North Carolina
Department of Administration

Beverly Eaves Perdue, Governor

Moses Carey, Jr., Secretary

December 27, 2010

Secretary Dee Freeman
Department of Environment and Natural Resources
1615 Mail Service Center
Raleigh, North Carolina 27699-1615

Commissioner Steven Troxler
Department of Agriculture and Consumer Services
1001 Mail Service Center
Raleigh, North Carolina 27699-1001

Re: Dedication of the **Hog Branch Ponds Plant Conservation Preserve**, Brunswick County

Dear Secretary Freeman and Commissioner Troxler:

Pursuant to Article 9A, Chapter 113A of the North Carolina General Statutes, this letter of allocation is executed for the purpose of dedicating the State-owned lands hereinafter described as a North Carolina Nature Preserve

This real property is currently administered by the Plant Conservation Program, North Carolina Department of Agriculture and Consumer Services, and consists of approximately 913 acres located in Brunswick County which are specifically described in Exhibit A, attached hereto and by reference made a part hereof. The dedicated lands shall be known collectively as the Hog Branch Ponds Plant Conservation Preserve Nature Preserve.

Dedication of the qualified portion of the tract fulfills the terms of any prior grant agreements and deed restrictions, including those of the Natural Heritage Trust Fund and the Ecosystem Enhancement Program.

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116 West Jones Street
Raleigh, North Carolina 27603

The Governor and Council of State have approved the dedication of the State-owned lands hereinabove described as the Hog Branch Ponds Plant Conservation Preserve Nature Preserve to be held in trust by the Custodian for the uses and purposes expressed in the Nature Preserves Act at a meeting held in the City of Raleigh, North Carolina, on the 3rd of August, 2010.

Sincerely,

Moses Carey, Jr.

MC

Attachment

CONSENTED AND AGREED TO:

Secretary Dee Freeman
Department of Environment and Natural Resources

Commissioner Steven Troxler
Department of Agriculture and Consumer Services

EXHIBIT A

HOG BRANCH PONDS
PLANT CONSERVATION PRESERVE
DEDICATED NATURE PRESERVE

COUNTY: Brunswick PHYSIOGRAPHIC PROVINCE: Coastal Plain

TOPOGRAPHIC QUADS: Funston, Southport

SIZE OF AREA: ca. 913 acres (all primary, including a 470-acre restoration area and a 24-acre special management area)

OWNER/ADMINISTRATION: State of North Carolina
Department of Agriculture and Consumer Services
Plant Protection Section, Plant Conservation Program

LOCATION: North of Military Ocean Terminal at Sunny Point, northwest of Allen Creek, east of Pretty Pond, and bisected by Pretty Pond Road.

DESCRIPTION: The Hog Branch Ponds Preserve is part of the rolling uplands and wetlands that occur along the northern boundary of the city of Boiling Spring Lakes. This area has distinctive landforms created by past coastal and aeolian processes, including ancient sand dunes and low sand ridges. The area is dotted with the distinctive oval basins of Carolina bays and the smaller, irregular basins of limesink depressions formed by dissolution of buried limestone. High water tables form seasonal to permanent ponds in the limesink basins and have allowed organic soils to accumulate in the sandy swales and Carolina bays. Extensive wet sandy soils are present in the western part of the area, while the eastern part has higher relict dunes that are excessively drained and are very dry.

The limesink basins for which the Hog Branch Ponds site is named support a diverse collection of Small Depression Pond communities. Some ponds have canopies of pond cypress (*Taxodium ascendens*), while others are treeless. Water lilies (*Nymphaea odorata*) often dominate in the wettest centers, while marshes of maidencane (*Panicum hemitomon*) occur around the edges. The ponds support a large collection of different rare species, including the state listed coastal beaksedge (*Rhynchospora pleiantha*), Florida spikerush (*Eleocharis elongata*), shrubby seedbox (*Ludwigia suffruticosa*), brown bogbutton (*Lachnocaulon minus*), and Harper's beaksedge (*Rhynchospora pleiantha*). Chicken turtles (*Deirochelys reticularia*), have also been found here.

