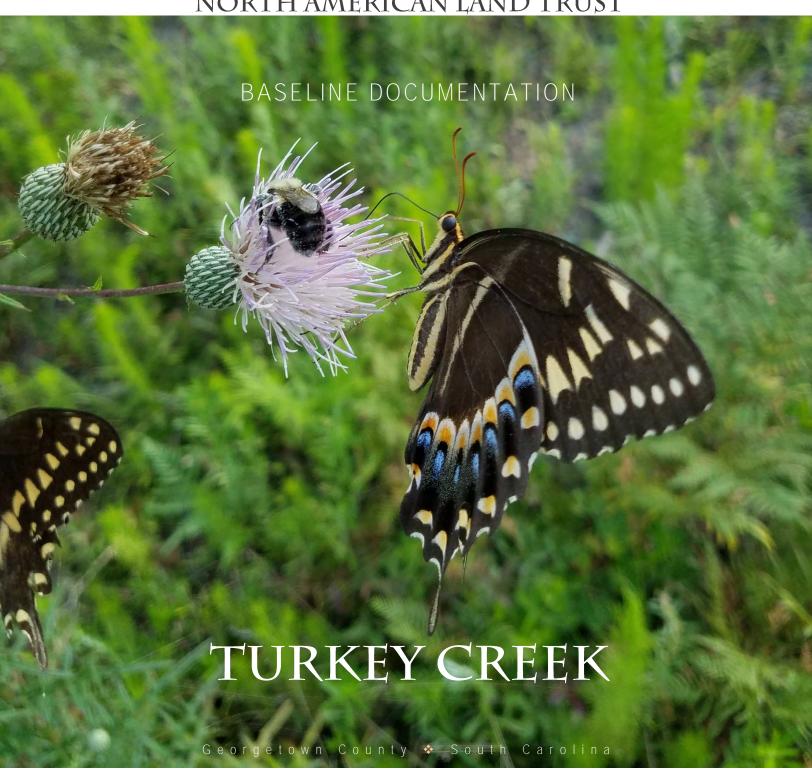


NORTH AMERICAN LAND TRUST





#### Purposes of Baseline Documentation as Defined by the Land Trust Alliance

- 1. Records both the important conservation values and the current conditions of the property.
- 2. Serves to support qualification for tax benefits and substantiating overall public benefit by describing why the property is being conserved and documenting current conditions.
- 3. Operates as evidence in future litigation, if it meets court-specific rules for admissibility, and provides a foundation for future monitoring and enforcement activities.
- 4. Enables land trust staff to identify worthwhile projects, to retain institutional knowledge and to communicate with landowners about stewardship responsibilities.

#### Treasury Regulations 26 C.F.R. § 1.170A-14(g)(5)(i)

#### (5) Protection of conservation purpose where taxpayer reserves certain rights—

- (i) *Documentation.* In the case of a donation made after February 13, 1986, of any qualified real property interest when the donor reserves rights the exercise of which may impair the conservation interests associated with the property, for a deduction to be allowable under this section the donor must make available to the donee, prior to the time the donation is made, documentation sufficient to establish the condition of the property at the time of the gift. Such documentation is designed to protect the conservation interests associated with the property, which although protected in perpetuity by the easement, could be adversely affected by the exercise of the reserved rights. Such documentation may include:
  - **(A)** The appropriate survey maps from the United States Geological Survey, showing the property line and other contiguous or nearby protected areas;
  - **(B)** A map of the area drawn to scale showing all existing man-made improvements or incursions (such as roads, buildings, fences, or gravel pits), vegetation and identification of flora and fauna (including, for example, rare species locations, animal breeding and roosting areas, and migration routes), land use history (including present uses and recent past disturbances), and distinct natural features (such as large trees and aquatic areas);
  - **(C)** An aerial photograph of the property at an appropriate scale taken as close as possible to the date the donation is made; and
  - **(D)** On-site photographs taken at appropriate locations on the property. If the terms of the donation contain restrictions with regard to a particular natural resource to be protected, such as water quality or air quality, the condition of the resource at or near the time of the gift must be established. The documentation, including the maps and photographs, must be accompanied by a statement signed by the donor and a representative of the donee clearly referencing the documentation and in substance saying "This natural resources inventory is an accurate representation of [the protected property] at the time of the transfer."



## ~Turkey Creek Conservation Area~

Georgetown County, South Carolina

~Table of Contents~

#### A. Acknowledgements

- Baseline Documentation Acknowledgment
- Building Zone Acknowledgment

#### B. Baseline Documentation Overview

- I. Donor Information
- II. Introduction
- III. Conservation Purposes
- IV. Conservation Values
- V. Summary of Reserved Rights
- VI. Monitoring Policy
- VII. Mission Statement
- C. North American Land Trust IRS Information
- D. North American Land Trust Board Resolution & Minutes
- E. Recorded Conservation Easement and Declaration of Restrictions & Covenants
- F. Existing Conditions Report
- G. Photographic Documentation

#### H. Supportive Mapping

- 1. Location Map
- 2. Base Map
- 3. Topography
- 4. Soils Map
- 5. Wetlands Map
- 6. Floodplain Map
- 7. Aerial Photograph
- 8. Concept Plan
- 9. Conservation Easement Plan



A. Acknowledgments



Property:

Date:

## ~Baseline Documentation Acknowledgment~

Turkey Creek Conservation Area

Location:	Georgetown County, South Carolina	
Conservation Easemer establish the condition Documentation is desi Conservation Area, wh Easement, could be acquatural resources inve	evailable to the Holder, prior to the time the donation of the not was made, this Baseline Documentation which is sufficient of the Conservation Area at the time of the gift. This Baseling gned to protect the conservation interests associated with the cich although protected in perpetuity by the Conservation liversely affected by the exercise of the reserved rights. This intory is an accurate representation of the Conservation Area are of the Conservation Easement to Holder.	ne ne
	NORTH AMERICAN LAND TRUST:	
Signature:	Stephen Thor Johnson, NALT President	
Date:		
	TURKEY CREEK, LLC:	
Signature:		



October 2, 2017
Turkey Creek Conservation Area
Georgetown County, South Carolina

#### **Building Zone Acknowledgement**

Four "Building Zones" have been established on the Turkey Creek Conservation Area, as shown on the attached Concept Plan. Please see Section 4.2. in the Turkey Creek Conservation Easement for additional terms, conditions and uses regarding the "Building Zones." The location of the "Building Zones" as shown on the Concept Plan have been carefully considered by NALT's land planning and stewardship staff, and strategically located to avoid adverse impacts to the protected conservation values and purposes.

Stephen Thor Johnson

**NALT President** 

Williams Gandy

**NALT Biogeographer** 



B. Baseline Documentation Overview



## NORTH AMERICAN LAND TRUST

Conservation Easement
Baseline Documentation

~Turkey Creek

Conservation Area~

Georgetown County, South Carolina

~ Baseline Documentation Overview~

#### I. Donor Information

Turkey Creek, LLC 3424 Peachtree Road NE STE 1550 Atlanta. GA 30326

#### II. Introduction

The following Baseline Documentation describes the Conservation Values and physical condition of the Turkey Creek Conservation Area located in Georgetown County, South Carolina. The Turkey Creek Conservation Area is comprised of approximately 230.99± acres.

Four "Building Zones" have been established on the Turkey Creek Conservation Area, as shown on the attached Concept Plan. Please see Section 4.2. in the Turkey Creek Conservation Easement for additional terms, conditions and uses regarding the "Building Zones." The location of the "Building Zones" as shown on the Concept Plan have been carefully considered by NALT's land planning and stewardship staff, and strategically located to avoid adverse impacts to the protected conservation values and purposes.

Please reference the Existing Condition Report, Photographic Documentation, and Supportive Mapping sections of this Baseline Documentation which further describe the Conservation Values of the Turkey Creek Conservation Area.

#### **III.** Conservation Purposes

The Internal Revenue Code Section 26 U.S.C. § 170 (h)(4)(a) has established specific 'Conservation Purposes' that, if perpetually protected through the donation of a Conservation Easement, could render the donor eligible for a charitable contribution. In particular, the Turkey Creek Conservation Area satisfies three (3) Conservation Purposes:

- 1. Preservation of the Conservation Area as a relatively natural habitat of fish, wildlife, or plants or similar ecosystem.
- 2. Preservation of the Conservation Area as open space which provides scenic enjoyment to the general public and yields a significant public benefit.
- 3. Preservation of the Conservation Area as open space which, if preserved, will advance a clearly delineated Federal, State or local governmental conservation policy and will yield a significant public benefit.

#### IV. Conservation Values

The following 'Conservation Values' document the ecological and environmental significance of the Turkey Creek Conservation Area. Please reference the Existing Conditions Report, Photographic Documentation, and Supportive Mapping sections of the Baseline Document that examine the Conservation Values of the Conservation Area in greater detail.

- The Conservation Area contains at least two ecological systems recognized by the International Vegetation Classification System: Southern Atlantic Coastal Plain Fresh and Oligohaline Tidal Marsh (CES203.376) and The Atlantic Coastal Plain Blackwater System (CES203.247).
- The Conservation Area contains at least two ecological associations recognized by the International Vegetation Classification System: Sandhills Swamp Tupelo -Pine Streamhead Swamp Forest (CEGL004734), Pond-cypress Depression Forest (CEGL007420).
- The Conservation Area is habitat for the globally vulnerable (G3 ranking) Le Conte's Thistle (*Cirsium lecontei*) which is present on the property.
- The Conservation Easement protects headwater streams that are tributaries to Turkey Creek, part of the greater Sampit River basin. The undeveloped Conservation Area serves water infiltration and sedimentation avoidance functions. This Conservation Easement will prevent development that otherwise

would contribute pollution and sedimentation to the streams, creeks and rivers in the watershed, and thus helps maintain higher water quality.

