Management Plan Former Poarch/Swinbank Property Montgomery County, Texas

September 17, 2021



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SITE INFORMATION

Identification of the Property

The Poarch/Swinbank Preserve is 117 acres of undeveloped, forested land in Montgomery County, Texas. It is located west of State Highway 249; Spring Creek forms its southern boundary and Sentinel Oaks Road its northern boundary. The property is bottomland hardwood riparian habitat. According to the Federal Emergency Management Agency data for Montgomery County, approximately 104 acres of the Property, or 89%, is located within the floodway and 13 acres (11%) in the 100-year floodplain. Vicinity and site maps are included in Appendix A.

Directions from Houston:

- Take SH 249 north
- Exit for Hardin Store Road/Decker Prairie Road
- Turn left (west) on Hardin Store Road
- Immediately turn left onto SH 249 Frontage Road south
- Turn right onto Sentinel Oaks Road
- After approximately 0.4 mile, park along Sentinel Oaks Road at the gate

Ownership

Current
Bayou Land Conservancy (BLC)
10330 Lake Rd, Bldg J
Houston, Tx. 77070

Previous Poarch/Swinbank LLC 1041 Conrad Sauer Houston, Tx. 77043

Date of Donation

September 17, 2020

Management Plan Authors

Becky Martinez, Conservation Director, Bayou Land Conservancy Suzanne Simpson, Land Stewardship Director, Bayou Land Conservancy

Acquisition History

Bayou Land Conservancy (BLC) initially spoke with Joe Swinbank about the possibility of conservation and land donation along Spring Creek in October 2017. Mr. Swinbank led a brief site visit in March 2019 with BLC. Conservation staff returned to the land in April 2019 for a longer site visit, confirmed it held many conservation values, and were eager to recommend receipt of this land donation.

This land was discussed in the BLC Lands Committee in May 2019 and the Lands Committee Chair (Dr. Matthew Berg) brought the project to the Board of Directors (BOD) for preliminary approval on May 21, 2019. The BOD granted preliminary approval and BLC staff continue to work with the landowners toward donation. BLC met with the donors, Joe Swinbank and Don Poarch, on July 9, 2020 and learned that they had no expectations further than conservation for the property.

At an August 25, 2020 meeting, the BOD gave the final approval to accept the land donation. The land was deeded to BLC on September 17, 2020.

BLC received property tax exemption from Tomball ISD and Montgomery County in December 2020, with no requirement to reapply annually.

Land Use History

According to historic aerial imagery and chain of title research, this site has never been developed. The earliest written history documents that this land was part of a larger parcel granted to Joseph House in 1831 by the State of Coahuila y Tejas in the Republic of Texas. In the deed, Mr. House was noted as having "much honesty, activity and industry, and he is one of the colonists introduced by Honorable Empresario [Stephen F.] Austin". The parcel granted to Mr. House was one league of land (equivalent to about 4,428.4 acres) "situated on the Creek called Spring Creek, one of the branches or tributaries of the San Jacinto [River]".

Chain of title research revealed that the land was subdivided and changed hands over time. During the American Civil War this land was part of a 450-acre parcel on both sides of Spring Creek, owned by George and Francisca Voebel. In a 1930 affidavit of heirship from their daughter (Louise Winkler [maiden name Voebel]), she recalls that her parents had rented and farmed the land, eventually purchasing it. She remembers seeing returning soldiers passing their house. She describes 100 acres of fenced and farmed land with a cotton gin, powered by Spring Creek, and a general mercantile store all operated by her family on the south side of Spring Creek. There is no mention of activity or structures north of Spring Creek on the land.

The only record of a land use is a 1978 timber deed and aerial photography indicates that timbering did occur in that timeframe. By 2000, Poarch Swinbank owned the land and cleared approximately 28 acres of the land in the eastern portion of the land. Vegetation has since reestablished in this area and no further land clearing, use, or development occurred. The only human disturbance on the land now includes wildlife feeders, shooting blinds, and trash dumping areas adjacent to neighbor properties.

CONSERVATION VALUES

The Conservation Values justifying the acceptance of the property donation are as follows, in no particular order:

- Protection of habitat important to a variety of bird species. The Property contains important nesting, wintering, and migratory stop-over habitat on Spring Creek for resident birds and Neotropical migrants including waterfowl, upland game birds, raptors, and songbirds.
- Protection in perpetuity of crucial wetland and riparian corridors which help to assure the continued functioning of the areas protected.
- Protection in perpetuity of forested riparian habitat from development encroachment.
- Protection in perpetuity of the floodway and 100-year-floodplain of Spring Creek within the Property from clearing so as to retain optimum floodwater retention capacity.

Natural Resources Inventory

According to the <u>Texas Ecosystem Assessment Mapper (TEAM)</u>, there are five habitat sub-types present on the property, all of which fall within the larger Pineywoods ecoregion, also known as the South Central Texas Plains ecotype (Appendix A). They are more fully <u>described</u> below:

<u>Small Stream and Riparian Temporarily Flooded Hardwood Forest</u> – "This is the prevalent mapped type for this system, with typical dominant species including *Liquidambar styraciflua* (sweetgum), *Quercus nigra* (water oak), *Celtis laevigata* (sugar hackberry), *Ulmus crassifolia* (cedar elm), and *Fraxinus pennsylvanica* (green ash). Many other hardwood species as mentioned above may be found at these sites."

<u>Upland Hardwood Forest</u> – "This is a commonly encountered vegetation type of the system, making up about a third of the areal extent of the system. It is dominated by deciduous hardwoods, but may (and often does) have some cover of pine, usually *Pinus taeda* (loblolly pine)."

<u>Pine Forest or Plantation</u> — "This represents the typical type for the system where the canopy is dominated by pines. Many sites actually represent pine plantations and managed forests, and discriminating between natural pine forest and plantation is problematic using our mapping methods. More than half of the area mapped for this system is represented by this vegetation type, and *Pinus taeda* (loblolly pine) predominates."

<u>Small Stream and Riparian Seasonally Flooded Hardwood Forest</u> – "This mapped type occupies wetter sites within the system and tends to have significant cover of species more tolerant of frequent flooding, such as *Quercus lyrata* (overcup oak), *Taxodium distichum* (baldcypress), *Quercus phellos* (willow oak), *Nyssa aquatica* (water tupelo), and *Salix nigra* (black willow). *Quercus nigra* (water oak), *Liquidambar styraciflua* (sweetgum), *Ulmus americana* (American elm), and *Fraxinus pennsylvanica* (green ash) are often dominant."

<u>Small Stream and Riparian Seasonally Flooded Mixed Forest</u> – "This mapped type may have significant cover contributed by *Pinus taeda* (loblolly pine), *Pinus elliottii* (slash pine), and/or *Juniperus virginiana* (eastern redcedar). Deciduous species described above share the canopy with these evergreen species."

On the ground conditions confirm that the property presents a mix of forested systems, with upland forests heavily dominated by loblolly pine (*P. taeda*) and mixed hardwood forests containing a suite of oak, elm, and ash species. The property is also replete with small oxbow lakes and cutoff stream meanders, some of which drain directly into Spring Creek and others that experience intermittent periods of wet and dry throughout the year. These form wetland-stream complexes with the surrounding low-lying habitat and represent some of the most diverse habitat within the property. The wet forest ground cover is dominated by species of sedge (*Carex sp.*) and woodoats (*Chasmanthium sp.*) with water hickory (*Carya aquatica*) common in the canopy. A rich assemblage of bryophytes, fungi, and lichen blanket the moist woodlands and recycle detritus on the forest floor.

The pine-mixed hardwood uplands contain a thick shrub layer dominated by yaupon holly (*Ilex vomitoria*). There is potential for greater diversity of plants and wildlife by implementing appropriate long-term management practices. The southern property boundary shares a border with Spring Creek. The riparian banks are sandy and remain in good condition, with only occasional erosion and cut banks. Spring Creek is much narrower here than in its downstream reaches. American sycamore (*Platanus occidentalis*) and river birch (*Betula nigra*) are present in substantial numbers and provide stability for the sandy banks.

Comprehensive floral and faunal inventories were performed on the property by a group of highly qualified biologists and naturalists on April 21, 2021 (Appendix B). The preserve contains habitat important for a variety of terrestrial species, including deer, foxes, coyotes, turtles, snakes, and songbirds. It also contains significant habitat value for amphibious and aquatic species, including alligators, anurans, salamanders, fish, and pond turtles. Moreover, the property is located within the Central Flyway, rendering it important migratory bird habitat for songbirds, shorebirds, raptors, hummingbirds, swifts, and swallows. Resident and migratory waterbirds, including wood ducks and blue-winged teal, take shelter in the forested stream channels and even nest along Spring Creek.

The property also contains some unproductive species, both native and non-native. The over-abundance of yaupon holly could benefit from prescriptive management practices, described in more detail in the Management section. Tallow (*Triadica sebifera*) is the dominant mid-story/canopy species in some of the mesic transitional forests, especially in Management Unit 1. Trifoliate orange, Chinaberry, privet, and Ligustrum are all present, particularly along the edges of the property. Japanese climbing fern is likely present on the property or is likely to colonize in the future. Feral hogs (*Sus scrofa*) maintain populations along Spring Creek, and evidence of sounders have been observed near water sources, such as the oxbow cutoffs, stream meanders, and Spring Creek itself.

Cultural Resources Inventory

BLC will complete a cultural resources inventory of the property in 2021-2022. Based on other known cultural resource finds along Spring Creek, the Akokisa people likely maintained a hunting presence in the area. The Akokisa were a band of the larger Atakapa ethnic group and were present along waterways from as far south as Galveston Island and as far north as Lake Creek. Arrowheads have been discovered at other BLC properties along Spring Creek. The Akokisa were nomadic, clinging to the coastlines for reliable food sources like mussels and oysters during the winters, and migrating north to their more permanent settlements along river systems where they hunted deer and buffalo. Broad, open floodplains such as those found on Lake Creek and the Trinity River were preferred over the riparian thickets of Spring Creek, but hunters still spent time in the southern reaches of the Piney Woods to take advantage of the abundant natural resources. The Poarch-Swinbank property presents an

opportunity to connect with Indigenous cultures and civilizations that maintained a historic presence along Spring Creek, the Lake Houston watershed, and elsewhere. BLC has made initial contacts with Indigenous representatives and remains open to partnerships that co-power and elevate Native American culture and ways of knowing.

