

# Alligator Snapping Turtle Proposed Listing and 4(d) Rule

*Welcome! The meeting will begin momentarily. Thank you for your patience as we wait for others to join.*

*\*Please join using computer audio*

*\*Closed captioning is available by selecting the Closed Caption icon at the bottom of your Zoom screen*



*U.S. Fish and Wildlife Service – December 7, 2021*





# Meeting Agenda

- Meeting Ground Rules
- USFWS Presentation
- Question and Answer Session
- Public Hearing Portion
- Closing Remarks



# Meeting Ground Rules



1. The meeting is being recorded; and will be posted to the USFWS website.
2. Microphones and videos of participants will be automatically muted for the duration of the meeting unless the moderator unmutes you during the Question-and-Answer session or verbal public hearing portion.
3. Questions will be addressed during the Question-and-Answer session at the end of the PowerPoint presentation.
4. Verbal public comments can be provided after the Question-and-Answer session. Written comments can also be submitted at <http://www.regulations.gov> (In the Search box, enter FWS-R4-ES-2021-0115).

# What Action Is Being Proposed?



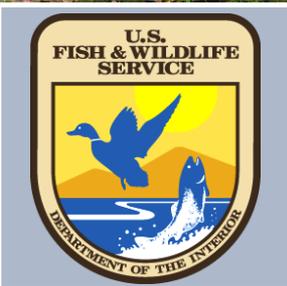
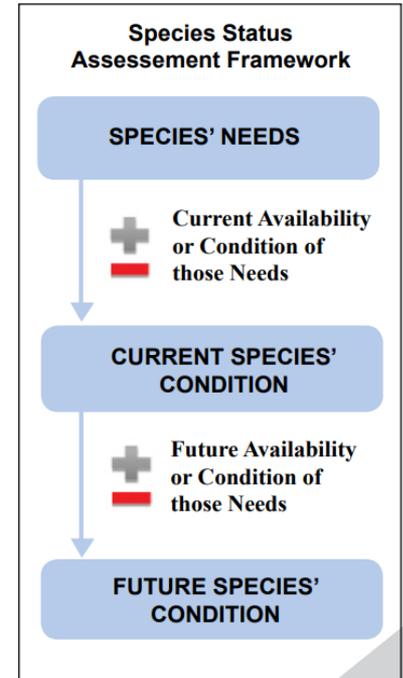
- On November 9, 2021, we proposed to list the alligator snapping turtle as a threatened species with a 4(d) rule.
- A Public Comment period is currently open through January 10, 2022.
  - *Please submit comments via the upcoming public hearing, electronically online, or in-writing.*
- A final listing and 4(d) rule is due November 9, 2022.



# Species Status Assessment Framework

An SSA is a focused, repeatable, and rigorous assessment of a species' ability to maintain self-sustaining populations over time. This assessment is based on the best available scientific and commercial information regarding life history, biology, and consideration of current and future vulnerabilities.

The SSA describes the species' current and future viability using the terms: “resiliency” of populations, and the “redundancy” and “representation” of the populations across entire range of a species.



# Large Freshwater Snapping Turtles



Common Snapping Turtle, *Chelydra serpentina*  
Photo credit: David Castellanos, USFWS



Suwannee Alligator Snapping Turtle, *Macrochelys suwanniensis*  
Photo credit: Chris Coppola, USFWS