- The Conservation Area borders County Road S-22-42 (Pennyroyal Road) for a distance of three-tenths of a mile and Turkey Creek (a navigable waterway) for a distance of 1.28 miles, and so provides natural scenic views and enjoyment to the general public.
- The Conservation Area includes over 60 acres of surveyed wetlands providing aquatic habitat for reptiles, amphibians, and aquatic insects.
- The Conservation Area provides the natural ecological requirements for at least two hundred fifty species of plants.
- The Conservation Area provides wildlife corridors, and breeding, foraging and sheltering habitat for at least seventy-five species of animals.
- The Conservation Area provides habitat for important wildlife and game species such as Whitetail Deer and Wild Turkey.
- The Conservation Area is part of the "Winyah Bay Focus Area" which was established by the Atlantic Coast Joint Venture of the 1986 Waterfowl Management Plan (NAWMP) - - a cooperative effort between the US, Canada and Mexico to protect large-scale upland and wetland habitats. The primary method of habitat protection in the Winyah Bay Focus Area will be through conservation easements on private land. The Low Country Land Trust describes this focus area as "the largest contiguous block of tidal freshwater wetlands in South Carolina. Managed heavily over centuries for rice cultivation, these wetlands are regionally significant habitat for waterfowl, colonial waterbirds and nesting ospreys. Upland tracts support endangered red-cockaded woodpecker colonies. Many other threatened or endangered species can be found throughout Winyah Bay, including bald eagles, short-nosed sturgeon, loggerhead sea turtles, peregrine falcons, least terns, piping plovers, and wood storks. The Focus Area is vital for recreational and commercial fishing and shellfish harvesting, and local forestry and agriculture play a significant role in the regional economy."
- The Conservation Area is part The Nature Conservancy's Winyah Bay and Pee
  Dee River Basin Project Area. The Nature Conservancy describes this area's river
  system as: "....one of the largest and most diverse wetland systems along the
  Atlantic Seaboard, protecting essential wildlife habitat and securing drinking
  water for coastal communities."

 The Conservation Area lies within the HUC12 watershed 030402070105, part of the larger Sampit River Watershed. The South Atlantic Conservation Blueprint categorizes 38% of the land within this HUC12 watershed as "High Priority." The vast majority of the Conservation Area has a score of 4 out of 5, or "High Priority".

The following governmental conservation policies are supported by the grant of this Conservation Easement and the Conservation Values described above achieve a significant public benefit in fulfillment of these conservation policies:

- The Conservation Area helps to fulfill the goals of the South Carolina Forest
  Legacy Program, including the following specified goals: "protect river systems,
  wetlands, and their associated upland habitats; reduce forest fragmentation
  caused by development; provide buffer areas and connectivity to already
  protected areas; and promote Best Management Practices for forestry"
- South Carolina Code Annotated 48-59-20 et seq., states that "rapid land development and economic growth which has benefited the state's people and economy, but has also led to the loss of forestlands, farmlands, wildlife habitats, outstanding natural areas, beaches and public areas for outdoor recreation; and has impacted the health of the state's streams, rivers, wetlands, estuaries, and bays, all of which impacts the quality of life of the state's current and future citizens and may jeopardize the well-being of the state's environment and economy if not addressed appropriately."
- South Carolina Code Annotated 48-59-20 et seq., also notes that "the protection of open space by acquisition of interests in real property from willing sellers is essential to ensure that the State continues to enjoy the benefits of wildlife habitats, forestlands, farmlands, parks, historical sites, and healthy streams, rivers, bays, and estuaries; for recreational purposes, for scientific study, for aesthetic appreciation, for protection of critical water resources, to maintain the state's position as an attractive location for visitors and new industry, and to preserve the opportunities of future generations to access and benefit from the existence of the state's outstanding natural and historical sites."
- South Carolina State Wildlife Action Plan (SWAP) chapter 4 page 8 states "Habitat protection has been identified as one of the most important actions to assist in the protection of South Carolina's priority species by SCDNR biologists, species experts and attendees at the public information meetings held throughout the state... The importance that SCDNR places on habitat protection for the benefit of South Carolina's wildlife is evident in the many programs currently in place at the SCDNR and in the partnerships SCDNR has forged with other state and federal agencies, organizations, academic institutions and industries." This section of the SWAP goes on to name the SWAP's conservation

actions as "(1) Acquire property for protection of priority species and to ensure habitat linkage through fee simple acquisition and conservation easements..." and then goes to list the priority of "1. Terrestrial Habitats, 2. Watersheds and 3. Coastal and Marine Habitats." Of these priorities three Terrestrial Habitats (o. Ponds and Depressions p. Blackwater Stream Systems q. Pine Woodland), one watershed (c. Pee Dee River Watershed), and two Coastal and Marine Habitats (a. Forested Habitats of the Coastal Plain e. Tidal Fresh and Brackish Systems) are present in the Conservation Area..

#### V. Summary of Reserved Rights

The Reserved Rights that have been allowed in the Conservation Easement have been carefully reviewed for consistency with the Conservation Purposes and the protection of the Conservation Values. Approval of the Reserved Rights by NALT must be conducted under the notice and review procedure set forth in the Conservation Easement, which assures that NALT may reject any exercise of the Reserved Rights that fails to protect the Conservation Purposes and the Conservation Values. A summary of certain Reserved Rights is specifically addressed below:

- <u>Buildings in Building Zone.</u> Limited improvements are permitted in the Reserved Rights within a defined "Building Zone". Protection of the Conservation Purposes and the Conservation Values is assured by restrictions on these predetermined locations of disturbance and use. The Holder has a right of prior approval of any such activity. The amount of disturbance has been determined to be de minimis compared to the dimensions and context of the Conservation Area.
- Roads and Driveways. These are strictly controlled by Holder and must be reviewed and approved subject to the obligation of the Owner to protect the Conservation Purposes and the Conservation Values.
- Alternative Energy Structures. It is important to address issues of climate change
  that alternative energy structures be permitted on conserved properties, subject
  to review and limitations. The Conservation Easement requires that any such
  structures serve only permitted uses in the Conservation Area, are pre-approved
  by Holder.
- <u>Buildings</u>. All dwelling units are restricted to the "Building Zone" and subject to strict size limitations assuring that they are only *de minimis* as compared to the size of the Conservation Area, and subject to approval by the Holder for consistency with the Conservation Purposes and Conservation Values. Any buildings or structures allowed by this easement outside of the "Building Zone" must be approved by Holder for location to ensure protection of conservation purposes and values.
- <u>Trails</u>. Trails of various sorts are needed for the proper management and permitted use of the Conservation Area. Accordingly, trails are permitted, but

- only subject to limitations that will serve to protect the Conservation Purposes and the Conservation Values.
- Water Courses There shall be no dredging, channelizing or other manipulation of natural water course or of any other water course existing within the Conservation Area except that manmade drainage swales, ditches or storm water management facilities may be dredged or otherwise altered for maintenance purposes or to maintain its function for its intended purpose.
- <u>Subdivision and Allocation of Reserved Rights</u>. Subdivision will have no impact
  on the legal enforceability of the Conservation Easement on the Conservation
  Area or any lots created from the Conservation Area. Nevertheless, in order to
  prevent any impact in the ability of Holder to monitor and enforce the
  Conservation Area or on the long term stewardship of the Conservation Area,
  Owner may only subdivide the Conservation Area with prior approval from
  Holder.
- <u>Utility Installations</u>. Utilities are necessary for any property to function.
  However, they are restricted to those necessary to service the permitted uses and the Conservation Easement imposes certain other limitations designed to protect the Conservation Purposes and the Conservation Values, including Holder approval.
- <u>Vegetation Management</u>. Owner shall cut and remove tree species, shrubs and grasses, including within the Wetland and Riparian Protection Area, only in conformance with a plan a "Vegetation Management Plan" approved by Holder. The purpose of the Vegetation Management Plan shall be to perpetually promote the fulfillment of the Conservation Purposes and protection of the Conservation Values including habitat for avian species and native grasses. The Vegetation Management Plan must address issues and provide information as Holder requests.

#### VI. Monitoring Policy

NALT monitors all Conservation Easements annually to determine compliance with the easement document and/or changes in the properties. Annual monitoring helps develop and maintain good relationships with landowner, and helps establish and maintain records of the property condition to augment the baseline documentation.

NALT's monitoring efforts are designed to protect the conserved land, educate the landowner and honor the written commitments made to the original landowners/donors and to other vested conservation partners. Annual or even more frequent monitoring helps the organization to prevent gaps in the information concerning the property and its owners or residents, and ensures that the owners and residents have knowledge of the restrictions placed on the use of the land.

If a property has changed hands since the previous monitoring visit, annual monitoring visits help ensure that the new owners know the restrictions placed on the land purchased, and present an opportunity for the new owner and land trust to make introductions and establish a relationship.

Annual monitoring is the minimum; more frequent monitoring is typically used for short-term stewardship issues or during a time when the easement may be at risk, such as during construction of structures permitted by the easement.

#### **Monitoring Process**

Monitoring of a particular property is generally performed and always supervised by a NALT staff member. The ways in which a monitoring representative may successfully complete the annual monitoring includes:

- physically visiting the Conservation Area
- remote sensing/aerial imagery
- low altitude aerial reconnaissance
- occasionally outside consultants

Prior to monitoring the Conservation Area the monitoring representative conducts the following:

- emails and/or telephones with the landowner, property manager and/or the persons residing on the property and invite them to participate
- reviews the baseline documentation
- reviews prior monitoring reports and other project specific background information
- reviews latest publically available aerial imagery

Monitoring representatives examine the property by air with a low altitude fly-over, with aerial/satellite imagery, or onsite with vehicle and/or by foot. On-site monitoring will be performed at least once in a 3-year period.

#### If onsite:

- take notes and geo-referenced photographs
- preferably record GPS track of route taken for the current year
- identify and record any changes or improvements to the property
- identify and record any observed compliance issues specific to the terms of the Conservation Easement

#### If by flight:

- take notes and photographs
- identify and record any observed changes or improvements to the property
- identify and record any observed compliance issues specific to the terms of the Conservation Easement

 upon return to office, diligently review the photographs taken during flight to identify and record any changes, improvements or possible compliance issues

#### If imagery used:

- obtain the most recent imagery available for the current year
- review imagery diligently
- identify and record any changes, improvements or possible compliance issues

Monitoring representatives document observations in the standard Monitoring Template, attaching photographic documentation, GPS track of route, and any necessary imagery, and sends the report to designated NALT employee within a month of completion of the monitoring visit.

#### VII. Mission Statement

The Mission of North American Land Trust is to promote long-term stewardship of our natural and cultural heritage by implementing successful private land conservation projects and promoting innovative land conservation techniques.

