# CANDIDATE CONSERVATION AGREEMENT WITH ASSURANCES FOR THE SPRING PYGMY SUNFISH BETWEEN GREENBRIAR ENTERPRISES, L.L.C., ET AL. AND THE U.S. FISH AND WILDLIFE SERVICE

## 1. Introduction

This Candidate Conservation Agreement with Assurances ("CCAA" or "Agreement") is effective and binding on the date of last signed, below, and between Greenbriar Enterprises, L.L.C., Albert McDonald, Mark Russell McDonald, Caroline McDonald Aderholt and Leah McDonald Engler (collectively "Property Owner") and the U.S. Fish and Wildlife Service ("Service") (collectively "Parties"). This CCAA has been developed through a collaborative effort between the Parties and a Cooperator, The Land Trust of North Alabama ("Land Trust"), to preserve significant habitat for and to reduce environmental threats to the Spring Pygmy Sunfish (*Elassoma alabamae*) ("Covered Species").

**Property Owner:** Greenbriar Enterprises, L.L.C.
c/o Albert McDonald, Manager of Greenbriar Enterprises, L.L.C. and Property Owner
9785 Segers Road
Madison, Alabama 35756

Mark Russell McDonald
Co-Manager of Greenbriar Enterprises, L.L.C. and Property Owner
2004 Big Cove Road
Huntsville, Alabama 35801

Caroline McDonald Aderholt
6207 30th St. North
Arlington, Virginia 22207

Leah McDonald Engler
28556 Garden Hills Rd.
Madison, Alabama 35756

**Cooperator:** Land Trust of North Alabama
c/o Executive Director
2707 Artie Street, Suite 6
Huntsville, Alabama 35805

Phone: 256.534.LAND (5263)
Fax: 256.536.6141

**Service:** Field Supervisor
c/o Daniel J. Drennen
U. S. Fish & Wildlife Service
6578 Dogwood View Parkway
Suite A
Jackson, Mississippi 39213

**Service Tracking Number: TE-155500B-0**

## 2. Enrolled Land

For purposes of this CCAA, the "Enrolled Land" (also known as the McDonald Farm), is owned by and under the direct control of the Property Owner and consists of approximately 272 acres, including all waters therein, located in Limestone County, Alabama. The Enrolled Land is depicted on the map at Appendix "A".

## 3. Duration of the CCAA and Enhancement of Survival Permit

The duration of this CCAA and the associated Enhancement of Survival Permit ("ESP" or "Permit") will run concurrently for a period of twenty-five (25) years except as otherwise provided in this Agreement. Notwithstanding the date on which the Permit is issued, the Permit will become effective on the date on which a final rule listing the Covered Species as "endangered" or "threatened" under the Endangered Species Act goes into effect. The duration of this CCAA may be extended and the Permit renewed.

Subject to 50 C.F.R. §13.22 and as provided herein, the duration of this CCAA may be extended and the Permit renewed prior to the expiration date listed thereon, with or without modification, with the written approval of the Parties. The Service's approval of any such extension or renewal may be conditioned on, among other things, the Property Owner's agreement to incorporate and implement modifications to the provisions of the CCAA, including, but not limited to, modifications and/or additions to the conservation measures set forth herein based on new and/or pertinent information concerning the Covered Species and its habitat as well as when the species' environmental or natural history conditions decline to a point such that additional measures may be needed to conserve and maintain growth of the species' population.

## 4. Authority and Purpose

Sections 2, 7, and 10 of the Endangered Species Act of 1973, as amended, [16 U.S.C. §§ 1531 - 1544] ("ESA" or "Act") and the Fish and Wildlife Coordination Act [16 U.S.C. §§661-666(c)] authorize the Service to enter into this CCAA. This CCAA also is entered into pursuant to the Service's final CCAA policy [64 *Federal Register* 32726] ("CCAA Policy") and implementing regulations at 50 C.F.R. §§17.22(d) and 17.32(d).

