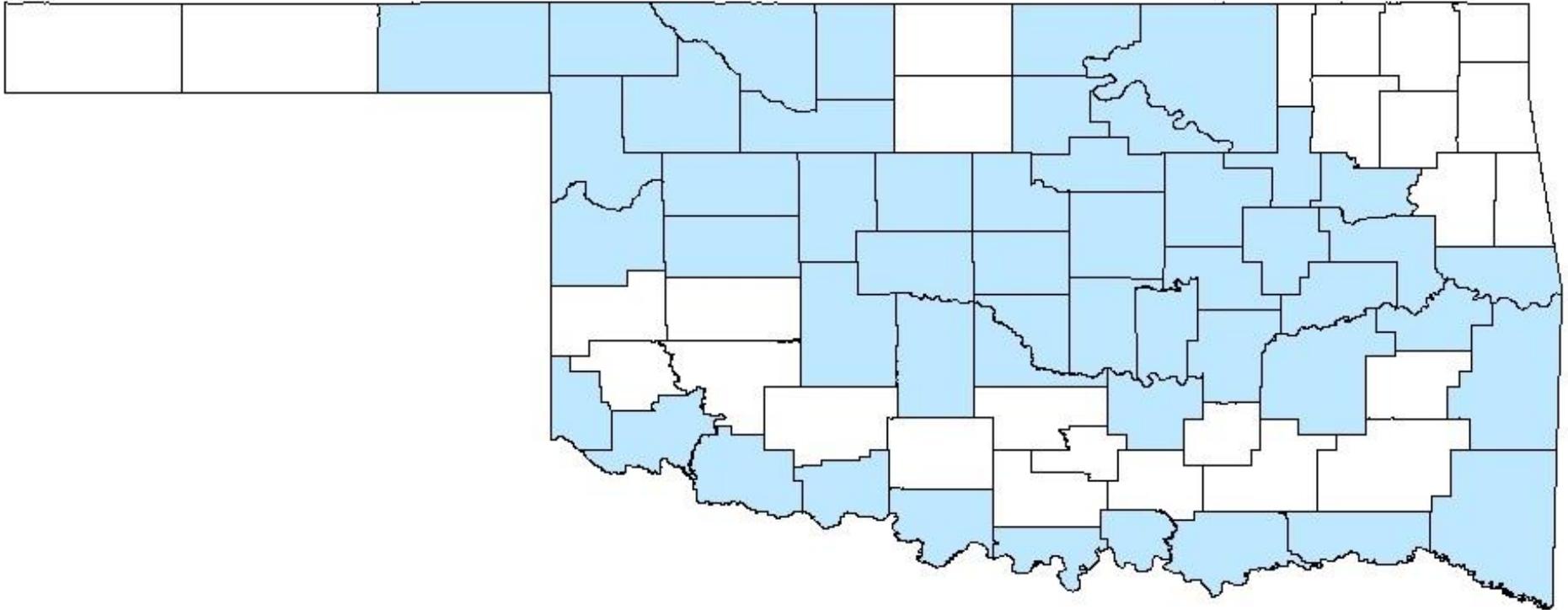
- Federally-listed (endangered) since 1985
- Requires open sandbar habitat along rivers and reservoirs for nesting
- USFWS evaluating current status of species, though no 5-year review being done at present time.
- Last 5-year review initiated in 2008



INTERIOR LEAST TERN: ODWC EFFORTS

- ODWC currently funding Section 6 project with University of Oklahoma that involves monitoring and protecting least terns during nesting season on the South Canadian River

INTERIOR LEAST TERN RANGE (IPAC)



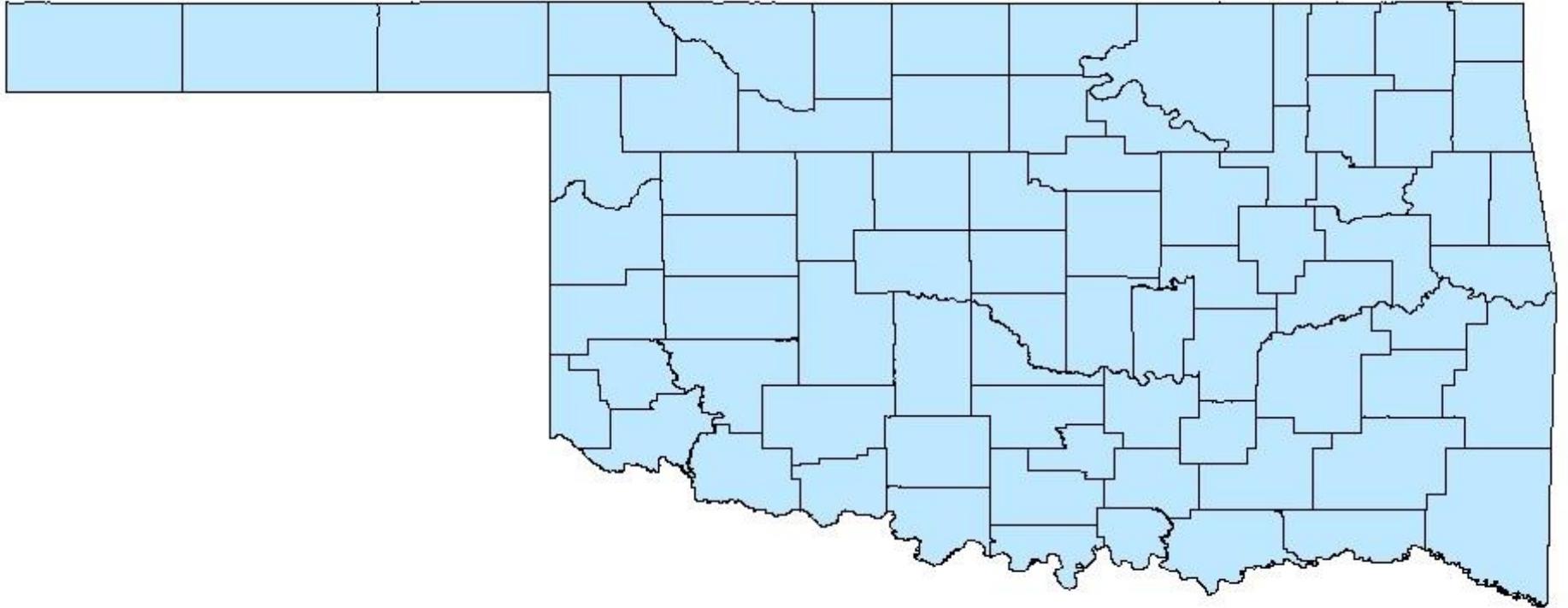
PIPING PLOVER

(*CHARADRIUS MELODUS*)

- Federally-listed (threatened) since 1985
- 5-year Review Initiated in July 2014
- Typically found on reservoirs within Oklahoma during spring and fall migration.
- ODWC receives a handful of reports annually, though most sightings are submitted by recreational bird watchers

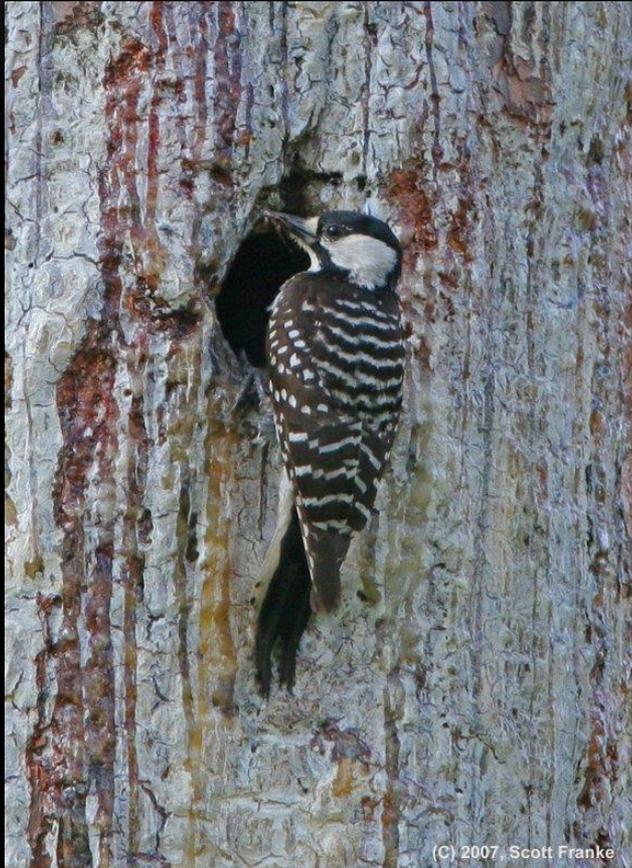


PIPING PLOVER RANGE (IPAC)



RED-COCKADED WOODPECKER

(*PICOIDES BOREALIS*)

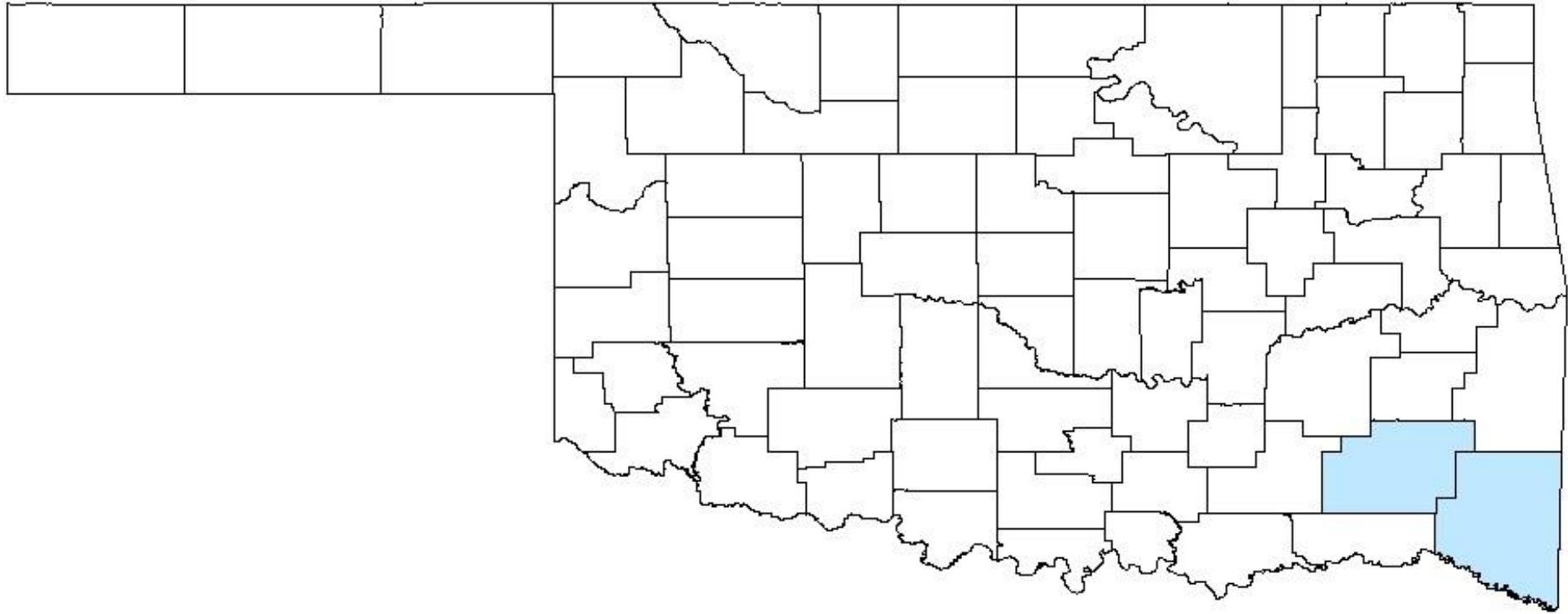


- Federally-listed (endangered) since October 1970
- Requires open, shortleaf pine forest habitat.
- Only population in the state occurs on ODWC-owned McCurtain County Wilderness Area and adjacent USFS lands on East side of Wilderness Area.