The protection of Turkey Creek with a Conservation Easement is consistent with mission statement of North American Land Trust and furthers the conservation goals of the organization and the landowner. By working directly with the private landowner to conserve Turkey Creek's diverse and unique natural resources, significant public benefit was achieved and documented by NALT's professional staff. Measurable public benefits include:

- The advancement of at least 3 clearly delineated State governmental conservation polices including the South Carolina Forest Legacy Program, South Carolina Code Annotated 48-59-20 and the South Carolina State Wildlife Action Plan (SWAP).
- Suitable habitat for the globally vulnerable (G3 ranking) Le Conte's Thistle (*Cirsium lecontei*) which is present on the property.
- The protection of headwaters, streams and wetlands that flow to Turkey Creek part of the greater Sampit River Basin.
- Scenic views from County Road S-22-42 (Pennyroyal Road) and Turkey Creek, a navigable waterway.

Additionally, innovative land conservation techniques such as the voluntary establishment of a Conservation Management Plan supported by NALT on behalf of the landowner will assure the sustainable management of the property's natural resources and underscores the private landowner's commitment to meaningful conservation outcomes long after the Conservation Easement has been recorded.



C. NALT IRS Information



#### Important Tax Information Regarding North American Land Trust

The following information is attached regarding NALT's current status:

#### Internal Revenue Service – Charitable Status

The IRS notified NALT that it had granted it permanent status on June 25, 1997 as a publicly supported 501 (c) (3) organization as described in section 509 (a) (1) and 170 (b) (1) (A) (vi). The notification is attached to this memorandum. Tax returns (IRS form 990) have been filed annually and are available upon request.

#### Internal Revenue Service – Employer Identification Number

NALT was assigned an Employer Identification Number on August 28, 1992 (Notification # CP 575 E).

The EIN that was assigned is: 23-2698266

A copy of the notification is attached to this memorandum.

#### **Commonwealth of Pennsylvania – Bureau of Charitable Organizations**

NALT is registered with the Bureau of Charitable Organizations and has submitted annual reports by the required deadlines.

The registration number is: **0014473** 

#### Auditor's Report

NALT has an annual audit that is performed by the following firm:

O'Connell & Company Certified Public Accountants Suite 213 One Washington Square 8101 Washington Lane, Ste 213 Wyncote, PA 19095 INTERNAL REVENUE SERVICE DESTRICT DIRECTOR P. O. BOX 2508 CINCINNATI, OR 45201

Date:

NORTH AMERICAN LAND TRUST C/O ANDREW JOHNSON PO BOX 134 CHADDS FORD, PA 19317-0134 Employer Identification Number: 23-2698266

DLN:

17053088920007

Contact Person:

D. A. DOWNING

Contact Telephone Number:

(513) 241-5199

Our Letter Dated:

November 1992

Addendum Applies:

No

Dear Applicant:

This modifies our letter of the above date in which we stated that you would be treated as an organization that is not a private foundation until the expiration of your advance ruling period.

Your exempt status under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3) is still in effect. Based on the information you submitted, we have determined that you are not a private foundation within the meaning of section 509(a) of the Code because you are an organization of the type described in section 509(a)(1) and 170(b)(1)(A)(vi).

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(1) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(1) organization.

As of January 1, 1984, you are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

You are required to file Form 990 only if your gross receipts each year are normally more than \$25,000. For guidance in determining whether your gross receipts are "normally" more than \$25,000, see the instructions for Form 990. If a return is required, it must be filed by the 15th day of the fifth month after the end of your annual accounting period. A penalty of \$10 a day is charged when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty charged cannot exceed \$5,000 or 5 percent of your gross receipts for the year, whichever is less. This penalty may also be charged if a return is not complete, so please be sure your return is complete before you file it.

If we have indicated in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

#### NORTH AMERICAN LAND TRUST

Because this letter could help resolve any questions about your private foundation status, please keep it in your permanent records.

If you have any questions, please contact the person whose name and telephone number are shown above.

Sincerely yours,

District Director

1 11 1050 (00)

DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE PHILADELPHIA PA 19255

DATE OF THIS NOTICE: 09-28-92
NUMBER OF THIS NOTICE: CP 575 E
EMPLOYER IDENTIFICATION NUMBER: 23-2698266
FORM: SS-4 TAX PERIOD: N/A
2820722445 O

FOR ASSISTANCE PLEASE WRITE TO US AT:

INTERNAL REVENUE SERVICE PHILADELPHIA PA 19255

BE SURE TO ATTACH THE BOTTOM PART OF NOTICE

OR YOU MAY CALL US AT:

574-9900 LOCAL PHIL. 1-800-829-1040 OTHER PA

NORTH AMERICAN LAND TRUST X GAIL CUMMINGS LEVAN 3800 CENTRE SQUARE WEST PHILADELPHIA PA 191022186

#### NOTICE OF NEW EMPLOYER IDENTIFICATION NUMBER ASSIGNED

Thank you for your Form SS-4, Application for Employer Identification Number (EIN). The number exsigned to you is shown above. It will be used to identify your business account, tax returns and documents, even if you don't have employees.

- 1. Keep a copy of the number in your permanent records.
- 2. Use your name and the number exactly as shown above on all Federal tax forus.
- 3. Use the number on all tax payments and tax-related correspondence or documents.

Using a variation of your name or number may result in delays or errors in posting payments to your account. It also could result in the assignment of more than one Employer Identification Number.

He have extablished the filing requirements and tax period shown above for your account based upon the information provided. If you need help to determine your required tax year, get publication 538, Accounting Periods and Mathods, which is available at most IRS offices.

Assigning an Employer Identification Number does not grant tex-exempt status to nonprofit organizations. Any organization, other than a private foundation, having annual gross receipts normally of \$5,000 or less is exempt by statute if it meets Internal Revenue Code requirements. Such organizations are not required to file Form 1023, Application for Recognition of Exemption, or Form 890, Return of Organization Exempt from Income Tax.

However, if your organization mants to establish its examption and receive a ruling or determination letter recognizing its exampt status, file Form 1023 with the Key District Director. For details on how to apply for the examption, see Publication 557, Tex-Exampt Status for Your Organization.

Thank you for your cooperation.

### Commonwealth of Pennsylvania



# Department of State Bureau of Corporations and Charitable Organizations

## Certificate of Registration

No. 14473

This is to certify that North American Land Trust is registered as a Charitable Organization with the Department of State, Bureau of Corporations and Charitable Organizations under The Solicitation of Funds for Charitable Purposes Act, 10 P.S. § 162.1 et seq., and is authorized to solicit charitable contributions under the conditions and limitations set forth under the Act.

This certificate is not to be used as identification, nor does it constitute an endorsement.

Secretary of the Commonwealth

Radia Ch. Contés

EXPIRATION PATE & AUTOMATIC EXTENSION: 11/15/2017



D. NALT Board Resolution and Minutes



#### **Secretary's Certificate of Vote**

The undersigned Assistant Secretary of North American Land Trust (the "Corporation") certifies that the Board of Directors of the Corporation, at a meeting duly noticed and held on September 22, 2017, a quorum being present, voted unanimously as follows:

RESOLVED, that the Corporation shall accept the grant of a **Conservation Easement** from Turkey Creek, LLC on approximately 230.99± acres of land known as the Turkey Creek Conservation Area located in Georgetown County, South Carolina.

FURTHER RESOLVED, that Stephen Thor Johnson, President, may execute the Conservation Easement in form approved by the President and take any and all other actions and execute any and all other documents as deemed necessary to effect the granting of the Conservation Easement and that any action so taken has been authorized by this vote.

Steven W. Carter Assistant Secretary September 22, 2017



E. Recorded Conservation Easement



~Turkey Creek Conservation Area~

> Georgetown County, South Carolina

~Recorded Conservation Easement and Declaration of Restrictions & Covenants~



F. Existing Conditions Report

#### **TURKEY CREEK CONSERVATION EASEMENT**

Existing Conditions Report & Biological Assessment Georgetown County, South Carolina



**Turkey Creek** 

Prepared For: North American Land Trust P.O Box 467, Chadds Ford, PA 19317

Prepared By:
Williams Gandy, NALT Biogeographer
North American Land Trust
P.O. Box 83
Boone, NC 28607
828.284.9894
wgandy@nalt.org



Dates Visited: June 27 - 30, 2017

Personnel: Williams Gandy, NALT Biogeographer

**County**: Georgetown

State: South Carolina

**Conservation Area Size**: Approximately 230.99 acres

Location: -79.346607, 33.340794 (approximate property center)

United States Ecoregion: Level III EPA Ecoregion: Southern Coastal Plain (75); Level IV EPA Ecoregion: Sea

Islands/Coastal Marsh (75j)

Watershed: Sampit River HUC: 0304020701

**USGS QUAD**: Georgetown South

#### **General Description**

The Turkey Creek Conservation Area (CA) is a 230.99 acres tract, located outside of Georgetown, South Carolina offof Pennyroyal Road, just past Pennyroyal Memorial Gardens, with an address of 1640 Pennyroyal Road, Georgetown, SC 29440. The entrance is a chain link gate that is on the right when coming from westbound lane. The project's western boundary is Sunfish Street and its eastern boundary is Turkey Creek, a tributary that flows into the Sampit River, which is part of The Great Pee Dee River Basin. The Nature Conservancy characterizes The Great Pee Dee along with the Winyah Bay watersheds as "one of the largest and most diverse wetland systems along the Atlantic Seaboard, protecting essential wildlife habitat and securing drinking water for coastal communities" (The Nature Conservancy). The entirety of the CA's eastern border is contiguous with the 318.33-acre Greenway Conservation Area, held by North American Land Trust (NALT). Contained within the boundaries of the Greenway CA is the 14.9 acre Greenway 15 Conservation Area, bringing the total contiguous conserved area on both sides of Turkey Creek to 564.22 acres. NALT's conservation efforts in the southeast have been substantial since its foundation in 1992, with a particularly intense focus on the coastal plain. Habitat connectivity via additional and contiguous encumbered land is always a viable approach to bolster conservation efforts in a given area. Habitat connectivity and conservation corridors are common themes in conservation science. By providing greater habitat to the species that inhabit these areas, we allow more options for those species when direct anthropogenic pressures are felt, such as development, water quality and habitat loss. By maintaining greater habitats through subsequent conservation, we allow for greater movement within a habitat corridor, which allows for genetic diversity for species that face uncertain changing climate pressures. The South Atlantic Landscape Conservation Cooperative describes their Functional Habitat Connectivity Project as:

Using corridors to reconnect fragments of natural habitat is widely recognized as an essential tool for promoting the survival of many species. Likewise, the present threats to biodiversity such as climate change, urbanization, sea level rise and the demographic vulnerability of small, isolated populations are leading more and more conservationists to see the increasingly urgent need to protect and restore networks of connected habitats (The South Atlantic Landscape Conservation Cooperative, 2015).