Alligator Snapping Turtle, *Macrochelys temminckii*  
Photo credit: Eva Kwiatek



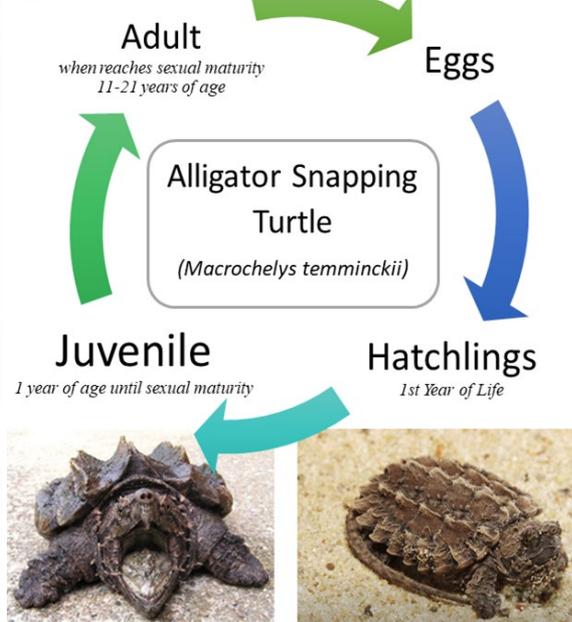
# Alligator Snapping Turtle Information



- Largest freshwater turtle in North America
- Secretive and highly aquatic
- Large head and long tail
- Strong jaws with hooked beak
- Webbed toes with long claws
- Three rows of spiked scutes
- Carapace dark brown
- Plastron significantly smaller than carapace
- Plastron is cross-shaped
- Eyes positioned on side of the head
- Hatchlings similar in appearance



# Life Cycle and Reproduction



- Age of sexual maturity:
  - 11-21 years for males
  - 13-21 for females
- Nesting:
  - One clutch per year; may skip a year
  - Clutch sizes around 30;
  - Incubation 105-121 days and nesting April to July (varies by latitude);
  - Nests 8-656 feet from nearest water;
  - Time to emergence up to 22 days
  - Temperature-dependent Sex Determination (TSD-2) Species – more males produced intermediate incubation periods and more females at the two extremes
- Generation Time: ~31 years
- Lifespan: ~70+ years



# Alligator Snapping Turtle Range

## Range includes:

1. Alabama
2. Arkansas
3. Florida
4. Georgia
5. Illinois
6. Indiana
7. Kansas
8. Kentucky
9. Louisiana
10. Mississippi
11. Missouri
12. Oklahoma
13. Tennessee
14. Texas





# Threats

- Predation (both native and non-native predators)
- Bycatch: Hook ingestion (internal) due to swallowing and bycatch from other targeted species
- Bycatch: Incidental hooking (external), hook or line entanglement from recreational fishing
- Bycatch: Entanglement and drowning from commercial fishing bycatch (for other targeted species) - hoopnets
- Legal harvest (**Commercial [historic]** and Recreational [LA and MS])
- Illegal collection/poaching

## Additional Stressors:

Habitat degradation and loss (aquatic and terrestrial)

Disease

Human persecution (gunshot)

Vehicle collisions (road, railway crossings, and boats)

Climate Change Effects (drought, floods, extreme temperatures, water withdrawal, SLR)

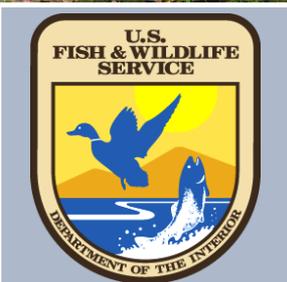
Invasive species

Human disturbance (herp enthusiasts, public

Interactions and harassment)



# Conservation Status by State



State	State Status
Alabama	Species of Concern
Arkansas	It is unlawful to kill, take, attempt to take, or possess alligator snapping turtles, their eggs, or other parts from the wild. Alligator Snapping Turtle Breeder/Dealer permit is required to possess, buy, sell, or offer to sell the species or its eggs.
Florida	Threatened
Georgia	Threatened
Illinois	Endangered
Indiana	Endangered
Kansas	Species in Need of Conservation (SINC)
Kentucky	Threatened
Louisiana	Species of Conservation Concern Recreational Harvest Allowed: No size limit. Take is limited to no more than one snapping turtle per day, per person, per vehicle/vessel; Fishing License required
Missouri	Imperiled Species
Mississippi	Recreational Harvest Allowed: A person can only possess and harvest ONE Alligator Snapping Turtle with a minimum top shell length (carapace) of 24 inches or greater per license year.
Oklahoma	Tier I, Species of Greatest Conservation Need
Tennessee	Rare to Very Rare and Imperiled
Texas	Threatened