RED-COCKADED WOODPECKER: ODWC EFFORTS

- ODWC has managed a population of Red-cockaded Woodpeckers on the McCurtain County Wilderness Area since 1991; most of the expenditures associated with management of the population are charged to a Section 6 grant.
- ODWC assists U.S. Forest Service with management and expansion of Red-cockaded Woodpecker groups on adjacent federal land.
- ODWC cooperates with other states and USFWS on translocating Red-cockaded Woodpeckers, as needed.

RED-COCKADED WOODPECKER RANGE (IPAC)



RED KNOT

(*CALIDRIS CANUTUS RUFA*)

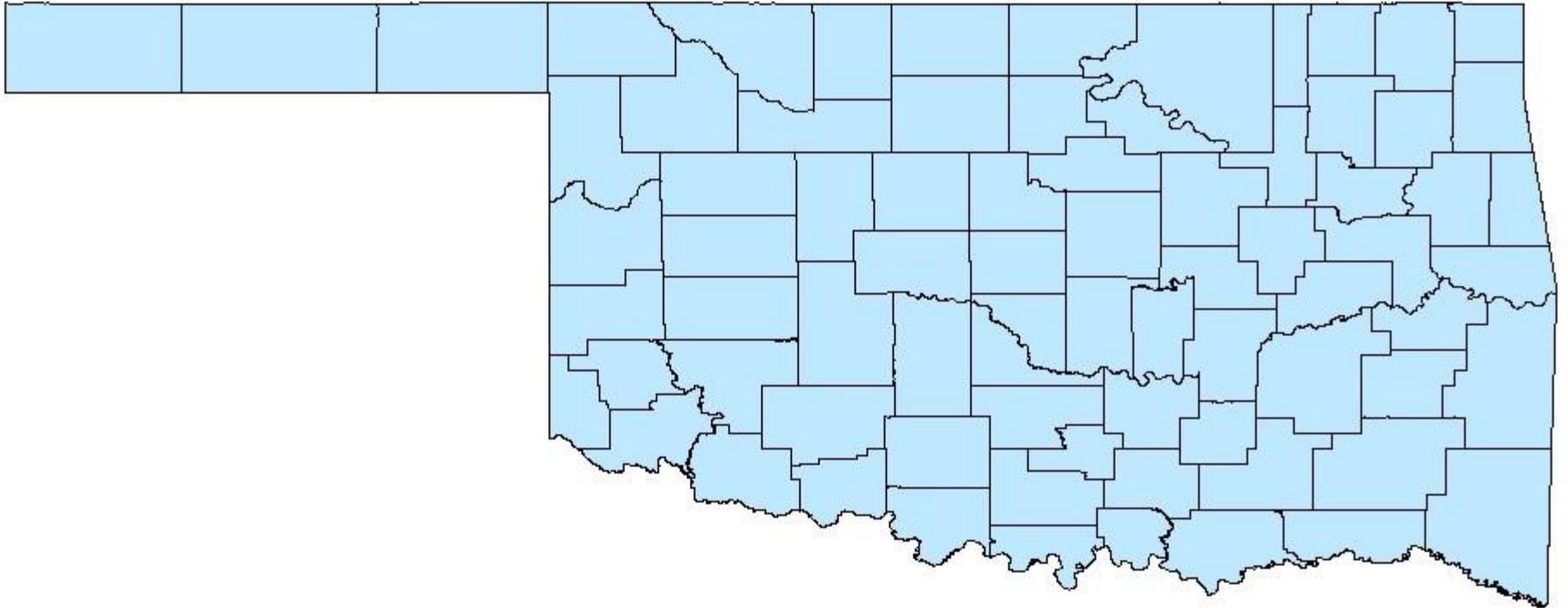
- Federally-listed (threatened) in December 2014
- Passes through Oklahoma during spring and fall migration and rarely stops; the majority of sightings have been on reservoirs within state.



RED KNOT: ODWC EFFORTS

- **November 2013** – ODWC submitted comments to the proposed listing rule:
 - ODWC opposed the proposed listing rule
 - Cited the fact that the Red Knot is a rarely sighted, high-flying migrant through Oklahoma
 - The Red Knot has only been documented ~40 times in Oklahoma (since the 1940's)
 - ODWC disappointed with the poor communicating with the state agencies when the range was expanded to include mid-western/Great Plains states.

RED KNOT RANGE (IPAC)



OZARK BIG-EARED BAT

(*CORYNORHINUS TOWNSENDII INGENS*)

- Federally-listed (endangered) since November 1979
- Occurs within a handful of caves in northeast Oklahoma
- Last 5-year review published in 2008

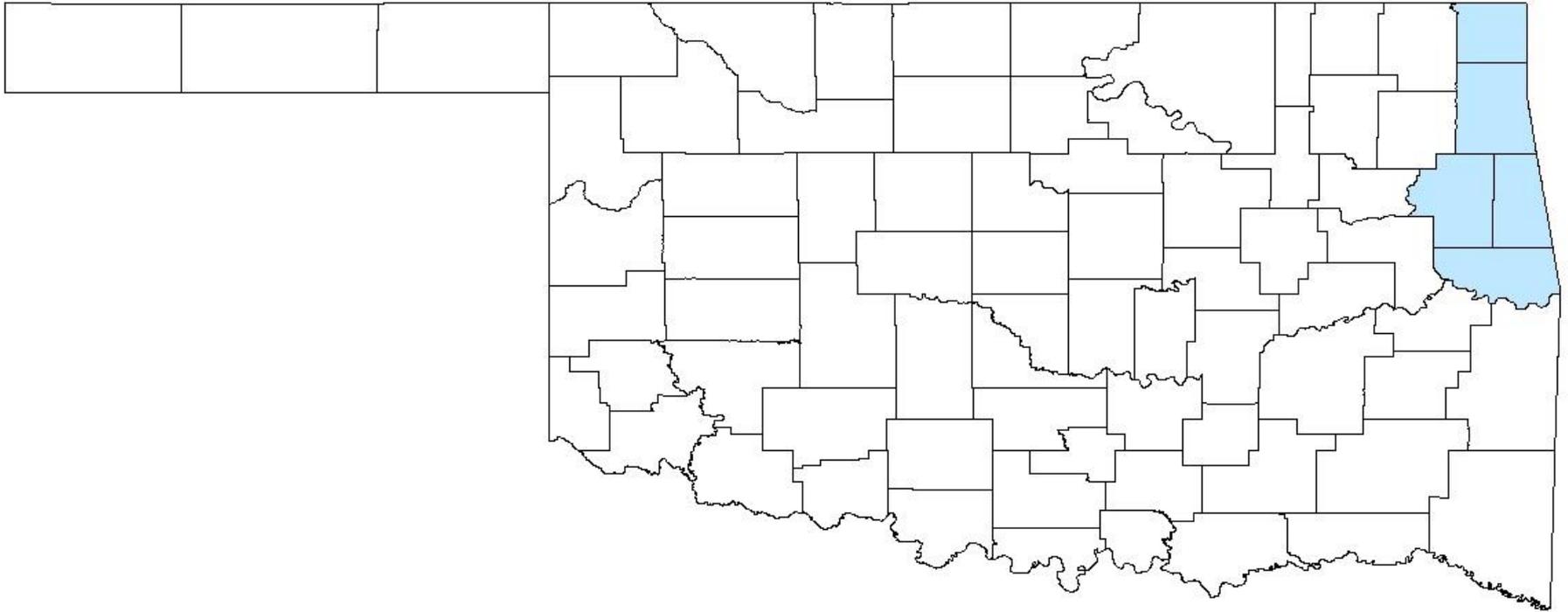


OZARK BIG-EARED BAT: ODWC EFFORTS

- ODWC has funded Section 6 project for ~20 years with Rogers State University that involves gating caves containing **Ozark Big-eared Bats** and **Gray Bats**
 - Purpose of gates is to protect hibernating bats from disturbance by human activities.
 - Project has expanded to include periodic surveys of all of the organisms in the caves, including federally-threatened Ozark Cavefish and Oklahoma state-listed Oklahoma Cave Crayfish.



OZARK BIG-EARED BAT RANGE (IPAC)



GRAY BAT

(*MYOTIS GRISESCENS*)

- Federally-listed (endangered) since April 1976
- Occurs within a handful of caves in northeast Oklahoma; some caves contain hundreds of individuals during summer.
- 5-year Review Initiated in July 2014



INDIANA BAT

(*MYOTIS SODALIS*)



- Federally-listed (endangered) since 1966
- No breeding population in Oklahoma
- Individuals randomly occur with other hibernating bats in Oklahoma
- 5-year Review Initiated in July 2014

NORTHERN LONG-EARED BAT

(*MYOTIS SEPTENTRIONALIS*)