The tidal marsh area of Turkey Creek is the second largest habitat area in the CA, totaling about 38.44 acres. "Tidal wetlands are among the most productive yet highly vulnerable ecosystems in the world. Among an array of ecological functions, these diverse ecosystems provide services such as nutrient cycle regulation, water filtration, protection from coastal storms, and fish and wildlife habitat" (Tabak, Laba, Spector 2016). The tidal marsh around Turkey Creek contains plant assemblages that are somewhat ambiguous in their distribution in both the southeastern coastal plain and their boundaries within the marsh surrounding Turkey Creek. The assemblages mimic those that apparently are constricted to nearby southeastern North Carolina region. Easy to identify groups of broadleaf and bulltongue arrowhead (Sagittaria latifolia & S. lancifolia), pickerelweed (Pontederia cordata), and cattail (Typha latifolia) jump out in an otherwise graminoid dominated wetland, where many big cordgrasses (Spartina cynosuroides) tower high in the marsh. Other more homogenous stands of common threesquare (Schoenoplectus pungens) are easily found just beyond the banks into the marsh. Generally, this marsh should be described as A Southern Atlantic Coastal Plain Fresh and Oligohaline Tidal Marsh ecological system (CES203.376), with many of the ecological associations found within it seemingly expressing themselves in the Turkey Creek marsh. NaureServe describes their confidence as "low" in many of these classifications that are limited to tidal areas in Eastern North Carolina. Therefore, it is possible that other more southerly examples, such as the Turkey Creek marsh, may fit well into the Common Threesquare (Royal Fern) and Upright Sedge-Green Arrow-arum-(Bull-tongue Arrowhead, Broadleaf Arrowhead)-Tidal-Marsh associations that are described under this system. However appropriate the degree of specificity for the ecological associations within Turkey Creek Marsh is, it stands as a high quality functioning tidal marsh ecosystem and an important headwater in the Sampit watershed.

The majority of the property is upland loblolly pine (Pinus taeda). An unnamed tributary essentially divides the property into eastern and western halves. The upland pinelands of the west have recently been thinned within about 2 or 3 years. This area is regenerating with typical ruderal species of sweetgum (Liquidambar styraciflua), poplar (Liriodendron tulipifera) and red maple (Acer rubrum). Herbs mostly consist of dogfennel (Eupatorium capillifolium) and assorted grasses. Wet depressions contain rush (Juncus spp.) and various sedges (Rhynchospora sp., Carex spp.). The eastern pineland shows an older thinning that has responded well to at least one burning. The landscape is more reminiscent of a maturing long leaf pine savannah than a residential thinning. Intentional or not, the thinning and subsequent burning has provided for good savannah-like habitat that shows many patches of broomsedge (Andropogon virginicus), and eastern brackenfern (Pteridium aquilinum). A common but nonetheless beautiful mix of native wildflowers will typically contain Maryland meadowbeauty (Rhexia mariana v. mariana), orange milkwort (Polygala lutea), roundleaf thoroughwort (Eupatorium rotundifolium) and others. The globally vulnerable Le Conte's Thistle (Cirsuium lecontei) is frequently found in this area as evidenced by its documentation in the neighboring longleaf pine savannah in the contiguous Greenway Conservation Area that North American Land Trust recorded in 2013. The recent burn has facilitated the high amount of native grasses and herbs as well as the savannah-like habitat with a noticeable absence of sapling ruderal hardwoods on this eastern portion of the property. Burning regimes in the future will continue to perpetuate the diverse savannah-like habitat while reducing non-native species.

The small headwater drains and wet depressions that would act as tributaries to perennial stream beds during wet periods broadly fit under The Atlantic Coastal Plain Blackwater System (CES203.247) (NatureServe 2017). This system is found frequently in the coastal plain of Georgia and the Carolinas. These small streams which originate in the coastal plain, contain little mineral load from the western

Appalachian Mountains and adjacent piedmont but rather the dark tannins from the detritus of the coastal forests through which they spring from and flow. These streams and their watersheds are termed "blackwater" due to their coastal plain headwater origin and the chemical (often acidic) differences stemming from that. This factor plays a major role in the flora that have evolved with and depend on these waters. The north running drain that bisects the property and other hardwood bottom areas on the periphery of the marsh fit well into a Sandhill Streamhead Swamp (Schalfale 2012) or the synonymic, Sandhills Swamp Tupelo - Pine Streamhead Swamp Forest (CEGL004734), a globally vulnerable (G3) community (NatureServe 2017). This perennial drainage has a characteristic canopy mix of swamp tupelo (Nyssa biflora), Carolina red maple (Acer rubrum var. trilobum), and tulip poplar (Liriodendron tulipifera). Large loblolly pine (Pinus taeda) are few, and sparse bald cypress (Taxodium distichum) occur as one nears the tidal marsh area. NatureServe describes the shrub layer as "pocosin species." This is certainly the case in this tributary showing a diverse array of swampbay (Persea palustris), wax myrtle (Morella cerifera), coastal sweet-pepperbush (Clethra alnifolia) shining fetterbush (Lyonia lucida) and some buttonbush (Cephalanthus occidentalis). Herbs are prominent as well, showing large patches of lizard's tail (Saururus cernuus), and green arrow arum (Peltandra virginica). Netted chainfern (Woodwardia aerolata) and royal fern (Osmunda regalis) occur throughout the forest floor with populations of Jack-in-the-pulpit (Arisaema triphyllum) occurring in more mesic locations.

Isolated depression communities are found throughout the property as well. The best examples of this can be found west of the north-south running drainage. Some examples are properly isolated and at least one is narrowly connected to the perennial drainage, likely only flowing overland into the drain during times of high water rain events. These areas fit quite well into the globally vulnerable (G3) Coastal Plain Depressional Swamp (Mixed Subtype) (Schalfale 2012) or the synonymic Pond-cypress Depression Forest (CEGL007420) (NatureServe 2017). The canopy is almost entirely swamp tupelo (*Nyssa biflora*) with very few examples of mature loblolly pine (*Pinus taeda*) or cherrybark oak (*Quercus laurifolia*). Shrubs in these areas are more likely to be on the rim of the depression or on hummocks around the largest trees root bases than on the forest floor. These species are typically shining fetterbush (*Lyonia lucida*) and southern blueberry (*Vaccinium formosum*) growing out of sphagnum (*Sphagnum sp.*) mats caught in the crevices of the root footprints. The herb layer is characteristically absent with only a few patches of netted chainfern (*woodwardia aerolata*) or an occasional graminoid. Vines are generally absent in these areas, though Spanish moss (*Tillandsia usneoides*) can be found occasionally.

#### **Physical Description**

**Aspect:** The majority of the property's upland faces north and northeast. The marsh area generally faces northwest.

**Slope:** Most of the property is planar (0-3.0%). The bluffs that interface the marsh with the uplands are gentle (3.1%-10.0%).

**Elevation:** 0 - ~7 feet.

General Topography: Typical Gulf Coastal Plain topography: flat with very local relief

**Hydrology and Moisture:** Dry uplands to hydric marsh.

**Geology:** Qso, Pleistocene sand primary, clay or mud secondary.

#### **Existing Structures/ Anthropogenic Evidence**

Unimproved roads, two impoundments, two docks and boat ramp through the marsh.

#### **Animal Habitat Factors**

**Habitat Heterogeneity:** High: Hydric to wet-mesic wetlands, mesic to dry uplands, ephemeral stream reaches, shrubby edge, Oligohaline and freshwater wetlands, and marsh.

**Amphibian Breeding Sites**: Based around the ephemeral reaches of the north running tributary and the perennial areas further north in the CA around the tributary. Localized depression wetlands from only a few feet to approximately 2 acres.

**Denning Sites:** None observed.

**BigTrees/Large Cavities:** Live, water and laurel oak (*Quercus virginiana*, *Q. nigra*, *Q laurifolia*), swamp tupelo (Nyssa biflora), Pond and Bald Cypress (*Taxodium distichum*, *T. ascendens*) mature trees are occasional throughout.

**Mast Producing Species:** Live, water, laurel and turkey oak (Quercus virginiana, Q. nigra, Q laurifolia, Q. laevis).

#### **Aquatic Habitat Factors**

**Hydrology:** The eastern portion of the property is tidal marsh and the entirety of the eastern border is Turkey Creek.

#### **Landscape Factors**

**ADJACENT LAND USE/OFFSITE STRESSES:** Residential development, agricultural lands, and protected natural areas.

**RELATION/CONNECTION TO OTHER SITES:** The entirety of the CA's eastern border is contiguous with the 326 acre Greenway Conservation Area, held by North American Land Trust (NALT). Contained within the boundaries of the Greenway CA is the 14.9 acre Greenway 15 Conservation Area, bringing the total contiguous conserved area on both sides of Turkey Creek to 573.6 acres.

**DEGREE OF THREAT/POTENTIAL FOR CHANGE:** Moderate. Many Industrial and residential developments are near or adjacent to the site with Georgetown's center only being 6.4 miles from the site's entrance. North American Land Trust's map suite in the baseline documentation for the 2013 Greenway Conservation Area shows the planned development with over 150 lots for the Turkey Creek Conservation Area.

#### Rare, Uncommon, or Indicator Species

Global, Federal, and State ranking information for rare species is maintained by the State Natural Heritage Program and the US Fish and Wildlife Service. Any rare species discussed in the following text will follow the standardized ranking system. Global ranks are defined thusly: G1 = critically imperiled globally because of extreme rarity (5 or fewer occurrences), G2 = imperiled globally because of rarity (6 to 20 occurrences), G3 = rare or uncommon (localized within range or narrowly endemic to special habitats, generally 20-100 occurrences), G4 = apparently secure, G5 = demonstrably secure, T\_ = the rank of a subspecies or variety. State rankings follow the same categories: S1 =critically imperiled in state because of extreme rarity (5 or fewer occurrences), S2 = Imperiled in state because of rarity (6 to 20 occurrences), S3 = rare or uncommon (localized within range or narrowly endemic to special habitats, generally 20-100 occurrences), S4 = apparently secure, S5 = demonstrably secure, SA= accidental in the state, SN= regularly occurring, usually migratory and nonbreeding, SR= reported from the state but without persuasive documentation, SU=

possibly in peril but status uncertain, SX= apparently extirpated from the state, SH= of historical occurrence in the state. An "X" after state or global designation indicates that the species is presumed extirpated. State Designations: E = Endangered, T = Threatened, R = Rare, U=Unusual. Federal Designations: LT = Listed Threatened, LE = Listed Endangered, FSC = Federal Species of Concern.