Legal Documentation

See Appendix C for the title policy and deed.

MANAGEMENT

Objectives

BLC accepted Poarch/Swinbank Preserve as a donation with the primary intent to preserve and enhance the site with native vegetation. This site also presents a unique opportunity to serve as a community outreach anchor for BLC's Ambassador Program and other corporate service and environmental education opportunities.

The site provides an ideal location to learn about native riparian habitat in the greater Lake Houston watershed. To that end, the objectives of the management plan are:

- A. Preserve the riparian habitat
- B. Enhance the habitat, as needed
- C. Utilize the site for the Ambassador Program and other BLC educational programming
- D. Explore trail development and public access of the land
- E. Maintain Land Trust Alliance Accreditation compliance

Reducing Threats to Conservation Values

Sand mining: The property was previously slated for sand mining, but this threat is effectively neutralized through BLC's ownership of the land. The property will be conserved in its natural state in perpetuity, and no aggregate mining activity will be permitted.

Invasive species: BLC will take regular action to the reduce the populations of invasive species, especially tallow. This will be done primarily through volunteer work days overseen by BLC staff and/or Texas Master Naturalists. Threat reduction will be strategic and based on resource availability.

Trespassing/poaching: Fencing around the property is in overall good condition, and BLC has made relationships with several neighbors who keep an eye out for any illegal activity. BLC also maintains relationships with local game wardens who can be called in as needed to help eradicate illegal activity. Lastly, BLC has adequately posted signage informing the public about the property and indicating no trespassing is allowed.

Preservation and Enhancement of Habitat

BLC accepted the donation of this land to protect the existing riparian habitat adjacent to Spring Creek. This habitat requires relatively little active management to provide a valuable resource for wildlife and

people. Some indigenous plant species, like yaupon holly, blanket the midstory and prevent maximum species diversity. Selective clearing and site preparation to promote midstory species like redbay, cherry laurel, possumhaw holly, American holly, American hornbeam, hawthorn, and hophornbeam can enhance the value of upland habitats.

Invasive species are an ecological concern and removal of invasive species will enhance the habitat for wildlife. Invasive species are those defined by the Texas Department of Agriculture's Noxious and Invasive Plants List and/or species included on the TexasInvasives.org website for Gulf Coast Prairies and Marshes (Appendix D for current lists). Invasive species known to be on the preserve at this time include Chinese tallow, nandina, Japanese privet, Chinese privet, Chinaberry, and trifoliate orange. Japanese climbing fern is likely present on the property or likely to colonize in the future.

Tallow Management

Tallow invasion presents the most significant management challenge to conservation values and also the greatest restoration opportunity to enhance habitat for wildlife value. Tallow invasions have plagued forests of the southeastern United States for over 150 years, reducing diverse plant communities to unproductive monocultures (Meyer 2011). Several external factors facilitate invasions, including low elevation, high temperatures, proximity to a water source, and recent habitat disruption (Wang et al 2014). Indeed, these characteristics are represented in the areas of the Poarch-Swinbank property most impacted by tallow invasion (Appendix A). The low-lying wetland habitats within 0.25-mi of Sentinel Oaks Rd. exhibit elevated presence of tallow trees, exceeding 80% canopy cover in some locations.

The most effective strategies to mitigate tallow presence include a multi-pronged approach that emphasize diverse treatment methodologies and prioritize site preparation to diversify the midstory and canopy strata. Direct application of herbicide is particularly effective from July through November when chemicals are more likely to be widely circulated through the plant organs via xylem and phloem (Williams and Minogue 2008). However, if treatment resources are available outside the ideal application window, herbicide can still be implemented for year-round tallow management. Herbicide application should follow protocols described in publications from reputable scientific sources, including but not limited to University of Florida Institute for Food and Agriculture Science (IFAS) Extension, Texas A&M AgriLife Extension, and USDA National Invasive Species Information Center (NISIC). In addition to herbicide, co-strategies like prescribed fire and strategic mowing are effective at partially control established tallow populations. BLC will consult with fire ecologists from the Texas A&M Forest Service and environmental consultants to determine the suitability of fire as a management strategy. Strategic mowing should focus on young tallow seedlings but must be combined with fire and/or herbicide to effectively reduce the spread of seedlings.

The Poarch-Swinbank property has been divided into three management units to more effectively monitor, measure, and evaluate tallow control and other management actions (Appendix A). The first five years of management (2021-2026) will prioritize reducing tallow populations in Management Unit 1 to below 20% canopy cover. Tallow in Management Units 2 and 3 should also be recorded and treated if resources allow.

BLC will sample the preserve annually to estimate percent cover of native and invasive species. Percent cover will be sampled following A Methodology for Monitoring Invasive Plant Management Projects in Coastal Habitats (Appendix E). At a minimum, 10 random 1-meter plots will sampled annually. The results will be included in the annual monitoring report.

Educational and Volunteer Programming

The preserve lacks suitable infrastructure to serve as an open-access land for public use. BLC instead intends to utilize the preserve as a limited use, invitation-only Ambassador Land. As an Ambassador Land, BLC will host educational trainings and events to share the unique ecological and cultural stories of the region including, but not limited to, hosting educational field trips, general public education events, and community service projects.

Educational field trips are likely to be those associated with BLC's Spring Creek Greenway Ambassador Program, available to adults and children 16 years and older. The development of an outdoor classroom will facilitate the Poarch-Swinbank preserve's involvement in education classes on native flora/fauna and low-impact trail creation.

Community service and volunteer work days are expected to take place at the preserve. These events will likely include trash pickups, invasive species removal, trail building, and biological surveys.

Experienced volunteers, such as Texas Master Naturalists, Spring Creek Greenway Ambassadors, and BLC Conservation Crew members, may be invited to provide general site condition monitoring. This opportunity is only for those invited by BLC staff.

Trail Development

To facilitate access for preserve monitoring and habitat enhancement, BLC plans to develop a limited permeable trail system, leveraging volunteer resources to build the trails. Trails will be developed using techniques approved by the U.S. Forest Service and implemented on BLC's Spring Creek Nature Trail. Hand tools, such as clippers, loppers, and Pulaskis, will be the preferential instrument used for trail development. Power tools, including chainsaws, are acceptable on an as-needed basis. Forestry mowers and other heavy equipment will be implemented only when other options are insufficient to complete a task in a timely manner.

Trails should be no greater than 8' wide and 10' high, with narrower trails preferred to deter off-road vehicle trespass. Trails should avoid wetland areas whenever possible and minimize disturbance to soils and mature vegetation. If bridges or boardwalks are necessary to cross tributaries and reduce impacts to natural resources, they should be constructed from permeable materials such as wood. Impermeable materials such as concrete and metal may be used to securely fasten structures and reduce the likelihood of flotation during flood events.

Land Trust Alliance Accreditation Compliance

BLC will maintain compliance with Land Trust Alliance's Standards and Practices related to Standard 12. Fee Land Stewardship. Standard 12 requires creation of this management plan and the following actions:

- 1. Determine the boundaries of land trust properties and physically mark them to the extent possible or necessary,
- 2. Inspect properties at least once per calendar year for potential management problems and promptly document the inspection, and

3. Address management problems, including encroachments, trespass and other ownership challenges, in an appropriate and timely manner and document the actions taken.

BLC marked the boundary of the preserve with BLC signage and purple spray paint in winter 2021. This signage and marking will be maintained by BLC.

Annual surveys will be conducted at the site and result in a report, filed in BLC's electronic database. BLC anticipates visiting the site on a quarterly basis to better discover and address management problems. To ensure legal protection of the preserve, BLC added it to the existing Terrafirma Insurance policy in 2020. This management plan will be reviewed annually by BLC's conservation staff and amended as needed to reflect significant changes in site conditions, changes to management plan objectives, or notable updates to budgets and/or timelines.

Timeline and Budget

The implementation of portions of this management plan, particularly Goals A-D, is dependent upon staff, volunteer, and funding resources. Within one year of ownership, foundations and corporations such as Repsol and TC Energy have expressed an interest in funding infrastructure like an outdoor classroom, and other similar partnerships can be cultivated for trail development and site enhancement. Trail construction will be completed by experienced volunteers that have prior experience on BLC's Spring Creek Nature Trail.