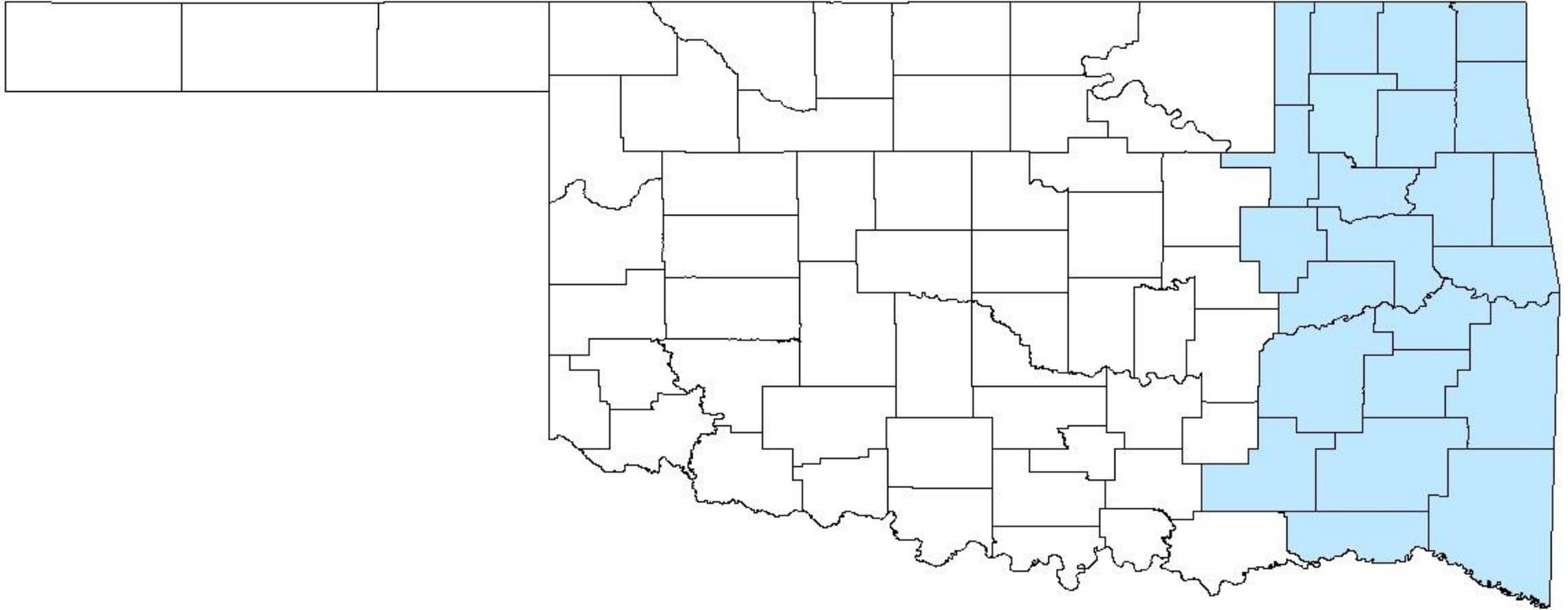
- Federally-listed (threatened) in April 2015 with Interim 4d Rule
- Occurs in eastern Oklahoma within forested landscapes
- Original petition also included Eastern Small-footed Bat



NORTHERN LONG-EARED BAT: ODWC EFFORTS

- **December 2013** - Comment letter submitted to Federal Register responding to 12-month finding and proposed rule.
- **August 2014** - Comment letter submitted to Federal Register responding to 6-month extension of proposed rule
- **October 2014** - ODWC attended NLEB Workshop in with multiple state agencies
- **December 2014** – Submitted additional comments when comment period on proposed rule was reopened.

NORTHERN LONG-EARED BAT RANGE (IPAC)



ARKANSAS RIVER SHINER

(NOTROPIS GERARDI)

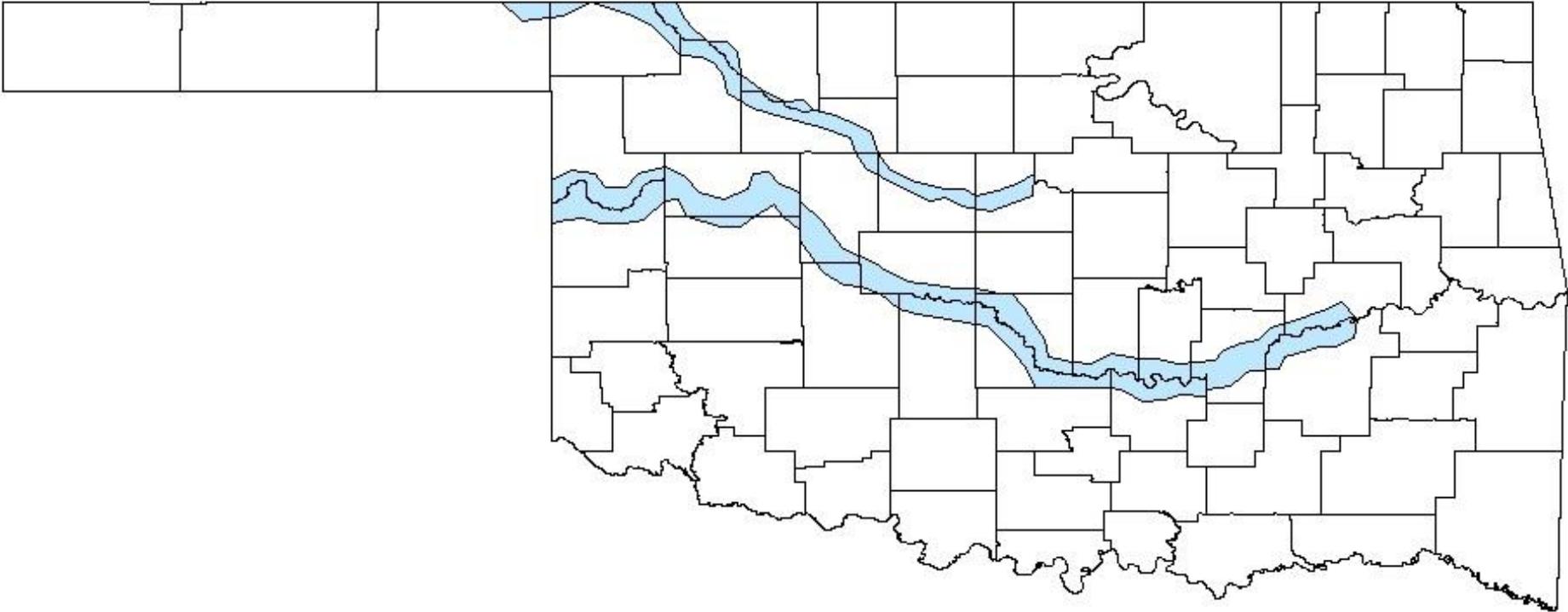


- Federally-listed (threatened) since November 1998
- Oklahoma contains designated Critical Habitat (Canadian and Cimarron Rivers)
- Last 5-year Review Initiated in 2009

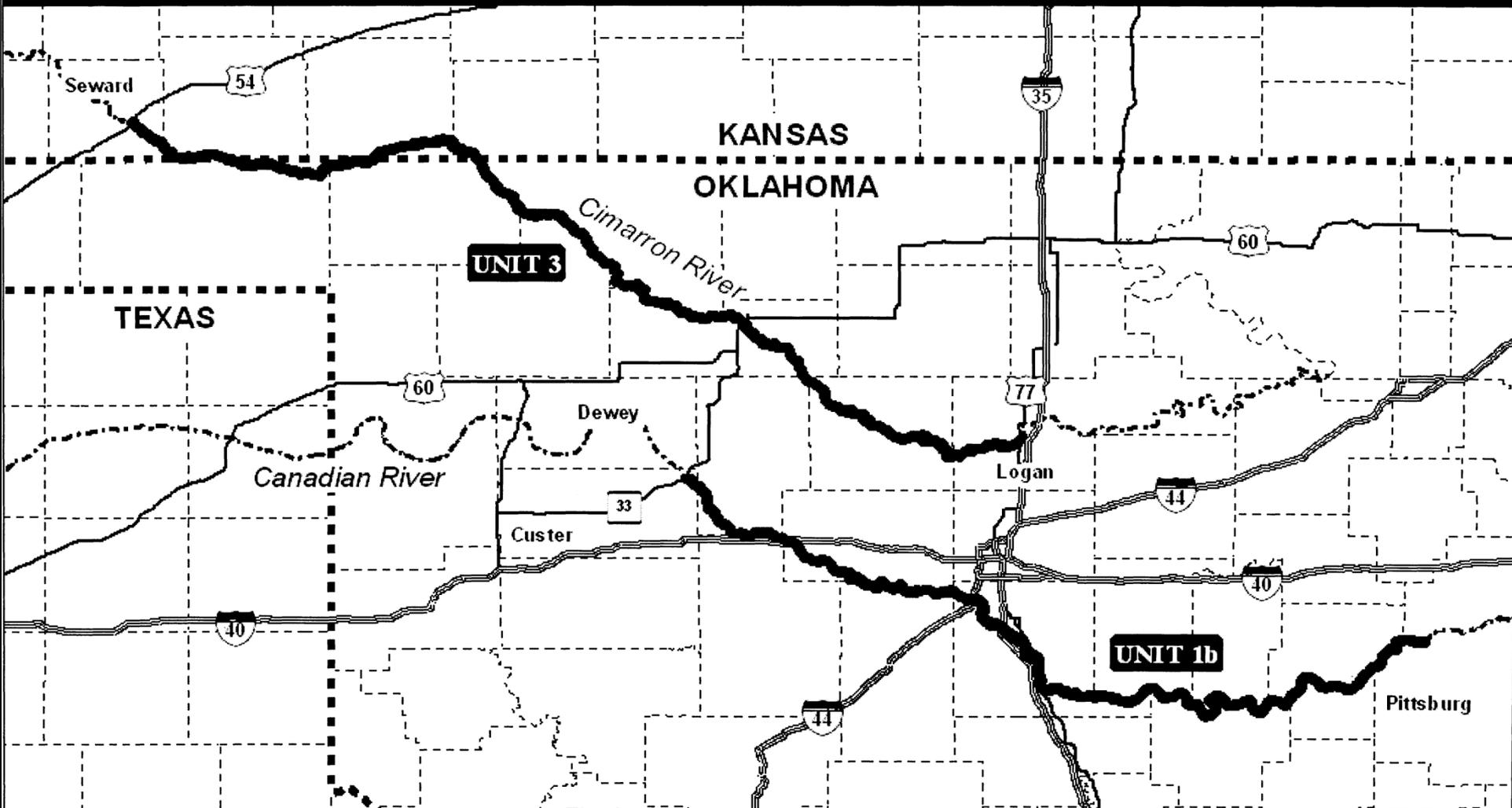
ARKANSAS RIVER SHINER: ODWC EFFORTS

- ODWC staff assists USFWS with Arkansas River Shiner surveys annually to monitor population trends along Canadian River
 - ODWC funds Section 6 project with Oklahoma State University that assist USFWS in processing Arkansas River Shiner samples collected.
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ARKANSAS RIVER SHINER RANGE

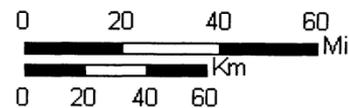


General Locations of Critical Habitat for the Arkansas River Shiner (*Notropis girardi*)



- Critical Habitat - 2005 - FINAL
- Rivers
- States
- Counties
- Interstates
- US Highways
- State Highways

<http://criticalhabitat.fws.gov>



LEOPARD DARTER

(*PERCINA PANTHERINA*)

- Federally-listed (threatened) since January 1978
- Last 5 year review initiated in 2006
- Designated Critical Habitat in Glover, Mt. Fork, Upper Little Rivers

