





National Fish and Wildlife Foundation

Executive Summary for the Sky Island Grasslands Business Plan March 24, 2009

Sky Island Grasslands Business Plan

Executive Summary

Conservation need: The Sky Islands are a unique region of more than 40 isolated mountain ridges surrounded by a sea of dry grasslands that straddles the Mexico/Arizona/New Mexico border. It is one of America's great hotspots for wildlife diversity, hosting more twice as many mammal species as Yellowstone National Park and supporting America's highest diversity of reptiles, bees and ants. Of the 9 million acres of grassland which once dominated this landscape, at least 2 million acres still have exceptional wildlife values and another 3.8 million acres of grassland could be restored. We are targeting jaguar, bison, pronghorn, black-tailed prairie dog, and Chiricahua leopard frogs as wildlife whose population response to conservation investments will be the best indicators of success. All of these species are priorities for the U.S. Fish and Wildlife Service or state wildlife agencies.

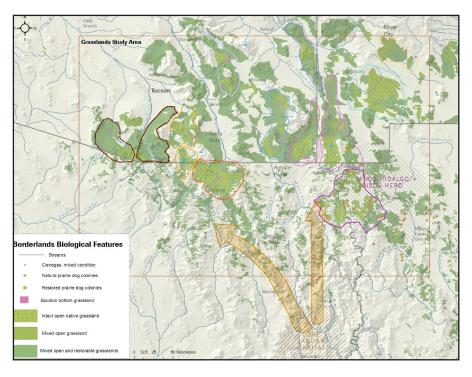
Performance targets: A new investment of approximately \$36.5 million over 10 years would result in a success in achieving 3-6% of black-tailed prairie dog recovery goals, a 300% increase in Mexico's bison population — making it one of the 10 largest free-roaming wild bison herds in North America, 5-10% of Chiricahua leopard frog goals; approximately 15% of Baird's sparrow and 5%

of rufous-winged sparrow winter or breed in the grasslands in this area but the degree to which they will benefit is uncertain.

Key partners: Sky Island Alliance, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Defenders of Wildlife, The Nature Conservancy, Arizona Game and Fish.

Major threats include:

Widespread disruption of natural fire regimes has already allowed shrubland to invade and likely permanently transform 4 million acres of grassland; this threat continues to expand. The availability of a diversity of surface water habitats is threatened by irrigation and spring development. Expanding home development and road and border security infrastructure are also threats.



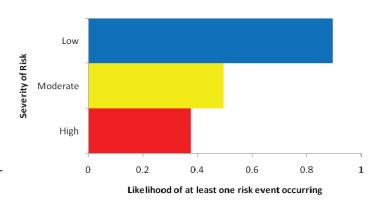
Implementation plan, key strategies, and annual budget: Four key strategies will prevent future declines and allow an increase in population sizes for target species:

- ☐ Implement at least 10,000 acres/year of mechanical clearing and other management practices to restore grassland and 30,000 acres/year of prescribed burning to maintain existing and restored grasslands in optimal condition \$2.6 million/year.
- □ Private landowners own many of the highest priority grasslands in the United States and almost all grasslands in Mexico and we need to expand incentives like ecosystem service payments, grass banks, and candidate conservation agreements to secure necessary voluntary landowner participation in targeted landscapes \$200,000/year.

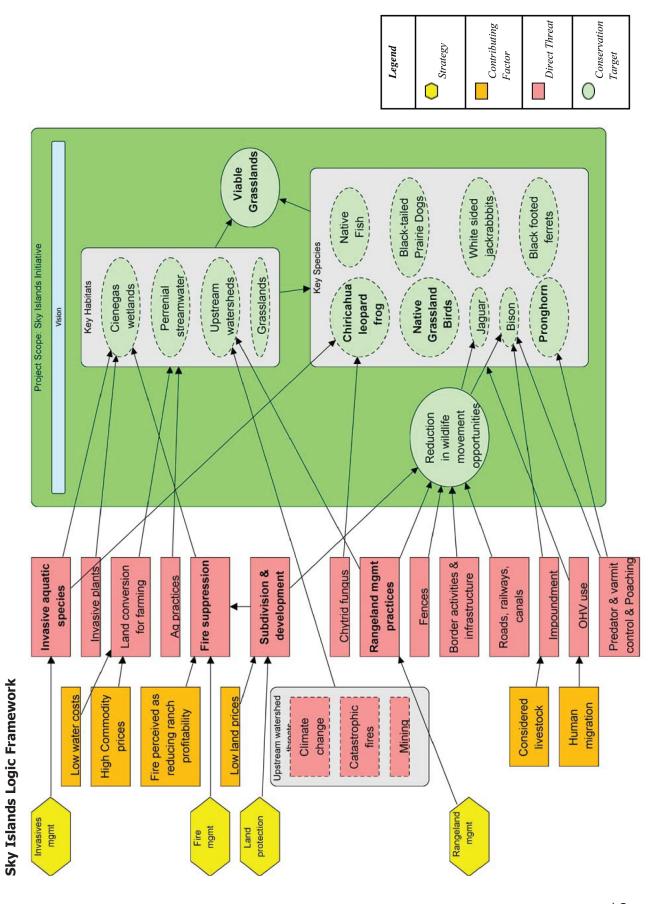
- □ Support protection of land and water rights on at least 50,000 acres of land that faces the highest threat from home development or clearing for farm operations \$5.5 million in total.
- ☐ Black-tailed prairie dogs, bison, and leopard frog all need targeted investments to create new populations or improve habitat and population viability for existing populations \$300,000/year.

Significant ancillary benefits: This is one of the most diverse native grasslands in the United States and most species will benefit from habitat management; also Sonoran tiger salamander, Baird's sparrow, aplomado falcon, black-sided jackrabbit, black bear.

NFWF financial leadership: NFWF will need to provide about 35% of annual costs, or about \$1.25 million/year. BLM and the Forest Service have also been making significant investments in prescribed burning and mechanical and chemical treatments of degraded grassland; the Mexican government runs an ecosystem service payment program that is likely to be expanded in the target regions of grassland including the Janos grassland and San Pedro grasslands.



Risk: This initiative is relatively low risk because past investments have shown that grassland restoration does work and has very low maintenance costs (as low as \$4/acre per 10 years) once grassland has been restored. Moderate risks come from potential failures to secure adequate landowner cooperation in the U.S. or Mexico, either through financial incentives, technical assistance or simple inadequate outreach capacity. *Prairie dog and leopard frog conservation efforts are subject to the greatest potential risks of failure associated with the possibility that disease outbreaks eliminate any population gains we secure.*







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