The western part of the preserve supports a mosaic of Pine Savanna, Wet Pine Flatwoods, and Pond Pine Woodland communities on the low sandy and mucky soils. Of particular note are two community subtypes, the Pleea Flat subtype of Pine Savanna and the Sand Myrtle subtype

of Wet Pine Flatwoods. Both communities are rare, with the majority of their limited global range in Brunswick County. The Boiling Spring Lakes area as a whole is the most extensive intact example remaining of both. The Pleea Flat community is an open-canopy savanna of longleaf pine (*Pinus palustris*) and pond pine (*Pinus serotina*). The ground cover is dominated by rush-featherling (*Pleea tenuifolia*) rather than the grasses typical of all other subtypes. The Sand Myrtle community is a longleaf pine-pond pine savanna with ground cover including sand-myrtle (*Leiophyllum buxifolium*) as the dominant shrub. Wiregrass *(Aristida stricta*) and trailing blueberry (*Vaccinium crassifolium*) are present in the herb layer beneath. Besides these rare communities, the site contains good examples of the typical Wet Pine Flatwoods and Pine Savanna communities. Pond Pine Woodland communities on the mucky soils have an open canopy of pond pine, with a dense tall shrub layer beneath. Fetterbush (*Lyonia lucida*), gallberries (*Ilex glabra, Ilex coriacea*), and red bay (*Persea palustris*) dominate the shrub layer.

The sandy uplands around the Hog Branch Ponds basins and to the west of them once supported Xeric Sandhill Scrub communities dominated by longleaf pine, with a sparse understory of turkey oak (*Quercus laevis*). Some Wet Pine Flatwoods and Pond Pine Woodland occurred in smaller wet areas of the landscape. These communities have been degraded by past logging and planting of other pines. This area is dedicated as a restoration area. Planted pines have been removed, and longleaf pine will be restored over time. This area supports two rare plant species. Venus flytrap (*Dionaea muscipula*) and a small amount of Georgia indigo-bush (*Amorpha georgiana* var. *confusa*) occur at most edges of the sandhills.

BOUNDARY JUSTIFICATION: The primary area includes the areas of intact natural communities. This includes the mosaic of Pine Savanna, Wet Pine Flatwoods, and Pond Pine Woodlands in the western part of the site. It also includes the Small Depression Ponds and their immediate vicinity. While these areas have suffered from past disturbances and lack of fire, they should recover well with time and fire management.

The more heavily altered drier areas are treated as a primary restoration area. This area was previously converted to pine plantations, but retains some natural herbaceous cover. Scattered patches of rare plants also remain within it. Most of the planted trees have already been removed, and ongoing restoration activities such as prescribed burning, planting, and possibly thinning, should restore this area to more natural character.

The powerline right-of-way on the east side of the preserve supports a population of Venus flytrap (*Dionaea muscipula*) and is designated as a special management area within the primary area. A gas line is identified on the map, but is not known to contain any rare species.

The dedicated area at present contains only areas where state ownership is relatively contiguous. Areas of fragmented ownership are excluded until the status of land protection in these areas becomes clearer.

A number of existing roads are present in parts of the dedicated area. These roads are pre-existing disturbances within the primary area which may be maintained within their existing footprint. It is hoped that most of these roads that are not needed for access or firebreaks will ultimately be abandoned and reclaimed.

MANAGEMENT AND USE: The Department of Agriculture and Consumer Services is responsible for the management of the preserve. The Nature Conservancy and the Division of Forest Resources provides support for these management functions. Fire is crucial to the ecological integrity of the natural communities and the survival of almost all of the rare species. Prescribed burning at frequencies and intensities which are specific to the community type should be utilized. Burn units should be planned to avoid burning all of any given kind of habitat in the same year. Fire lines should be constructed to minimize impact to natural communities, and should avoid rare species populations.

THIS DEDICATION OF THE HOG BRANCH PONDS PLANT CONSERVATION PRESERVE IS MADE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. As used in this Letter, the terms "natural area" and "nature preserve" shall have the same meaning as contained in North Carolina General Statutes, section 113A-164.3.

2. Pursuant to North Carolina General Statutes 113-164.8, all State-owned lands lying within the above designated area are hereby dedicated as a nature preserve to be known collectively as the Hog Branch Ponds Plant Conservation Preserve Nature Preserve (hereinafter "preserve") for the purposes provided in the North Carolina Nature Preserves Act, as amended, and other applicable law, and said State-owned land, shall be held, maintained, and used exclusively for said purposes.