# Conservation Actions



## ***Captive Propagation / Reintroduction:***

- Captive rearing and head-start programs are ongoing at Tishomingo (Oklahoma) National Fish Hatchery.
- Nashville Zoo's Alligator Snapping Turtle Headstart and Release program was initiated in 2016 when the Zoo received a four-year grant to collect eggs and then grow the turtles for 3-4 years to a size that will increase change of survival when released. Once the turtles are large enough, they are transferred back to the Tennessee Wildlife Resource Agency for release.
- The State of Illinois is reintroducing Alligator Snapping Turtles to strategic watersheds.
- Repatriation of confiscated, poached turtles (Texas-June 22, 2021)

## ***BMPs / Watershed Protection:***

- Missouri implements BMPs for Construction and Development Projects to minimize impacts to AST.
- The species occurs on several military installations (16+) and other Federal lands.

## ***Outreach / Education:***

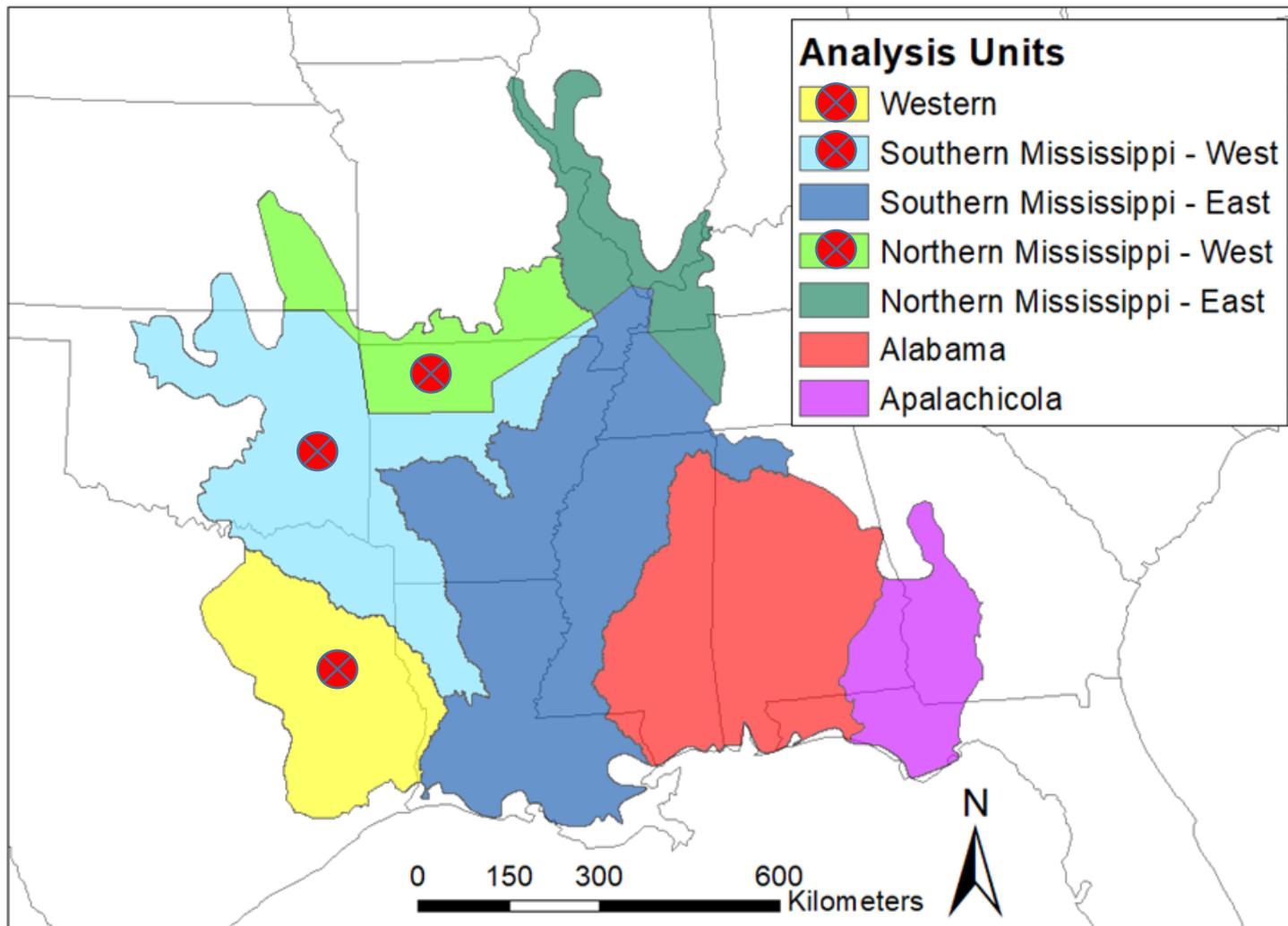
- Public outreach is implemented to help aid in identifying the species and educate the public about aquatic turtle conservation.

