

LAND CONSERVATION WORKING GROUP

Goal: The Sandhills Conservation Partnership will work together to maintain and restore the biological integrity of the natural systems of the North Carolina Sandhills in ways that promote the well-being of inhabitants of the Sandhills, maintain the viability of natural infrastructure and important institutions, and encourage a community stewardship ethic.

Objectives:

Biological Objectives The Reserve Design Working Group has created a vision of the network of natural areas of significance in the Sandhills, as laid out in the previous section. The following Biological Objectives proceed from this foundation toward the goal of a viable, ecosystem-scale network of conserved lands and waters.

- 1.) **Conserve high quality natural communities and their full complement of native species, in order to minimize additional loss of prime wildlife habitat and biological diversity.** The “gems” of relatively undisturbed and exemplary natural community occurrences in the Sandhills will be considered for protection activities such as acquisition or conservation easements, especially if they are threatened by development or other destructive change. Such systems include longleaf pine/wiregrass communities, mesic pine flatwoods, cypress/gum/hardwood floodplains, Atlantic white-cedar streamhead swamps, and sandhills seeps, among others.
- 2.) **Protect ecological processes that maintain and support these ecosystems** such as fire, watershed hydrology, and a variety of floodplain processes relating to water and nutrient retention and cycling. In Sandhills uplands, fire is essential to the long-term health of almost all natural communities and fire-adapted species. In deciding how to conserve an area, we will also work to conserve the ability to burn it when necessary, such as by buffering it from surrounding development. Stream flows in this temperate, forested desert are critical to humans, plants and wildlife. We will look at streams and accompanying riparian areas holistically to assure that our uses of water and land do not compromise the integrity of stream flow regimes and water quality.
- 3.) **Bolster wildlife populations by encouraging improved mobility of individuals and the flow of genetic material between populations.** Accomplish this by focusing conservation activities spatially, so as to buffer and connect existing protected areas. The need for a long-term perspective is very important and habitat restoration potential must be considered. Properties in a strategic location, but with somewhat degraded biological value, may be more important in the long run than isolated, high quality tracts. In addition, the scale of protection activities is dependent upon the life history of target species of interest, and different challenges will be presented based on differences between species. Conservation aimed at the good of some may not be to the good of all.

Community Objectives The following Community Objectives are not biological per se, and so were not included in the Reserve Design. They are important to the health and well-being of human communities in the Sandhills and to the quality of life that makes the Sandhills a great place to live. They are closely related to the biological objectives, and it can be truly said that each set of objectives is essential to the other.

1.) Conserve public water supplies and associated wetlands and riparian zones.

Even though the Sandhills enjoys abundant precipitation, its extremely well-drained soils cause it to resemble a forested desert, especially at certain times of year (spring and fall) when droughts of several months are common. Rivers in the Sandhills are typically small (except for the Cape Fear, which is just outside the Sandhills) and relatively steady in their flows due to our sandy soils and the capacity of surface aquifers. Human communities are dependent on stream flows and wells for drinking water, hence the conservation of stream buffers, recharge areas and biological influences such as beaver and floodplain forests are critical to long-term human welfare in the Sandhills.

2.) Provide for nature-related public recreational activities such as hunting, fishing and ecotourism.

Hunting and fishing have been an important part of life in the Sandhills for all of human history here. They are an important reason for much of the conservation work that has happened here in the past century. Ecotourism, including uses such as bird watching, canoeing, hiking, horseback riding, as well as hunting and fishing, has been a steadily growing economic activity in the Sandhills. The economic effects are not only from people who visit, but possibly more importantly, people who move or retire here to take advantage of the outdoor wealth of place and climate. Building on this economic base in a way that sustains the biological resources on which it is based will provide long-term benefits for both human and natural communities.

3.) Maintain the viability of Ft. Bragg and associated lands used by the military.

Ft. Bragg, including Camp Mackall and Pope Air Field, are by far the largest economic engine in the Sandhills, and one of the very largest in the state. They are the Army's "premier power projection platform," and as such are critical to the nation's defense. Military training is dependent on sufficient, well managed training areas to be available over and over again for realistic soldier training. These areas are primarily located on Ft. Bragg and Camp Mackall, but important training areas also are found on the Sandhills Gameland and on private lands leased or licensed by the Army. Such private lands include lands acquired through the Army's partnership with The Nature Conservancy.

4.) Enhance the quality of life of Sandhills residents by preserving local history, culture and natural heritage through the conservation of farms, open space and natural areas that sustain the best of the Sandhills.

The history and culture of the Sandhills date from a time when space seemed infinite and nature was not separate - people lived from the land and its biological resources. One of the keys to sustainable growth of wonderful places is to retain the character of the place that attracts people in the first place. The abundance of open space and connection to nature make the Sandhills a gracious place to live. Anyone who lives here can tell you how important trees are to surviving the long summer in good humor! Unplanned growth has been steadily eroding

our quality of life as strip shopping centers and traffic jams take the place of vibrant downtowns and peaceful country roads. The need for conservation is not restricted to natural areas, but extends to farms, working forests, historic sites, parks and town centers.

