



## Conservation Planning for Biodiversity: Information for Land Trusts

### Why is Conservation Planning Important?

As habitat loss and fragmentation increase and more species decline across the United States, conservationists need to take a strategic approach to habitat and biodiversity protection. Due to limited resources, prioritization and cooperation are essential. There are a wide variety of factors to consider when setting habitat conservation priorities, such as habitat quality, species rarity, species diversity, threat level and land costs. A large body of literature on these topics. After considering these complex issues, it is clear that some places and species are more important to protect than others. Conservation planning provides a strategic approach by using the best available science to identify which species and habitats to target and which parts of the landscape are the most important.

There are numerous benefits of habitat conservation planning at the landscape scale. These include:

1. Identifying a common set of goals and priorities;
2. Coordinating planning efforts to avoid haphazard conservation;
3. Reducing habitat fragmentation and isolation;
4. Informing land use and transportation planning efforts;
5. Providing communities with a conservation vision; and
6. Helping alleviate conflicts by involving all stakeholders, building consensus and providing predictability.

### What Is a Conservation Plan?

Conservation plans will vary dramatically in their scale, approach and format. However, all plans contain at least some, if not all, of the following information:

1. A set of goals or visions that outline the purpose and importance of protecting ecosystems;
2. Lists of priority or target species and habitat types, often including maps of these elements;
3. Maps of conservation opportunity areas or other ecologically significant places on the landscape that deserve conservation focus and some level of protection;
4. A discussion of the threats facing these species and habitats;
5. A set of strategic actions that different stakeholders can take to abate these threats and achieve a sustainable network of protected lands and waters; and
6. A method for monitoring habitats and actions over time to evaluate the effectiveness of the plan.

Not all conservation plans focus exclusively on biodiversity protection. Increasingly, communities recognize the importance of protecting "green infrastructure," or land and water resources that provide vital community services such as water purification (wetlands and riparian vegetation), carbon sequestration (forests and grasslands) or economic productivity (agriculture and forestry). Biodiversity values can be easily incorporated into these more holistic planning efforts, increasing their value substantially.

For a primer on conservation planning, go to: [www.biodiversitypartners.org/habconser/cnd](http://www.biodiversitypartners.org/habconser/cnd).





# LIVING LANDS: Helping Land Trusts Conserve Biodiversity

## Additional Examples of State Conservation Plans

Florida's Closing the Gaps

[www.floridaconservation.org/oes/habitat\\_sec/Closing\\_Gaps.pdf](http://www.floridaconservation.org/oes/habitat_sec/Closing_Gaps.pdf)

Massachusetts Biomap and Living Waters

[www.mass.gov/dfwele/dfw/nhosp/nhbiomap.htm](http://www.mass.gov/dfwele/dfw/nhosp/nhbiomap.htm)

New Jersey's Landscape Project

[www.state.nj.us/dep/fgw/ensp/landscape](http://www.state.nj.us/dep/fgw/ensp/landscape)

## Regional Conservation Planning

Species and ecosystems have little regard for political boundaries. Therefore, some organizations define boundaries using natural divisions like ecoregions or watersheds. Also, multiple states within a given region can work together to achieve large-scale ecosystem protection.

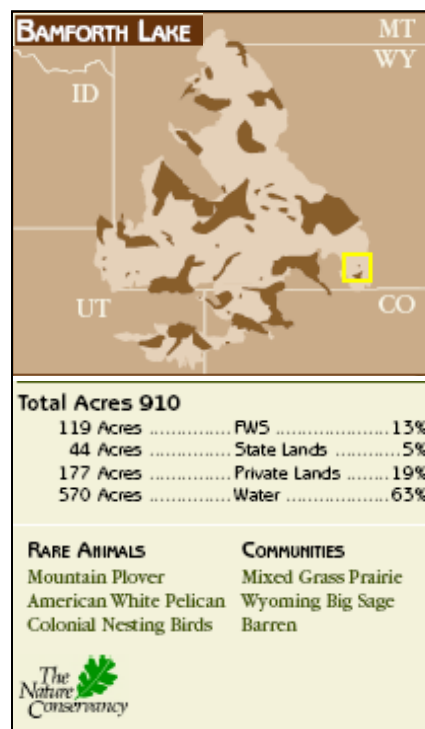
### The Nature Conservancy's Ecoregional Assessments