## ***CITES:***

- *Macrochelys temminckii* is a CITES, Appendix III species since 2006 which requires reporting of exported turtles.



# Analysis Units





# Current Condition

## RESILIENCY:

The estimates per analysis unit range from 200,000 to 212.5 turtles. The most likely estimate of range-wide abundance is 361,213 turtles, with 55% of those occurring in the Alabama Analysis Unit.



## REPRESENTATION:

No representative units have been lost compared to the historical distribution despite some range restrictions.



## REDUNDANCY:

While the distribution of the species still encompasses much of its historical range, resilience within that range has decreased, largely from historical harvest pressures. The species still occurs in all historically known states, except for Indiana and Kansas, where its persistence is unconfirmed.





# Future Condition



## **RESILIENCY:**

For all six scenarios modeled, resilience is expected to decline drastically for all analysis units.



## **REPRESENTATION:**

As resilience decreases across all analysis units, representation is also expected to decline rapidly. Losses to genetic diversity, life history diversity, and finer scale difference among drainages are also expected.



## **REDUNDANCY:**

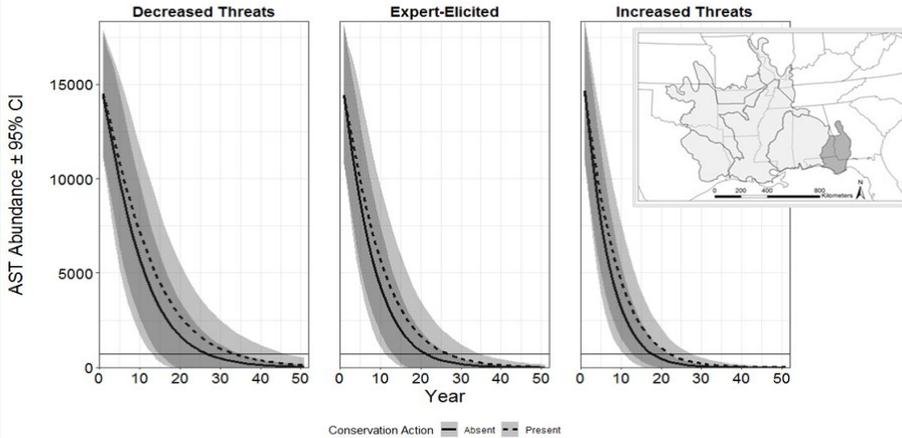
As both resilience and representation decline across all analysis units, redundancy is also expected to decline. Where turtles persist in the future, they are likely to be rare and not found in resilient groupings.