#### Partners In Flight Species Assessment Database, Species of Regional Importance

Belted Kingfisher (*Ceryle alcyon*)
Brown Thrasher (*Toxostoma rufum*)
Carolina Chickadee (*Parus carolinensis*)
Downy Woodpecker (*Picoides pubescens*)
Eastern Towhee (*Pipilo erythrophthalmus*)
Field Sparrow (*Spizella pusilla*)

Northern Flicker (Colaptes auratus)

Pileated Woodpecker (*Dryocopus pileatus*)

Pine Warbler (Dendroica pinus)

Red-bellied Woodpecker (*Melanerpes carolinus*)

Red-headed Woodpecker (Melanerpes erythrocephalus)

Tufted Titmouse (Baeolophus bicolor)

**Potential for Other Special Status Species:** Due to the heterogeneous nature of the property and rare community types continued bio surveys will likely reveal additional uncommon and /or rare taxa.

#### **Management Recommendations**

Prescribed fire in the upland pine and marsh areas as climate, weather and local municipalities allow.

#### **Plant Species Observed**

Carolina red maple Acer rubrum var. trilobum

indigo bush

broomsedge bluestem

Jack-in-the-pulpit

switchcane

Amorpha fruticosa

Andropogon virginicus

Arisaema triphyllum

Arundinaria tecta

ebony spleenwort Asplenium platynueron
American beautyberry Callicarpa americana
trumpet creeper Campsis radicans
goldenfruit sedge Carex aureolensis
southern waxy sedge Carex glaucescens

buttonbush Cephalanthus occidentalis
Chasmanthium laxum var.

slender woodoats laxum

Le Conte's thistle Cirsium lecontei G3- Globally Vulnerable

buttonbush Clethra alnifolia
Atlantic pigeonwings Clitora mariana

Asiatic dayflower Commelina communis exotic

<sup>\*</sup>additions by William Conner of Clemson University

whitemouth dayflower Commelina erecta

dodder vineCuscuta sp.swamp titiCyrilla racemosaVirginia buttonweedDiodia virginianapersimmonDiospyros virginianatrailing arbutusEpigaea repens

American burnweed Erechtites hieraciifolius
tenangle pipewort Eriocaulon decangulare
dogfennel Eupatorium capsillifolium
roundleaf thoroughwort Eupatorium rotundifolium
green ash

green ash Fraxinus pennslyvanica
Pennsylvania everlasting Gamochaeta pensylvanica

sneezeweed Helenium amarum

manyflower

marshpennywort *Hydrocotyle umbellata*Spider lily *Hymenocallis spp.* 

orangegrass Hypericum gentianoides

inkberry Ilex glabra
American holly Ilex opaca
Virginia iris Iris virginica

needlepod rush Juncus scirpoides red cedar Juniperus virginiana

lespedeza *Lespedeza sp.* exotic privet *Ligustrum sp.* exotic

sweetgum Liquidambar styraciflua tulip poplar Lirodendron tulipifera

Japanese honeysuckle Lonicera japonica exotic

seedbox Ludwigia alternifolia southern magnolia Magnolia grandiflora sweetbay Magnolia virginiana

noyau vine Merremia dissecta exotic

muscadine Muscadina rotundifolia

southern wax myrtle
swamp tupelo
black tupelo
royal fern

Myrica cerifera
Nyssa biflora
Nyssa sylvatica
Osmunda regalis

Virginia creeper Parthenocisus quinquefolia

maypop Passiflora incarnata green arrow arum Peltandra virginica

loblolly pinePinus taedalongleaf pinePinus palustris

stinking camphorweed Pluchea foetida var. foetida

sweetscent Pluchea odorata
orange milkwort Polygala lutea
pickerelweed Pontederia cordata

black cherry Prunus serotina
western brackenfern Pteridium aquilinum
blackroot Pterocaulon polystachyum
Darlington oak Quercus hemisphaerica

turkey oak Quercus laevis
laurel oak Quercus laurifolia
blackjack oak Quercus marilandica

water oak
willow oak
live oak
rose meadowbeauty
Quercus nigra
Quercus phellos
Quercus virginiana
Rhexia alifanus

Maryland meadowbeauty Rhexia mariana var. mariana

winged sumac Rhus copallinum
smooth sumac Rhus glabra
rough Mexican clover Richardia scabra
sawtooth blackberry Rubus argutus
sorrel Rumex acetosa
dwarf palmetto Sabal minor

bulltongue arrowhead Sagittaria lancifolia \*

broadleaf arrowhead Sagittaria latifolia

black willow Salix nigra

bulrush Schoenoplectus spp. \*

woolgrass Scirpus cyperinus marsh bristlegrass Setaria parviflora saw greenbrier Smilax bona-nox laurel greenbrier Smilax laurifolia sweetleaf Symplocos tinctoria pond cypress Taxodium ascendens bald cypress Taxodium distichum Toxidendron radicans poison ivy

Chinese tallow Triadica sebifera exotic

cattail Typha sp.

black highbush blueberry Vaccinium fuscatum hillside blueberry Vaccinium pallidum

Brazilian vervain *Verbena brasiliensis* exotic garden vetch *Vicia angustifolia* exotic

southern rockbell Wahlenbergia marginata netted chainfern Woodwardia areolata

yelloweyed grass Xyris sp.

Adam's needle Yucca filamentosa annual wild rice Zizania aquatica \*

#### **Animal Species Observed**

Common Name Scientific Name Notes

Mammal

Virginia opossum Didelphis virginiana
White tail deer Odocoileus virginianus

Northern raccoon *Procyon lotor* tracks

Eastern grey squirrel Sciurus carolinensis

**Bird** Bird inventory by Peter Smith unless otherwise noted

Mallard
Anas platyrhynchos
Great Blue Heron
Ardea herodias
Tufted Titmouse
Northern Cardinal
Northern Cardinal
Cardinals cardinalis
Cardinals Cardinalis

Belted Kingfisher

Northern Flicker

Black Vulture

American Crow

Fish Crow

Blue Jay

Yellow-rumped Warbler

Ceryle alcyon

Colaptes auratus

Coragyps atratus

Corvus brachyrhynchos

Corvus ossifragus

Cyanocitta cristata

Dendroica coronata

Pine Warbler Dendroica pinus
Pileated Wodpecker Dryocopus pileatus
Gray Catbird Dumetella carolinensis

Little Blue Heron Egretta caerulea

Bald Eagle Haliaeetus leucocephalus special concern species

Red-bellied Woodpecker Melanerpes carolinus

Red-headed Woodpecker Melanerpes erythrocephalus

Osprey Pandion haliaetus
Carolina Chickadee Parus carolinensis
Downy Woodpecker Picoides pubescens
Eastern Towhee Pipilo erythrophthalmus
Common Grackle Quiscalus quiscula
Chipping Sparrow Spizella passerina

Chipping Sparrow Spizella passerina Field Sparrow Spizella pusilla

Carolina Wren Thryothorus Iudovicianus

Brown Thrasher Toxostoma rufum

Eastern Kingbird Tyrannus tyrannus found by Patty Kennedy

Herpetiles

American toad Anaxyrus americanus
Green Anole Anolis carolinensis
American bullfrog Lithobates catesbeianus

**Butterflies** 

Gulf fritillary Agraulis vanillae
Palamedes Swallowtail Papilio palamedes

#### References

- NatureServe. (2017). NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: October 4, 2017).
- Tabak, N. M., Laba, M., & Spector, S. (2016). Simulating the Effects of Sea Level Rise on the Resilience and Migration of Tidal Wetlands along the Hudson River. PloS one, 11(4), e0152437.
- The Nature Conservancy. Black River Preserve forests Winyah Bay and Pee Dee River Basin, South Carolina. Retrieved from https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/southcarolina/black-river-preserve-fact-sheet-3.pdf.
- The South Atlantic Landscape Conservation Cooperative (2015). *Identifying and Prioritizing Key Habitat Connectivity Areas for the South Atlantic Region Final Report for the South Atlantic Landscape Conservation Cooperative.* Retrieved from https://www.wildlandsnetwork.org/sites/default files/SALCC%20report%206\_24\_15.pdf.
- Schafale, M. P. (2012). Guide to the natural communities of North Carolina. Fourth approximation. North Carolina Department of Environment, Health, and Natural Resources, Division of Parks and Recreation, Natural Heritage Program, Raleigh.
- Speight, J. G. (1990). Landform. Australian Soil and Land Survey Field Handbook 2.
- Weakley, A. S. (2015). Flora of the southern and mid-Atlantic states. University of North Carolina Herbarium, North Carolina Botanical Garden, University of North Carolina, Chapel Hill.

# Williams Gandy Biogeographer

#### Williams Gandy

151 Sheridan Avenue Boone, NC

(828) 284-9894 williamsgandy@nalt.org

#### **Experience**

#### North American Land Trust / Biogeographer

2012 - Present

Build, administrate and serve out NALT geodatabases, provide staff support for GPS and GIS, cartographic output, CADD/GIS compatibility, botanical inventory, plant community descriptions & mapping, biological and conservation value assessment for potential easement acquisition.

### City of Winston-Salem Division of Stormwater/ Stormwater/Engineering

Technician

2010 - 2012

GIS building and maintenance, environmental GIS modeling, GPS sampling, stormwater BMP inspection, illicit discharge stream tracking, field mapping, GIS method development, field water quality and quantity data collection

#### The Response Group/British Petroleum / GIS Situation Analyst

May - July 2010

Provide mapping and GIS analysis and data management support for area and forward operating command posts in response to the BP Deepwater Horizon oil spill.

#### Frontline Conservation Real Estate/MineShine/ GIS

Technician/Cartographer

August 2008

Produce map layouts for conservation real estate using tax map data, DEMs, and remotely sensed images, assemble GIS for demographic mapping across the southeastern United States.

### **Lower San Pedro Restoration Monitoring Program/** Field Research Team Leader

December 2008

Woody vegetation sampling, geomorphic surveying, ground and surface water monitoring, GIS data processing and display for Nature Conservancy lands.