The Nature Conservancy realized they can use their funding more effectively if they have a long-range plan for land acquisition and restoration based on the best available science. In North America, The Nature Conservancy organized their planning by ecoregions, which can span multiple states and countries. These plans identify a portfolio of conservation lands and rank them based on ecology and threat levels.

[www.nature.org/aboutus/howwework/cbd](http://www.nature.org/aboutus/howwework/cbd)

For example, the map at the right shows the Wyoming Basin Ecoregional Portfolio sites. The Bamford Lake site is highlighted in the yellow box and landowner information and conservation targets for the site are listed at right.

[www.conserveonline.org/docs/2003/10/THE\\_PLAN.PDF](http://www.conserveonline.org/docs/2003/10/THE_PLAN.PDF)



## Southeastern Ecological Framework Project

This project, completed by the Environmental Protection Agency Region 4, identifies ecologically significant areas and connectivity across eight southeastern states (Florida, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama and Mississippi). The plan identified 43% of the land area across these eight states as critical for protecting ecosystem function. It builds off existing protected areas and identifies additional lands that can help maintain habitat connectivity.

[www.geoplan.ufl.edu/epa](http://www.geoplan.ufl.edu/epa)

## Local Conservation Planning

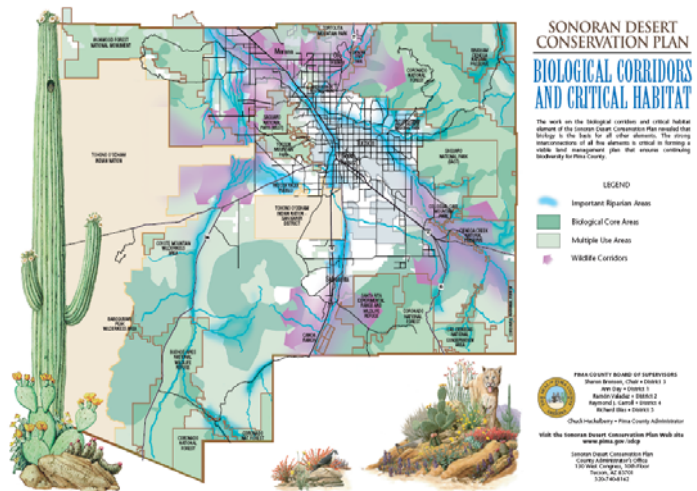
Most land use decisions are made at the local level. Conservation plans at the local scale are necessary to inform development and land use decisions. In addition, local plans involve residents and citizens in the protection of their landscape. This ground-up approach is often the most sustainable over the long-term. Linking local plans to larger regional and state level efforts helps build the continuity necessary to maintain ecosystem function at the landscape level.

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## Sonoran Desert Conservation Plan, Arizona

This award-winning plan fully integrates conservation and land use planning. Planners and ecologists came together to create a plan that protects critical environmental resources (including riparian and endangered species habitat) and cultural resources (such as ranch lands and archeological sites) in Pima County, Arizona. This plan was Pima County's response to rapid population growth that was leading to urban sprawl, habitat loss and species endangerment. The map at right shows biological corridors and critical habitat.

[www.co.pima.az.us/cmo/sdcp](http://www.co.pima.az.us/cmo/sdcp)



## Blackbird-Millington Corridor, Delaware and Maryland

The Blackbird-Millington Corridor stretches from the Delaware Bay, across Delaware and into eastern Maryland. The Delaware Department of Natural Resources partnered with The Nature Conservancy to develop a local conservation plan for this area. The partners used extensive public input to create a strategic conservation plan for protecting forests, aquatic resources and working agricultural lands. Based on the wishes of the community, the plan outlines a detailed set of actions focusing heavily on incentive programs, easements and acquisition to protect this unique area.