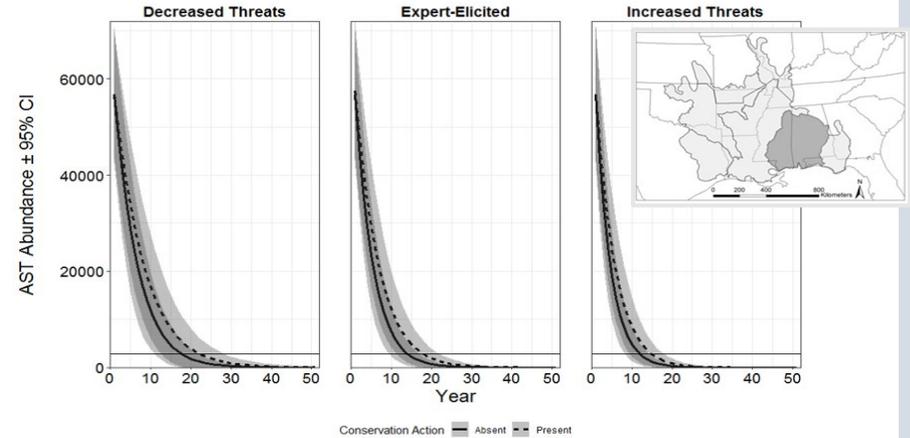
# Future Condition Graphs

(Projected out 50 years)

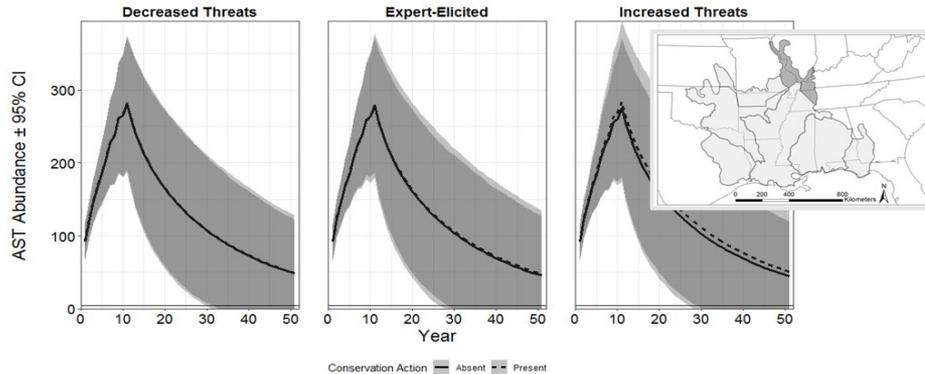
## Apalachicola



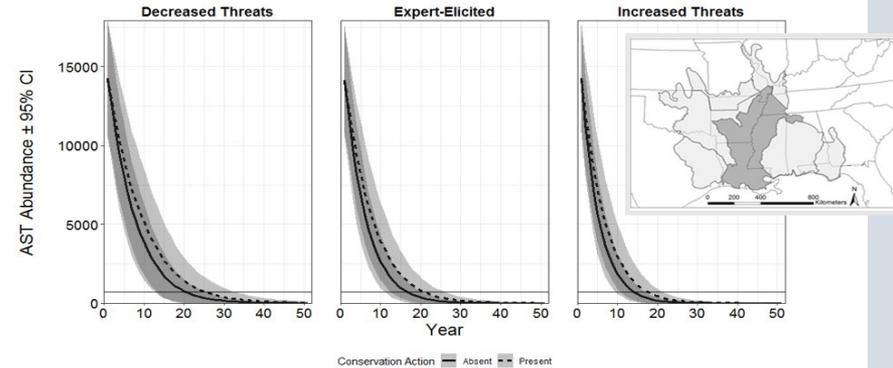
## Alabama



## Northern Mississippi- East



## Southern Mississippi- East



(dotted line with conservation actions and solid line without conservation actions)

# What Does Threatened with a 4(d) Rule Mean?

- The Endangered Species Act (Act) defines a “threatened species” as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- Federal agencies are required to consult with the USFWS before they authorize, carry out, or fund any activity that may impact a listed species.
- The provisions of the proposed 4(d) rule would promote conservation of the alligator snapping turtle by prohibiting harvest and encouraging implementation of best management practices for activities in freshwater wetlands and riparian areas to minimize habitat alteration to the maximum extent practicable.





