

**U.S. FISH & WILDLIFE SERVICE**  
**KENTUCKY ECOLOGICAL SERVICES FIELD OFFICE**

***Collaboration Opportunities***  
***for***  
***Watershed Improvement Projects***

Jennifer Garland  
Deputy Field Supervisor  
Kentucky ES Field Office



# Today's Goals

- Brief overview of the U.S. Fish and Wildlife Service (Service) and the Kentucky Ecological Services Field Office (KFO)
  - U.S. Fish and Wildlife Service
  - Ecological Services Branch
  - Kentucky Field Office
- Priority Work Areas
- Identify opportunities for collaboration
  - Technical Assistance
  - Regulatory Assistance
  - Funding Opportunities



# U.S. Fish and Wildlife Service

## Mission Statement:

Working with others to *conserve, protect, and enhance* fish, wildlife, plants and their habitats for the continuing benefit of the American people.



# Southeast Region Vision

*Together,  
we will connect lands and waters  
to sustain fish, wildlife and plants  
by being visionary leaders, bold innovators  
and trusted partners,  
working with and for people.*



# USFWS Programs:

## Authority:

- Endangered Species Act (1973)
- Bald/Golden Eagle Prot. Act (1940)
- Migratory Bird Treaty Act (1918)
- Fish & Wildlife Coord. Act (1965)

## Major Divisions:

- Migratory Birds
- Fisheries
- Wildlife Refuges
- Law Enforcement
- Ecological Services



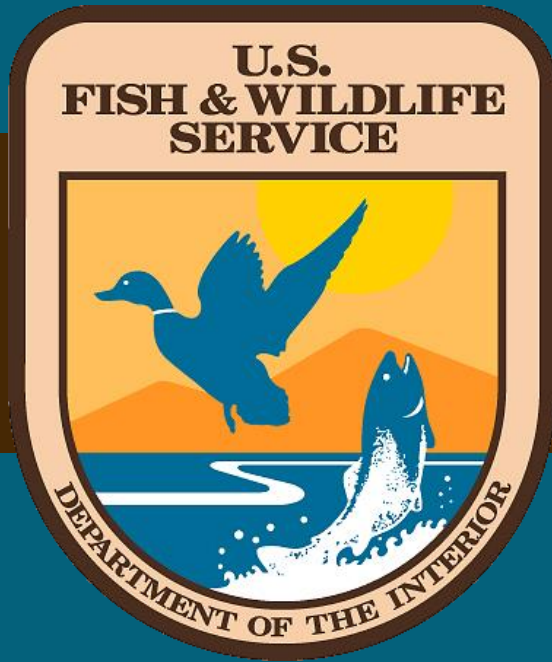
# Kentucky Ecological Services Field Office

<https://www.fws.gov/frankfort/>

- Listing & Recovery
  - Aquatics: Dr. Michael Floyd
- Consultation
  - Jessi Miller, Carrie Allison
- Partners for Fish & Wildlife
  - Brent Harrel

Name	Function	Phone Number	E-Mail Address
Carrie Allison	Wildlife Biologist (consultation)	502-695-0468, ext 46103	<a href="mailto:carrie_allison@fws.gov">carrie_allison@fws.gov</a>
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Michael Floyd	Wildlife Biologist (recovery)	502-695-0468, ext 46102	<a href="mailto:mike_floyd@fws.gov">mike_floyd@fws.gov</a>
Jennifer Garland	Deputy Field Supervisor	502-695-0468, ext 46115	<a href="mailto:jennifer_garland@fws.gov">jennifer_garland@fws.gov</a>
Vacant	Wildlife Biologist (interdisciplinary/energy)	Vacant	Vacant
Brent Harrel	Private Lands (private lands coordinator)	502-229-4630	<a href="mailto:brent_harrel@fws.gov">brent_harrel@fws.gov</a>
Vacant	Administrative Assistant	Vacant	Vacant
Vacant	Senior Biologist (Ohio River coordinator)	Vacant	Vacant
Vacant	Wildlife Biologist (consultation)	Vacant	Vacant
Jessi Miller	Wildlife Biologist (pre-development consultation)	502-695-0468, ext 46104	<a href="mailto:jessica_miller@fws.gov">jessica_miller@fws.gov</a>
Vacant	Wildlife Biologist (private lands - West Kentucky)	Vacant	Vacant





