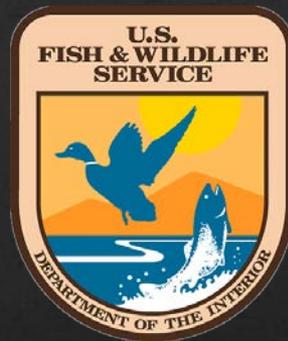


Public Hearing for the Proposed Rule to List Sharpnose and Smalleye Shiners

Department of the Interior
U.S. Fish and Wildlife Service



September 4, 2013

Sharpnose and Smalleye Shiner Biology



Sharpnose Shiner



Smalleye Shiner

- Minnows native to nearly the entire Brazos River
- Broadcast-spawners - spawn eggs and sperm into flowing water where fertilization & development occur
- Developing early life stages require flowing water to remain afloat and alive
- Live <3 years, most survive only one breeding season (April-Sept)
- Cannot successfully reproduce and are outcompeted or predated upon by larger fish in lakes

What action is the FWS taking?

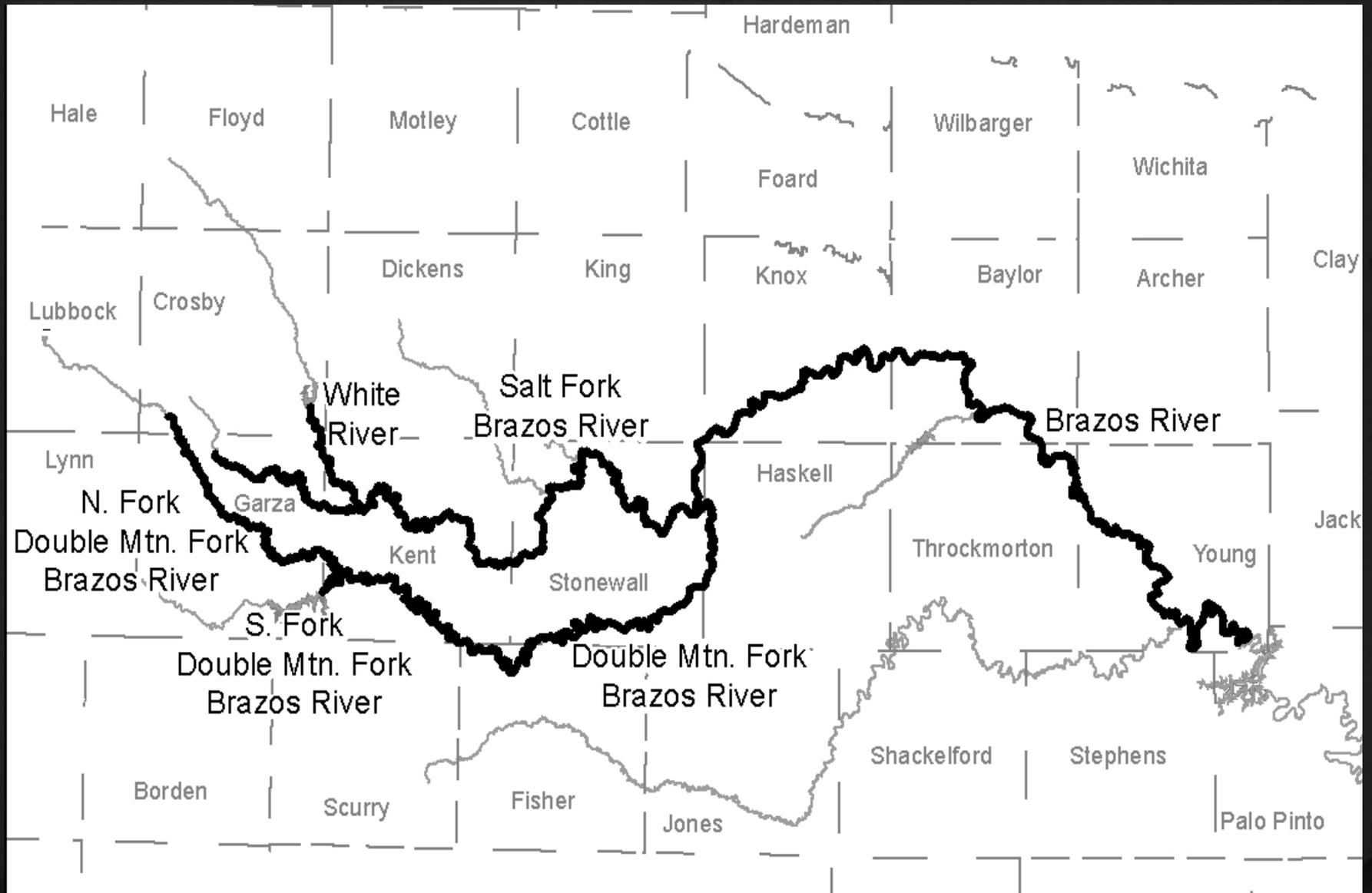
Sharpnose and Smalleye shiners have been candidates for listing under the Endangered Species Act since 2002

