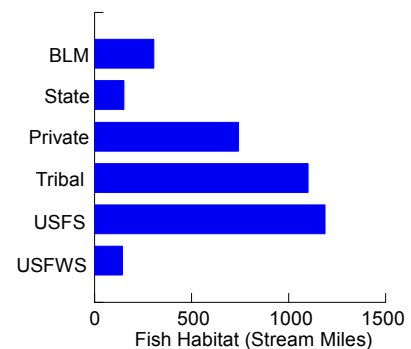
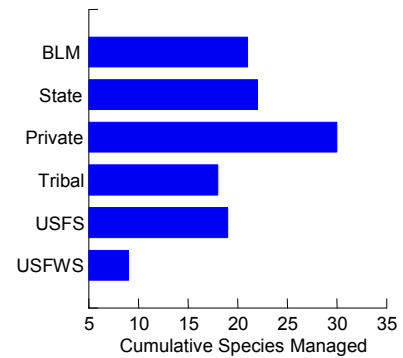
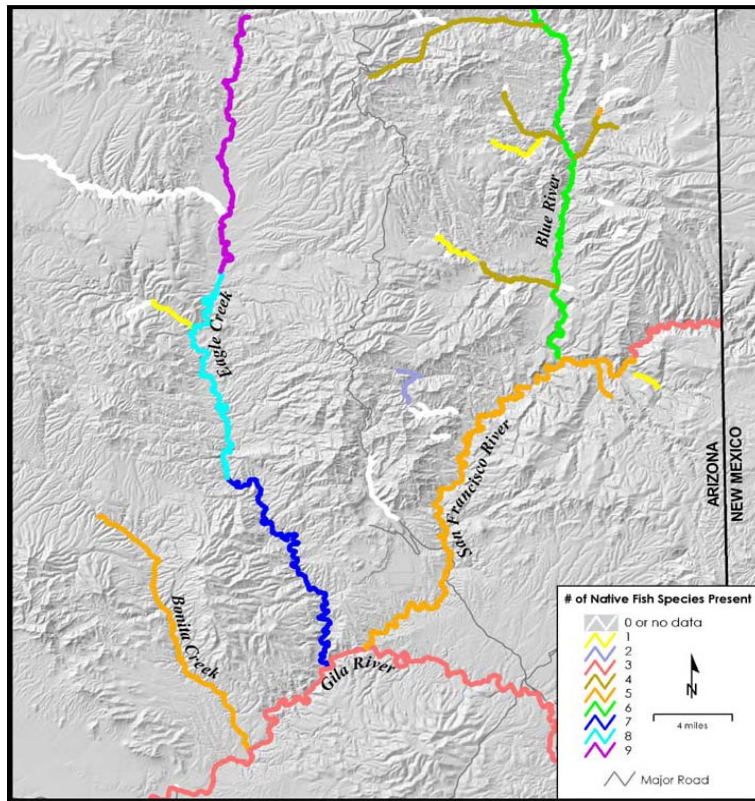


# MAPPING THE DISTRIBUTION OF ARIZONA'S NATIVE FISH

The Nature Conservancy, Conservation Science Program

September 2004



The left figure illustrates cumulative fish richness by stream reach for a portion of the Gila River system in southeastern Arizona. Colored reaches illustrate changes in the total number of native species per reach. Right figures present example results of state-wide analyses: cumulative number of species (*top right*) and cumulative extent of fish habitat (*bottom right*) managed by the state's major land managers.

## PROJECT SUMMARY

- Data were developed to enable identification of habitat-based conservation goals for ecoregional assessments, and to provide a conservation- and management-oriented tool for use in regional and local planning focused on rivers, watersheds, and aquifers.
- Occupied habitat was delineated for each of Arizona's 36 native fish species. Data were attributed to EPA's National Hydrography Data Set to facilitate stream-based analyses.
- Habitat was estimated using Heritage Program point-locality occurrence data, supplemented with data from primary and secondary literature sources, data on physical barriers within streams (e.g., dams), and expert input on the distribution of individual species.
- Data provide a graphical and analytical tool and are well-suited for use with third-party data sets.
- Data are attributed using a dynamic segmentation protocol, which enables multiple biological, ecological or physical stream-based attributes to be incorporated into the data set.
- Additional data sets in development include threatened and endangered species by stream system, changes in perennial surface flow, and extent of riparian habitat.