

Great Meadows Conservation Trust, Inc. Land Management Plan

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Approved by the Board of Directors on February 24, 2005.

Summary Description of the Great Meadows Conservation Trust, Inc.

The Trust was incorporated in 1968 as a non-profit tax-exempt organization to protect and preserve the flood plain of the Connecticut River in the towns of Glastonbury, Rocky Hill, and Wethersfield in central Connecticut. It acquires land and holds conservation easements in the Meadows and leases some of its land for farming. The Trust believes that the Meadows provide valuable agricultural and recreational benefits in the crowded central Connecticut area which should be preserved for reasons of social and environmental concerns.

Summary Description of the Great Meadows

The Great Meadows are part of a series of Connecticut River flood plains extending from Massachusetts to Long Island Sound. Originally they were covered with flood plain forests and marshland, but over the centuries since colonization much of the woodland has been turned into farmland meadow in our area of concern. Geological uplifting and glaciation created a river basin about 5 miles long and 2.5 miles wide, through which the Connecticut River forms two great meanders. The river bed itself is nearly level from the Long Island Sound to Thompsonville, subjecting the lower section of the river to Hartford to tidal effects of the Long Island Sound when the river is low. A narrowing of the bedrock surrounding the river channel at Bodkin Rock (south of Middletown) constricts the river, so that in times of flood the water is held back and accumulates, creating the floods typical of the Meadows.

Floods in the Meadows can occur at any time of the year but late winter and spring produce the most. Flood stage is nominally set at 16 feet at the Hartford river gauge. As most of the Meadows are below this 16 ft marker, flooding is extensive and spectacular, particularly when floods reach their normal 20-25 ft range. Some floods have been recorded at 37 ft above the normal, non-flood level of the river.

Because of the powerful force of water, the river is continually acting to establish a channel to match its flow. It does this by eroding some banks and building others through deposition of sediments. The most erosion takes place on the outside bends of the meanders (unless erosion is blocked), and deposition or land building takes place in the inside curves of meanders. The force of erosion varies with the flow characteristics, with flooding forcing the greatest changes in channel formation (MacBroom, 1998). What this means is that land in the Meadows is geologically ephemeral, and historical records show the changes in the Meadows since colonial times (MacBroom, 1998). The river's current channel through the central Connecticut region may not be the same channel in one hundred years.

Because of this capacity to hold the excess of water from the river during times of flood, the Meadows provide a safety valve for cities and towns surrounding the river. Without these flood plains many of the urban, suburban, and rural areas surrounding the river would themselves be periodically inundated, as seen historically in the Park River and Farmington River floods (MacBroom, 1998) that led to the construction of dikes around parts of Hartford and East Hartford.

Objectives for Management

The objectives for management of Great Meadows lands include:

The preservation of the rural landscape, water resources, marshland, swamps, woodland, open spaces, native flora and fauna, and unique historic and scenic sites; and the promotion of scientific study within the Meadows and education of the public regarding the natural, cultural, and ecological values of the Great Meadows, including its history, landscape, flora, fauna, recreational and flood control significance.

Plans for Implementation of Objectives

Protection

Protection begins with the identification of areas which provide habitat for significant plant or wildlife species or make a significant contribution to environmental quality, and the identification of areas, sites, structures, or objects with historical, architectural, or cultural significance.

The Trust provides incentives for property owners to preserve and protect their property, while allowing an appropriate public interest in the property. These may include such measures as donation, bargain sale, sale or donation of easements, rental, and land acquisition.

Protection of large areas of land is often accomplished by acquisition of relatively small key parcels in the area.

Protection also requires that boundaries be known. All properties under Trust management have on record the location of boundary lines, established by town records and maps. The Board of Directors may authorize Land Surveys of properties in certain situations. This may also include the establishment of boundary markers, though, in some areas, this may be difficult due to flooding and farming which frequently removes markers.

In sites with environmentally sensitive situations or agricultural activities public access may be limited. The Board of Directors may close certain parcels to protect environmental resources.

Sign postings are placed to identify parcel ownership to exercise dominion over those properties. These assist in creating a public awareness of our Trust. They also prevent a claim of unknowing trespass in cases of cutting of timber, planting of crops without lease, collecting, or other actions not approved of by the Trust.

Agricultural Use

The Trust promotes the use of Trust properties for farming under its leasing program. The leasing program keeps the parcels in productive use, maintains the ecological communities of a meadow, preserves ownership rights to the parcels,

encourages activities that are compatible with the aims of the Trust, encourages accepted farming practices, soil conservation, and soil preservation, and helps determine the boundaries of the parcels.