Section 2 of the Act states that encouraging interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs is essential to safeguarding the Nation's heritage in fish, wildlife, and plants. Section 7 of the Act requires the Service to review programs that it administers and to utilize such programs in furtherance of the purposes of the Act. Section 10(a)(l)(A) of the Act authorizes the Service to issue permits to "enhance the survival" of proposed and candidate species as well as those species that may become candidates in the future. By entering into this CCAA, the Service is utilizing its Candidate Conservation Program to further its mission of species' conservation.

The purpose of this CCAA is to provide for the implementation of conservation measures for the Covered Species within the Enrolled Land. Under the terms specified herein, the Property Owner will conserve and restore the Covered Species' habitat within the Enrolled Land as well as reduce and/or limit the threats to and promote the survival of the species. By entering into this CCAA, the Service has determined that implementation of the conservation measures set forth herein and the expected benefits of such measures, when combined with benefits that would be achieved were it assumed that similar measures were also to be implemented on other necessary properties, would preclude or remove the need to list the Covered Species as "endangered" or "threatened" under the ESA.

The Property Owner is only responsible to implement conservation measures that will reduce threats and impacts to the Covered Species and its habitat that he or she can control on the Enrolled Land. The Property Owner will not be held responsible for the proportion of those threats that he or she cannot control on the Enrolled Land, or elsewhere in the range of the species. Specifically, the Service has determined that implementation of the conservation measures set forth in Section 6(A) of this Agreement will reduce threats and impacts to the Covered Species and its habitat within the Enrolled Land.

## 5. Background and Description of Existing Conditions

Since the discovery of the Spring Pygmy Sunfish in 1937, the conservation of the species has been of concern to biologists, including the Service, and the landowners whose properties contain the species. The species is highly localized within the eastern Highland Rim of the Tennessee River Drainage, Limestone County, Alabama. The Highland Rim is a unique geological and ecological region that supports unique aquatic habitats and organisms. The Covered Species historically occupied three small distinct spring systems (Cave Spring, Pryor Spring, and Beaverdam Spring). Two of the three native populations of the species (Cave Spring and Pryor Spring) are considered extirpated.

The current population of the Covered Species occupies about six river miles of the Beaverdam Spring/Creek system within the County. The Covered Species is a single population existing as several isolated populations within the spring pools and runs (metapopulation structure). The Beaverdam Spring system meanders for approximately

2,000 feet of marginal habitat on the Enrolled Land. The Covered Species has never been abundant on or near the McDonald Farm, and has been sporadically collected with only a few individuals captured from 2010 to 2013.

For the purposes of this CCAA, the Property Owner has requested that the Service measure the population status of the Covered Species range-wide, as the preferred method to document any population declines. Measuring the abundance of the Covered Species range-wide provides a more accurate measure of population dynamics within the Beaverdam Spring system. Only a few individuals have been collected on the McDonald land, therefore, a measure of the population on the Enrolled Land as an indicator for the status of the species does not accurately reflect the population status..

The Covered Species prefers patches of dense, filamentous submergent vegetation for foraging, refuge from predators, and spawning. Without stable aquatic environments and water provided by spring pools and spring runs, changes in vegetation and water availability would result in non-beneficial impacts to the species.

The subsurface groundwater movement in this region of Alabama is quite complex, and more studies are needed. Additional studies throughout the duration of the CCAA will increase understanding of the hydrological and biological dynamics of the spring system where the spring pygmy sunfish occurs, and their effects on the Covered Species habitat. The adaptive management provisions of Section 7, below, will help inform management practices that may benefit the Covered Species by the Property Owner on the Enrolled Land, for those practices directly under the control of the property owner.