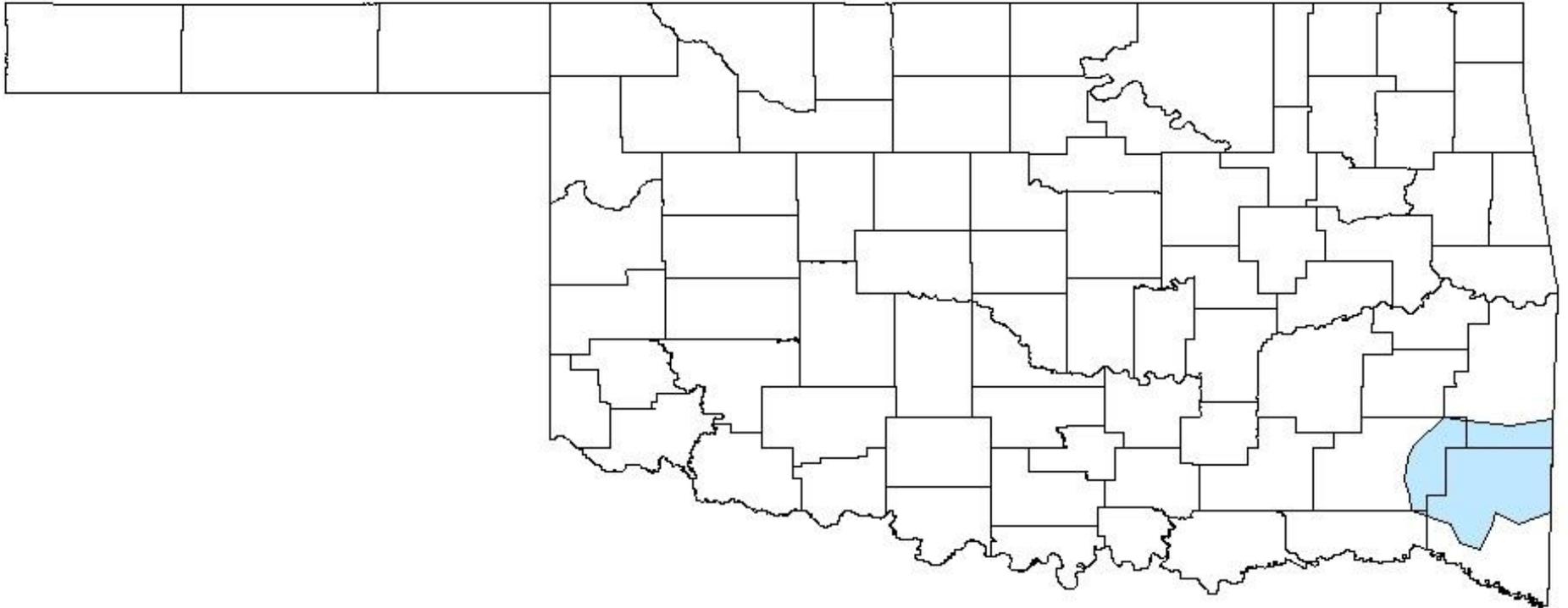


LEOPARD DARTER: ODWC EFFORTS

- ODWC personnel assist USFWS and U.S. Forest Service with Leopard Darter surveys annually.

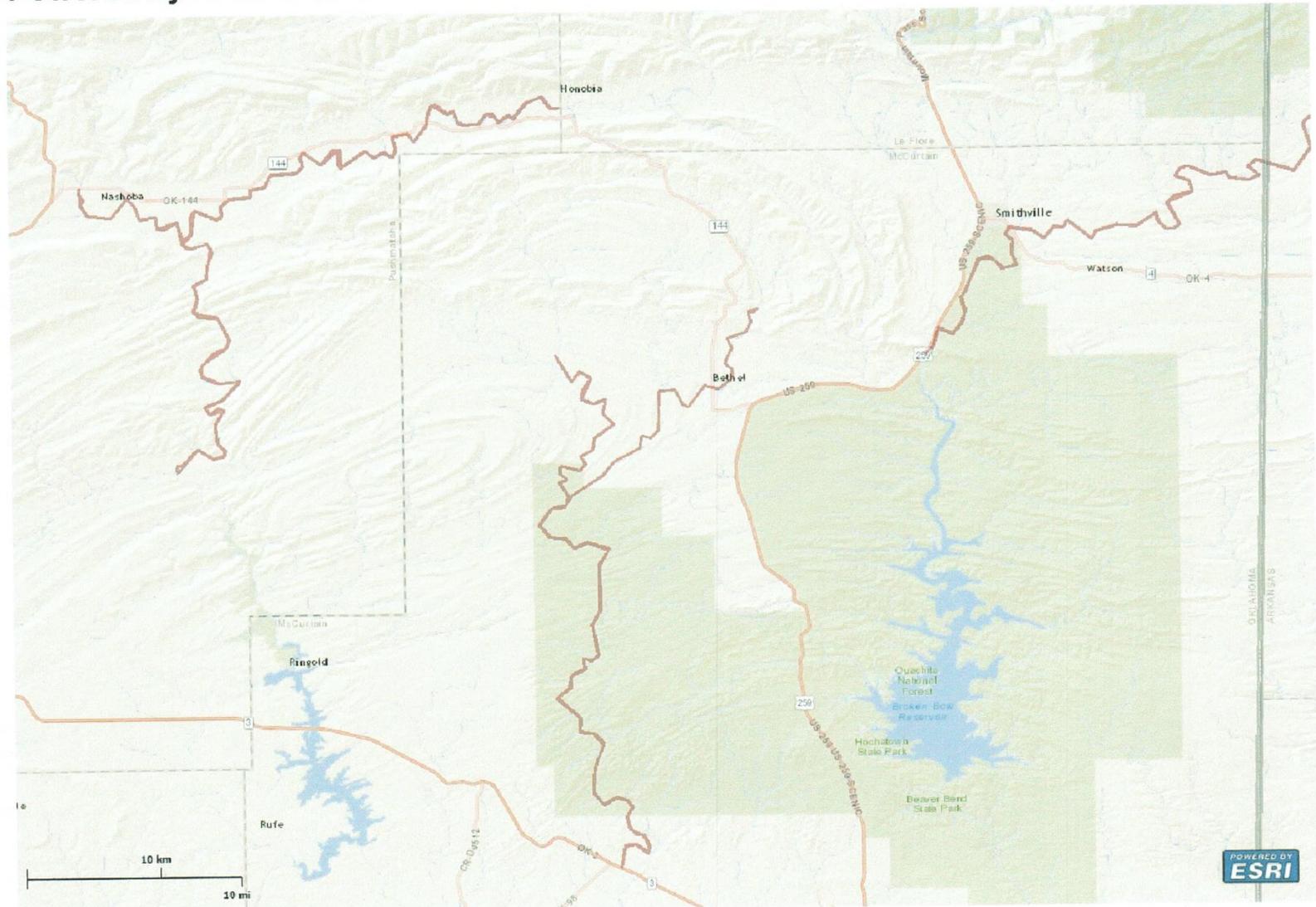


LEOPARD DARTER RANGE



Leopard Darter Critical Habitat

Powered by ArcGIS Server



OZARK CAVEFISH

(*AMBLYOPSIS ROSAE*)

- Federally-listed (threatened) since November 1984
- Occurs in 3 caves in northeast Oklahoma.
- Last 5-year review initiated in 2006.

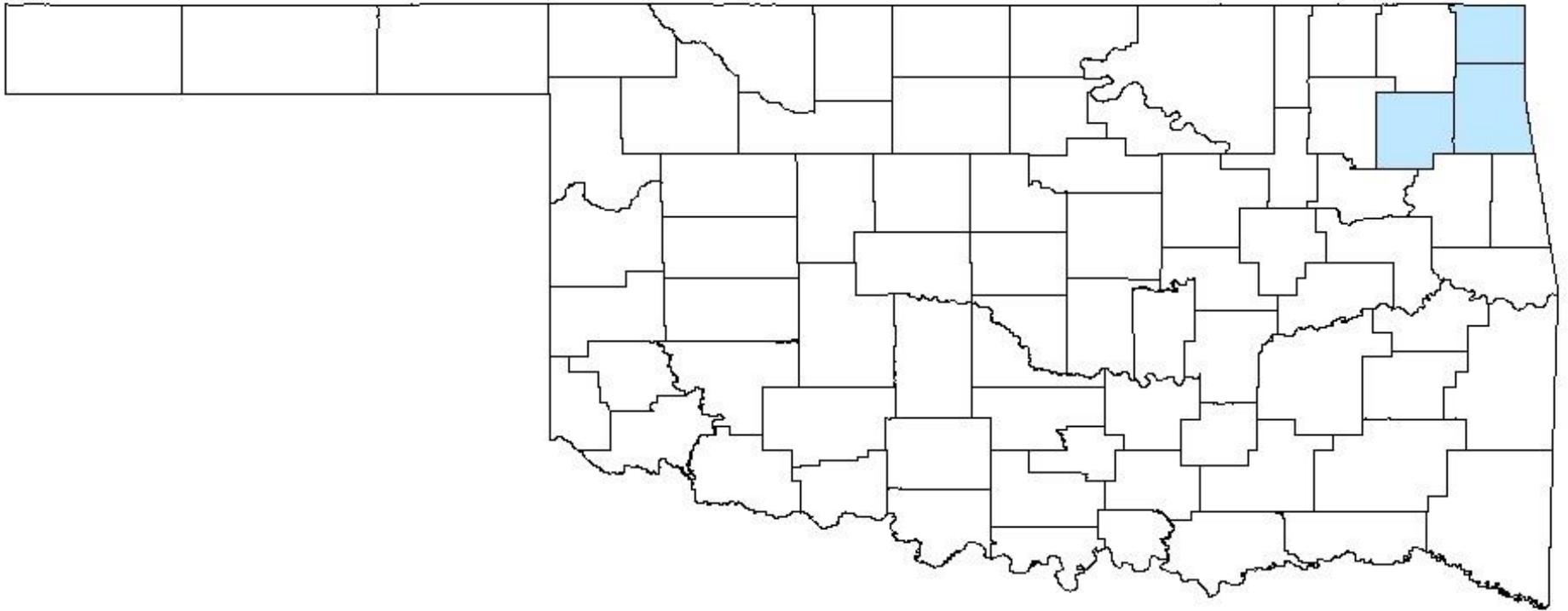


OZARK CAVEFISH: ODWC EFFORTS

- Ozark Cavefish populations in Oklahoma are monitored through Section 6 Cave-gating Project for Ozark Big-eared Bats and Gray Bats in Northeast Oklahoma.