3. **Primary Custodian**: The primary custodian of the Nature Preserve will be the **North Carolina Plant Conservation Program, Department of Agriculture and Consumer Services**, which will be responsible for managing the preserve in accordance with State Administrative Code 15 NCAC 12H.0300 and .0400.

4. **Primary Classification**: The primary classifications and purposes of the preserve will be rare plant conservation and other recreational uses authorized by the Primary Custodian. The ecological significance of the preserve is described in Exhibit A.

5. **Management Areas:** For the purposes of management, the preserve shall be considered to consist of a Primary Area (approximately 913 acres), as more particularly described in Exhibit A, attached thereto and by this reference made a part hereof. The Primary Area consists essentially of the natural area encompassing the rare plant species, and the surrounding Small Depression Pond, Pine Savanna, Wet Pine Flatwoods, Pond Pine Woodland, and Xeric Sandhills Scrub natural community types.

   The Primary Area--composed of the natural area as described above--is deemed by the Secretary of the North Carolina Department of Environment and Natural Resources to qualify as an outstanding natural area under statutory criteria for nature preserve dedication (G.S. 113A-164.6) and further serves all of the public purposes for a dedicated preserve as stated in Administrative Rules 15 NCAC 12H.0301(b).

6. **Rules for Management of the Primary Area**:

   A. Character of Visitor Activity: The principal visitor activities in the preserve may include passive recreation. These activities shall be regulated by the Custodian to prevent significant disturbance of the preserve. These activities may specifically be regulated by the Custodian to protect and conserve the natural values of the preserve.

Activities and uses unrelated to those listed above are prohibited except as otherwise provided in these Articles or unless necessary to carry out the purposes of the preserve. Prohibited activities include, but are not limited to: construction; commercial activities and development; commercial silviculture; agriculture and grazing; gathering of native species of plants or plant products; the removal, disturbance, molestation, or defacement of minerals, archaeological and natural resources, except for research purposes as approved by the Custodian; and those activities specifically restricted in these Articles.

There shall be no fires, except as necessary for ecological management of the preserve or in conjunction with supervised educational activities of the Custodian, or further excepted as herein provided or otherwise expressly permitted.

B. Orientation and Guidance of Visitors: The Custodian reserves the right to orient and guide visitors for educational programs, scientific research, and for preserve management. Exhibits, programs, and printed materials may be provided by the Custodian in service areas. The Custodian may restrict access to visitors in those instances or in such areas that restrictions may be determined necessary to safeguard sensitive environmental resources in the preserve.

C. Disturbance of Natural Resources: The cutting or removal of trees, dead or alive, or the disturbance of other natural resources is prohibited except as necessary for removal of hazards to visitors, control of disease that would damage or reduce the significance of the preserve, restoration after severe storm damage, trail clearance and maintenance, or for purposes of maintenance or restoration of natural communities or rare species populations as stipulated in the preserve management plan and that which is consistent with the purposes of these Articles.

Specifically, a component of the management plan, the longleaf restoration plan, will address restoration of areas (identified as Primary (Restoration) Areas in the Exhibit A map). The off-site canopy trees within these areas have been removed. The herbaceous layer retains some natural composition and structure, as well as some rare species populations. Longleaf restoration will minimally focus on prescribed burning and planting/subsequent thinning of longleaf.

The longleaf restoration plan will be submitted to the Natural Heritage Program for review and approval. Subsequent modification of the longleaf restoration plan may occur through mutual consent of Plant Conservation Program and Natural Heritage Program staff, as additional areas in need of restoration or new methods of restoration area determined.

Additionally, a powerline right-of-way supporting a rare plant population is designated as a special management area (see Exhibit A map).

The Primary Areas defined along the a portion of the Hog Branch Ponds tract were protected through fee simple acquisition by the State of North Carolina and deed restrictions were imposed by the Ecosystem Enhancement Program. These deed restrictions are recorded in Brunswick County, NC, Register of Deeds, December 17, 2004, Deed Book 2060, Pages 1002-1009.

