PECOS SUNFLOWER - July 26, 2005

Status: The species was listed as threatened on October 20, 1999, under the Endangered Species Act of 1973. The species is listed as threatened in the State of Texas and endangered in the State of New Mexico.

Biology and Ecology: The Pecos sunflower is a wetland annual plant that grows on wet, alkaline soils at spring seeps, wet meadows and pond margins. Abundance can vary from year to year depending on water availability; large populations can die off from one year to the next if the habitat dries up. The species was once thought to be a hybrid between prairie sunflower and common sunflower, but genetic tests have supported the validity of Pecos sunflower as a true species. Its occurrence in desert wetland habitat is unique. The Pecos sunflower may have genes that could improve agricultural sunflower, because of its very high tolerance for alkaline soils.

Distribution: Pecos sunflower occurs in seven widely spaced populations in west-central and eastern New Mexico and west Texas. Populations vary from less than 100 individuals to several hundred thousand individuals.

Threats and Reason for Decline: Loss and/or alteration of wetland habitat are the primary threat to Pecos sunflower, primarily by surface water diversion and wetland filling for agriculture and recreational uses, and groundwater pumping and aquifer depletion for municipal uses. In addition, the species is potentially out competed by nonnative invasive vegetation (tamarisk), and impacted by land management activities (grazing, mowing, etc). Negative impacts from grazing and mowing can be addressed through timing and duration of these actions.

Recovery Actions: Recovery actions include identifying and securing core conservation areas essential for the long-term survival of this species, continuing life history, population, and habitat studies, and ensuring compliance with existing regulations. Some core conservation areas have already been secured. A large population of Pecos sunflower was discovered in 2004 at La Joya State Waterfowl Management Area near Socorro. The Nature Conservancy manages another large population of Pecos sunflower at its Diamond Y Springs Preserve in West Texas, and the State of New Mexico recently acquired a significant conservation habitat near Santa Rosa, New Mexico through a non-traditional section 6 grant awarded by the Service. This was the first New Mexico land acquisition for a threatened or endangered plant.

Map/Photo: In separate files.