OZARK CAVEFISH RANGE (IPAC)



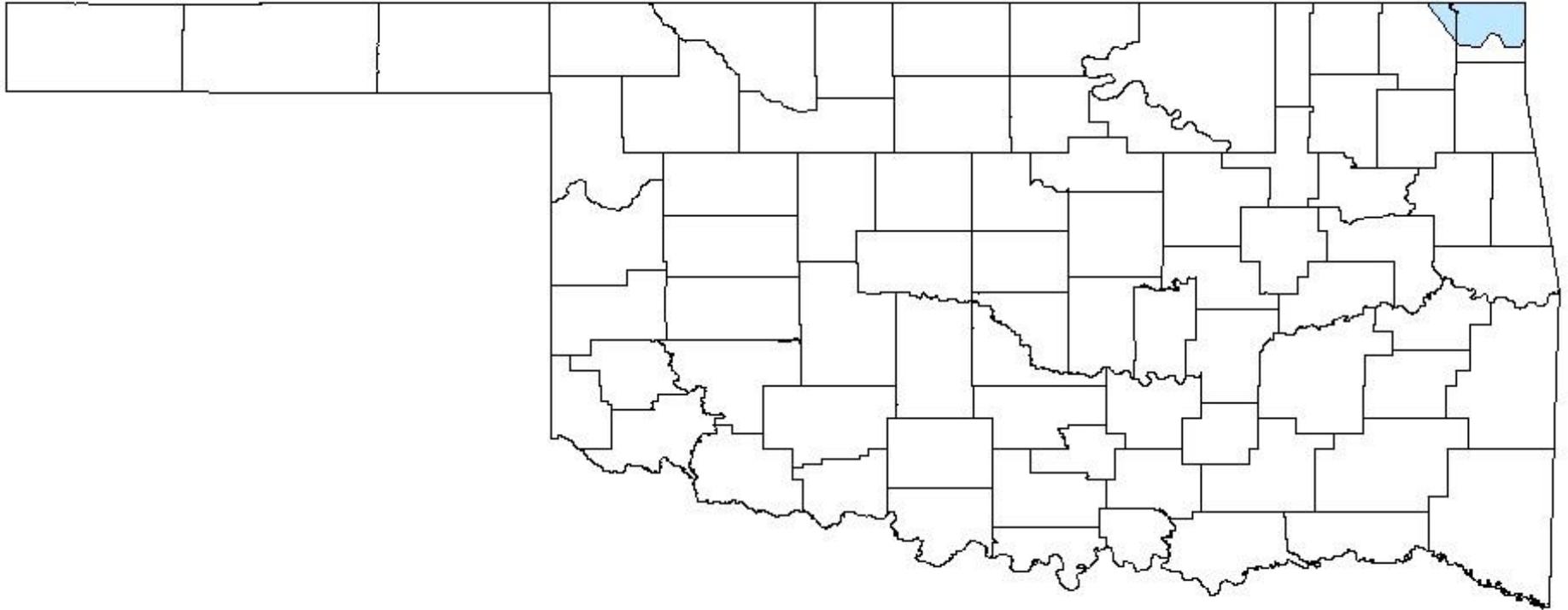
NEOSHO MADTOM

(*NOTURUS PLACIDUS*)

- Federally-listed (threatened) since May 1990
- Last 5-year review initiated in 2011
- Occurs in Neosho and Spring River drainages in Craig and Nowata Counties



NEOSHO MADTOM RANGE



OUACHITA ROCK POCKETBOOK MUSSEL

(*ARKANSIA WHEELERI*)

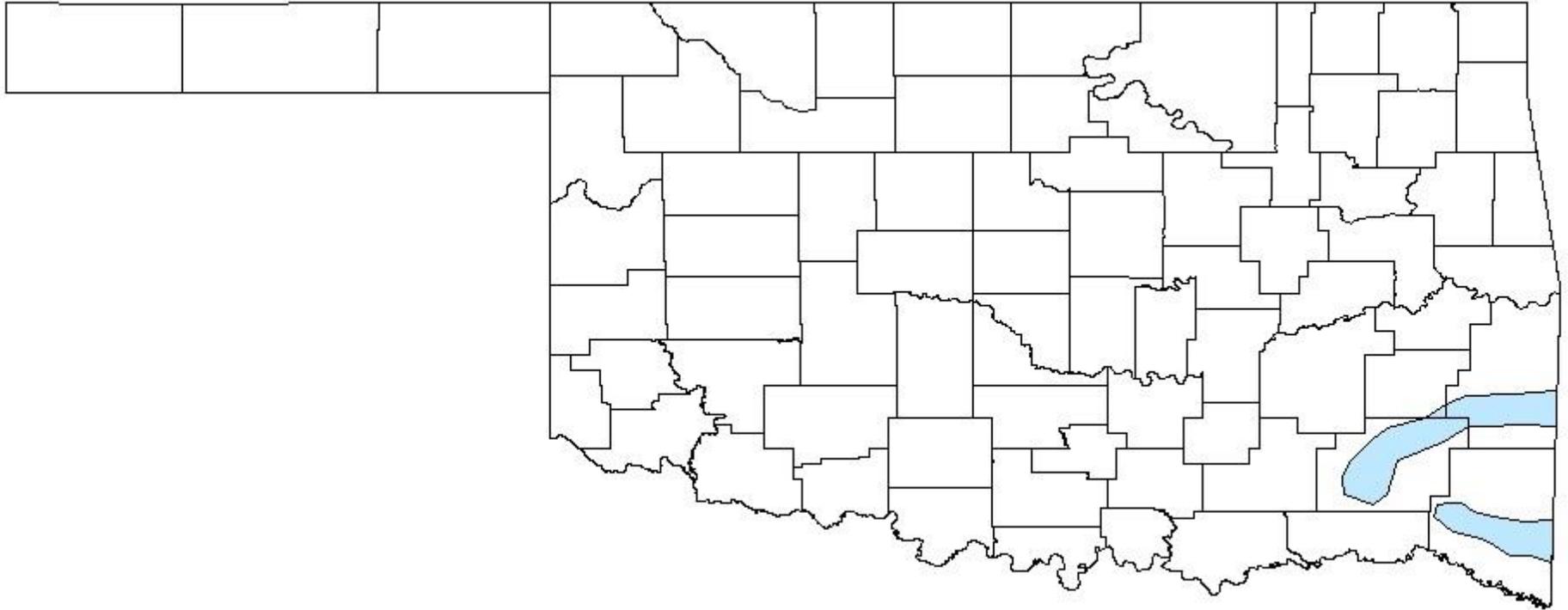


- Federally-listed (endangered) since October 1991
- Last 5-year Review initiated April 2007
- Occurs in Kiamichi and Little Rivers in Southeast Oklahoma

OUACHITA ROCK POCKETBOOK: ODWC EFFORTS

- ODWC is currently funding a project with Missouri State University involving captive propagation of Ouachita Rock Pocketbooks to be released at sites supporting current populations, to assist in recovery.

OUACHITA ROCK POCKETBOOK RANGE



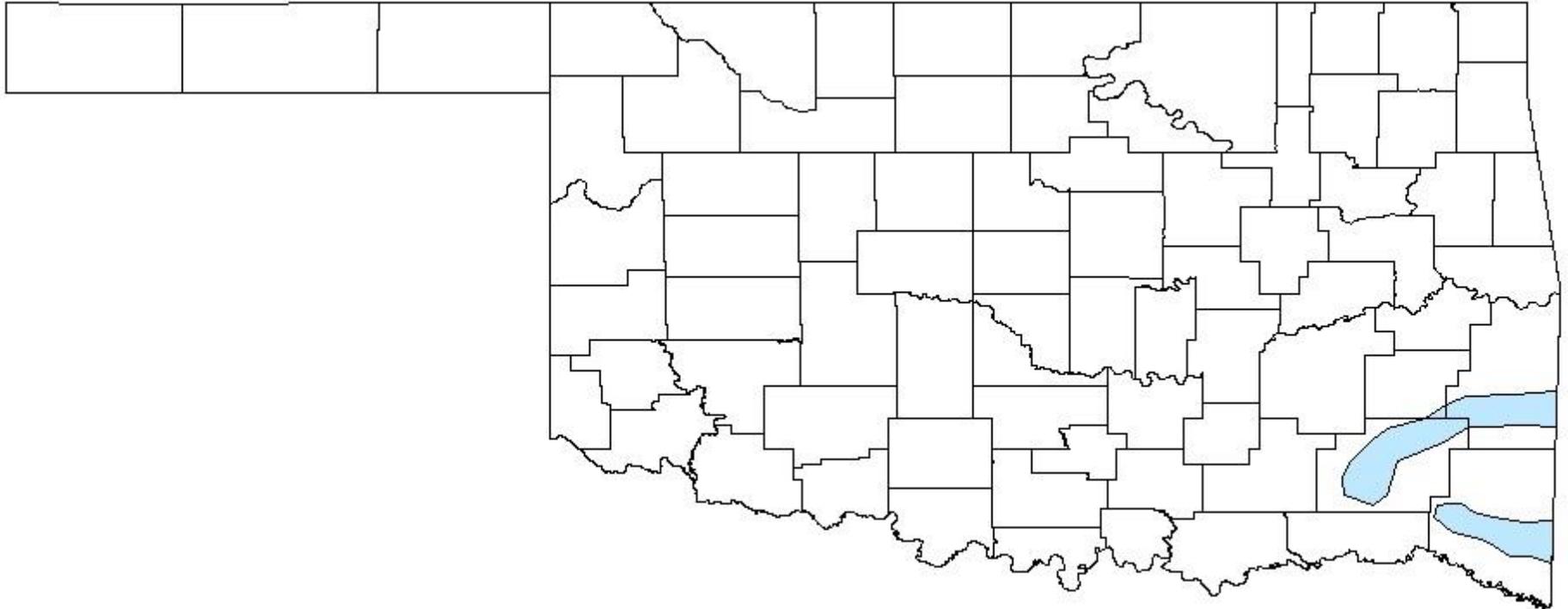
SCALESHELL MUSSEL

(*LEPTODEA LEPTODON*)

- Federally-listed (endangered) since October 2001
- 5-year review initiated in July 2014
- Occurs in Kiamichi and Little Rivers with Ouachita Rock Pocketbook



SCALESHELL MUSSEL RANGE



NEOSHO MUCKET

(*LAMPSILIS RAFINESQUEANA*)

- Federally (endangered) listed since September 2013
- Critical Habitat designated on April 30, 2015
- MDL species
- Occurs in Neosho, Spring, Illinois, and Elk Rivers