POARCH-SWINBANK BUDGET AND TIMELINE 2021-2026

TASK	TIMELINE	COST	ANNUAL STAFF TIME	NOTES
			Mon	itoring
Monitoring Surveys; including invasive species monitoring & Rx burn monitoring	Twice/year	\$8,000.00	16	Volunteer/Staff time. Assume 2 days for 2 people per event for five years. Include field & office time. = \$50/hr*2 days*2 people*8hrs*Syrs = \$8,000
			Site Enh	ancement
Prescriped Burning	2022-2026	\$27,000.00	40	Two events in M.U. #1 (25 acres) and half of M.U. #2 (25 acres) priced at \$30/acre (ref: Texas &&M Forest Service Prescribed Fire Grants, www.texasagriculture.gov) \$3,000.00 Staff training course = \$500 x 2 staff (ref: www.krirm.tamuk.edu/prescribedburning) = \$1,000.00 Field & office time = \$50/hr *2 staff *40 hours * 5 years = \$20,000 Additional 10% for misc, unforeseen costs = \$2,400 Total cost = \$26,400 -> rounded to \$27,000 Prospective funding = www.tfsweb.tamu.edu/PrescribedFireGrantsApplication
Invasive sp removal forested portion	Quarterly/year	\$9,500.00	֌	Majority of invasive species removal will incorporate volunteer resources. If contracted out "\$250-400/acre. Assumed \$300 and doing removal three times over five years. Additional treatment events will be conducted by volunteers. Pricing based on GBWMB knowledge & price for Spring Acres III treatment by Apache. (\$300/ac*10ac*3 events)+(\$50/hr*4 hours*2 staff) = \$9400, rounded to \$9500 Possible funding source: SEP funds

Tree/Shrub Planting	2022-2026	\$8,500.00	16	Plant native trees in inv. sp. removal areas. Gross cost esimate based on estimated price of \$3/seedling* 100 seedlings/acre *25ac = \$7,500 Staff & field time = \$50/hr*8hr*2 staff = \$800 Rounded up to \$8,500
Silt fence/dumping removal	2022-2026	\$5,200.00	4	Assume one event per year. Silt fencing removal will be completed by volunteers, possibly using a neighbor's equipment. (\$1,000 roll-off *5 years)+(\$50/hr*4hrs) = \$5,200
Trail development	2022-2024	\$10,000.00	8	Labor for trail and associated infrastructure will be completed by volunteers, Material costs for two wetland bridge crossings + staff time = \$10,000
				Misc
Fencing	2022-2026	\$2,200.00	-4	As needed, likely unneccessary, but neighbors may be an issue. Assume \$2/foot for 1000 feet. (\$2*1000) +(4hrs*\$50/hr)
Terrafirma Insurance	2021-2026	\$315.00	0	\$63/yr * 5 years = \$315.00
Liability Insurance	2021-2026	\$234.00	0	\$0.40/acre * 117 acres * 5 years = \$234,00
Outdoor Classroom	2022-2026	\$50,000.00	40	Contract labor = \$20,000 Materials = \$20,000 Staff & field time = 40hrs/r *550/hr *5 years = \$10,000 (ref: doubling estimates from www.classroominnature.weebly.com/total-cost.html)
Cultural Resources Inventory	2022	\$10,500.00	10	Consultant work = \$10,000 (based on SCNT arch work) Staff & field time = \$50/hr * 10 hrs = \$500
TOTAL		\$131,449.00	142	

Purpose Provide 5 yr estimate of reasonable expenses for the Poarch-Swinbank property

The intent is for budget making & potential grant applications.

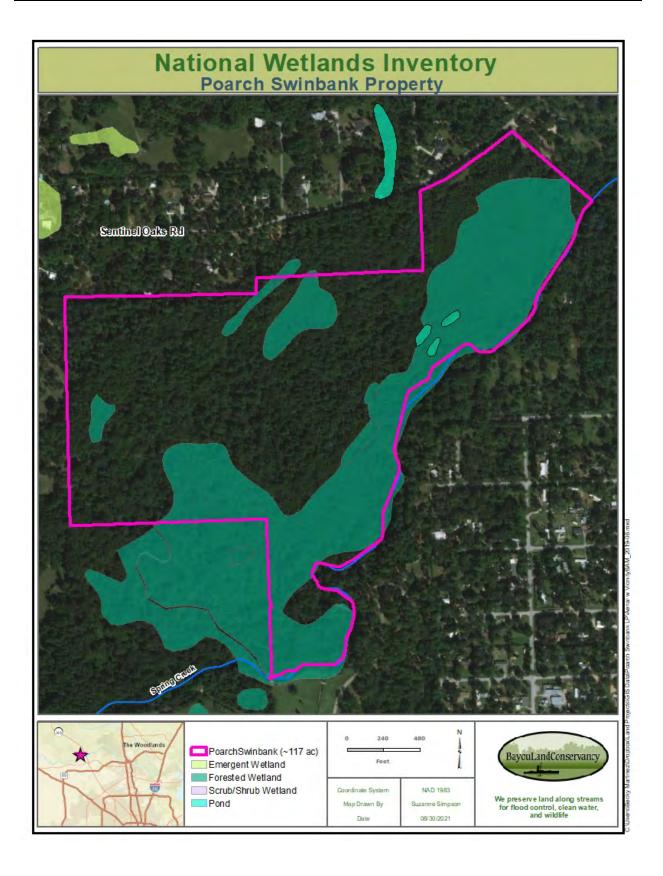
Revision Date Revisions Made

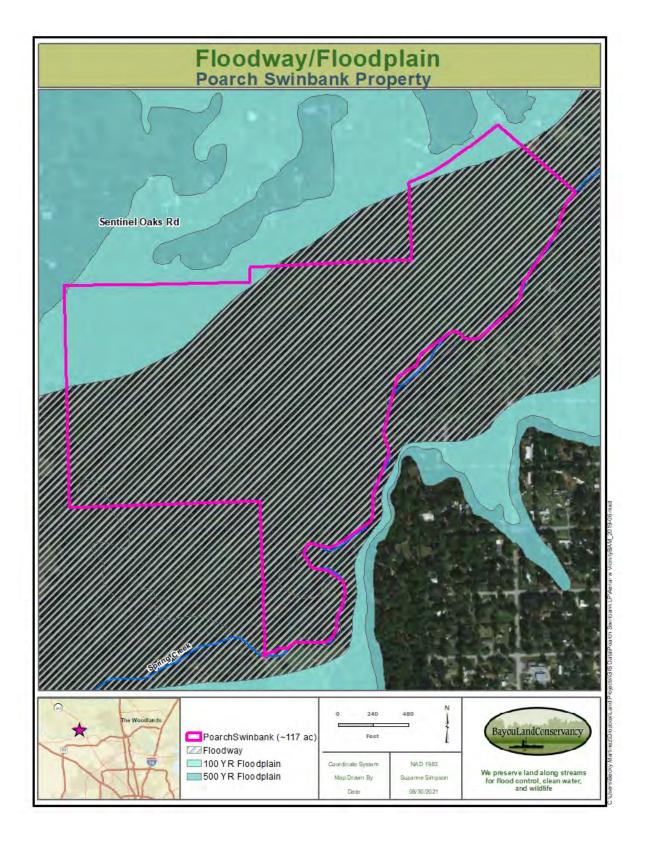
Assumptions & Notes Estimates for right actions and structures can vary widely. Upper-end estimates are included here.

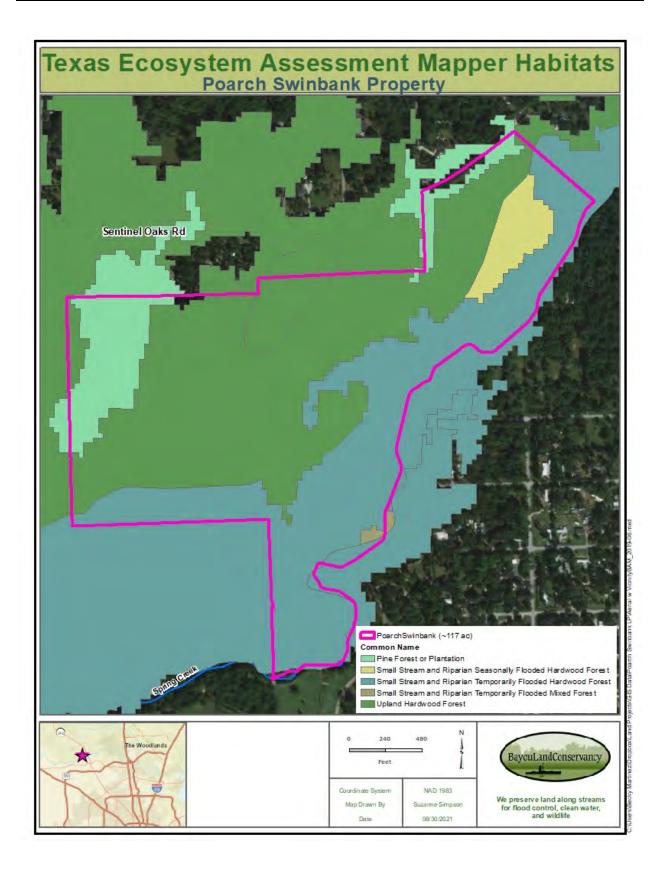
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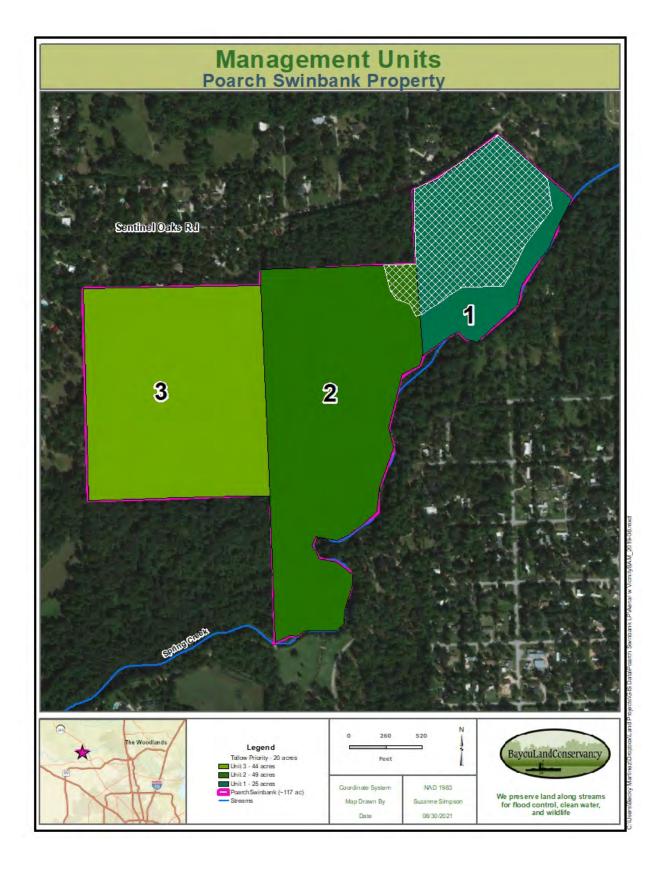
A - Vicinity and Site Maps