#### Education

#### **Appalachian State University** / M.A. Geography

August 2009: Boone, NC

Master's Thesis: Groundwater Yield Modeling in the Fractured Bedrock Aquifers of the Blue Ridge Physiographic Province, Watauga County, North Carolina

#### **Appalachian State University** / B.S. Geography

2006: Boone, North Carolina

#### Appalachian State University / B.S. Community & Regional Planning

2006: Boone, North Carolina

#### Skills Knowledge Abilities

- •GIS software (ArcInfo, ERDAS Imagine, GeoMedia, Whitebox GAT, SAGA), geo-database management, administration, environmental and watershed modeling
- •GPS sampling: Trimble Yuma, Trimble Geo XT, XH with ArcPad (incl. differential correction), Garmin units
- Cartography, satellite imagery and aerial photography interpretation, utilization, vegetation indices, image geo-rectification
- Mapping and GIS data management for disaster response
- •TOPCON Total Station Survey equipment (pulse station, handheld unit, post-processing)
- Botanical inventorying, geomorphologic assessment, soils, geology
- Stream flow gaging and groundwater level monitoring, hydrologic/hydraulic computations
- •Water quality sampling (grabs, ISCO 6712 Portable Sampler, YSI 556 Multi-Probe Sensor)
- •Stormwater BMP inspection, citation, reporting, and consultation, erosion control
- Statistical modeling and methods (SPSS, PSPP)
- Graphic display and data processing in Microsoft Office Suite and Corel products



G. Photographic Documentation



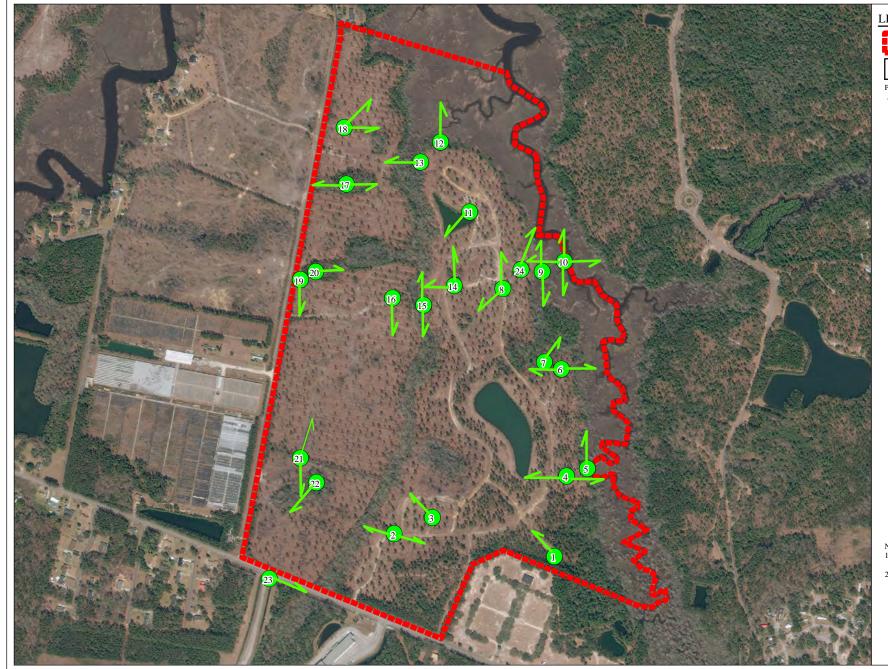
~Turkey Creek

Conservation Area~

Georgetown County, South Carolina

~Photographic Documentation~

Williams Gandy,
NALT Conservation Biologist
June 27-29, 2017



LEGEND:

Subject Property 232.76 ± acres



Approximate Direction & Location of Photograph

Photographs taken on June 27th, 28th and 29th 2017 by Williams Gandy photo point 24 taken by Brad Jenkins on October 5th 2017

- NOTES:

  1. Property Boundaries from Kellahan & Associates, Inc. 116 N. Jackson Street, Kingstree, S.C. 29556

  2. Aerial Image from World View 3 Sensor, 2017-03-21

0.075 0.15 0.225 0.3

### TURKEY CREEK

GEORGETOWN COUNTY, SOUTH CAROLINA

PHOTOGRAPHIC INDEX MAP





# Turkey Creek Conservation Area Photographic Documentation Photographs taken by Williams Gandy, NALT Biogeographer June 27<sup>th</sup>, 28<sup>th</sup> and 29<sup>th</sup>, 2017



1 – NW



2 – WNW



2 – ESE



3 – NW





Turkey Creek Conservation Area Photographic Documentation Photographs taken by Williams Gandy, NALT Biogeographer June 27th, 28th and 29th, 2017











7 – NE







8 – N



9 **-** S



9 – N



10 – N



10 **-** S







10 - W







12 – N

Turkey Creek Conservation Area
Photographic Documentation
Photographs taken by Williams Gandy, NALT Biogeographer
June 27th, 28th and 29th, 2017







14 – N





Turkey Creek Conservation Area Photographic Documentation Photographs taken by Williams Gandy, NALT Biogeographer June 27th, 28th and 29th, 2017







16 – S

Turkey Creek Conservation Area
Photographic Documentation
Photographs taken by Williams Gandy, NALT Biogeographer
June 27th, 28th and 29th, 2017









Turkey Creek Conservation Area Photographic Documentation Photographs taken by Williams Gandy, NALT Biogeographer June 27th, 28th and 29th, 2017



Turkey Creek Conservation Area Photographic Documentation Photographs taken by Williams Gandy, NALT Biogeographer June 27th, 28th and 29th, 2017







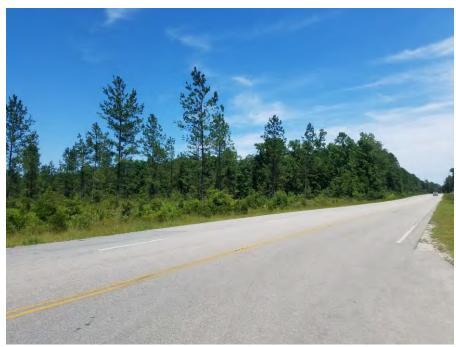
21 – NNE

Turkey Creek Conservation Area Photographic Documentation Photographs taken by Williams Gandy, NALT Biogeographer June 27th, 28th and 29th, 2017





Turkey Creek Conservation Area
Photographic Documentation
Photographs taken by Williams Gandy, NALT Biogeographer
June 27th, 28th and 29th, 2017



23 – SE



Palamedes Swallowtail (Papilio Palamedes) and on Le Conte's thistle (Cirsium lecontei) (G3)

Turkey Creek Conservation Area
Photographic Documentation
Photographs taken by Williams Gandy, NALT Biogeographer
June 27th, 28th and 29th, 2017



24 – NNE (photo taken by Brad Jenkins on October 5<sup>th</sup>, 2017)



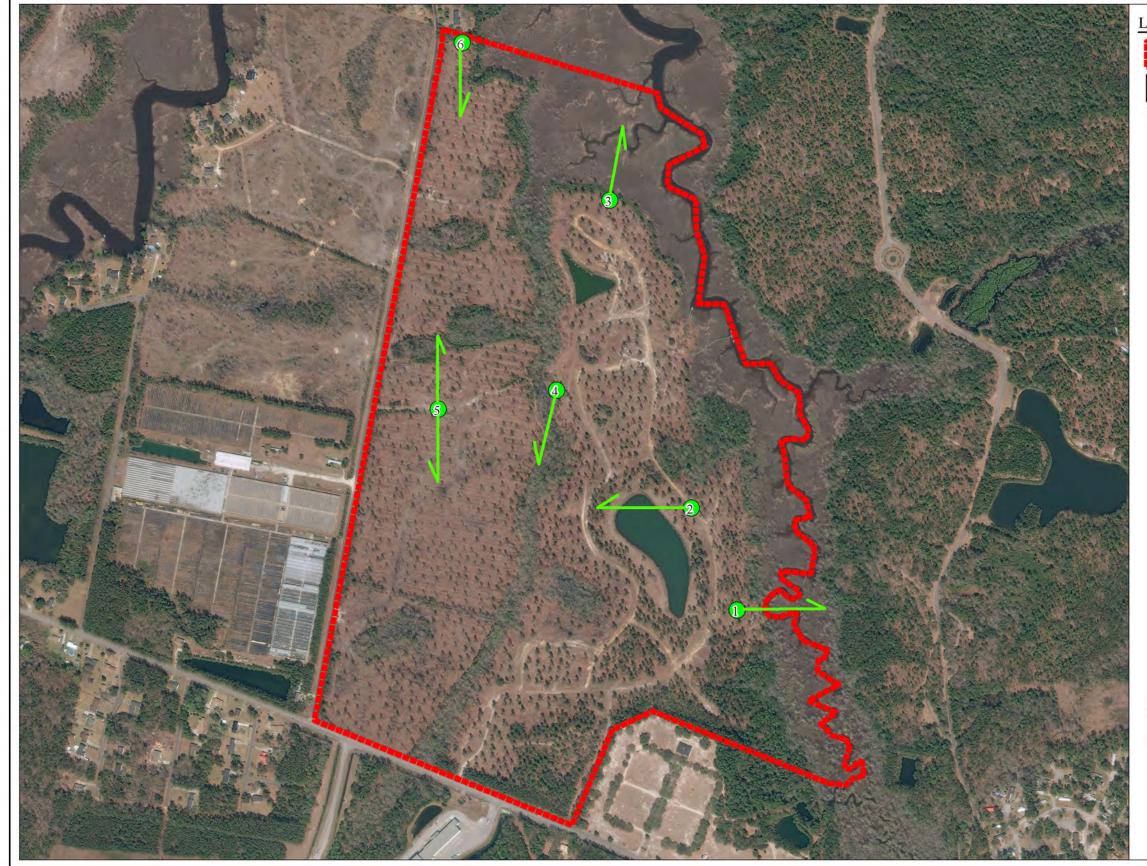
~Turkey Creek

Conservation Area~

Georgetown County, South Carolina

~Photographic Documentation~

Williams Gandy,
NALT Conservation Biologist
November 30, 2017



LEGEND:

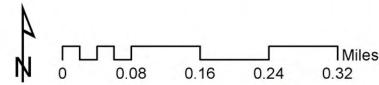
Subject Property 232.76 ± acres



Approximate Direction & Location of Photograph

Photographs taken on November 30th, 2017 by Williams Gandy

- Property Boundaries from Kellahan & Associates, Inc. 116 N. Jackson Street, Kingstree, S.C. 29556
   Aerial Image from World View 3 Sensor, 2017-03-21



### TURKEY CREEK

GEORGETOWN COUNTY, SOUTH CAROLINA

PHOTOGRAPHIC DOCUMENTATION





1 – E



2 – W



3 – NNW



4 – SSW



5 – N



5 **-** S



6 – SSE



Roosting at sunset



H. Supportive Mapping



### ~Turkey Creek

Conservation Area~

Georgetown County, South Carolina

~ Supportive Mapping~

- 1. Location Map
- 2. Base Map
- 3. Topography
- 4. Soils Map
- 5. Wetlands Map
- 6. Floodplain Map
- 7. Aerial Photograph
- 8. Concept Plan
- 9. Conservation Easement Plan







#### **LEGEND**



Approximate Location of Property

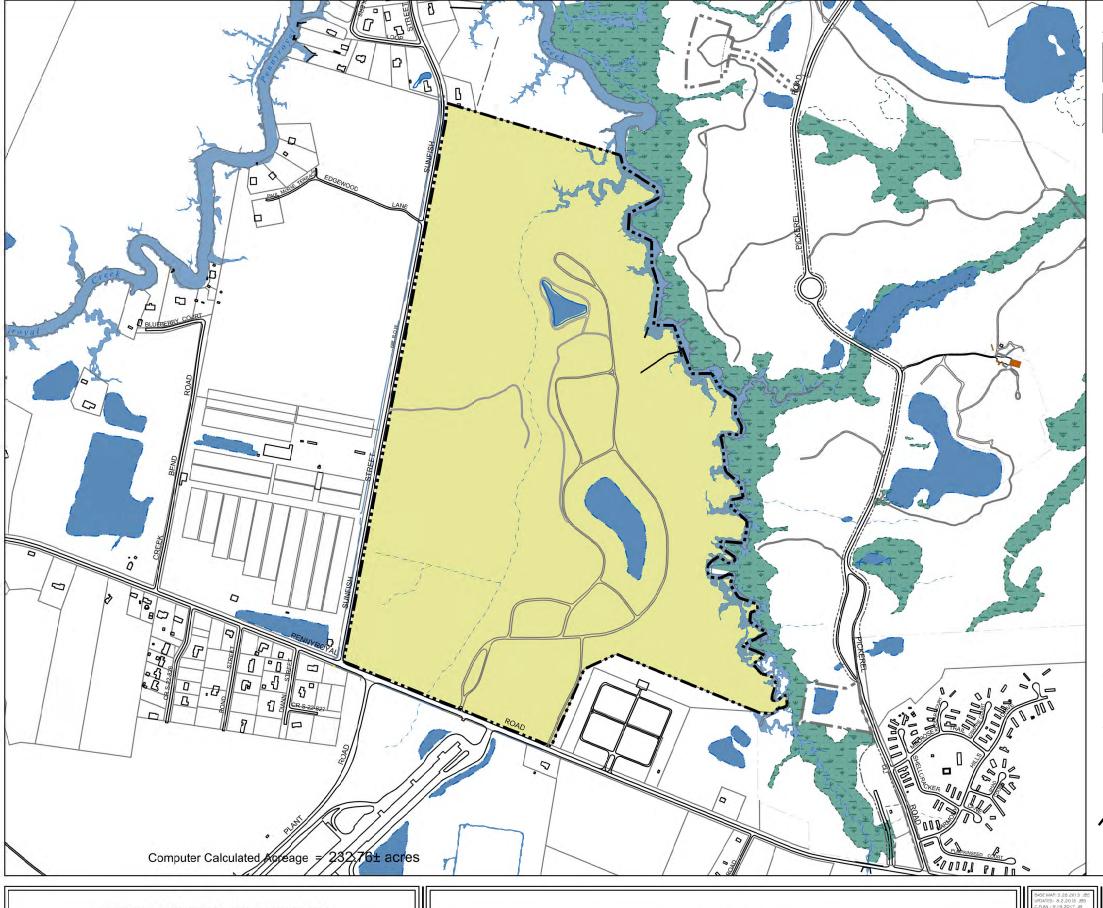


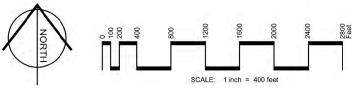
TURKEY CREEK CONSERVATION AREA

GEORGETOWN, SOUTH CAROLINA

LOCATION MAP







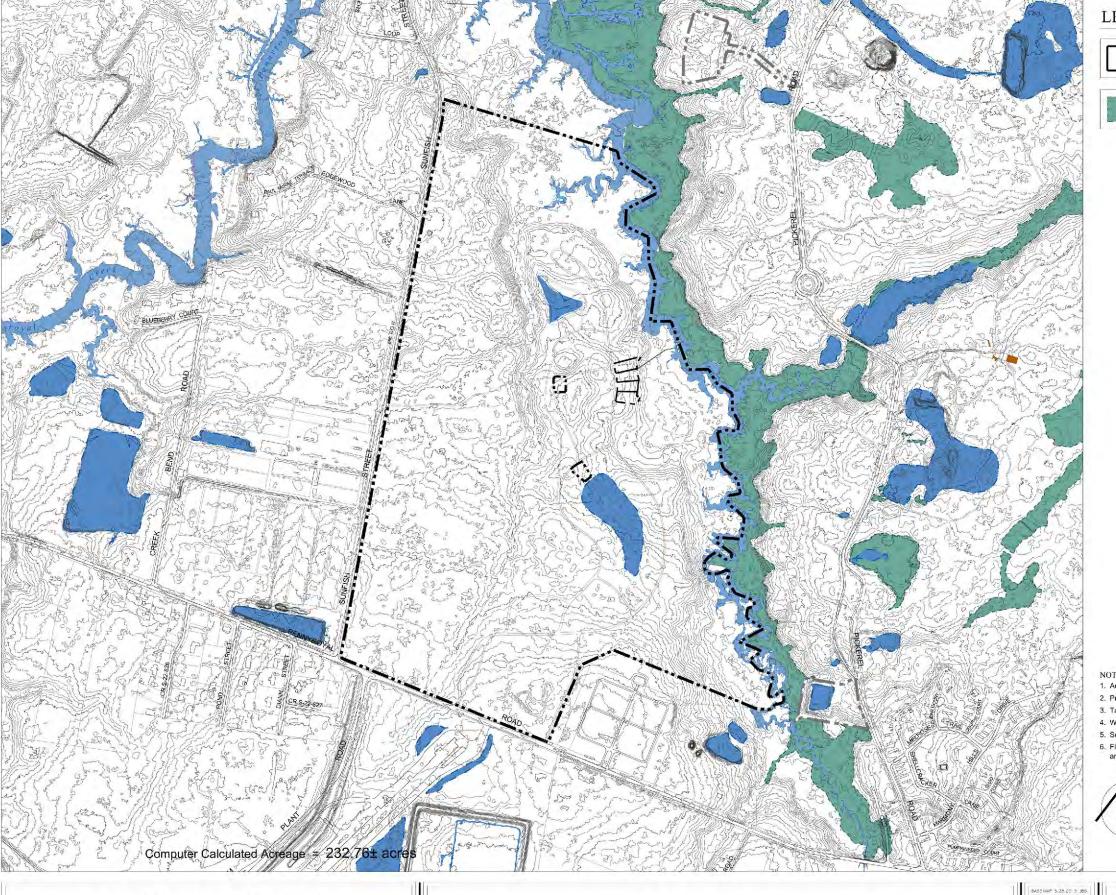
GEORGETOWN COUNTY, SOUTH CAROLINA

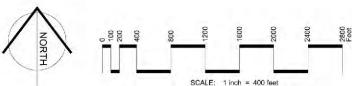
BASE MAP



Green Stripe, Ltd.
Conservation - Limited Development
Charleston, South Carolina Larry Kohler (843) 722-9076







GEORGETOWN COUNTY, SOUTH CAROLINA

**TOPOGRAPHY** 

Green Stripe, Ltd.
Conservation - Limited Development Charleston, South Carolina Larry Kohler (843) 722-9076

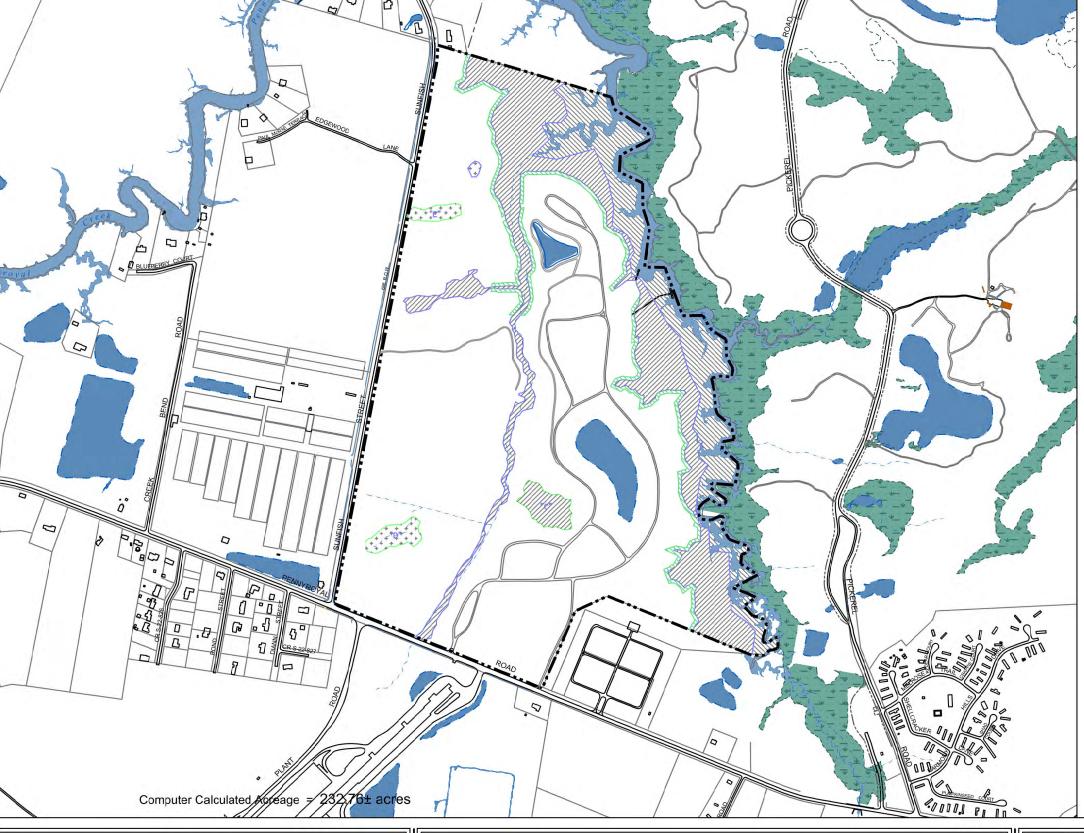


GEORGETOWN COUNTY, SOUTH CAROLINA

SOILS MAP

Conservation - Limited Development Charleston, South Carolina Larry Kohler (843) 722-9076





GEORGETOWN COUNTY, SOUTH CAROLINA

WETLANDS MAP

Green Stripe, Ltd.