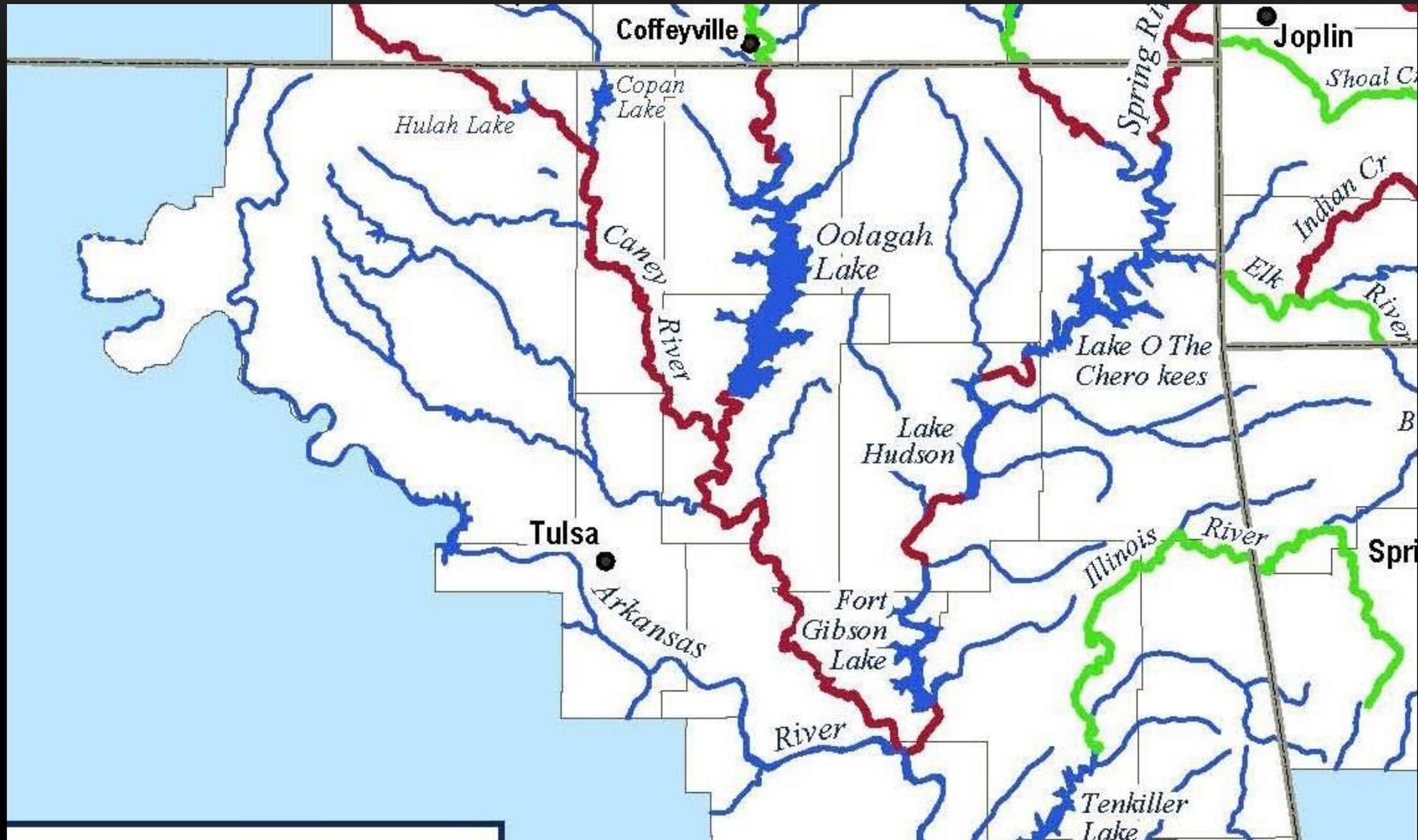
NEOSHO MUCKET MUSSEL: ODWC EFFORTS

- December 2012 - Submitted comments to original proposed rule and proposed critical habitat.
- July 2014 - Submitted comments to re-opening of comment period for critical habitat designation.
- ODWC is currently providing input to USFWS on development of Recovery Plan

NEOSHO MUCKET: ODWC EFFORTS

- ODWC funded a Section 6 project (mid-1990's) with the University of Oklahoma to determine the status and habitat preference of the Neosho Mucket on the Illinois, Neosho, Verdigris, Spring, and Caney Rivers in northeast Oklahoma.

NEOSHO MUCKET RANGE



RABBITSFOOT MUSSEL

(*QUADRULA CYLINDRICA CYLINDRICA*)

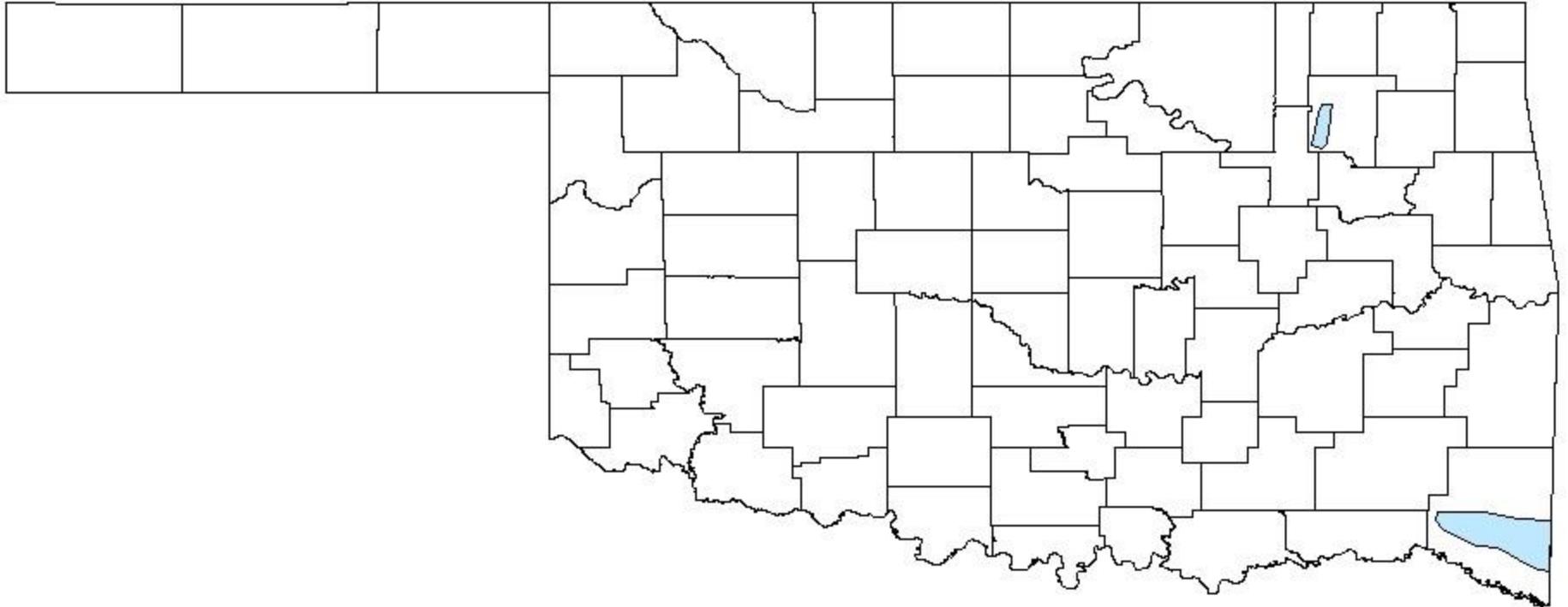


- Federally-listed (threatened) since September 2013
- Critical Habitat designated April 30, 2015
- MDL Species
- Occurs in Little, Verdigris, Mt. Fork, and Glover Rivers

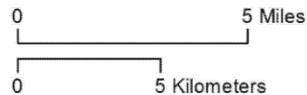
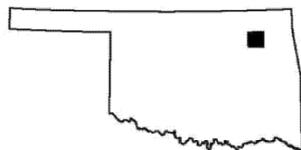
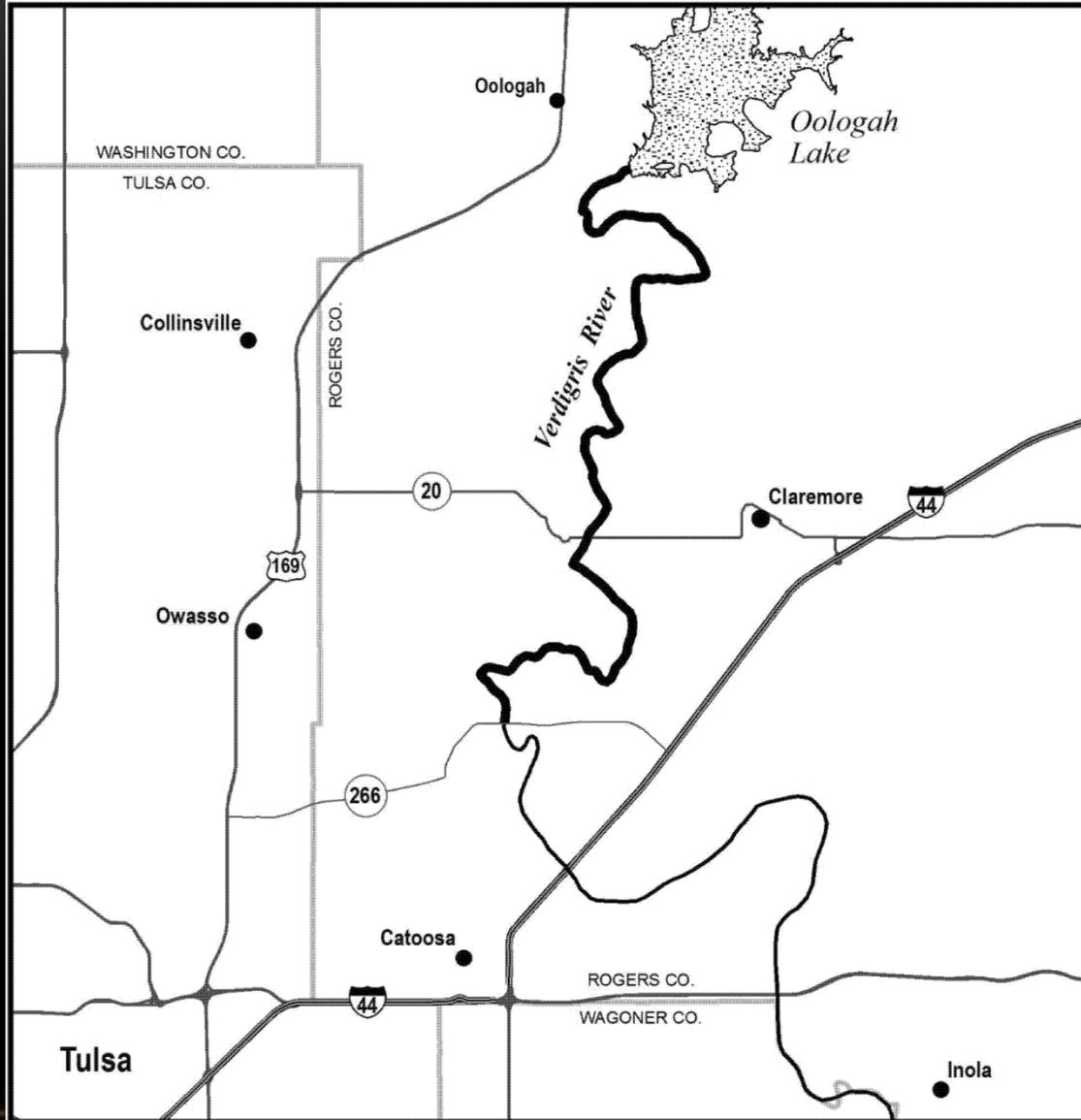
RABBITSFOOT MUSSEL: ODWC EFFORTS