D. Wild Fire Control: Wild fires may mimic natural processes historically occurring in an ecosystem on a landscape level. When the extent of a wild fire does not threaten human life or structures, it may be allowed to burn with minimal control. If wild fire control is necessary, firebreaks may need to be established. When possible, existing roads and firebreaks will be utilized for wild fire control. When new firebreaks need to be established, environmentally sensitive areas will be avoided when possible. Old firebreaks which affect the natural hydrology of wetlands will be filled and allowed to revegetate. Planning of firebreak restoration should occur in consultation with the North Carolina Natural Heritage Program.

E. Water Control: The purpose of water control shall be to maintain the preserve's natural water regime. Water levels that have been altered by man may be changed if necessary to restore the preserve to its natural condition.

F. Pollution and Dumping: There will be no storage or dumping of ashes, trash, garbage, hazardous substances, toxic waste, other unsightly or offensive material, or fill material, including dredge spoil in, on, or under the preserve. No underground storage tanks may be placed within the preserve. No surface or ground waters of the preserve may have pollutants added within the preserve.

G. Control of Vegetational Succession: Control of vegetational succession may be undertaken if necessary to maintain or restore a particular natural ecosystem type or to preserve endangered, threatened, rare, or other unusual species. Controls will be done in the manner that best imitates the natural forces believed responsible for maintaining the natural ecosystem type, or that minimizes unnatural effects on non-target portions of the ecosystem. Prescribed burning is essential to some ecosystems and may be used where natural wildfire historically kept understories open and promoted herbaceous diversity.

H. Control of Populations: Any control of animal or plant populations on the preserve shall be for the purpose of correcting those situations where those populations are significantly affecting natural conditions on the preserve. The Custodian may, in consultation with the North Carolina Natural Heritage Program, ap-

ply biological controls, herbicides and pesticides, and other means deemed necessary or appropriate to control or eradicate exotic or native species of plant or animal that are degrading the natural character of the preserve. Because of potential impacts on native species, no exotic flora or fauna shall be introduced into the preserve.

I. Research and Collecting Permits: Any person wishing to engage in scientific research requiring collecting or otherwise affecting anything within the preserve shall first secure written permission from the Custodian.