# What is a 4(d) Rule?

- 4(d) rules provide for the conservation of a threatened species by tailoring protections to those needed to prevent further decline and facilitate recovery.
  1. First, we use these rules to incentivize proactive conservation efforts, by streamlining ESA compliance for actions that have long-term benefits but might result in "take" in the short term.
  2. Secondly, we often use 4(d) rules to streamline Endangered Species Act compliance for actions that result in low levels of take but do not threaten a species' continued existence.
- This approach focuses our attention on the threats that individually or cumulatively make a difference to the species' recovery. The exact requirements depend on the species' biology, conservation needs, and threats affecting the species.
- 4(d) rules can help maintain and improve threatened species status to help prevent further declines while simultaneously reducing undue regulatory burden.





# Proposed 4(d) Rule

## Prohibitions with Exceptions



### **All prohibitions that apply to endangered species with exceptions**

#### *Additional General Exceptions*

1. Federal and State captive-breeding/headstart programs
2. Farming of alligator snapping turtles
3. Tribal activities
4. State-licensed wildlife rehabilitation facilities

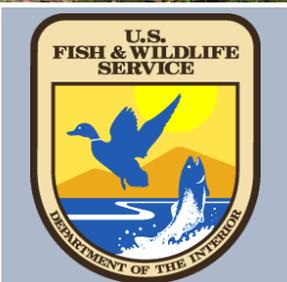


### **Take incidental to an otherwise lawful activity caused by:**

1. Construction, operation, and maintenance activities that occur near- and in-stream
2. Pesticide and herbicide application that follow the chemical label and appropriate application rates.
3. Silviculture practices and forest management activities that use BMPs.
4. Maintenance dredging activities that remain in the previously disturbed portion of the maintained channel.



### **Reporting Requirements**





# Critical Habitat



Section 4(a)(3) of the Endangered Species Act and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species.



The Service has determined that the designation of critical habitat may be prudent for the alligator snapping turtle; however, we find that designation of critical habitat is not determinable at this time.



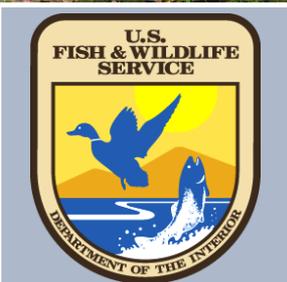
The Endangered Species Act allows the Service an additional year to publish a critical habitat designation that is not determinable at the time of listing.





# Information Needed

- Species biology, ecology, life history, pop trends
- Distribution, also spatial distribution as they pertain to threats
- Threats related to recreational or commercial fishing (e.g., fishing gear and tackle)
- Magnitude of poaching/collection
- Nest predation
- Conservation measures
- Tribal use, cultural significance
- Info about turtle exclusion devices and other fishing technologies that could reduce bycatch
- Info about the proposed exceptions in the 4(d) Rule
- Risk and benefits of Critical Habitat





# Summary



- The Service is proposing to list the alligator snapping turtle, *Macrochelys temminckii*, as a threatened species under the Endangered Species Act.
- The proposed listing includes a 4(d) rule that would prohibit harvest and promote the conservation of the species.
- The Service is requesting any additional information from the public regarding the species life history, distribution, threats, conservation measures, Tribal use, devices and technology to reduce bycatch, the proposed exceptions in the 4(d) rule, and the risks and benefits of critical habitat.