FWS is proposing to list the sharpnose shiner and smalleye shiner as endangered

FWS is proposing to designate Critical Habitat:

- 623 river miles of the upper Brazos River basin in Baylor, Crosby, Fisher, Garza, Haskell, Kent, King, Knox, Stonewall, Throckmorton, and Young Counties, Texas
- A 30-m (98-ft) lateral extent beyond the bankfull width of the active channel along all 623 river miles

Critical Habitat



ESA Shiner Listing Process

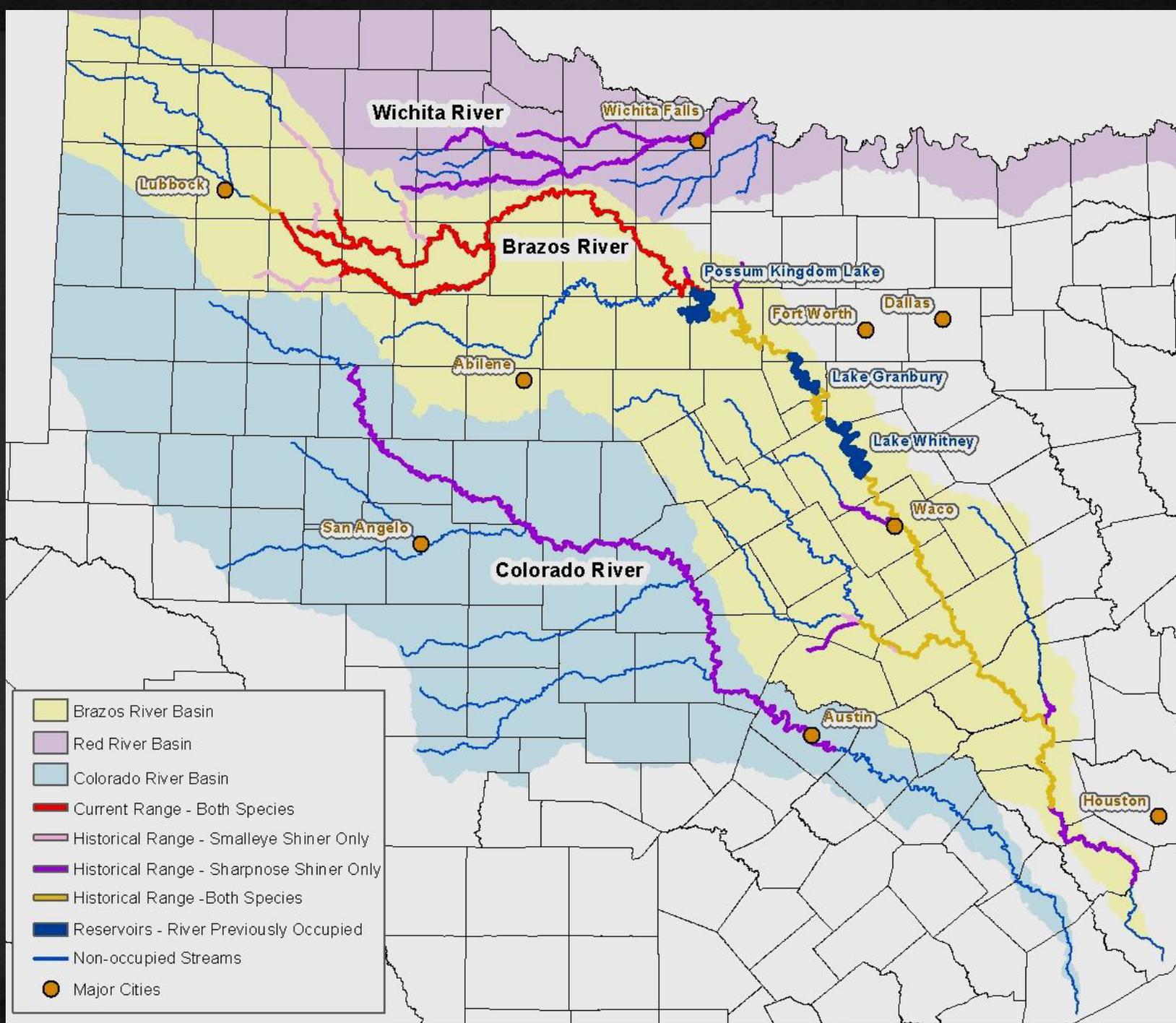
- August 6, 2013 – Proposed Rules published
- 60-day public comment period (Closes October 7, 2013)
- Draft Economic Analysis for Critical Habitat
(with 2nd comment period later)
- Final determinations due by August 6, 2014