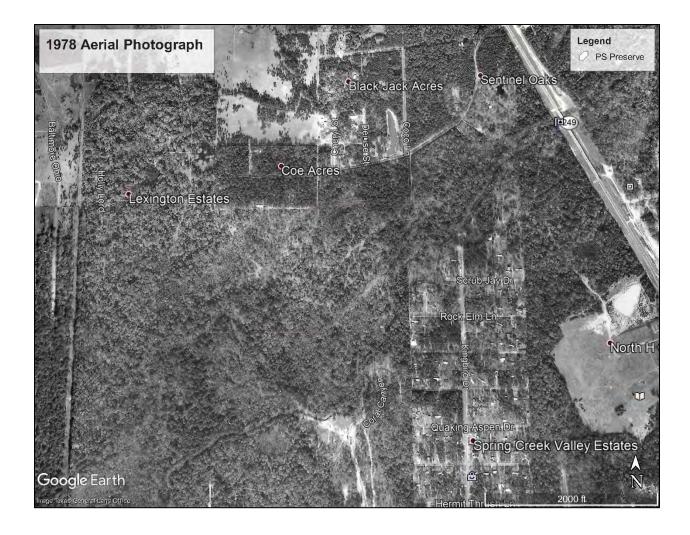




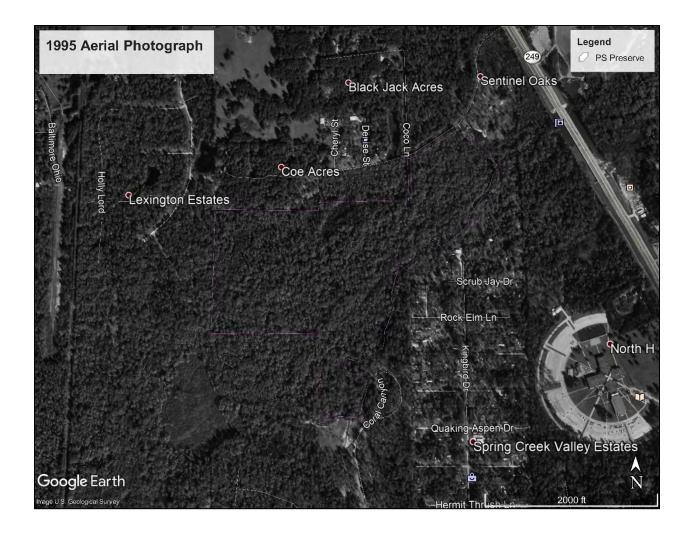


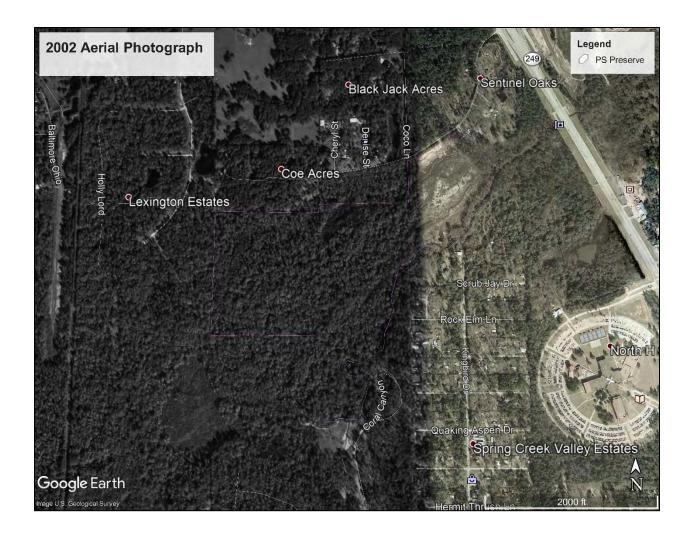


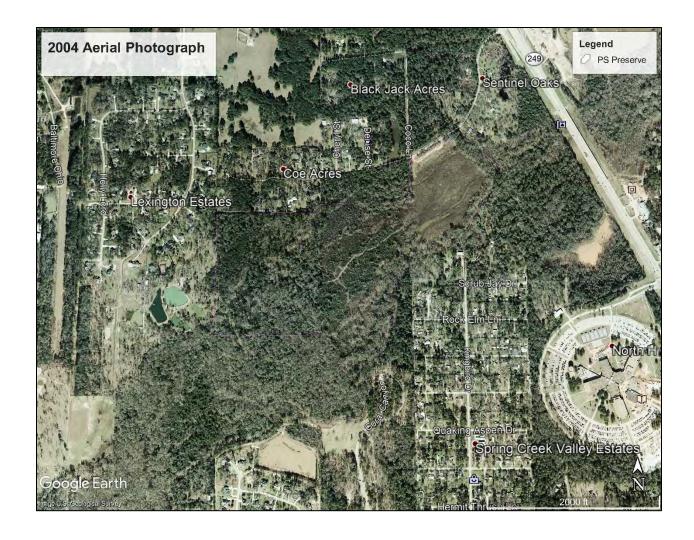




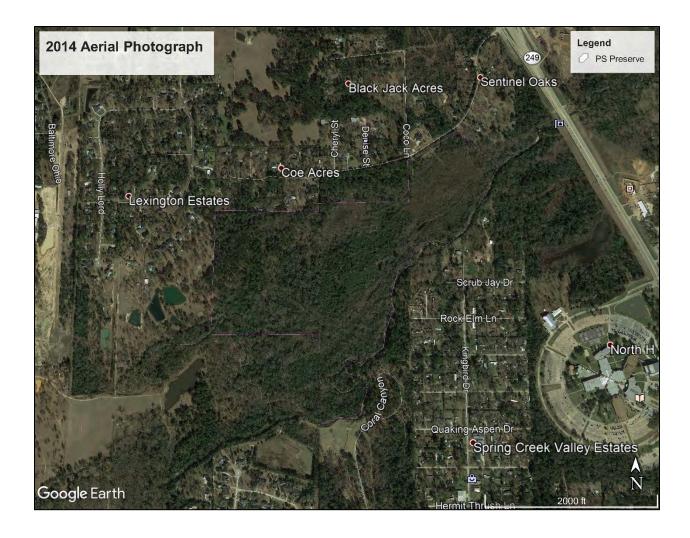












B – Floral, Faunal, and Fungal Inventories

Table 1. A comprehensive list of the floral species observed during a species inventory performed on the Poarch-Swinbank property by Bayou Land Conservancy on April 21st, 2021.

Higher Classification	Common Name	Scientific Name	Nativity Status	Organism Type
Aceraceae	Boxelder	Acer negundo	Native	Tree
Amaryllidaceae	Onions	Allium sp.	Unknown	Herbaceous
Anacardiaceae	Winged Sumac	Rhus copallinum	Native	Tree/Shrub
Anacardiaceae	Poison Ivy	Toxicodendron radicans	Native	Vine
Aquifoliaceae	Yaupon	Ilex vomitoria	Native	Shrub
Aquifoliaceae	Possumhaw	Ilex decidua	Native	Tree
Aquifoliaceae	American Holly	Ilex opaca	Native	Tree
Arecaceae	Palmetto	Sabal minor	Native	Shrub
Asteraceae	Everlastings and cudweeds	Gamochaeta sp.	Native	Herbaceous
Asteraceae	Ragweed	Ambrosia sp.	Native	Herbaceous
Asteraceae	Philadelphia Fleabane	Erigeron philadelphicus	Native	Herbaceous
Asteraceae	Carolina Desert- chicory	Pyrrhopappus carolinianus	Native	Herbaceous
Asteraceae	Straggler Daisy	Calyptocarpus vialis	Native	Herbaceous
Asteraceae	Eastern Baccharis	Baccharis halimifolia	Native	Shrub
Asteraceae	Dogfennel	Eupatorium capillifolium	Native	Shrub
Berberidaceae	Nandina	Nandina domestica	Introduced/Invasive	Shrub
Betulaceae	River Birch	Betula nigra	Native	Tree
Betulaceae	American Hornbeam	Carpinus caroliniana	Native	Tree
Bignoniaceae	Cross Vine	Bignonia capreolata	Native	Vine
Bignoniaceae	Trumpet Creeper	Campsis radicans	Native	Vine
Caprifoliaceae	Coralberry	Symphoricarpos orbiculatus	Native	Shrub
Caprifoliaceae	Arrowwood Viburnum	Viburnum dentatum	Native	Shrub
Caprifoliaceae	Common Elderberry	Sambucus nigra	Native	Tree/Shrub
Caprifoliaceae	Honeysuckle	Lonicera sempervirens	Native	Vine
Caryophyllaceae	New Zealand moss	Scleranthus uniflorus	Introduced/Invasive	Bryophyte
Clusiaceae	St. Johnswort	Hypericum sphaerocarpum	Native	Shrub
Cornaceae	Blackgum	Nyssa sylvatica	Native	Tree
Cupressaceae	Baldcypress	Taxodium distichum	Native	Tree
Cyperaceae	Louisiana Sedge	Carex louisianica	Native	Herbaceous
Cyperaceae	Cherokee Sedge	Carex cherokeensis	Native	Herbaceous