There is a longstanding history of agricultural use, including cattle and irrigated cropland operations, within the Enrolled Land. Studies of the Covered Species' natural history are on-going. The Property Owner is currently implementing erosion control measures, based on the Natural Resources Conservation Service's Farm Management Plan (http://www.nrcs.usda.gov/wps/portal/nrcs/main/al/programs/), within the Enrolled Land that provide conservation benefits to the Covered Species and its habitat.

## 6. Conservation Measures and the Parties' Commitments:

A. During the term of this CCAA, Property Owner agrees to do the following:

1. Maintain a vegetated buffer zone of up to 100 feet, using habitat specific native plants, extending from the edge of the existing waterline around Beaverdam Creek, as determined by vegetation type, flood plain map and/or other information sources. No barren or cultivated ground will be maintained within the buffer zone. The dimensions of the buffer zone are to be measured in true horizontal distance.

2. Limit cattle access to Beaverdam Creek and the vegetated buffer zone described in Section 6(A)(1), above, to a single location agreed upon by the Parties.

3. Limit extraction of surface water and/or groundwater from its private agricultural irrigation system to the yearly average of 155,520,000 gallons during the irrigation cycle from May 1-August 25 annually as set forth in Appendix "B" to this CCAA.

4. Maintain Property Owner's typical level of extraction of surface water and/or groundwater from the Limestone County Water and Sewer Authority, so as not to exceed the yearly average of 220,000,000 gallons per year as set forth in Appendix "C" to this CCAA.

5. Refrain from engaging in or allowing the following to occur within the buffer zone of the Enrolled Land: deforestation; land clearing; industrial development; residential development; aquaculture; livestock grazing; placement of new, temporary or permanent ground or surface water removal installations; stocking of farm ponds; introduction of non-native fish (such as trout or carp); use of insecticides, herbicides, fungicides, or fertilizer; installation of impervious surface; and other practices which would impact the spring hydrology excluding public road, utility, public works projects and facilities installed or removed, as may be, pursuant to condemnation or eminent domain proceedings. After consultation with the Service, the Property Owner may engage in beaver management in the watershed, including beaver control and dam removal, in accordance with Service guidelines and any other applicable federal, state or local regulations.

6. Implement additional water management measures in the event of drought, as determined by the Service, and/or new hydrological information indicating that water extraction at the rate set forth in Section 6(A)(3), above, is inadequate for the conservation of the Covered Species. The Parties agree that a 15% or greater decline of the range-wide population of the Covered Species, as determined by the Service and supported by data from three consecutive population samples conducted in accordance with Sections 11(B)(3) or (4), below, and the rate of water extraction occurring at any such time shall be deemed "inadequate for the conservation of the Covered Species." The additional water management measures that will be implemented by the Property Owner upon the occurrence of either event, e.g., drought or new hydrological information, shall be agreed upon by the Parties and consistent with the Purpose of this CCAA described in Section 4 and adaptive management provisions of Section 7 of this CCAA.

7. Comply with this CCAA and the Permit.

(B) The Service agrees to do the following:

1. Provide the required criteria and conditions of the CCAA are met, issue an Enhancement of Survival Permit to the Property Owner for a term concurrent with the term of this CCAA that, upon its effective date as

described in Section 3, above, would authorize the Property Owner to engage in incidental take of the Covered Species consistent with this CCAA and the terms and conditions of the Permit. The Permit will become effective on the date on which a final rule listing the Covered Species as "endangered" or "threatened" under the Endangered Species Act goes into effect. The Service also will provide the assurances set forth in Section 9, below, to the Property Owner.

2. Subject to Section 16.3, below, provide technical assistance on best management practices such as erosion control, storm water management, vegetation management, improvements to water quantity and water quality for available habitat, and well-head protection, to the Property Owner and The Land Trust, upon request or as needed.

3. Measure water levels within the spring system on the Enrolled Land at a site determined by Service biologists, as stated in Section 11(B)(2), below. The Service may elect to use a designated representative to perform this task. Water levels in the Beaverdam Spring system will be correlated to habitat utilization by the Covered Species, and will be reported by the Land Trust, in accordance with Section 11(B)(2), below.