## Priority Aquatic Work Areas

# Kentucky's Federally Listed Species (49)\*

Birds (1)



Plants (10)



Fishes (9)



Bats (4)



Crustaceans (2)



Mussels (23)\*



# At Risk Species

- Proposed, Candidate, and Petitioned Species

- [https://www.fws.gov/frankfort/pdf/KY\\_TE\\_List.pdf](https://www.fws.gov/frankfort/pdf/KY_TE_List.pdf)

- Proposed Species – none

- Candidate – no aquatics

- Petitioned –

- Fishes: Northern cavefish, Smallscale darter, Popeye shiner
- Mussels/Snails: Longsolid, Cumberland moccasinshell, Round hickorynut; Tennessee Clubshell, Pink (=Pyramid) pigtoe, Shortspire hornsnail, Domed anyclid, Salamander mussel, Kentucky creekshell
- Crustaceans: Spiny scale crayfish
- USFWS National Listing Workplan - <https://www.fws.gov/endangered/what-we-do/listing-workplan.html>



# Cumberland River Drainage



Blackside Dace,  
*Chrosomus cumberlandensis* (T)



Cumberland bean, *Villosa trabilis*



Palezone Shiner, *Notropis albizonatus* (E)



Tuxedo darter,  
*Etheostoma lemniscatum* (E)



Tan Riffleshell, *Epioblasma florentina walkeri*



Cumberland darter, *Etheostoma susanae* (E)