		5		
Dicranaceae	Broom forkmoss	Dicranium cf d. soparium	Native	Bryophyte
Ebenaceae	Common Persimmon	Diospyros virginiana	Native	Tree
Ericaceae	Farkleberry	Vaccinium arboreum	Native	Tree/Shrub
Euphorbiaceae	Chinese Tallow	Triadica sebifera	Introduced/Invasive	Tree
Fabaceae	Coralbean	Erythrina herbacea	Native	Shrub
Fabaceae	Sesbania	Sesbania drummondii	Native	Shrub
Fagaceae	Southern Red Oak	Quercus falcata	Native	Tree
Fagaceae	Blackjack Oak	Quercus marilandica	Native	Tree
Fagaceae	Water Oak	Quercus nigra	Native	Tree
Fagaceae	Post Oak	Quercus stellata	Native	Tree
Geraniaceae	Carolina Crane's- bill	Geranium carolinianum	Native	Herbaceous
Hamamelidaceae	Sweetgum	Liquidambar styraciflua	Native	Tree
Hypnaceae		Hypnum sp.	Native	Bryophyte
Juglandaceae	Water Hickory	Carya aquatica	Native	Tree
Juglandaceae	Mockernut Hickory	Carya tomentosa	Native	Tree
Juncaceae	Soft Rush	Juncus effusus	Native	Herbaceous
Lamiaceae	Lyreleaf Sage	Salvia lyrata	Native	Herbaceous
Lauraceae	Redbay	Persea borbonia	Native	Tree
Malvaceae	Turk's Cap	Malvaviscus arboreus var. drummondii	Native	Shrub
Meliaceae	Chinaberry	Melia azedarach	Introduced/Invasive	Tree
Moraceae	Red Mulberry	Morus rubra	Native	Tree
Oleaceae	Chinese Privet	Ligustrum sinese	Introduced/Invasive	Shrub
Oleaceae	American Fringetree	Chionanthus virginicus	Native	Tree
Oleaceae	Green Ash	Fraxinus pennsylvanica	Native	Tree
Oleaceae	Japanese Ligustrum	Ligustrum japonicum	Introduced/Invasive	Tree
Oxalidaceae	Wood Sorrel	Oxalis sp.	Unknown	Herbaceous
Phytolaccaceae	Pokeweed	Phytolacca americana	Native	Herbaceous
Pinaceae	Loblolly pine	Pinus taeda	Native	Tree
Platanaceae	American Sycamore	Platanus occidentalis	Native	Tree
Poaceae	Switch cane	Arundinaria gigantea	Native	Grass
Poaceae	Quaking Grass	Briza sp.	Introduced/Invasive	Grass
Poaceae	Inland Sea Oats	Chasmanthium latifolium	Native	Grass
Poaceae	Rosette Panic- grasses	Dicanthelium sp.	Native	Grass
Polygonaceae	Swamp Smartweed	Persicaria hydropiperoides	Native	Herbaceous

Polygonaceae	Dock	Rumex sp.	Native	Herbaceous
Polypodiaceae	Resurrection Fern	Pleopeltis polypodioides	Native	Fern
Polytrichaceae	Haircap mosses	Atrichum sp.	Native	Bryophyte
Radulaceae	Flat-leaved scalewort	Radula complanata	Native	Bryophyte
Rhamnaceae	Alabama Supplejack	Berchemia scandens	Native	Vine
Rosaceae	Mock Strawberry	Potentilla indica	Introduced/Invasive	Herbaceous
Rosaceae	Dewberry	Rubus spp.	Native	Shrub
Rosaceae	Parsley Hawthorn	Crataegus marshallii	Native	Tree
Rosaceae	Hawthorn	Crategus sp.	Native	Tree
Rosaceae	Cherrylaurel	Prunus caroliniana	Native	Tree
Rosaceae	Black Cherry	Prunus serotina	Native	Tree
Rosaceae	Littlehip Hawthorn	Crataegus spathulata	Native	Tree/shrub
Rubiaceae	Common buttonbush	Cephalanthus occidentalis	Native	Tree
Rutaceae	Trifoliate Orange	Poncirus trifoliat	Introduced/Invasive	Tree/Shrub
Salicaceae	Black Willow	Salix nigra	Native	Tree
Saururaceae	Lizard's Tail	Saururus cernuus	Native	Herbaceous
Smilacaceae	Greenbriar	Smilax sp.	Native	Vine
Smilacaceae	Saw Greenbrier	Smilax bona-nox	Native	Vine
Smilacaceae	Roundleaf Greenbrier	Smilax rotundifolia	Native	Vine
Tiliaceae	Carolina Basswood	Tilia americana var. caroliniana	Native	Tree
Trentepohliaceae		Trentepohlia sp.	Native	Algae
Ulmaceae	Sugarberry	Celtis laevigata	Native	Tree
Ulmaceae	Water Elm	Planera aquatica	Native	Tree
Ulmaceae	Winged Elm	Ulmus alata	Native	Tree
Ulmaceae	American Elm	Ulmus americana	Native	Tree
Ulmaceae	Cedar Elm	Ulmus crassifolia	Native	Tree
Vaucheriaceae		Vaucheria sp.	Native	Algae
Verbenaceae	American Beautyberry	Callicarpa americana	Native	Shrub
Vitaceae	Peppervine	Nekemias arborea	Native	Vine
Vitaceae	Virginia Creeper	Parthenocissus quinquefolia	Native	Vine
Vitaceae	Grapevine	Vitis spp.	Native	Vine
Vitaceae	Muscadine Grape	Vitis rotundifolia	Native	Vine

Table 2. A comprehensive list of the faunal species observed during a species inventory performed on the Poarch-Swinbank property by Bayou Land Conservancy on April 21st, 2021.

Higher Classification	Common Name	Scientific Name	Nativity Status	Organism Type
Araneae	Jumping Spider	Phidippus cf. P. audax	Native	Arachnid
Araneae	Wolf Spider	Rabidosa rabida	Native	Arachnid
Araneae	Spiny-backed Orbweaver	Gasteracantha cancriformis	Native	Arachnid
Linyphiidae	Filmy dome spider	Neriene radiata	Native	Arachnid
Lycosidae	Wolf spiders		Native	Arachnid
Opiolones	Daddy Longleg	Phalangium sp.	Native	Arachnid
Oxyopidae	Lynx spider	Oxyopes sp.	Native	Arachnid
Salticidae	Jumping Spider	Platycryptus sp.	Native	Arachnid
Chilopoda	Centipede	Scolopendra sp.	Native	Arthropod
Diplopoda	Millipede	Chicobolus cf. C. spingerus	Native	Arthropod
Accipitridae	Red-shouldered Hawk	Buteo lineatus	Native	Bird
Accipitridae	Cooper's Hawk	Accipiter cooperii	Native	Bird
Ardeidae	Great Egret	Ardea alba	Native	Bird
Cardinalidae	Cardinal	Cardinalis cardinalis	Native	Bird
Cardinalidae	Indigo Bunting	Passerina cyanea	Native	Bird
Cathartidae	Black Vulture	Coragyps atratus	Native	Bird
Columbidae	White-winged Dove	Zonalis asiatica	Native	Bird
Corvidae	Blue Jay	Cyanocitta cristata	Native	Bird
Mimidae	Northern Mockingbird	Mimus polyglottos	Native	Bird
Parulidae	Yellow-rumped Warbler	Dendroica coronata	Native	Bird
Parulidae	Orange-crowned Warbler	Vermivora celata	Native	Bird
Picidae	Red-bellied Woodpecker	Melanerpes carolinus	Native	Bird
Strigidae	Barred Owl	Strix varia	Native	Bird
Troglodytidae	Carolina Wren	Thyrothorus ludoviianus	Native	Bird
Turdidae	American Robin	Turdus migratorius	Native	Bird
Aphrophoridae		Philaenus sp.	Native	Insect
Asilidae	Bee-mimic robber flies	Laphria sp.	Native	Insect
Braconidae	Braconid wasps		Native	Insect
Calliphoridae	Green bottleflies	Lucilia sp.	Native	Insect
Cicadellidae	Sharpshooter	Draeculacephala	Native	Insect
Coccinellidae	Lady beetles		Native	Insect
Coenagrionidae	Blue-tipped dancer	Argia tibialis	Native	Insect
Coleoptera	Ground Beetle	Scarites subterraneus	Native	Insect
Crambidae	Crambid snout moths		Native	Insect

Culicidae	Anopheles punctipennis	Anopheles punctipennis	Native	Insect
Curculionidae	True weevils		Native	Insect
Diptera	Crane Fly	Nephrotoma cf. N. appendiculata	Native	Insect
Dolichopodidae	Long-legged flies		Native	Insect
Formicidae	Pyramid ants	Dorymyrmex sp.	Native	Insect
Geometridae		Scopula sp.	Native	Insect
Geometridae		Scopula sp.	Native	Insect
Gerridae	Water strider	Limnoporus canaliculatus	Native	Insect
Gyrinidae	Whirligig beetles		Native	Insect
Heliozelidae	Shield bearer moth	Heliozela sp.	Native	Insect
Hemiptera	Spittlebug	Aphrophoridae	Native	Insect
Hesperiidae	Funereal duskywing	Erynnis funeralis	Native	Insect
Hymenoptera	Imported Fire Ant	Solinopora invicta	Introduced/Invasive	Insect
Isopoda	Pillbug (Sowbug)	Armadillidium vulgare	Native	Insect
Lasiocampidae	Forest tent caterpillar	Malacosoma disstria	Native	Insect
Lepidoptera	Question Mark	Polygonia interrogationis	Native	Insect
Lepidoptera	Lawnmower Moth	Pyralidae	Native	Insect
Mantidae	Carolina mantis	Stagmomantis carolina	Native	Insect
Scutelleridae	Jewel bugs		Native	Insect
Syrphidae	Maize calligrapher	Toxomerus politus	Native	Insect
Tipulidae	Crane flies		Native	Insect
Tortricidae	Torticine leafroller moths		Native	Insect
Suidae	Feral Hog	Sus scrofa	Introduced/Invasive	Mammal
Colubridae	Dekay's Brown Snake	Storeria dekayi	Native	Reptile

Table 3. A comprehensive list of the fungi, lichen, and other phyla observed during a species inventory performed on the Poarch-Swinbank property by Bayou Land Conservancy on April 21st, 2021.