# Submitting Comments

## ***Comments accepted through January 10, 2022***

- *Orally:* Oral comments will be received during the public hearing, which starts at **7:30 CST**.
- *In writing electronically:* Go to the Federal eRulemaking Portal: <http://www.regulations.gov>.  
In the Search box, enter FWS-R4-ES-2021-0115  
Click on “Comment”
- *By hard copy:* Submit by U.S. mail:  
Public Comments Processing  
Attn: FWS-R4-ES-2021-0115  
U.S. Fish and Wildlife Service  
MS: PRB/3W  
5275 Leesburg Pike  
Falls Church, VA 22041-3803

We will accept comments received or postmarked on or before **January 10, 2022**. Comments submitted electronically must be received by **11:59 p.m. Eastern Time on January 10, 2022**.



# Photo Credits



Photo by Brian Broom,  
Mississippi Clarion  
Ledger, July 15, 2020



Photo by Kevin Enge, Florida  
Fish and Wildlife Commission



Photo by Bradly  
O'Hanlon, Florida Fish and  
Wildlife Commission



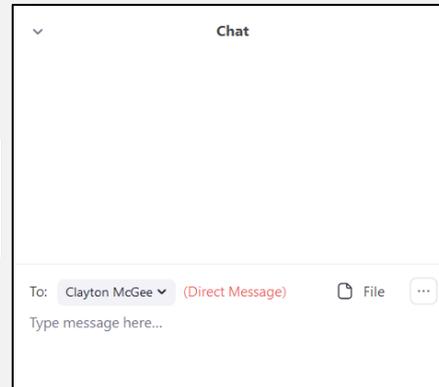
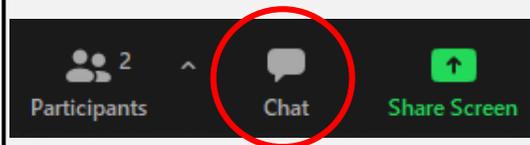
Photo by Bradly  
O'Hanlon, Florida Fish and  
Wildlife Commission

# Question-and-Answer Session: Instructions



## Using the Zoom Web Platform or App

- Click on the “chat” icon at the bottom of your Zoom screen to write and send your question to the host of the meeting ([Clayton McGee](#)).



- The moderator will read questions aloud for all participants to hear and a USFWS staff member will respond to questions aloud.
- We will try to answer questions in the order they are received.



## Using Your Phone

- Press \*9 to “raise your hand” to let staff know you have a question. The moderator will then unmute you so that you can ask your question.
- You can unmute yourself by pressing \*6 on your phone keypad.
- You will be identified by the last four digits of your phone number.



# Verbal Public Hearing: Ground Rules

- The USFWS wants to hear from all members of the public. We will be using the following guidelines:
  - *Be mindful of the length of your comment, so that everyone can speak*
  - *Please be respectful of others*
  - *Refrain from profanity*
- If guidelines are not followed, your microphone will be muted, and we will move to the next person.