Cumberland Arrow Darter, *Etheostoma sagitta*



Buck Darter, *Etheostoma nebra*



# Licking River Drainage Federally Listed Mussels



Freshwater mussel assemblage from the Licking River, Photo by Monte McGregor



# Green River Drainage Federally Listed Species



Fanshell



Sheepnose



Northern Riffleshell



Pink Mucket

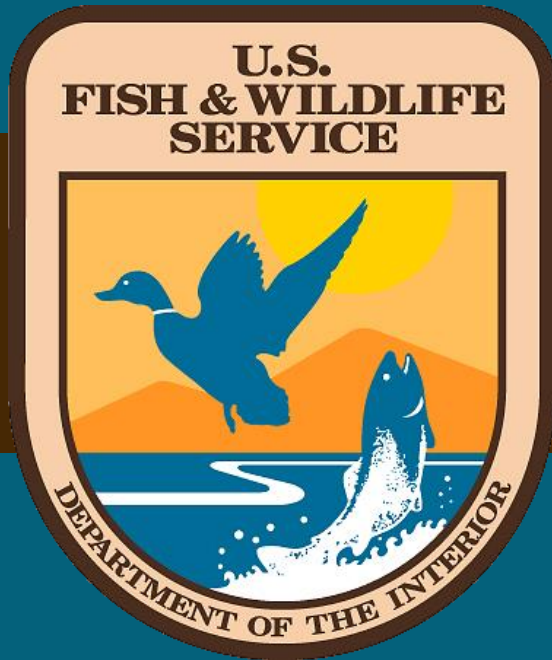


Rough Pigtoe



Snuffbox





# Opportunities for Collaboration

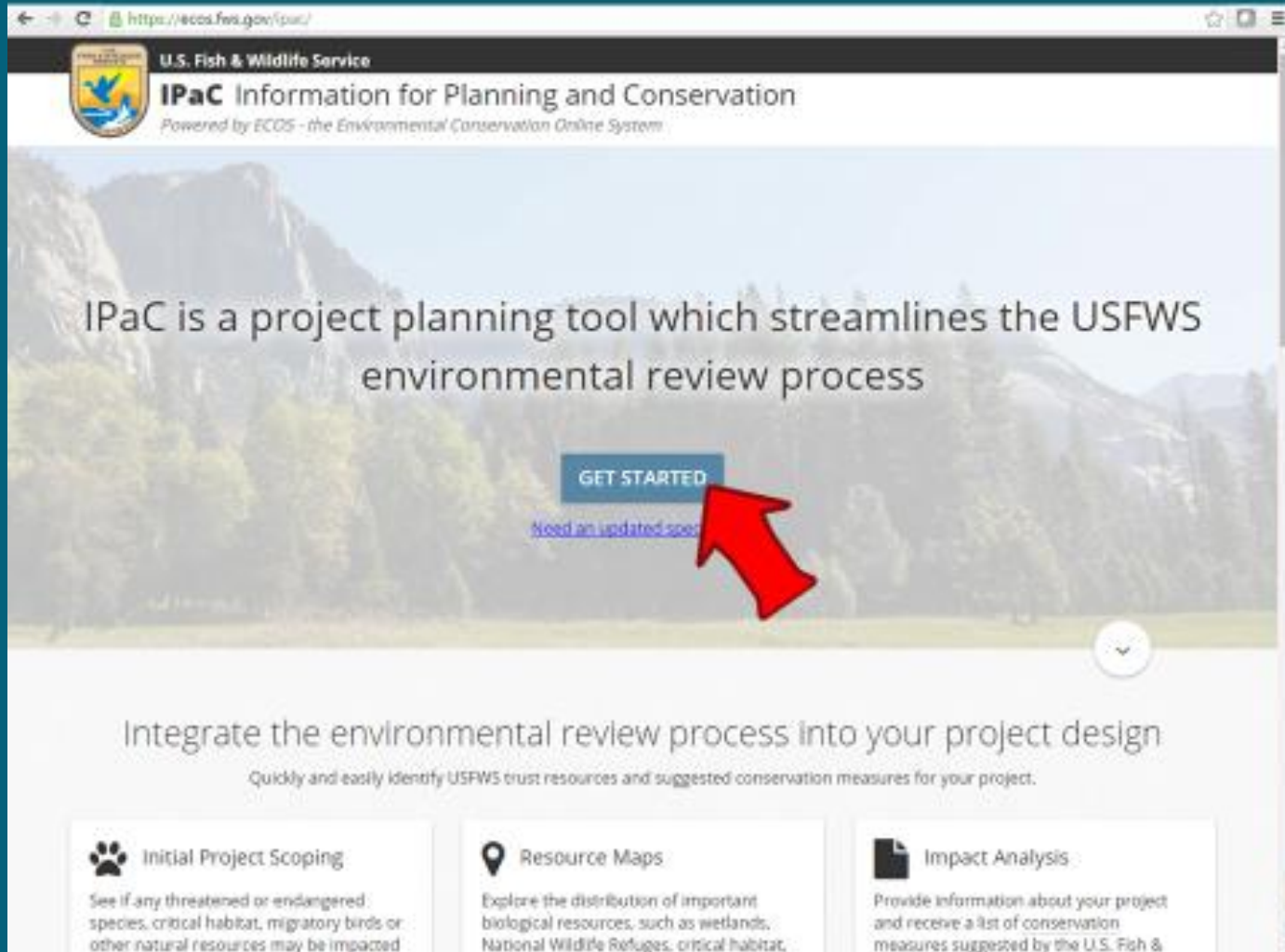


# Technical Assistance

- Identification of Watersheds with Listed and/or At Risk Species
  - Information for Planning and Conservation (IPaC)
- Species Information (e.g. threats, habitat, etc.)
  - Environmental Conservation Online System (ECOS)
- Development of Best Management Practices to benefit listed & at risk species



# IPaC



The screenshot shows the IPaC website homepage. At the top, the U.S. Fish & Wildlife Service logo is on the left, and the text "U.S. Fish & Wildlife Service" and "IPaC Information for Planning and Conservation" is on the right. Below this, it says "Powered by ECOS - the Environmental Conservation Online System". The main content area features a large background image of a mountain landscape with the text "IPaC is a project planning tool which streamlines the USFWS environmental review process". A blue "GET STARTED" button is centered, with a red arrow pointing to it. Below the button is a link that says "Need an updated spec?". At the bottom, there are three columns of information: "Initial Project Scoping", "Resource Maps", and "Impact Analysis", each with a brief description of the service.