Why Endangered?

What are the shiner species lacking?

- Adequate unfragmented river habitat
 - Require an estimated ~171 miles of unfragmented, flowing river for reproduction
 - Habitat is fragmented by impoundments and in-channel structures
 - Proposed development of additional fish migration barriers
 - Species are currently restricted to the Brazos River basin upstream of Possum Kingdom Lake

Shiner Ranges



Why Endangered?

- Adequate water quantity (river flow)
 - Average spawning season river flows required to support reproductive development
 - Sharpnose shiners: 92 cubic feet per second (cfs)
 - Smalleye shiners : 227 cfs
 - Most reproduction occurs during high flow pulses
 - Drought, groundwater withdrawal, saltcedar encroachment, and upstream reservoirs act together to reduce surface water flows

Why Endangered?

- Adequate water quality

The upper Brazos River is occasionally impacted by:

- Petroleum contamination
- Golden alga blooms, and
- Low dissolved oxygen, increased temperatures, and increased salinities during drought-induced river pooling

Why Endangered?

- Commercial harvesting as bait fish
 - It is currently legal to harvest sharpnose and smalleye shiners for use as bait
 - It is unclear to what extent commercial harvesting has historically impacted, or is currently impacting these species

Critical Habitat

Designating critical habitat must be considered under the Endangered Species Act and is useful in guiding Federal agencies toward species recovery

Critical Habitat IS NOT:

- A refuge or sanctuary for listed species
- Relevant to private landowners unless there is a Federal permit/action affecting their property

Peer Review and Public Comments

- Public comments accepted until **October 7, 2013**.
- The proposed rules and species status assessment (SSA) are currently being peer reviewed by four independent scientists
- Where can I find the proposed rule, CH designation, and SSA to review them?
 - <http://www.regulations.gov>
Docket No. FWS-R2-ES-2013-0083
Docket No. FWS-R2-ES-2013-0008
 - <http://www.fws.gov/southwest/es/ArlingtonTexas/shiner.htm>

Submitting Public Comments

Submit comments in writing in one of the following methods:

- 1) Electronically <http://www.regulations.gov>. Search for Docket No. FWS-R2-ES-2013-0083 or FWS-R2-ES-2013-0008. You may submit a comment by clicking on “Comment Now!”
- 2) By hard copy U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS-R2-ES-2012-0083; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

Brief Questions Period

(Please note: we are unable to answer questions during the hearing portion of the meeting)



Sharpnose and smalleye shiner habitat – Brazos River main stem

FWS photo
February 12, 2013