Conservation - Limited Development
Charleston, South Carolina Larry Kohler (843) 722-9076



GEORGETOWN COUNTY, SOUTH CAROLINA

FLOODPLAIN MAP

Green Stripe, Ltd.
Conservation - Limited Development Charleston, Seath Carolina

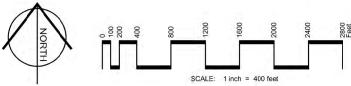




LEGEND:

Subject Property

- 1. Aerial Photograph from Apollo Mapping: date flown March 21, 2017.
- 2. Property boundaries from a Survey by Kellahan & Associates, January 8, 2008; updated January 23, 2008.
- 3. Tax parcels from Georgetown County GIS Department.
- 4. Wetlands (NWI), Topographic information from Georgetown County GIS Department.
- 5. Soils data from USDA NRCS, Soil Data Mart.
- Floodplain information from FEMA FIRM Map Panels 4500850376D, 4500850377D, 4500850378D, and 4500850379D.



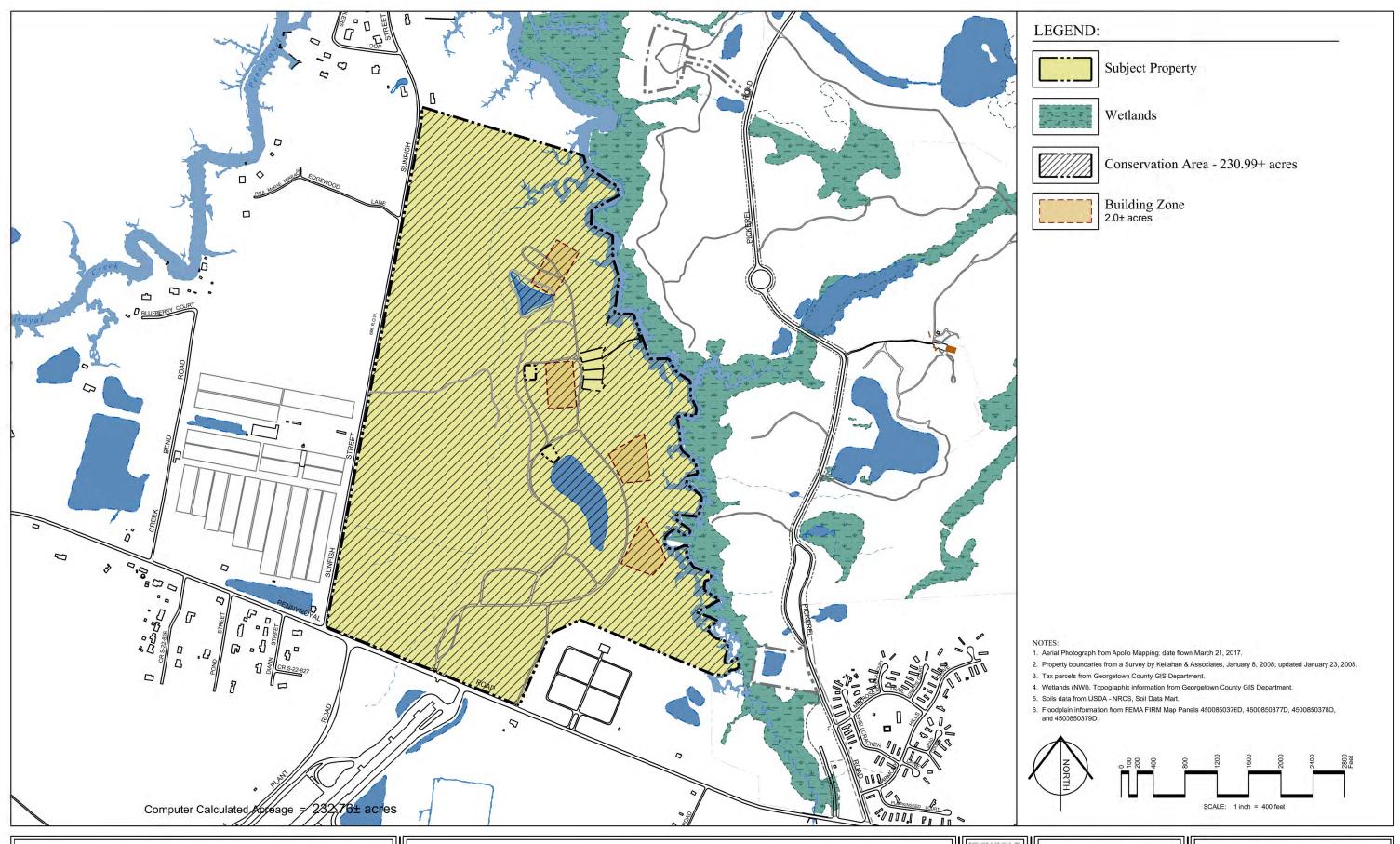
### TURKEY CREEK

GEORGETOWN COUNTY, SOUTH CAROLINA

AERIAL PHOTOGRAPH

Green Stripe, Ltd.
Conservation - Limited Development
Charleston, South Carolina Larry Kohler (843) 722-9076





GEORGETOWN COUNTY, SOUTH CAROLINA

**CONCEPT PLAN** 

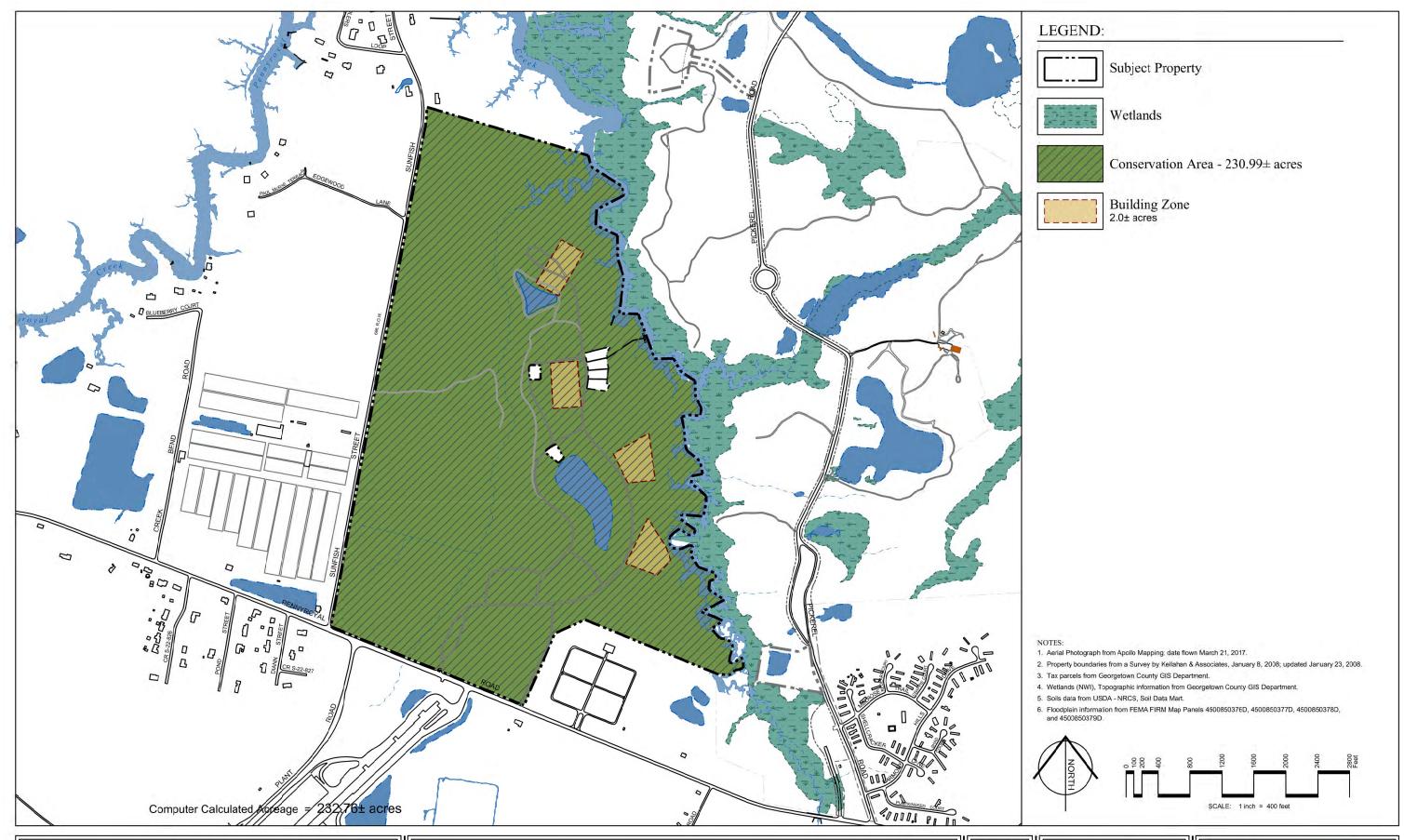




Green Stripe, Ltd.

Conservation - Limited Development Charleston, South Carolina Larry Kohler (843) 722-9076





GEORGETOWN COUNTY, SOUTH CAROLINA

CONSERVATION EASEMENT PLAN



Green Stripe, Ltd.
Conservation - Limited Development
Charleston, South Carolina Larry Kohler (843) 722-9076