U.S. Fish & Wildlife Service  
IPaC Information for Planning and Conservation  
Powered by ECOS - the Environmental Conservation Online System

IPaC is a project planning tool which streamlines the USFWS environmental review process

[GET STARTED](#)

[Need an updated spec?](#)

Integrate the environmental review process into your project design

Quickly and easily identify USFWS trust resources and suggested conservation measures for your project.

- Initial Project Scoping**  
See if any threatened or endangered species, critical habitat, migratory birds or other natural resources may be impacted
- Resource Maps**  
Explore the distribution of important biological resources, such as wetlands, National Wildlife Refuges, critical habitat,
- Impact Analysis**  
Provide information about your project and receive a list of conservation measures suggested by the U.S. Fish &



# IPaC

← → ↻ <https://ecos.fws.gov/ipac/gettingStarted/map> ☆ 📄 ☰

**IPaC** Information for Planning and Conservation U.S. Fish & Wildlife Service

**1** Find location

**2** Define area

**3** Confirm


Verify the area where project activities will occur

AREA: 11.52 acres

[CONTINUE](#)

[START OVER](#)

Map showing a blue-shaded polygon area on a topographic map. The map includes contour lines, roads (Dorton Branch Rd, Bryan Hill Rd W, Francis Rd, Arin St, Northside Dr, 59th St, Mary St, Smith Ln), and a lake. A 'Streets' layer is visible in the bottom left corner.

Layers  

powered by  
**esri**



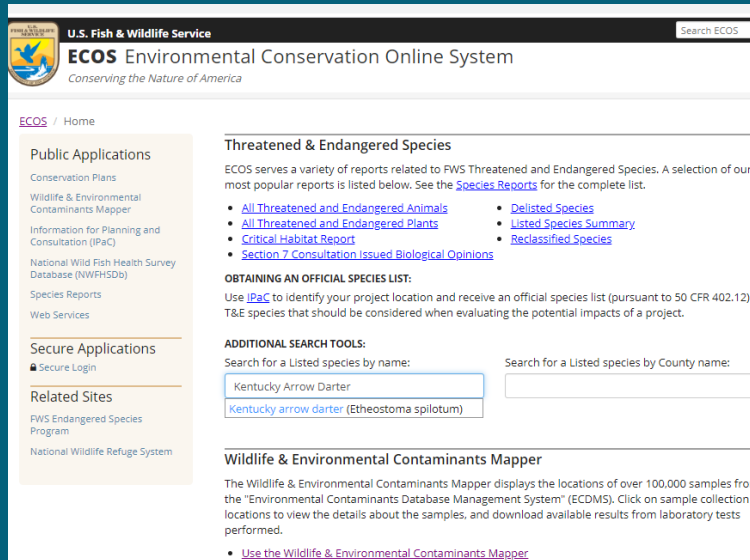


# IPaC -

The screenshot displays the IPaC (Information for Planning and Conservation) web application. The browser address bar shows the URL: <https://ecos.fws.gov/ipac/project/7XWNC.PB45FCB15BUXSF.H1STOQ/resources>. The page header includes "IPaC Information for Planning and Conservation" and "U.S. Fish & Wildlife Service". The main content area is titled "My project Bell County, Kentucky" and features a navigation menu with "OVERVIEW", "RESOURCES", "DESIGN", "IMPACT ANALYSIS", and "REGULATORY DOCUMENTS". A "SAVE" and "SHARE" button is also present. A central message states: "This project potentially impacts 24 resources managed or regulated by the U.S. Fish & Wildlife Service." Below this is an "EXPORT TRUST RESOURCE REPORT" button. Four resource categories are listed with icons and counts: "Endangered species" (3), "Migratory birds" (15), "Refuges & Hatcheries", and "Wetlands". The "Endangered species" section is expanded, showing a list of species. The first entry is "Cumberland Elktoe" (*Alasmidonta acropurpurea*), labeled as "Endangered". The second entry is "Fanshell" (*Cyprogenia stegaria*).