Higher	Common Name	Scientific Name	Nativity	Organism
Classification			Status	Туре
Apiaceae	Hoary bowlesia	Bowlesia incana	Native	Fungus
Burkholderiales		Leptothrix sp.	Native	Bacteria
Graphidaceae	Graffiti lichen	Graphis sp	Native	Lichen
Lycoperdaceae	Pear-shaped puffball	Apioperdon pyriforme	Native	Fungus
Mycenaceae	Bonnet	Mycena sp.	Native	Fungus
Omphalinaceae	Common funnel	Infundibulicybe gibba	Native	Fungus
Parmeliaceae	Ruffle lichens	Parmotrema sp.	Native	Lichen
Parmeliaceae	Greenshield Lichen	Flavoparmelia sp.	Native	Lichen
Physciaceae	Shadow Lichen		Native	Lichen
Ramalinaceae	Farinose cartilage lichen	Ramalina farinacea	Native	Lichen
Ramalinaceae	Dot lichen	Bacidia sp.	Native	Lichen
Reticulariaceae	Wolf's Milk	Lycogala epidendrum	Native	Slime Mold
Stereaceae	Ceramic parchment	Xylobolus frustulatus	Native	Fungus
Stereaceae	False turkey-tail	Stereum ostrea	Native	Fungus
Stereaceae	Crowded parchment	Stereum complicatum	Native	Fungus
Xylariaceae	Cramp Balls	Annulohypoxylon	Native	Fungus
		thouarsianum		
Xylariaceae		Kretzschmaria sp.	Native	Fungus
Xylariaceae	Hypoxylon canker	Biscogniauxia atropunctata	Native	Fungus

C – Legal Documentation (Gift Deed)

Comprehensive legal documents are stored in accordance with BLC's Record-Keeping Policy. Excerpts from these documents are provided in this appendix.

DOC #2020104131 Pages 9

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OR ALL OF THE FOLLOWING INFORMATION FROM ANY INSTRUMENT THAT TRANSFERS AN INTEREST IN REAL PROPERTY BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

GIFT DEED

CHICAGO TITLE GFC1720723114

THE STATE OF TEXAS

8 8

COUNTY OF MONTGOMERY

WHEREAS, POARCH/SWINBANK LLC, a Texas limited liability company (successor by merger to Poarch/Swinbank Limited Partnership) ("Grantor") is the owner of that certain 117.751 acre, more or less, tract of land, which land is described by metes and bounds in Exhibit A attached hereto and made a part hereof for all purposes (the "Land");

WHEREAS, Grantor desires to give, donate and convey the Land to **BAYOU LAND CONSERVANCY**, a Texas not for profit corporation ("Grantee);

NOW, THEREFORE, for and in the sole consideration of good citizenship, charity, and environmental conservation, Grantor has GIVEN, DONATED, GRANTED and CONVEYED and by these presents does GIVE, DONATE, GRANT and CONVEY unto Grantee, the Land, together with any and all improvements, appurtenant easements and any other rights and appurtenances located thereon and/or thereunto belonging or appertaining (herein collectively called the "Property").

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging unto Grantee, its successors and assigns forever; and Grantor hereby binds Grantor and its successors and assigns to WARRANT AND FOREVER DEFEND all and singular the Property unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor but not otherwise, except this warranty, gift, donation, grant and conveyance are expressly made subject to (i) any and all encumbrances or matters of record in Montgomery County, Texas, and (ii) any and all matters that a true and correct surveyor a visual inspection of the Property would reveal, to the full extent any of such encumbrances or matters described in clauses (i) and/or (ii) above are subsisting and appertain to the Property and only to the extent that same are otherwise enforceable against Grantee.

GRANTOR AND GRANTEE, BY GRANTEE'S ACCEPTANCE HEREOF, ACKNOWLEDGE AND AGREE THAT GRANTOR HAS NOT MADE, DOES NOT MAKE AND SPECIFICALLY DISCLAIMS ANY REPRESENTATIONS, WARRANTIES, PROMISES, COVENANTS, AGREEMENTS OR GUARANTEES OF ANY KIND OR CHARACTER WHATSOEVER, WHETHER EXPRESS OR IMPLIED, ORAL OR WRITTEN, PAST, PRESENT OR FUTURE, OF, AS TO, CONCERNING OR WITH RESPECT TO; (I) THE NATURE, QUALITY OR CONDITION OF THE PROPERTY; INCLUDING, WITHOUT LIMITATION, THE WATER, DRAINAGE CHARACTERISTICS, SOIL AND GEOLOGY

RELATING TO SAME; (II) THE SUITABILITY OF THE PROPERTY FOR ANY AND ALL ACTIVITIES AND USES WHICH GRANTEE MAY CONDUCT THEREON; (III) THE COMPLIANCE OF OR BY THE PROPERTY OR OPERATIONS CONDUCTED THEREON WITH ANY LAWS, RULES, REGULATIONS, ORDINANCES OR REGULATIONS OF ANY APPLICABLE GOVERNMENTAL AUTHORITY OR BODY; (IV) THE HABITABILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PROPERTY; (V) THE PRESENCE OF ANY ENDANGERED OR THREATENED SPECIES ON THE PROPERTY, AS WELL AS THE SUITABILITY OF THE PROPERTY AS A HABITAT FOR ANY OF THOSE SPECIES; OR (VI) ANY OTHER MATTER WITH RESPECT TO THE PROPERTY (EXCEPT THE SPECIAL WARRANTY OF TITLE CONTAINED HEREIN). WITHOUT LIMITING THE FOREGOING, GRANTEE, BY GRANTEE'S ACCEPTANCE HEREOF, ACKNOWLEDGES AND AGREES THAT GRANTOR HAS NOT MADE AND DOES NOT MAKE ANY REPRESENTATION OR WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ANY HAZARDOUS OR TOXIC SUBSTANCES ON, UNDER OR ABOUT THE PROPERTY OR THE COMPLIANCE OR NON-COMPLIANCE OF THE PROPERTY WITH ANY AND ALL FEDERAL, STATE OR LOCAL ENVIRONMENTAL LAWS, ORDINANCES, REGULATIONS, ORDERS, DECREES OR RULES REGULATING, RELATING TO OR IMPOSING LIABILITY OR STANDARDS OF CONDUCT CONCERNING ANY HAZARDOUS OR TOXIC SUBSTANCES. GRANTEE, BY GRANTEE'S ACCEPTANCE HEREOF, ACKNOWLEDGES AND AGREES THAT HAVING BEEN GIVEN THE OPPORTUNITY TO INSPECT THE PROPERTY PRIOR TO THE DATE HEREOF, GRANTEE ACCEPTS THE PROPERTY PURSUANT TO GRANTEE'S INDEPENDENT EXAMINATION, STUDY, INSPECTION AND KNOWLEDGE OF THE PROPERTY, AND GRANTEE IS RELYING UPON GRANTEE'S OWN DETERMINATION OF THE VALUE AND CONDITION OF THE PROPERTY AND USES TO WHICH THE PROPERTY MAY BE PUT AND NOT UPON ANY INFORMATION THAT HAS BEEN OR WILL BE PROVIDED BY GRANTOR. BY GRANTEE'S ACCEPTANCE HEREOF, GRANTEE ACKNOWLEDGES AND AGREES THAT GRANTEE ACCEPTS THE PROPERTY IN ITS "AS IS, AND WITH ALL FAULTS" PRESENT CONDITION.

Grantor warrants and represents that all ad valorem taxes and assessments for the Property (together, "Taxes") for the year 2019 and all prior years have been paid by Grantor. When bills for Taxes for the year 2020 are received by either Grantor or Grantee, copies thereof shall be forwarded to the other by such party. Grantor and Grantee shall then prorate Taxes as of the effective date set forth below and the parties shall be responsible for payment of any Taxes attributable to their respective periods of ownership during the year 2020, pursuant to Section 26.11 of the Texas Tax Code.

Grantee joins in the execution of this Gift Deed to confirm its acceptance of this gift and conveyance and its agreement to the terms and provisions hereof.

This instrument may be executed in one or more counterparts, the pages of which may be aggregated to form a single document.

EXECUTED on the dates of the respective acknowledgments set forth below, to be effective as of the date that both parties below have executed and acknowledged this document.

GRANTOR:

	POARCH/SWINBANK LLC
THE STATE OF TEXAS § COUNTY OF HARRIS §	By: Donald L. Poarch, Vice President Jos B. Sacriv France
This instrument was acknowledg	ged before me on this 11 May of Letember, 2020
by Donald L. Poarch, Vice President of	Poarch/Swinbank LLC, on behalf of/said limited liability
company. JOEB SWINBANK	have no march
	Malley M Mague Notary Public
	Molly M Magee
	Printed Name of Notary
MOLLY M MAGEE	
Notary ID #504877 My Commission Expires	My commission expires: 6/1/2024
June 1, 2024	
	GRANTEE:
	BAYOU LAND CONSERVANCY
	BATOU LAND CONSERVANCT
	By: Sin Sin
	Name: LISA- LIN
	Title: BOARD CHAIR
THE STATE OF TEXAS §	
COUNTY OF HARRIS §	
This instrument was acknowledge	ged before me on this 17th day of September, 2020
by USA UN , BOA	er CHAIR of Bayou Land Conservancy, on behalf
of said Bayou land Conscivency	
J	There h Wilson
	Notary Public
CHERIE WILSON	Cherie L Wilson
Notary Public, State of Texas	
	Printed Name of Notary
Notary Public, State of Texas Comm. Expires 01-19-2023	Cherie L Wilson

Bayou Land Conservancy 10330 Lake Road, Bldg J Houston, TX 77070

801-00-0123

Exhibit A

FRONTIER SURVEYORS, INC. 990 VILLAGE SQUARE G-200 TOMBALL, TEXAS 77375 PHONE (281) 351-7153 FAX (281) 351-7997

METES AND BOUNDS

October 16, 2000

BEING 117.751 acres of land, situated in the Joseph House Survey Abstract Number 20, Montgomery County Texas, comprised of 43.84 acres and part of 77.75 acres described in deeds to J. E. Lieppman, MD, recorded in Volume 515, Page 288 and Volume 474, Page 83, respectively, Deed Records, Montgomery County Texas; said 117.751 acres more fully described as follows:

COMMENCING at a 2 inch iron pipe found in the South line of the Marvin M. Scheil and Rhonda Scheil, Trustees, 31.901 acre tract, recorded under Montgomery County Clerk's File Number 99086569, said pipe marking the Northwest corner of Lot 1 of Sentinel Oaks. a subdivision recorded in Volume 5, Page 459 Montgomery County Map Records, the Northeast corner of said 77.75 acre tract and the tract herein described;