The Land Management Committee of the Trust will receive and consider applications from prospective tenants. Acquired parcels will include consideration of existing tenants. The Land Management Committee of the Trust will send its recommendations to the Board of Directors. The Board and the Operations Committee will approve new tenants or changes in tenants. The Land Management Committee of the Trust will deliver lease forms as well as serving as the contact point for the tenants. Such leases will begin and end on April 15.

Educational Use

The Trust promotes the use of Trust properties to educate the public concerning the value of the Meadows in terms of the natural environment, history, culture, and hydrology. The Trust permits low or no-impact use of sites by civic or academic groups for educational purposes.

Scientific Use

The Trust permits sites to be used as locations for research in the natural sciences, historical anthropology, and environmental impact studies. The Trust may conduct or permit others to conduct low or no-impact research by civic or academic groups on Trust properties.

Research on the properties of the Trust must be approved prior to implementation of the study. Research may not interfere with cultivation unless the user of that site also agrees. Research must be of low- or no-impact to the environment of the site, such as floral inventory or population counts. Any perturbation must be minimal at best.

Collections of flora, fauna, or artifacts must be approved by the Trust prior to the collecting period. Disposition of said collections will be determined by the Trust. Recreational collecting (hunting, fishing, berry-picking) is exempt.

The Trust requires a copy of the final report of any research.

Passive Recreational Use

The Trust will allow the use of the Trust properties for low-impact recreational use, such as fishing, and hiking, and prohibit the use of off-road vehicles (dirt bikes, off-road vehicles, snowmobiles) which would detract from the use of these properties by others.

The Trust properties are open from dawn to dusk for recreational use. Exceptions may be granted on request. Usually the towns will close the road gates at night.

Most parcels are small and not large enough for the establishment of trail systems. Some parcels have trails or roads crossing them that are part of a larger trail or road system.

The Trust does not charge any fees for recreational use of its properties. This affords the Trust protection under the Connecticut Landowner Liability Act, CGS section 52-557f.

Hunting is allowed on properties except where otherwise restricted by deed. Where an organized hunting club is active, the Trust allows its parcels to be used for their private hunting reserves. The Board of Directors may restrict hunting on certain parcels.

Special Management Considerations

The maintenance of these sites in the natural state or as farmland is a principle of the Trust, so actions to maintain these activities are foremost in the plan. As all of the sites lie on the Connecticut River floodplain and are frequently inundated, it is expected that some sites will erode while others will accumulate more land. Normally natural disturbances will not be a cause for remediation by the Trust, as this is an aspect of natural ecosystems. In most cases the floodplain ecosystems are self-sustaining through the periodic flooding, keeping most communities at a disturbed woodland stage.

One aspect of maintenance is the removal of invasive or non-native species. The plan then requires periodic surveys of the parcels of the Trust for evaluation of any action necessary to protect the parcels from non-indigenous species, including removal when feasible. However, care should be taken that the removal of selected species does not cause greater impact to the flora and fauna that the Trust is trying to protect.

In some cases properties are actively managed to prevent the spread of invasive growth. In other cases management is through a strategy of non-interference. Properties are leased for use by local farmers, maintained as a rural landscape, or allowed to enter an ecological succession. Monitoring will ensure that properties will be used as intended, will ascertain use (sanctioned and otherwise) and will remedy unauthorized use. Should they not be used as intended, agreements with users of the property may be re-evaluated. Properties that have been allowed to return to nature will be examined annually for debris removal, unauthorized use, or other undesired impact.

The Trust also promotes the reintroduction of native species, either through controlled plantings or the construction of habitat suitable for the return of native flora or fauna.

Finance

Finances for Land Management are provided through a line item in the annual budget. Donations toward management are also accepted. As management tasks are contracted out and more funds are needed, other finance methods will be pursued.

Parcel Inspection Timetable

Properties under cultivation will be examined annually to ensure their use fulfills the terms of the agreement between the Trust and the user. Properties left to nature will be under benign neglect and examined annually for those parcels that are readily accessed. For other parcels where access is more difficult examination may be made less frequently along a more extended schedule.

Two copies of inspection reports are maintained in two separate locations for the purpose of document security.

Other Documents

The following documents are included in this plan by reference. They are updated as conditions change and new parcels are acquired. Some parcels have a more active stewardship plan, and their plans are included.

The Land Book, by Peter Revill. This document gives maps and summary descriptions of the parcels.

Management notes, by Larry Lunden. This document gives information on parcel usage, legal restrictions, and other considerations.

Stewardship Plan for Eleanor Buck Wolf Parcel. This document gives a detailed plan for the Wolf parcel.

Stewardship Plan for Wood Parcel. This document will be developed to give a detailed plan for the Wood parcel.

References

MacBroom, James Grant. 1998. The River Book. Connecticut Department of Environmental Protection.