# ECOS - <https://ecos.fws.gov/>



U.S. Fish & Wildlife Service  
ECOS Environmental Conservation Online System  
Conserving the Nature of America

ECOS / Home

**Public Applications**

- Conservation Plans
- Wildlife & Environmental Contaminants Mapper
- Information for Planning and Consultation (IPaC)
- National Wild Fish Health Survey Database (NWFHSDb)
- Species Reports
- Web Services

**Secure Applications**

- Secure Login

**Related Sites**

- FWS Endangered Species Program
- National Wildlife Refuge System

**Threatened & Endangered Species**

ECOS serves a variety of reports related to FWS Threatened and Endangered Species. A selection of our most popular reports is listed below. See the [Species Reports](#) for the complete list.

- [All Threatened and Endangered Animals](#)
- [All Threatened and Endangered Plants](#)
- [Critical Habitat Report](#)
- [Section 7 Consultation Issued Biological Opinions](#)
- [Delisted Species](#)
- [Listed Species Summary](#)
- [Reclassified Species](#)

**OBTAINING AN OFFICIAL SPECIES LIST:**

Use [IPaC](#) to identify your project location and receive an official species list (pursuant to 50 CFR 402.12) T&E species that should be considered when evaluating the potential impacts of a project.

**ADDITIONAL SEARCH TOOLS:**

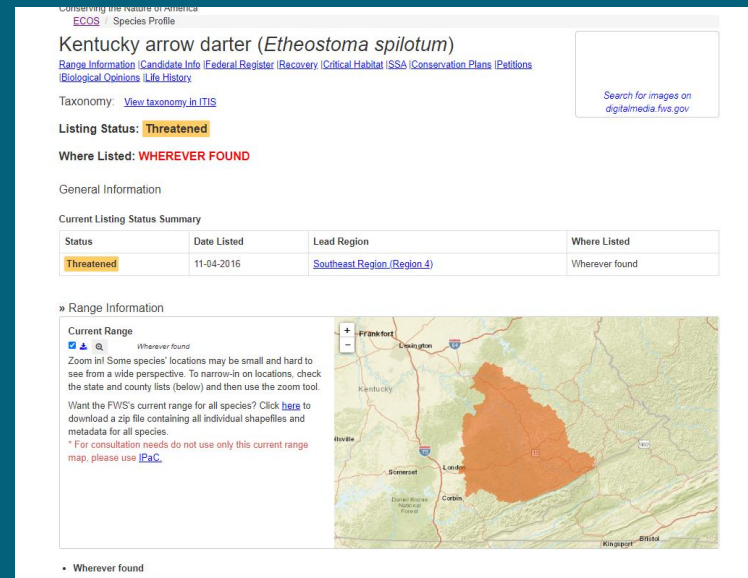
Search for a Listed species by name:   
Kentucky arrow darter (*Etheostoma spilotum*)

Search for a Listed species by County name:

**Wildlife & Environmental Contaminants Mapper**

The Wildlife & Environmental Contaminants Mapper displays the locations of over 100,000 samples from the "Environmental Contaminants Database Management System" (ECDMS). Click on sample collection locations to view the details about the samples, and download available results from laboratory tests performed.