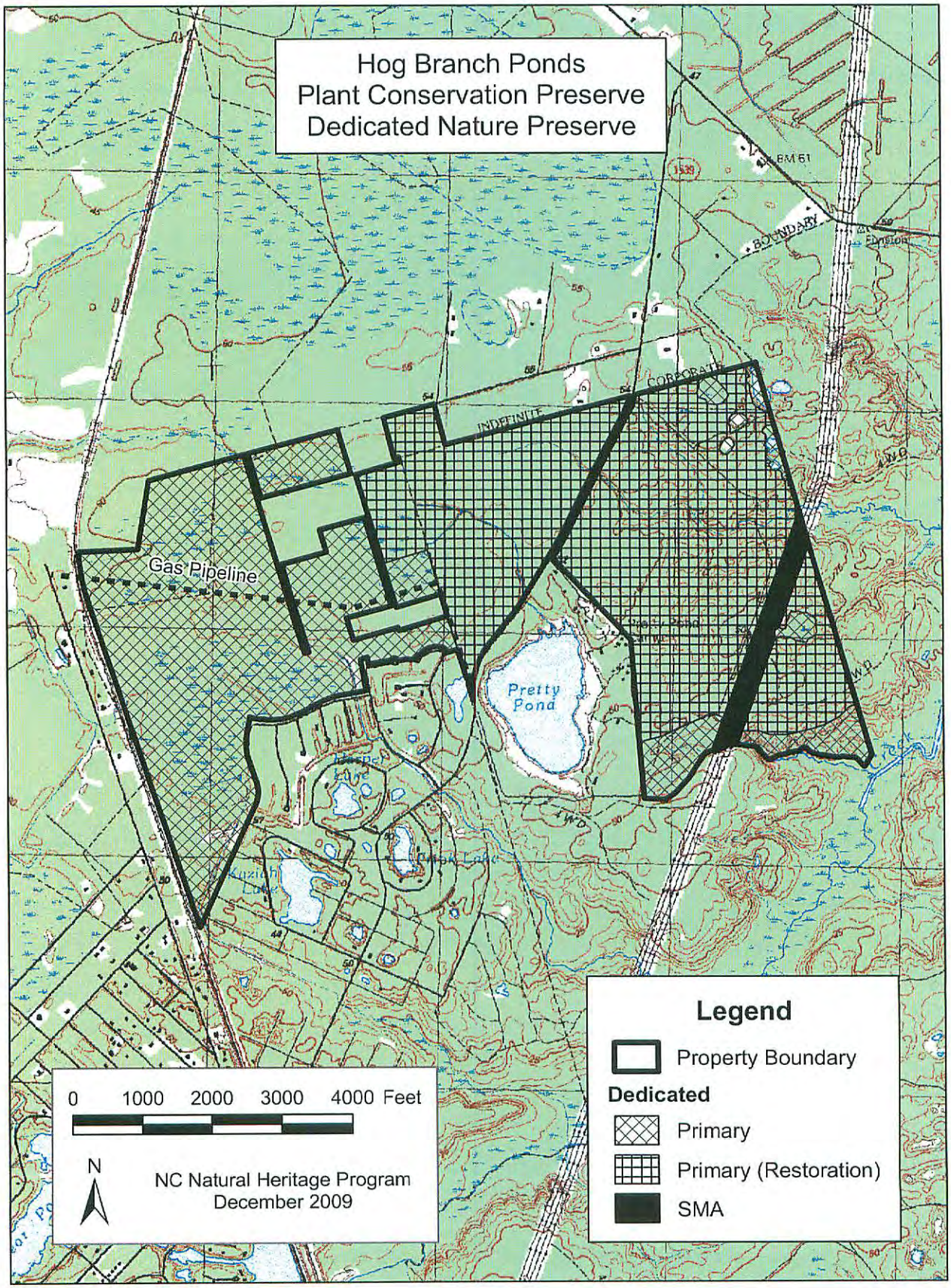
J. Roads and Trails: Construction and maintenance of roads, trails, and other access structures within the preserve will be limited to the level necessary to appropriately manage the preserve. New roads shall not be constructed in the Primary Area. When necessary, the Custodian may construct and maintain access limited to staff use for management purposes, such as service paths (single lane vegetated paths) for patrol, right-of-way maintenance, and other management activities, within the Primary Area. Number and width of new paths will be minimized, and sensitive areas avoided when possible. Existing roads that occur within or form a boundary of the Primary Area may be maintained by grading of the roadbed, replacing culverts, or adding stone as needed in order to maintain the integrity of the road for vehicular use. Access management and construction will be part of the overall management planning process and will include consultation with the North Carolina Natural Heritage Program.

K. Other Structures and Improvements: Structures or facilities shall not be erected by the Custodian within a preserve, except as may be consistent with the purposes of the preserve as stated in this dedication. Site selection shall be consistent with this dedication.

L. Management Plan: The **Department of Agriculture and Consumer Services, Plant Conservation Program**, as Primary Custodian of the preserve, shall be required to prepare and submit for approval to the Secretary of the Department of Environment and Natural Resources a management plan for the preserve. This plan shall be subject to all the provisions of this dedication and shall additionally be consistent with the management principles set forth in the North Carolina Administrative Code 15 NCAC 12H.0300 and .0400 and such other regulations as may be established from time to time by the Secretary of the Department of Environment and Natural Resources. In any case where contradictions may arise between this instrument of dedication and other management regulations, the terms of this dedication shall take precedence.

7. **Amendment and Modification**: The terms and conditions of this dedication may be amended or modified upon agreement of the Commissioner of the Department of Agriculture and Consumer Services and the Secretary of the Department of Environment and Natural Resources, and approved by the Council of State. Any portion of the tract dedicated pursuant to this instrument may be removed from dedication in accordance with the provisions of North Carolina General Statutes 113A-164.8.

8. **Permanent Plaque**: The Custodian should erect and maintain a permanent plaque or other appropriate marker at a prominent location within the preserve bearing the following statement: "This Area is Dedicated as a State Nature Preserve."


Hog Branch Ponds
Plant Conservation Preserve
Dedicated Nature Preserve
Gas Pipeline
Pretty Pond
Legend
Property Boundary
Dedicated
Primary
Primary (Restoration)
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NC Natural Heritage Program
December 2009