- December 2012 - Submitted comments to the proposed rule (with Neosho Mucket) and critical habitat designation
 - July 2014 - Submitted comments to re-opening of comment period for critical habitat designation.
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RABBITSFOOT RANGE



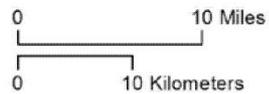
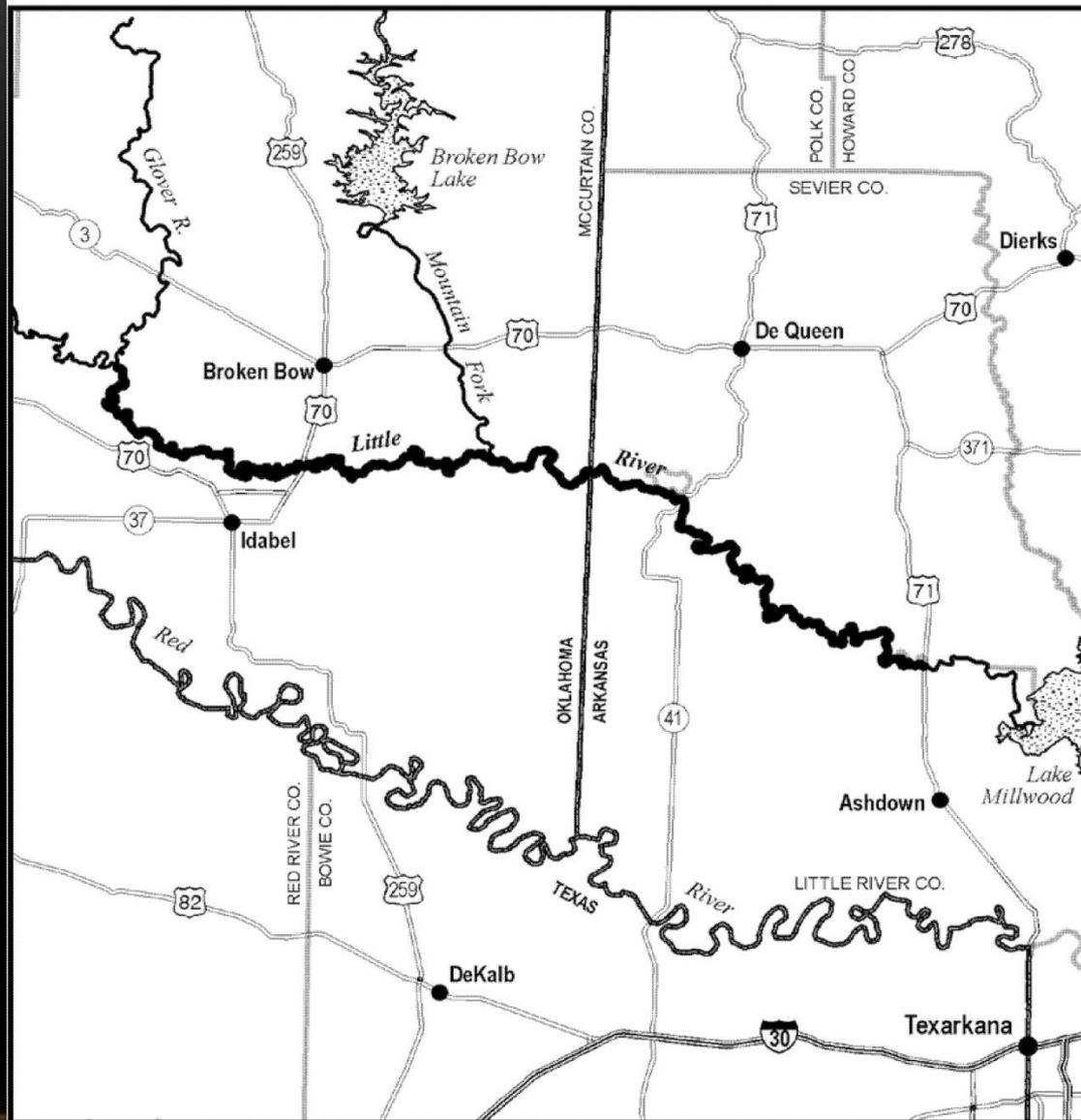
Map of Unit RF2 (Verdigris River) of critical habitat for Rabbitsfoot



~ Critical Habitat



Map of Unit RF6 (Little River) of critical habitat for Rabbitsfoot



~ Critical Habitat



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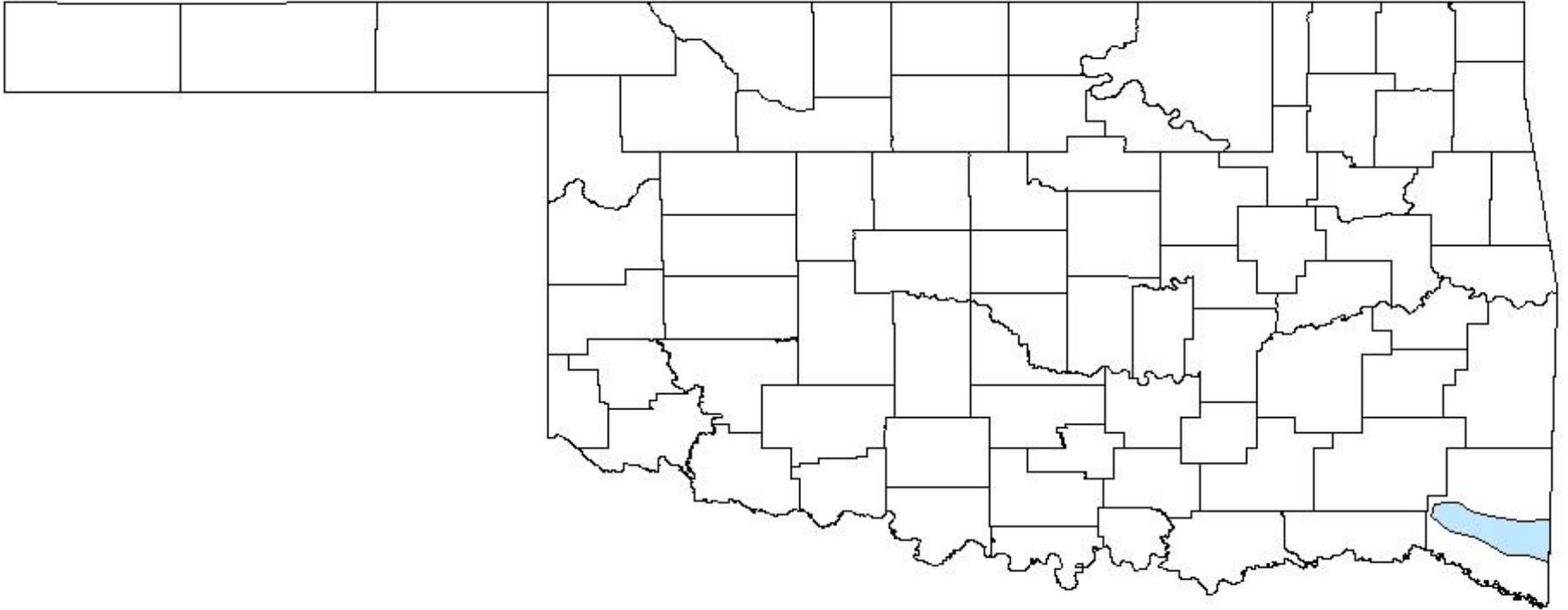
WINGED MAPLELEAF MUSSEL

(*QUADRULA FRAGOSA*)



- Federally-listed as endangered in July 1991.
- Occurs in Little River watershed in McCurtain County.
- Last 5-year review initiated in 2009.

WINGED MAPLELEAF MUSSEL RANGE



CANDIDATES

- Oklahoma currently has 3 Federal Candidate Species
- Candidates are species that were found to be “warranted but precluded” upon publication of their 12-month finding due to higher listing priorities
- Some species have been candidates for several years, such as the Arkansas Darter
 - Due to the MDL settlement (Court Order), USFWS is legally (time) bound to take further listing action on candidates by 2016

ARKANSAS DARTER

(*ETHEOSTOMA CRAGINI*)

- Federal Candidate since November of 1991 – **LPN 11**
- MDL Species – USFWS to take further action by Fall 2016
- Occurs in Cimarron River tributaries (NW Oklahoma) and Several tributaries of Spring, Spavinaw, and Neosho Rivers (NE Oklahoma)



ARKANSAS DARTER: ODWC EFFORTS

- ODWC currently providing input into a USFWS species review process in cooperation with other states throughout the range of the species.
- ODWC has conducted periodic surveys over last 5 years; planning to conduct surveys in 2015 - 2016.



ARKANSAS DARTER: ODWC EFFORTS

- ODWC funded a Section 6 project (mid-1990's) conducting a status survey of the Arkansas Darter in Oklahoma.



SPRAGUE'S PIPIT

(*ANTHUS SPRAGUEII*)

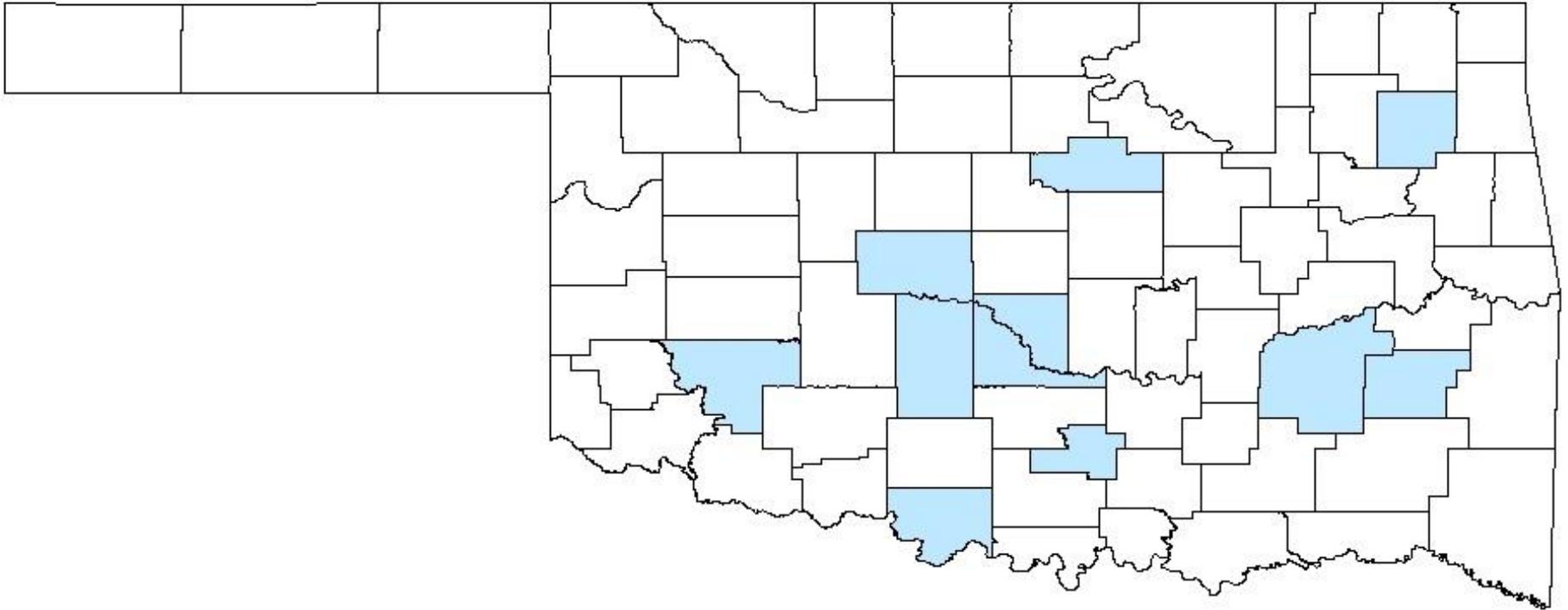
- Federal Candidate since September 2010 – **LPN 11**
- MDL Species – USFWS to take listing further action by September 30, 2015
- Occurs within the state during spring and fall migration
 - Often found in “random” places such as overgrazed pastures, parking lots, airports, etc. – essentially any open area with vegetation of shorter stature.