- [Use the Wildlife & Environmental Contaminants Mapper](#)



Conserving the Nature of America  
ECOS Species Profile

## Kentucky arrow darter (*Etheostoma spilotum*)

[Range Information](#) | [Candidate Info](#) | [Federal Register](#) | [Recovery](#) | [Critical Habitat](#) | [ISSA](#) | [Conservation Plans](#) | [Petitions](#) | [Biological Opinions](#) | [Life History](#)

Taxonomy: [View taxonomy in ITIS](#)

**Listing Status:** **Threatened**

**Where Listed:** **WHEREVER FOUND**

General Information

**Current Listing Status Summary**

Status	Date Listed	Lead Region	Where Listed
Threatened	11-04-2016	<a href="#">Southeast Region (Region 4)</a>	Wherever found

**Range Information**

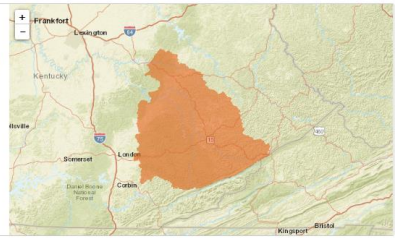
**Current Range**

[Wherever found](#)

Zoom In! Some species' locations may be small and hard to see from a wide perspective. To narrow-in on locations, check the state and county lists (below) and then use the zoom tool.

Want the FWS's current range for all species? [Click here](#) to download a zip file containing all individual shapefiles and metadata for all species.

\* For consultation needs do not use only this current range map, please use [IPaC](#).



• Wherever found



# Contact a Biologist

- Listing & Recovery
  - Aquatics: Dr. Michael Floyd
- Consultation
  - Jessi Miller, Carrie Allison
- Partners for Fish & Wildlife
  - Brent Harrel

Search			
Staff Listing			
Name	Function	Phone Number	E-Mail Address
Carrie Allison	Wildlife Biologist (consultation)	502-695-0468, ext 46103	<a href="mailto:carrie_allison@fws.gov">carrie_allison@fws.gov</a>
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# Regulatory Assistance

- If your project is likely to impact a federally – listed species, in a positive or negative manner, you should reach out to the USFWS – Kentucky Field Office to ensure compliance with the Endangered Species Act.
- Project information can be submitted via email to [KentuckyES@fws.gov](mailto:KentuckyES@fws.gov)



# Visit our Website



U.S. Fish & Wildlife Service

## Kentucky Ecological Services Field Station

Southeast Region

 Search

ES Finder

Service Finder

Office Finder

Contact Finder

Kentucky ES

Activity Highlights

Fact Sheet

Questions & Answers

Endangered Species

Consultation

Working with Bats in Kentucky

Federal Permits & Projects

Partners for Fish & Wildlife

GIS

Jr. Duck Stamp Info

Outreach and Education

Staff

Directions to our office

Links

Contact us

### Consultation

The Endangered Species Act (ESA) requires federal agencies to consult with the U.S. Fish and Wildlife Service (Service) on actions that have the potential to adversely affect federally listed species. The Service's Kentucky Field Office (KFO) typically receives over 1,000 pre-development consultation requests each year for a variety of different projects. We provide assistance to both federal and non-federal entities throughout the consultation and/or technical assistance process to ensure compliance with the Endangered Species Act. Federal agencies and project proponents are encouraged to coordinate with the Service early during project planning to identify listed species that may occur in the action area of the proposed project and measures that would avoid or minimize adverse effects to those species.



Credit: USFWS

To identify endangered, threatened, proposed, and candidate species and designated critical habitat that are known to occur or may potentially occur at a proposed project site, please visit the Service's [Information for Planning and Conservation \(IPaC\)](#) website which is a project planning tool to streamline the review process. After using IPaC to identify the species that may be present at your project site, you can request project-specific assistance from the KFO in addressing potential impacts to species that may be present to ensure that your project is in compliance with the ESA. Please follow this [outline](#) as you prepare your correspondence to ensure that your request contains all of the information that is required for us to adequately review your project.

### Emergency Consultation

Occasionally, federal agencies must respond to emergency situations where human life and property are in danger. It is the U.S. Fish and Wildlife Service's policy to assist federal agencies with their ESA compliance issues during an emergency response, but to never delay the necessary response to secure human life and property.