[www.dnrec.state.de.us/nhp/information/blackbird.asp](http://www.dnrec.state.de.us/nhp/information/blackbird.asp)

[www.nature.org/wherewework/northamerica/states/delaware/preserves/art12413.html](http://www.nature.org/wherewework/northamerica/states/delaware/preserves/art12413.html)

## Additional Examples of Local Conservation Planning

New Jersey Pinelands

[www.nj.gov/pinelands](http://www.nj.gov/pinelands)

Balcones Canyonlands Conservation Plan, Austin, Texas

[www.co.travis.tx.us/tnr/bccp](http://www.co.travis.tx.us/tnr/bccp)

Chicago Wilderness Biodiversity Conservation Plan

[www.chicagowilderness.org](http://www.chicagowilderness.org)

Metro's Fish and Wildlife Habitat Protection Plan, Portland, Oregon

[www.metro-region.org/pssp.cfm?progservID=9](http://www.metro-region.org/pssp.cfm?progservID=9)

## Species-Specific Planning Efforts

### Bird Conservation

The Audubon Society's Important Bird Areas identifies critical bird habitat locations across the United States. These areas are incorporated into numerous conservation planning efforts including the other bird plans listed below.

[www.audubon.org/bird/iba](http://www.audubon.org/bird/iba)

North American Waterfowl Management Plan is an international plan for bird conservation throughout North America. The plan establishes regional partnerships, or "Joint Ventures" that work to develop projects and protect critical migratory bird habitat.

[www.nawmp.ca](http://www.nawmp.ca)

## **Bird Conservation (Continued)**

Partners in Flight Plans are the result of international cooperation spanning North, Central and South America. Partners in Flight has developed Bird Conservation Plans for North America that identify priorities, establish objectives, develop conservation actions and initiate evaluation procedures.

[www.pwrc.usgs.gov/pif](http://www.pwrc.usgs.gov/pif)

Western Hemisphere Shorebird Network strives to create a comprehensive network of protected habitats that will support and maintain shorebird populations throughout their migratory pathways.

[www.whsrn.org](http://www.whsrn.org)

North American Waterbird Conservation Plan focuses on protecting waterbirds in North America, Central America and the Caribbean.

[www.waterbirdconservation.org](http://www.waterbirdconservation.org)

North American Bird Conservation Initiative established a committee made up of government agencies, private organizations and other bird initiatives to increase coordination and join together many of the separate bird conservation planning efforts.

[www.nabci-us.org](http://www.nabci-us.org)

## **Endangered Species Recovery Plans**

Endangered species recovery plans outline a set of goals and actions to bring an endangered species back from the brink of extinction. These plans, developed by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, strive to increase the number of individuals and populations to a self-sustaining level. The plans are meant to coordinate action across different levels of government and can cover one or multiple species.

[www.fws.gov/endangered/recovery](http://www.fws.gov/endangered/recovery)

## **Habitat Conservation Planning**

Habitat Conservation Plans (HCPs) are a prerequisite to obtaining an "incidental take" permit under the federal Endangered Species Act. Incidental take refers to take (i.e. harm to an endangered species) that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." HCPs outline specific steps that the applicant must take to minimize and mitigate impacts to the endangered species. Frequently these plans require habitat protection, restoration and enhancement in one area in exchange for some lost habitat in another. The U.S. Fish and Wildlife Service has developed the Habitat Conservation Planning Handbook to help guide applicants and planners through the HCP planning process.

[www.fws.gov/endangered/hcp](http://www.fws.gov/endangered/hcp)

For an analysis of Habitat Conservation Planning by Defenders of Wildlife, go to: [www.defenders.org/pubs/hcp01.html](http://www.defenders.org/pubs/hcp01.html).