SPRAGUE'S PIPIT: ODWC EFFORTS

- Submitted comments on August 31, 2012 responding to USFWS informational request regarding status of species.
- Submitted further comments on February 9, 2015 responding to a second USFWS informational request of status of species and any new or relevant biological information.

SPRAGUE'S PIPIT RANGE (IPAC)



RATTLESNAKE MASTER-BORER MOTH

(*PAPAPEMA ERYNGII*)

- Federal Candidate since August 2013 – **LPN 8**
- Only occurs in Osage County
- Presence of moth is entirely dependent upon availability of host plant, Rattlesnake Master.

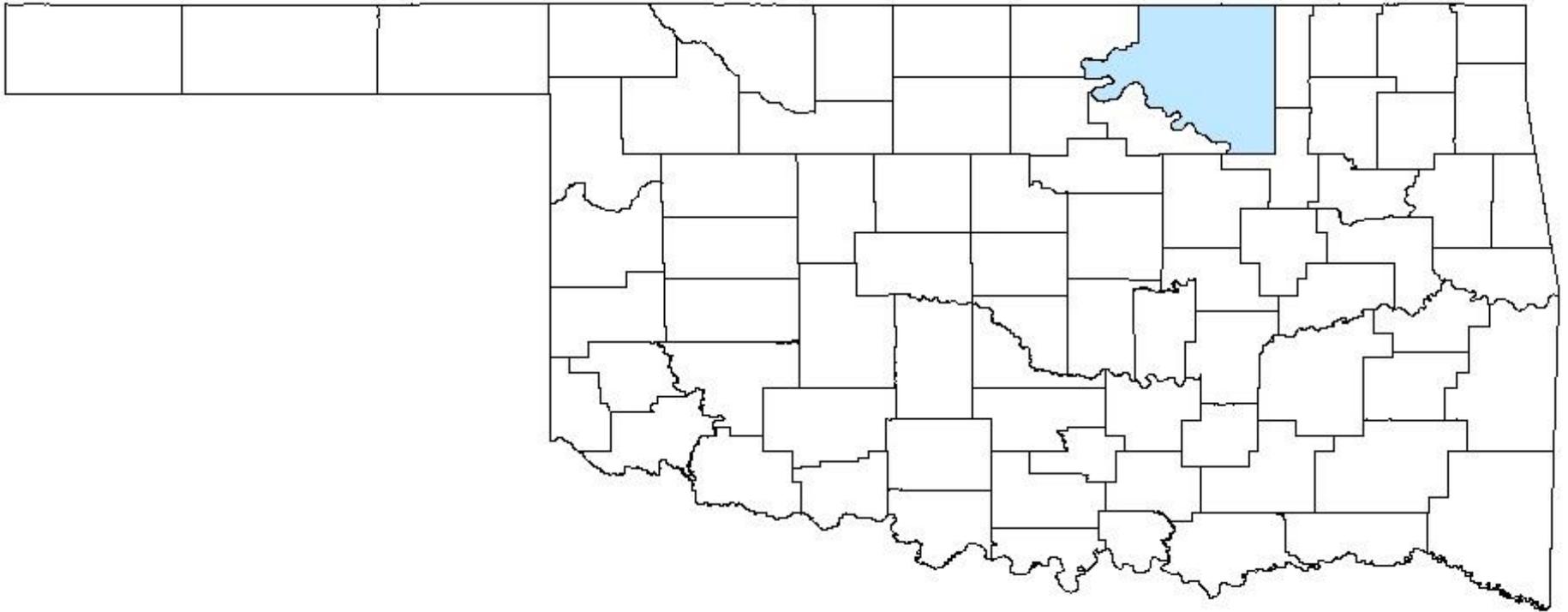


RATTLESNAKE MASTER-BORER MOTH: ODWC EFFORTS

- ODWC is currently funding a State Wildlife Grant examining the effects and response of prescribed fire on the Rattlesnake Master-borer Moth and associated host plant on the Tallgrass Prairie Preserve in Osage County.



RATTLESNAKE MASTER-BORER MOTH RANGE (IPAC)



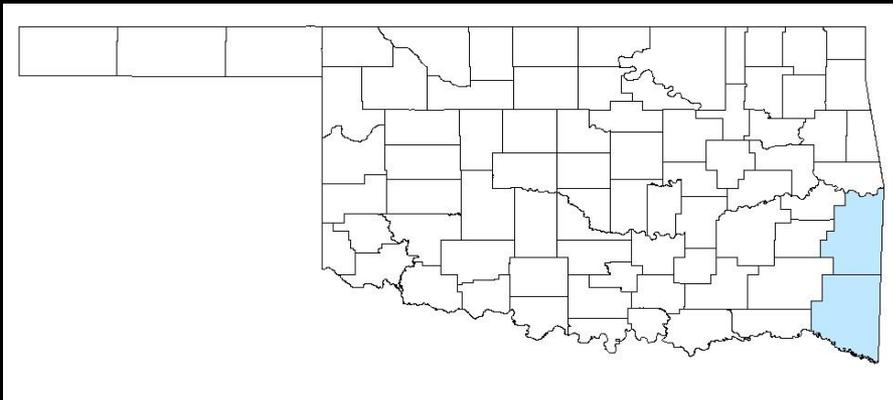
FEDERALLY-LISTED PLANTS

- Plants are not treated as public trust resource, therefore landowner retains rights where plants are located.
 - Federally-listed plants trigger Section 7 consultation by federal actions.
 - Oklahoma has 3 federally-listed plants:
 - Western Prairie-Fringed Orchid
 - Eastern Prairie-Fringed Orchid
 - Harperella
-

HARPERELLA

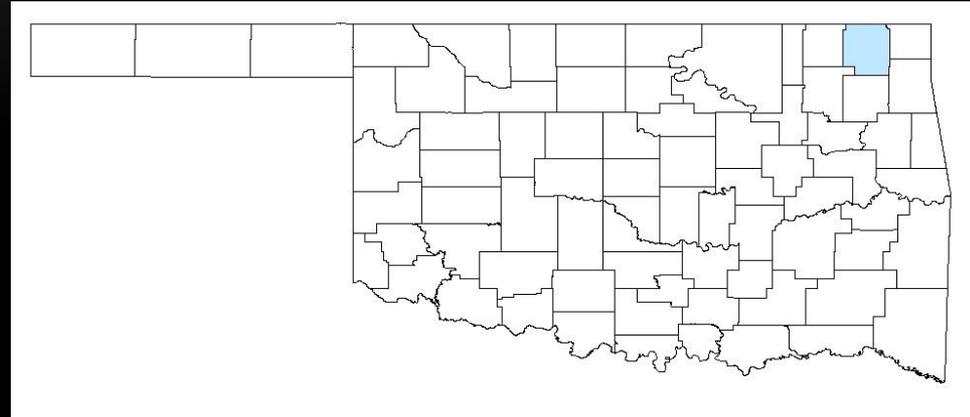
(*PTILIMNIUM NODOSUM*)

- Listed as endangered since September 1988
- Occurs in LeFlore, McCurtain Counties.
- Habitat consist of areas along clear, rocky streams.

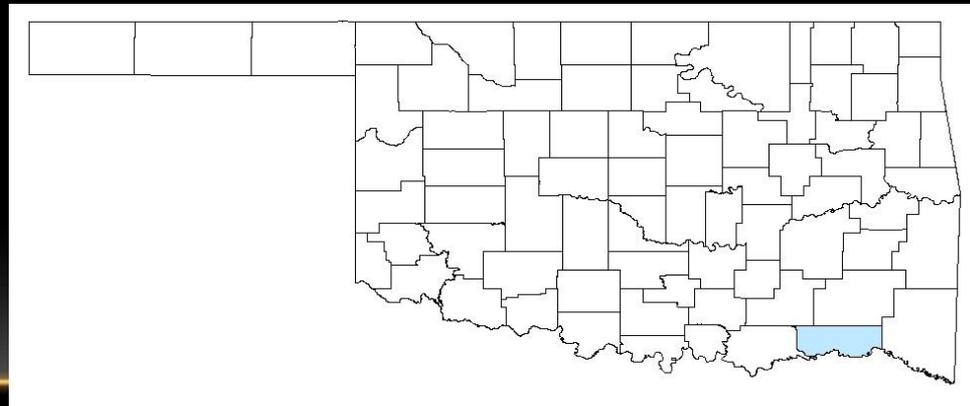


PRAIRIE FRINGED ORCHIDS

- **Western Prairie-Fringed Orchid**
(*Platanthera praeclara*)
 - Occurs on 2 sites in Craig County, though has not been seen since early 1990's.
 - Habitat consist of Tallgrass Prairie sites that are somewhat moist.



- **Eastern Prairie-Fringed Orchid**
(*Platanthera leucophaea*)
 - Only known occurrence in Oklahoma is Choctaw County.
 - Has not been seen in over 100 years and is likely extirpated.



ESA – PRECLUSION SUCCESS STORIES

- **Swift Fox** (*Vulpes velox*)
 - Proposed for listing but precluded due to coordinated, rangewide conservation efforts
 - ODWC conducts annual Swift Fox surveys in panhandle of state and submits report
- **Black-tailed Prairie Dog** (*Cynomys ludovicianus*)
 - ODWC's Landowner Incentive Program provided cost-share for landowners that agreed to allow prairie dog colonies to persist on their land.

QUESTIONS?

