Hualapai Tribe Drought Contingency Plans and Implementation

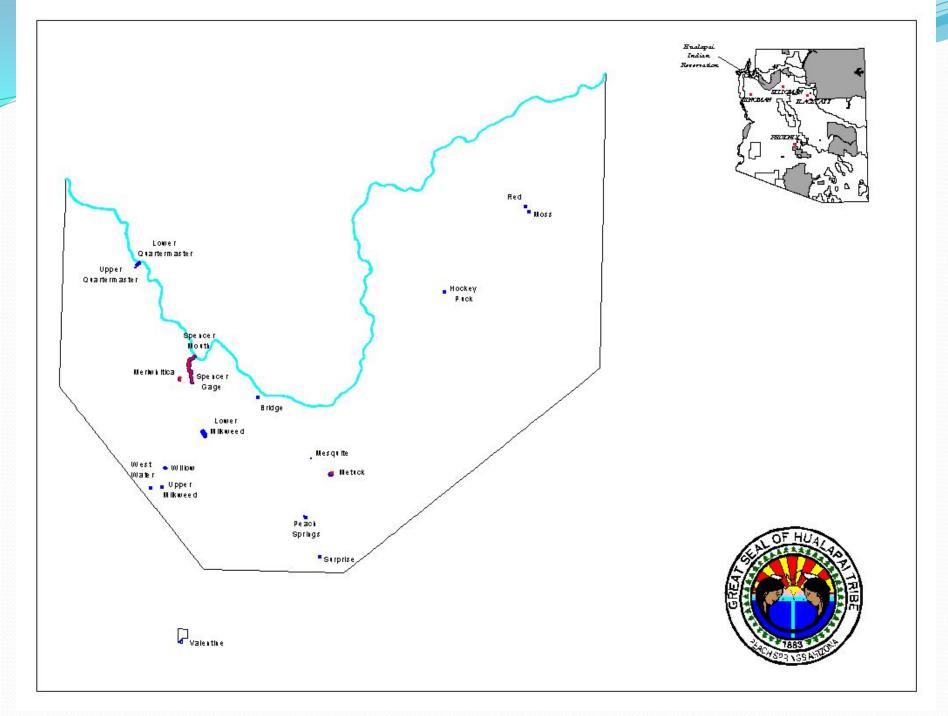


Department of Natural Resources Water Resources Program Manager, Alex Cabillo P.O. Box 300 Peach Springs, AZ 86434 (928) 769-2254 email acabillo@hotmaill.com Water and The Hualapai

Water is ha'nyi gach ja (grandfather water) to the Hualapai. Prayers are said when one partakes of the life-giving liquid. The springs (ha'pak) of the Hualapai lands are considered holy water.



The Holy water is bathed in for healing of the body and soul. Babies are taken to the sacred spring near their place of birth and Washed. Doing this makes the child a part of the spring, and the child can return to the spring for blessing and guidance. That child is related to the water. The Hualapais live through the water, and the water lives through the Hualapai.



Drought Conditions

<u>Reduced Precipitation/Increasing Temperatures</u> A.Reduced water availability

- A. Impacts to
- Water quality
- Human health (e.g. impacts to air quality)
- Forest health
- Fisheries
- Tourism
- Recreation

•Decreased carrying capacity for wildlife and cattle - herd reductions

•Loss of riparian habitats

Loss of wetland area

•Increased fire danger and wildfire severity

•Invasion of non-native plants and animals

Drought Conditions (cont.)

B. Impacts to water rights – Less water available for tribal water rights – Increased costs of –Operations –Water lines, storage tanks, new wells –Water hauling

Mitigation Actions and Adaptive Measures Undertaken by the Hualapai Tribe

- A. Construction of water catchments –Nine water catchments have been constructed on the reservation
- **B.** Removal of non-native tamarisk
 - -20 acres of tamarisk eradicated
 - -Over 800 willow trees planted
 - -Nursery developed to produce willows
- **C.** Development of fish-rearing facility
 - -Grow-out of endangered razorback sucker for repatriation
 - -Establishment of genetic refuge for endangered humpback chub

Mitigation and Adaptive Measures (cont.)

D. Installation of new wells and pipelines

 Mud Tank well drilled in 2004
 Construction of new water pipeline to Westwater
 Replacement of Thornton Tower water pipeline
 Feasibility study for filtering radioactive well water

E. Watershed Management Planning –Nine sub-basins now have watershed management plans –Wetland Monitoring Program –Sage removal to stimulate native grass succession





























The Hualapai Department of Natural Resources addresses problems, goals and objectives through an integrated resource management approach. This presentation reflects the efforts of the following programs within the Hualapai Department of Natural Resources: Air, Agriculture, Environmental, Forestry, Geographic Information Systems Coordination, Range Water, Water Resources and Wildlife, Fisheries and Parks.