# Verbal Public Hearing: Instructions for Commenters

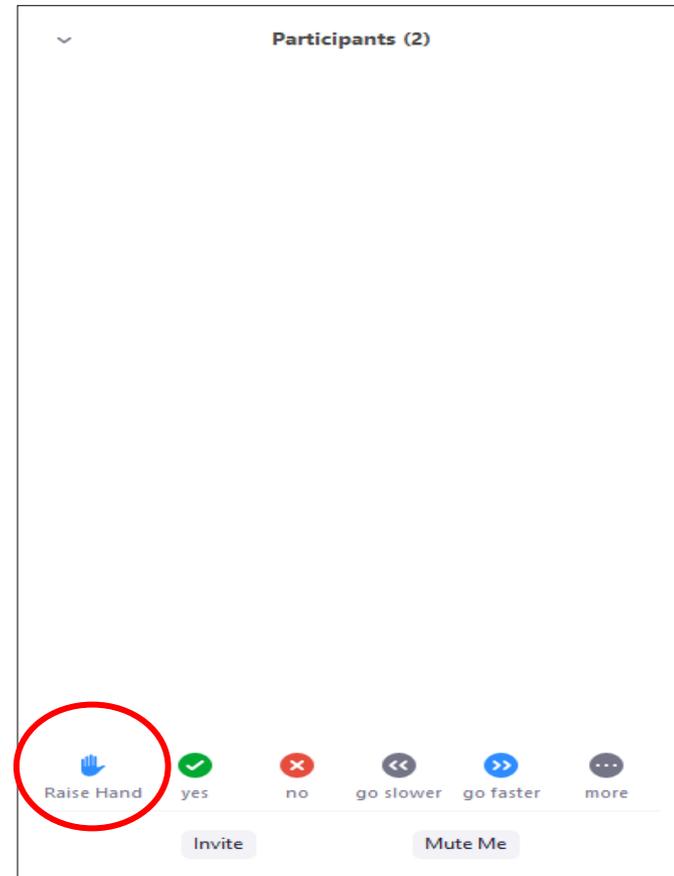
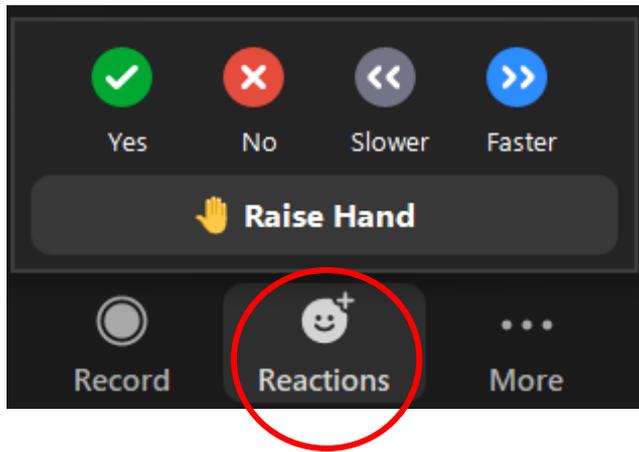
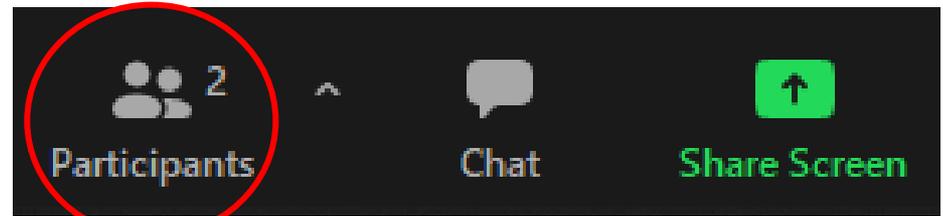
- Verbal public comments will be accepted in order of registration.
- When it is your turn, the moderator will call out your name and display your name on the screen.
- Use the “raise hand” feature at the bottom of your participants list or, if you are calling in through the phone, press **\*9** to “raise your hand.”
- The moderator will then unmute you.
- Please spell out your full first and last name for the record before you provide your comment.
- Your comment will be included in the project record



# Participating Using Zoom

Zoom Participants Icon

Zoom Reactions Icon



To access the raise hand feature, click on the participants list icon at the bottom of your Zoom screen, then click on the raise hand button at the bottom of your participants list. If you are calling in using your phone, press **\*9** on your keypad.

If you are having issues with your computer microphone, please dial in to the meeting: **Phone:** 346 248 7799; **Meeting ID:** 845 7149 9098

**Current Commenter:**

**Next Commenter:**

\*If you are unable to offer or complete your verbal public comment during the meeting today, the USFWS encourages you to submit your comment in writing at <http://www.regulations.gov> (In the Search box, enter FWS-R4-ES-2021-0115).



# Thank you!

The USFWS is available to accept verbal public comments until **8:30pm Central Time.**

*If you would like to offer a verbal public comment, please let us know by accessing the raise hand feature at the bottom of your participants list, in your Zoom reactions icon, or by pressing \*9 on your phone keypad. You can also chat directly to Clayton McGee.*

Written comments can also be submitted at <http://www.regulations.gov> (In the Search box, enter FWS-R4-ES-2021-0115) **on or before January 10, 2022.**