Strategies:

Planning for Conservation For planning purposes, the Conservation Working Group has divided the Sandhills into ten Focus Areas (see attached map.) These Focus Areas have been analyzed to identify: their biological and non-biological resources; threats to those resources; strategies to abate the threats; partners willing to implement the strategies, and tools, funding sources, etc., available in each Focus Area. This planning process has been used for five of the Focus Areas and will be finished for the other five. Examples of biological and non-biological resources, threats, etc. may be found on the focus area example sheet found at the end of this section. Included also is a map of the ten focus areas and an enlarged example of one area.

Build Public Support for Conservation It will be essential in each area to listen to the community's needs, understand their conservation history and interests and develop strategies to involve the public in conservation activities. Community support for conservation will be the key to long-term success in the areas in which we work. We have had modest success so far in having our conservation perspective included in regional efforts like the Sustainable Sandhills. We will convey the Partnership's recommendations to the Sustainable Sandhills Land Use Team for inclusion into their regional land use analysis. Through increased public participation in conservation we hope that communities will also include conservation goals in local land use plans.

Support Conservation Funding Programs The availability of state, federal and private funding sources are always a major limiting factor in the accomplishment of on-the-ground conservation activities. The Partnership, through its members and associates, will continually work to maintain and increase funding levels through such activities as publicity for completed projects, education of the public and influencing decision-makers. We will also work to support cost share and incentive programs for landowners such as NRCS WHIP, the USFWS Partners for Fish and Wildlife, etc. Examples of state funds critical to the achievement of on-the-ground conservation are, the Clean Water Management Trust Fund, the Natural Heritage Trust Fund and the Parks and Recreation Trust Fund.

Implement Protection Activities One of the most important strategies available to the partners for the accomplishment of many of the biological and community objectives is the use of the suite of "protection" tools such as outright (fee simple) acquisition, conservation easements, options, long-term management agreements and voluntary short-term agreements. The arrangement of these tools in the previous sentence is intentional, with the most effective and most expensive tool first (land acquisition), followed by progressively less effective, but also less expensive, tools all the way to voluntary agreements.

Protection Tools These tools are called “protection” tools, because they assure greater protection of natural resources on a tract of land. They may also be called “free market” tools because they are only used with willing landowners. All of the protection activities of the partnership are restricted to willing landowner transactions – we do not use eminent domain or condemnation for conservation purposes.

Fee simple acquisition, when possible, holds the greatest potential for major habitat restoration, as the purchaser has the highest level of control over management decisions. It is, however, expensive, and typically requires the help of grants from reliable conservation funding organizations. They are perpetual – once land is in a park, wildlife area or nature preserve, it will stay that way.

Conservation easements are an extremely valuable protection tool, as they preclude or limit future development of a property, but they require good understanding and cooperation between the landowner and the conservation entity, as the landowner generally retains responsibility for management of the property, within bounds set by the easement. They are also perpetual, but less expensive than fee acquisition.

Options are short term legal instruments that give an agency or conservation organization the right to purchase a tract of land or an easement within a specified period of time.

Long-term management agreements, such as leases, are intermediate in term. They are a good tool to manage resources for a certain time period when a landowner has no interest in selling or placing an easement on his or her property. A lease can also serve to buy time with a landowner who has not decided on long-term plans for the property.

Voluntary landowner agreements such as Safe Harbor serve to build a relationship with the landowner and become mutually educated on the property and its rare species. In some cases the trust developed through a program such as Safe Harbor can lead to more long-term conservation protection status. It is the least binding of the protection toolbox, since landowners may withdraw whenever they want.

Once land has been placed under one of the above forms of conservation protection, the focus shifts to management, or stewardship. Restoration activities are often important, as human impacts on many tracts have altered the ecological processes that historically maintained the diversity of species and habitats. Land managers often must reintroduce such processes. Restoration examples include longleaf pine/wiregrass community restoration, stream bank or wetland restoration. In the case of altered fire regimes, the use of prescribed burns is critical to restoration of fire adapted ecosystems. Restoration of longleaf pine communities may include some or all of the following management actions: thinning of loblolly pine and/or hardwoods, planting of longleaf pine seedlings, collection and sowing of wiregrass seed, and reintroduction of a regular but variable regime of controlled burns. Stream and wetland restoration on the other hand, typically involve the re-establishment of hydrology through re-meandering, bank stabilization of channelized drainages, and planting of flood tolerant vegetation. Habitat restoration will be especially important when focusing on the establishment of wildlife corridors and

buffering existing habitat, where available properties with lower biological integrity occupy important strategic positions on the landscape. Restoration will also be important for degraded portions of existing protected land. Restoration of ecosystems are often expensive and time-consuming. Once brought back to a healthy condition, such systems can frequently be maintained by controlling a single ecological process, such as fire.

For the above strategies to be given the opportunity to work in the long-term, public support for such conservation measures are important, which points to the need for public outreach. When possible, allowing the community to use protected lands can foster trust and appreciation for the mission. Public recreational opportunities on the Sandhills Gamelands, Ft. Bragg or The Nature Conservancy's Calloway Forest can build awareness in local communities that conservation provides tangible benefits to the people.

Performance Measures

The Land Conservation Working Group will establish performance measures to gauge the success of conservation efforts in the Sandhills. Parameters such as habitat protected, connectivity established, and buffers created will be used to quantify and track our progress.