For more information on emergency consultations, please visit the [emergency consultation page](#).



# Information to Include

## How to Submit a Project for Pre-development Consultation

Please include a cover letter with your correspondence that indicates that you are submitting a project for our review to ensure that the proposed project would be in full compliance with the Endangered Species Act. It is helpful if you explicitly request an action from us (e.g., technical assistance to determine the potential for impacts to listed species, concurrence with your determinations). We generally respond to requests within 30 days.

Your correspondence should be mailed to: Mr. Lee Andrews  
Field Supervisor  
U.S. Fish & Wildlife Service  
Kentucky Ecological Services  
330 West Broadway, Rm 265  
Frankfort, Kentucky 40601

If your correspondence is less than 10 pages, you can email it in a PDF file to [KentuckyES@fws.gov](mailto:KentuckyES@fws.gov).

### Describe the proposed project

The level of detail for adequate project descriptions will vary depending on the complexity of the project. For example, describing the placement and construction of a building on a vacant lot may be relatively simple while describing a proposed water supply improvements project that includes installation of several miles of water line, associated water tanks, and pump stations may be more detailed and complex. Your project description should include the following:

- The purpose of the proposed project.
- The GPS coordinates, in decimal degrees, of the location of the project and a map showing the extent of the proposed project area (polygon or line).
- A description of the habitat in the project proposed area (e.g., open field, forest, previously disturbed right-of-way, streams, caves, rock shelters, abandoned mine portals, etc.). Consider the entire "action area" of the proposed project by including all areas that may be affected directly or indirectly by the project. For example, a pipeline crossing a stream has a project footprint confined to the pipeline corridor, however, the "action area" would be the project footprint plus all of the aquatic habitat downstream of the crossing that would be influenced by sediment discharged during the construction of the project.
- Include information about all of the components associated with the proposed project, including interrelated actions that are part of a larger action and depend on the larger action for their justification, interdependent actions that have no independent utility apart from the action under consideration, and future actions that are reasonably certain to occur as a result of the proposed project. Examples include: a water line that would be connected to a proposed water tank, an access road for a proposed telecommunications tower, a utilities line to serve a proposed development, and a future development that is reasonable certain to occur in response to a new road.
- Describe how the project proponent plans to carry out the project (e.g., bulldozer, heavy equipment, tools, tree removal, etc.).
- Photographs are helpful.

### Identify federally-protected species and critical habitat

Identify all of the federally-listed species and critical habitat that may be affected by the proposed project. If you have not already done so, we recommend that you obtain a species list for the action area of the proposed project by visiting the following site: <https://ecos.fws.gov/ipac/>. The information provided at this site will also include species-specific recommendations to consider as you design your project.

### Effects Analysis

Describe how the proposed project may impact federally-listed species. Include:

- Direct effects – "Direct effects" are the effects that occur at the time of construction activities.
- Indirect effects – "Indirect effects" are the effects that would occur later in time from the project construction, but would be reasonably likely to occur.
- Cumulative effects - "Cumulative effects" are those effects on listed species or critical habitat that result from future activities and/or projects that are induced by the proposed project subject to consultation and that occur after that project is completed (i.e., water tanks, subdivisions, commercial development) that would reasonably occur as a result of the proposed project.