THENCE South 42°44'23" East, with the Southwest line of said Lot 1, a distance of 626.47 feet to a 5/8 inch iron rod with cap set in the Northwest line of a 60 foot wide Road Easement recorded under Montgomery County Clerk's File Number 7619705, the Southwest corner of Lot 1, for the Northeast corner and PLACE OF BEGINNING for the herein described tract;

THENCE continuing South 42°44'23" East, crossing said Road Easement, at 61.00 feet pass a 5/8 inch iron rod with cap set for the Northwest corner of Lot 14 of said Sentinel Oaks, the Southeast corner of said Easement in all, a distance of 746.00 feet to a point in the centerline of Spring Creek, the Northwest line of Bill Gardner's Lot 1, recorded under Harris County Clerk's File Number T670997, part of Spring Valley Estates, Section 4 an unrecorded addition to Harris County, Texas, the East corner of said 77.75 acre tract from which a fence post found on top bank of said Spring Creek, bears North 47°03'35" West. 28.29 feet:

THENCE with the centerline meanders of Spring Creek, the Northwest line of Spring Creek Valley Estates an unrecorded subdivision, the Northwest line of 6.6441 acres granted to Harris County, recorded under Harris County Clerk's File Number C979559 and 107.44 acres granted to Harris County, recorded in Volume 3138, Page 696 Deed Records Harris County Texas, the following courses:

Page 1 of 5 pages

Exhibit A

801-00-0124

- 1. South 40°34'44" West, 86.48 feet
- 2. South 23°03'32" West, 95.61 feet
- 3. South 38°12'10" West, 86.47 feet
- 4. South 32°41'45' West, 281.66 feet
- 5. South 21°27'39" West, 219.69 feet
- 6. South 35°13'29" West, 239,40 feet
- 7. South 71°44'04" West, 245.58 feet
- 8. North 85°16'28" West, 201.21 feet
- 9. South 12°24'18" West, 137.88 feet
- 10. South 51°13'13" West, 227.33 feet
- 11. South 32°49'13" West, 381.63 feet
- 12. South 20°53'31" East, 203.50 feet
- 12. 000u1 20 00 01 Last, 200.00 lect
- 13. South 34°09'14" West, 161.62 feet
- 14. South 12°55'15" West, 332.20 feet
- 15. South 56°59'50" West ,316.19 feet
- 16. North 73°09'15" West, 181.84 feet
- 17. South 38°18'19" West, 173.52 feet
- 18. South 58°44'20" West, 163.71 feet
- 19. South 44°17'04" East, 204.10 feet
- 20. North 85°34'53' East, 164.05 feet
- 24. North 65 5455 East, 104.05 feet
- 21. North 67°08'14" East, 183.68 feet
- 22. South 08°46'16" West, 275.05 feet
- 23. South 06°50'07" West, 69.09 feet
- 24. South 41°09'52" West, 27.60 feet
- 25. South 80°37'00" West, 44.99 feet
- 26. South 69°02'38" West, 80.59 feet
- 27. North 63°59'08" West, 44.37 feet
- 28. South 86°58'40" West, 185.45 feet
- 29. South 40°42'55" West, 63.46 feet
- 30. South 81°14'33" West, 80.84 feet

31. North 88°25'51" West, 29.06 feet to a point for the Northeast corner of a tract of land granted to Harris County, recorded under Harris County Clerk's File Number B579700, the Southeast corner of that certain 16.1 acre tract granted to Montgomery County, described as Tract Five (5), recorded under Montgomery County Clerk's File Number 9834599, the Northwest corner of said Harris County 107.44 acre tract, the Southwest corner of said 77.75 acre Lieppman Tract and the tract herein described;

Page 2 of 5 pages

801-00-0125

Exhibit A

THENCE North 00°09'21" East, with the East line of the Montgomery County 16.1 acre tract, Tract Five (5), at 32.85 feet pass a 5/8 inch iron rod with cap set for reference on the top bank of Spring Creek, continuing in all, a distance of 1057.75 feet to an old 2 inch iron pipe found marking the Northeast corner of said Tract Five (5), The Southeast corner of the aforementioned J.E. Lieppman 43.84 acre tract and an interior corner of the tract herein described:

THENCE South 89°44'31" West, with the North line of said Tract Five (5) Montgomery County's 16.1 acre tract, at 541.00 feet pass an old 2 inch iron pipe found and held for line, continuing in all, a distance of 1293.43 feet to a 5/8 inch iron rod with cap set for an angle point in the East line of Lot 8, Block 2, Section 1 of Lexington Estates, recorded in Cabinet H, Sheet 89B Montgomery County Map Records, the Southwest corner of the Lieppman 43.84 acre tract and the tract herein described;

THENCE North 00°40'28" East, passing a 5/8 inch iron rod found on line marking the South corner of Lot 7 of said Lexington Estates, passing a 5/8 inch iron rod found on line marking the South corner of Lot 4 of said Lexington Estates, passing 5/8 inch iron rod found at 1.22 feet at right angles East for the South corner of Lot 3, in all, a distance of 1492.11 feet to a ½ inch iron rod found at the base of a fence corner post, marking the Southwest corner of the ABC Land Development Company, Inc. 25 acre tract (Coe Acres) recorded under Montgomery County Clerk's File Number 7638181, the Northwest corner of the Liepmann 43.84 acre and the most Westerly Northwest corner of the tract herein described;

THENCE South 89°31'11" East, with the South line of said Coe Acres, at 426.26 feet pass a ½ inch iron rod found at right angles North, 0.10 feet, at 852.71 feet pass a ½ inch iron rod found at right angles North 0.48 feet, at 1066.08 feet pass a ½ inch iron rod found on line, continuing in all, a distance of 1279.91 feet to an old 2 inch iron pipe found marking the Northeast corner of the Lieppmann 43.84 acre tract, the Southeast corner of said Coe Acres and an interior corner of the tract herein described:

THENCE North 02°00'44" East, with the West line of the Lieppman 77.75 acre tract, the East line of said Coe Acres, a distance of 105.98 feet to a plow point found marking the Southwest corner of that certain 10.99 acre tract granted to Julian F. Hopcus and Jane C. Hopcus, recorded under Montgomery County Clerk's File Number 8146777, the most Westerly Northwest corner of the Liepmann 77.75 acre tract and an intermediate Northwest corner of the tract herein described;

THENCE South 89°51'33" East, with the South line of the Hopcus Tract, a distance of 1111.60 feet to a 5/8 inch iron rod with cap set for the Southeast corner of the Hopcus Tract, an interior corner of the Lieppman 77.75 acre tract and the tract herein described;

Page 3 of 5 pages

801-00-0126

12 5

Exhibit A

THENCE North 00°11'24" East, with the East line of the Hopcus Tract, at 550.36 feet pass a 5/8 inch iron rod with cap set in the South line of the aforementioned 60 foot Road Easement, the Northeast corner of the Hopcus Tract, the Southeast corner of the residue of that certain 55.623 acre tract granted to ABC Land Development Company, Inc., recorded under Montgomery County Clerk's File Number 7618735, continuing in all, a distance of 610.36 feet to a 5/8 inch iron rod with cap set for the Northwest corner of the tract herein described;

THENCE due, East, a distance of 22.00 feet to a 5/8 inch iron rod with cap set for an angle point in the North line of said easement;

THENCE North 57°34'00" East; with the North line of said easement and the tract herein described a distance of 643.57 feet to the PLACE OF BEGINNING, containing 117.751 acres. SUBJECT TO the following described Road Easement (60 foot wide);

BEING 0.949 acre of land, that same tract described by a centerline description recorded under Montgomery County Clerk's File Number 7619705 Deed Records Montgomery County Texas; said easement more fully described as follows:

BEGINNING at a 5/8 inch iron rod with cap set in the Northeast line of above mentioned Lieppman 77.75 acre tract, marking the Southwest corner of Lot 1 of said Sentinel Oaks, said rod located South 42°44'23" East, 626.47 feet from an old 2 inch iron pipe found marking the Northeast corner of the above described tract;

THENCE South 42°44'23" East, with the East line of the above described tract, a distance of 61.00 feet to a 5/8 inch iron rod with cap set for the Northwest corner of Lot 14 of said Sentinel Oaks, the Southeast corner of said easement;

THENCE South 57°34'00" West, a distance of 671.91 feet to a 5/8 inch iron rod with cap set for an angle in the South line of said easement;

THENCE due, West, a distance of 39.68 feet to a 5/8 inch iron rod with cap set in the most Northerly West line of the Lieppman 77.75 acre tract, marking the Northeast corner of the above mentioned Hopcus Tract the Southwest corner of the ABC Land Development Company 55.623 acre tract and this easement;

Page 4 of 5 pages

801-00-0127

Exhibit A

THENCE North 00°11'24" East, with ABC Land Development Company Tract, the Northerly West line of said Lieppman Tract, a distance of 60.00 feet to a 5/8 inch iron rod with cap set for corner;

THENCE due, East, a distance of 22.00 feet to a 5/8 inch iron rod with cap set for an angle point in the North line of this easement;

THENCE North 57°34'00" East, a distance of 643.57 feet to the PLACE OF BEGINNING.

This is to certify that this description of land represents an actual survey made on the ground under my supervision, as shown by the accompanying plat and substantially complies with the current Texas Society of Professional Land Surveyors Standards and Specifications for a Category 1A, Condition III, Survey.

ELMER E. COON PROFESSIONAL LAND SURVEYOR TEXAS REGISTRATION NUMBER 1679

EEC/kld 200363D



Page 5 of 5 pages

Doc #: 2020104131 Pages 9

E-FILED FOR RECORD 09/18/2020 04:22PM

COUNTY CLERK MONTGOMERY COUNTY, TEXAS

STATE OF TEXAS, COUNTY OF MONTGOMERY

I hereby certify that this instrument was e-filed in the file number sequence on the date and time stamped herein by me and was duly e-RECORDED in the Official Public Records of Montgomery County, Texas.

