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DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES PROGRAM**

TELEPHONIC INTERVIEW TIME (09:48)

**CONCHO WATER SNAKE (HOST – ANN HAAS WITH ADAM ZERRENNER, ANDY
GLUESENKAMP, AND LESLIE GRAY)**

This transcript was produced from audio provided by FWS Endangered Species Program

P R O C E E D I N G S

(Music plays.)

MS. HAAS: Hi, this is Ann Haas, for the Fish and Wildlife Service, talking today with Adam Zerrenner, who is the Field Supervisor for the Fish and Wildlife Services, Austin, Texas Ecological Services Office, Andy Gluesenkamp, who is the State Herpetologist for the Texas Parks and Wildlife Department, and Leslie Gray, who is the Public Affairs Office for the Fish and Wildlife Service in Texas. We're talking about the delisting of the Concho water snake today, and its removal from protection under the Endangered Species Act. Andy, will you tell us about this species, where it lives and what caused it to be listed as threatened?

MR. GLUESENKAMP: Well, the Concho water snake is known from the Colorado and Concho Rivers in North Central Texas, that's range encompasses a span of about ten counties. The concern for this species at the time of listing, had to do primarily with some large dam-building projects, and the specific concern was that by the creation of reservoirs in an area that formerly had ripple habitat, that that would obliterate snake habitat, and also further isolate the populations upstream and downstream of these reservoirs.

What decades of monitoring have shown us, is that the snakes will occupy some habitat along the shoreline of these reservoirs. And so the construction of these dams was not necessarily the death knell that was expected.

MS HAAS: And so what have partners done to help ensure that the Concho water snake will endure into the future?

MR. ZERRENNER: The principal players or partners involved in the Concho water snake's recovery have been the Colorado River Municipal Water District, along with the Texas Department of Parks and Wildlife. The Colorado River Municipal Water District and the Fish and Wildlife Service entered into a memorandum of understanding several years ago, where the water district agreed to do a number of conservation measures, even after the species could potentially be delisted, that would benefit the snake. So this recovery really speaks to working with local water districts and also Texas Parks and Wildlife, who delisted the Concho water snake prior to the Fish and Wildlife Service.

MS HAAS: Tell us about Tamarisk and how that affects the supply of water.

MR. GLUESENKAMP: Tamarisk, also known as saltcedars, an invasive exotic plant, it establishes readily in riparian areas, and it out-competes native plants. As a result, tamarisk can completely overwhelm stream site habitats. In addition, this species draws tremendous volumes of water through evapo-transpiration, and it can literally suck streams and rivers dry. In addition to that, it leaves the soils with a very high concentration of salt, making it difficult for other plants to establish themselves. For these reasons, removal of tamarisk is a very important component of habitat recovery.

MS HAAS: And how do we remove it?

MR. GLUESENKAMP: Removal of tamarisk is usually by mechanical means. There has been some research into using some prominent herbicides, in association with mechanical methods, but primarily it's a blood, sweat, and tears effort.

MS HAAS: I want to get back to the Concho water snake for a minute, in terms of what it eats and what are its predators. Does it hibernate?

MR. GLUESENKAMP: The Concho water snake is known to over-winter in rock ledges and debris piles, but more interesting is their use of crayfish burrows as hibernacula. In fact, these hibernacula may be occupied by multiple individual Concho water snakes, in addition to other species of snakes. The Concho water snake is a non-venomous fish eater. They prey primarily on non-game species, things like minnows and small sunfish. Oftentimes, they feed in shallows where they can corral small fish with their body. It makes it easier for them to catch them.

They actually use their body to make a barrier, so prey can't escape. Common predators include king snakes, coachwhips, racers and cottonmouths, in addition to birds, such as owls, hawks and herons, and of course ubiquitous raccoons, bullfrogs, bass and catfish. However, the primary predator of this species is likely the great blue heron. Large numbers of snake remains have been found below great blue heron

rookeries, and given their hunting practices, that's one species that's usually in the right place and the right time, to prey on a water snake.

MS. HAAS: That's a pretty big list of predators.

MR. GLUESENKAMP: It is. It's not a very big snake, so they've got a lot of bigger predators out there.

MS. HAAS: Why should we care about the Concho water snake?

MR. GLUESENKAMP: It's a hard road to hoe, getting folks to care about a little brown snake, let alone a secretive snake like the Concho water snake. However, we can be proud about the Concho water snake. It's one of only three snake species endemic to Texas. That means it occurs in Texas and nowhere else on earth. That's something that Texans can be proud of, and this species depends on many of the same things that other, more charismatic species rely on.

Their preferred habitat is negatively affected by erosion, which leads to siltation of rivers and streams; water diversion, which reduced quality and quantity of habitat; and also, poor water quality, which can be caused by non-point source pollution and runoff. They also need an adequate and reliable supply of water of good quality for their survival. So protecting the Concho water snake is the proxy for protection of our rivers and streams, and the quality of life that goes along with it.

MS HAAS: What is next with this species then?

MR. ZERRENNER: The Fish and Wildlife Service is working very closely with Texas Parks and Wildlife right now on the Post-Delisting Monitoring Plan, and Post Delisting Monitoring Plans go into place for all species that are delisted from the Endangered Species Act. And what this will allow is for the service and the state to work together in partnership, to ensure that the snake continues to be safe.

MS. GRAY: As part of the delisting, we're also removing the critical habitat. Critical habitat was designated in 1989.

MS. HAAS: So this is a celebration for all of us.

MR. GLUESENKAMP: Yeah, this is really something to be excited about. It's not easy to recover a species and remove it from the Endangered Species Act. The Concho water snake has been listed since 1986, so there has been so many people that have been involved in working together over the years to recover the species. So really, the success is tribute to many people, many partners, both with the Fish and Wildlife Service, with water districts, federal agencies, Texas Parks and Wildlife, other state agencies, universities and others. And it really is working in partnership to make sure that the species is around for future generations.

The other thing with delisting a species off the Endangered Species Act is that, you know, given the amount of hard work and effort that it takes to recover a species, we can now focus our efforts on other species that are of greater need. And there's other imperiled species that we can now focus on, that are high priority, and hope to achieve the same success that we did with the Concho water snake.

MS. HAAS: This is Ann Haas for the US Fish and Wildlife Service, thanking Adam Zerrenner, Andy Gluesenkamp, and Leslie Gray. Bye now.