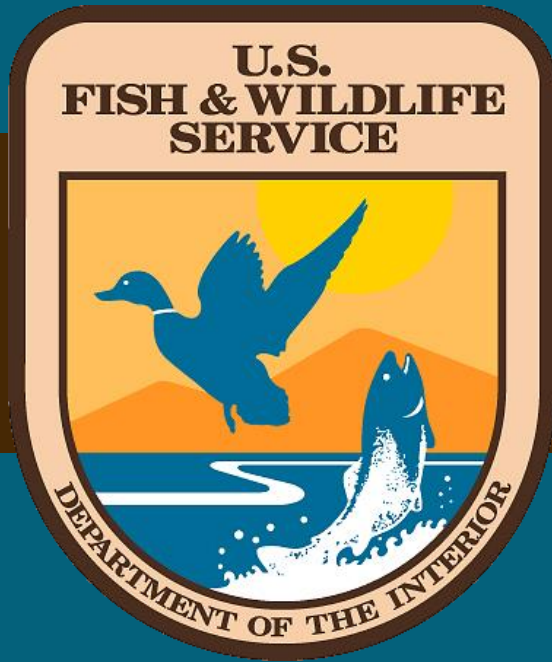
### Determinations

The Federal action agency should make a determination for each of the federally-listed species or designated critical habitat that could potentially be affected by the proposed project. This conclusion should be supported by the effects analysis. One of the three following determinations should be applied to each species:

- "No effect" means that there will be no impacts, positive or negative, to listed species and critical habitat. This determination is usually not appropriate if suitable habitat is present. No concurrence from the U.S. Fish and Wildlife Service (Service) is required for "no effect" determinations.
- "May affect - not likely to adversely affect" means that all effects to listed species are insignificant, discountable, and/or beneficial. Insignificant effects relate to the size of the impact and include those effects that are not measurable. Discountable effects are effects that are extremely unlikely to occur. The Service will review the information supporting the determination and either concur or not concur with the determination.
- "May affect - likely to adversely affect" means that listed species and/or designated critical habitat are likely to be significantly adversely affected by the proposed project. Adverse effects can be in the form of habitat loss and/or habitat alteration; however, adverse effects also come in other forms based on the species, its life history, and the effects from the action. This determination will result in formal consultation. Before making this determination, we recommend further informal consultation with the Service to explore additional actions or modifications to the proposed project that could lessen effects on federally-listed species.







# Funding Opportunities

# Partners for Fish and Wildlife

- Project proposals, are usually developed by the PFW biologist 1-2 years in advance.
- These proposals compete for regional funding, and focus on benefitting listed and at risk species





# Funding Opportunities

- Partners for Fish and Wildlife
  - Per project funding cap of \$25,000
  - Intended to leverage other funding not be sole source
  - Currently working on aquatic projects in the following watersheds
    - Licking
    - Upper Cumberland
    - Green



# Funding Opportunities (cont.)

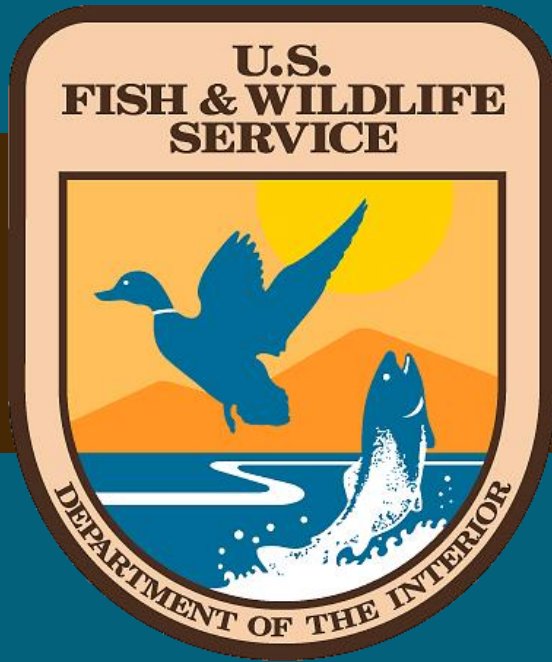
- Discretionary Funding
  - Projects need to address priorities
  - Projects need to be “shovel ready”
  - Best to have a draft scope of work on the shelf
  - Identified funding recipient



# Recap

- The work of the Kentucky Ecological Services Field Office is largely focused on the conservation and recovery of listed and at-risk species
- We are available to provide technical and/or regulatory assistance on projects that have the potential to impact (+/-) these species.
- In limited situations, we may have funding available to support projects with direct conservation benefits to these species.





QUESTIONS?