09/18/2020

Male Sunday County Clerk Montgomery County, Texas

D – Invasive Species Lists

Figure: 4 TAC §19.300(a)

Common Name	Botanical Name
Noxious plants	
alligatorweed	Alternanthera philoxeroides
balloonvine	Cardiospermum halicacabum
Brazilian peppertree	Schinus terebinthifolius
broomrape	Orobanche ramosa
camelthorn	Alhagi camelorum
Chinese tallow tree	Triadica sebifera
Eurasian watermilfoil	Myriophyllum spicatum
giant duckweed	Spirodela oligorrhiza
giant reed	Arundo donax
hedge bindweed	Calystegia sepium
hydrilla	Hydrilla verticillata
itchgrass	Rottboellia cochinchinensis
Japanese dodder	Cuscuta japonica
kudzu	Pueraria montana var. lobata
lagarosiphon	Lagarosiphon major
paperbark	Melaleuca quinquenervia
purple loosestrife	Lythrum salicaria
rooted waterhyacinth	Eichhornia azurea
saltcedar	Tamarix spp.
salvinia	Salvinia spp.
serrated tussock	Nassella trichotoma
torpedograss	Panicum repens
tropical soda apple	Solanum viarum
water spinach	Ipomoea aquatica
waterhyacinth	Eichhornia crassipes
waterlettuce	Pistia stratiotes
Invasive plants	
Chinese tallow tree	Triadica sebifera
kudzu	Pueraria montana var. lobata
saltcedar	Tamarix spp.
tropical soda apple	Solanum viarum

https://texreg.sos.state.tx.us/fids/200701978-1.html



GULF COAST PRAIRIES AND MARSHES

The Gulf Coast Prairies and Marshes region is a nearly level, slowly drained plain less than 150 feet in elevation, dissected by streams and rivers flowing into the Gulf of Mexico. The region includes barrier islands along the coast, salt grass marshes surrounding bays and estuaries, remnant tallgrass prairies, oak parklands and oak mottes scattered along the coast, and tall woodlands in the river bottomlands. Native vegetation consists of tallgrass prairies and live oak woodlands. Brush species such as mesquite and acacias are more common now than in the past. Although much of the native habitat has been lost to agriculture

and urbanization, the region still provides important habitat for migratory birds and spawning areas for fish and shrimp.

DIRTY DOZEN TERRESTRIAL INVASIVE SPECIES

These plants have been identified as particularly worrisome terrestrial invasive species in the Gulf Coast Prairies and Marshes ecoregion. Click on their scientific names to go to the Invasive Plant Database and learn more.

Giant salvinia - Salvinia molesta

Chinese tallow tree - Triadica sebifera

Salt cedar - Tamarix ramosissima

Deep-rooted sedge - Cyperus entrerianus

Brazilian peppertree - Schinus terebinthifolius

Chinaberry tree - Melia azedarach

Japanese honeysuckle - Lonicera japonica

Chinese privet - Ligustrum sinense

Common water hyacinth - Eichhornia crassipes

Alligatorweed - Alternanthera philoxeroides

Trifoliate orange - Poncirus trifoliata

Guineagrass - Urochloa maxima

 $https://www.texas invasives.org/i101/ecoalert_detail.php?ecoregion_id=2$

E – A Methodology for Monitoring Invasive Plant Management Projects in Coastal Habitats

A METHODOLOGY FOR MONITORING INVASIVE PLANT MANAGEMENT PROJECTS IN COASTAL HABITATS

Monitoring invasive plant management projects in areas behind the primary dunes where the substrate is more stable may include setting up permanent plots. A very simple monitoring strategy would be to set up a series of permanent plots in which the percent cover of native versus invasive vegetation would be documented. The goal of this monitoring is to have a coarse determination of management success without having to know statistics or being able to identify every plant species in the plots.

Where should I put study plots and how big should they be?

The size and number of the plots will vary with the size and type of the study area. A general rule of plot size is the following:

For grasslands; minimum plot size is 25 to 100 square meters For shrublands; minimum plot size is 100 to 250 square meters For forests; minimum plot size is 100 to 500 square meters

Definitions (repeated from above):

Grassland: Grasses, forbs, ferns, and other herbaceous plants dominant, generally forming at least 25% cover. Trees, shrubs, and dwarf-shrubs generally less than 25% cover. Shrubland: Shrubs generally greater than 0.5 meter tall with individuals or clumps overlapping to not touching, generally forming more than 25% canopy coverage; tree cover generally less than 25%

Forest and woodland: Trees with their crowns overlapping, generally forming 60-100% cover Woodlands - Open stands of trees with crowns, not usually touching, generally forming 25-60% cover.

A minimum of three plots should be set up in areas where: the plot is representative of the area as a whole, the plot is uniform in plant composition and structure as well as habitat type – that is; the soil and hydrology within the plot should be uniform (you don't want a stream running through the plot), there are no major disturbances within the plot (other than the presence of invasive plants), and the plot should not be near the boundary with another vegetation type.

Because the purpose of the plots is to simply monitor the effectiveness of management – that is whether or not the amount of invasive plants is decreasing, there are no control plots. If you wanted to test the efficacy of different treatment types on a particular invasive species, then the experimental design would be quite different.

Each plot corner should be marked using GPS for the plot center and permanent stakes at the corners. Within the plots, all invasive plant species should be listed. Native plants can be lumped together as "Natives" for each vegetation layer (trees, shrubs, grass/herbaceous plants) as the purpose of monitoring is to determine if management to get rid of invasive species is working or not.

After all species and species groups have been listed, enter the total percent cover (cover class) by vegetation layer for each invasive species and for each native vegetation layer (trees, shrubs,

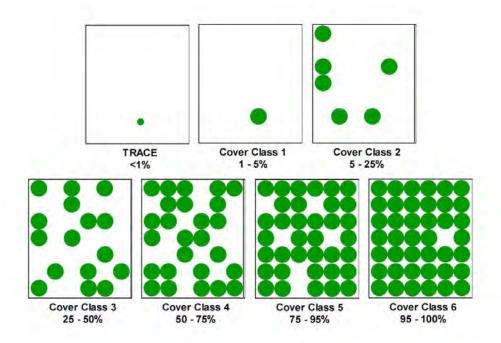
grasses/herbaceous plants, indicating dominant plants when possible). Because of layer overlaps, the sum of the percent cover values for all species within each layer may be greater than the total layer coverage. For example, a vine of Asiatic bittersweet twining its way up an oak tree, might have percent cover that is counted twice; once for the invasive vine and again as part of the native tree coverage. Also, percent cover might be canopy cover for some species and ground cover for other species. Management for invasive plants may differ with species which is why percent cover of each invasive species should be documented separately.

Estimating % Cover:

Canopy cover is the portion of the plot covered by the species (or group of species) being surveyed. One way to think of this is to visualize all of the plants pushed together until their canopies touch, and then estimate the overall portion of the plot that this represents. Classify the cover into one of the categories shown below (based on Daubenmire 1959 and reprinted from The California Weed Mapping Handbook: http://wmproto.sonomacreek.net/content/welcome):

Cover Class	Range of Coverage	Midpoint of Range	
Trace	< 1%	0.5%	
1	1-5%	3.0%	
2	5-25%	15.0%	
3	25-50%	37.5%	
4	50 - 75%	62.5%	
5	75 - 95%	85.0%	
6	95-100%	97.5%	

The graphic below gives a visual image of the amount of cover represented by the midpoint of each of the categories:



Daubenmire, R. 1959. A canopy-cover method of vegetation analysis. Northwest Science, 33:43-46.

http://www.vetmed.wsu.edu/org_nws/NWSci%20journal%20articles/1950-1959/1959%20vol%2033/33-1/v33%20p43%20Daubenmire.PDF

Percent Cover (Cover Class) Year 1	Percent Cover (Cover Class) Year 2	Percent Cover (Cover Class) Year 3	Percent Cover (Cover Class) Year 4	Percent Cover (Cover Class) Year 5
			+ +	77277
	(Cover Class)	(Cover Class) (Cover Class)	(Cover Class) (Cover Class) (Cover Class)	(Cover Class) (Cover Class) (Cover Class) (Cover Class)

Sample the plot prior to doing any management and then on an annual basis for at least 5 years, recognizing that management may be ongoing during this period. For each invasive plant species determine its percent cover within the plot. Seedlings may be difficult to identify so draw a picture or take a photograph and come back and check later in the growing season or place a marker next to the seedling and check the following year. Many invasive plants have large seed banks in the soil, and management of this seed bank should be part of the management strategy, as will resprouting of established plants.

Prior to beginning any restoration or management work on coastal habitats in Connecticut or New York, contact should be made with the Long Island Sound Study Habitat Restoration Coordinators:

Heather Young
New York State Department of Environmental Conservation
Long Island Sound Habitat Restoration Coordinator
205 N. Belle Meade Rd. Suite 1
East Setauket, NY 11733
phone: 631-444-0441
fax: 631-444-0474

Harry Yamalis
CT Department of Energy and Environmental Protection
Office of Long Island Sound Programs
79 Elm Street
Hartford, CT 06106-5127
Phone: 860-424 3620

Phone: 860-424-3620 Fax: 860-424-4054 harry.vamalis@ct.gov

hxyoung@gw.dec.state.ny.us

Other Potential Contacts: U.S. Fish and Wildlife Service Southern New England - New York Bight Coastal Program 50 Bend Road Charlestown, RI 02813 Phone: 401/364-9124

Fax: 401/364-0170 fax

Email: FW5ES SNENYBCEP@fws.gov

New York Sea Grant

http://www.seagrant.sunysb.edu/articles/t/bringing-science-to-the-shore-since-1971

Connecticut Sea Grant http://web.uconn.edu/seagrant/

The Nature Conservancy Connecticut http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/connecticut/index.htm

The Nature Conservancy New York http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/newyork/index.ht

Save the Sound http://ctenvironment.org/save-the-sound.cfm

Audubon Connecticut http://ct.audubon.org/

Audubon New York http://ny.audubon.org/

Connecticut Audubon Society http://www.ctaudubon.org/

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