4. Select sampling sites on the Enrolled Land for baseline and range-wide estimates of the Covered Species' population, in accordance with Section 11(B)(3), below. The sampling sites will be selected by the Service based on the best available science on the species' occurrence at the collection sites within the Enrolled Land for the five (5) years predating the effective date of this CCAA.

5. Communicate with the Land Trust to ensure completion of annual habitat analyses, monitoring and reporting. If the Land Trust does not fulfill the actions agreed to in this CCAA, the Service will discuss options with the Property Owner for securing an alternate party to complete the monitoring and reporting requirements of the CCAA.

(C) The Land Trust agrees to do the following:

1. Satisfy all reporting required by Section 11(A), below.

2. Propose changes to the monitoring and/or reporting requirements when it believes such changes are necessary for adaptive management as described in Section 7, below.

3. Ensure that annual habitat analyses and select site samplings are performed as specified in Section 11, below.

4. Provide resources required to perform the reporting and monitoring activities set forth in Section 11, below.

## 7. Adaptive Management

If new information or empirical data becomes available, the conservation measures outlined in Section 6 of this CCAA may be modified by mutual agreement of the Parties to include adaptive management measures to achieve greater conservation for the Covered Species. The primary purpose of adaptive management is to examine alternate strategies for meeting the goals and objectives of the CCAA through research, evaluation, and/or monitoring. Either Party may propose the implementation of adaptive measures to better meet the conservation needs of the Covered Species. The Land Trust may propose and will be involved in decisions regarding the implementation of adaptive management measures pertaining to monitoring and/or reporting. Adaptive management measures will become effective when agreed upon in writing by the Parties: however, the Land Trust also must agree in writing to any measures pertaining to monitoring and reporting on the natural history of the Covered Species, groundwater and surface water usage within the Enrolled Land, including pumping from the aquifer, and changes in the species' habitat.

## 8. Succession and/or Transfer

Pursuant to 50 C.F.R. §§13.24, 13.25, 17.22(d)(3)(i) and 17.32 (d)(3)(i), this CCAA will be binding on and will insure to the benefit of the Property Owner and its respective successors and transferees (collectively referred to as "transferee" or "transferees") including, but not limited to, subsequent owners of the Enrolled Land or any portion thereof. The rights and obligations of this CCAA will run with the ownership of the Enrolled Land. Should the Property Owner contract to sell, transfer or gift any or all of the Enrolled Land, it agrees to notify the Service and the Land Trust at least thirty (30) days in advance of any such sale, transfer or gift. The Property Owner also agrees to inform the transferee at least thirty (30) days in advance of sale, transfer or gift that the Enrolled Land is subject to this CCAA and the Permit.

The Permit issued to the Property Owner may be transferred to non-federal transferees in accordance with 50 C.F.R. Part 13, including but not limited to, §13.25 and 50 C.F.R. §§17.22 (d)(3)(i) and 17.32 (d)(3)(i), which require, among other things, that the transferee agree in writing to become a party to this CCAA and the Permit. Upon becoming a party to this CCAA and the Permit, the transferee will have the same rights and obligations as the Property Owner with respect to the Enrolled Land or portion thereof, as applicable. The transferee also may choose to enter into a new CCAA with the Service and receive a new enhancement of survival permit provided the Service determines the transferee is qualified under the CCAA Policy and 50 C.F.R. Parts 13 and 17. If the transferee chooses not to become a party to this CCAA or to a new CCAA and the Permit or a new permit, the transferee will not receive any of the benefits and assurances of the Service's Candidate Conservation with Assurances program, and the CCAA and Permit would be treated as abandoned by the Service. If

the Property Owner does not transfer the entire Enrolled Land, it will continue to be bound by this CCAA, hold the Permit and retain the regulatory assurances provided herein as to any portion or portions of the Enrolled Land as to which it retains ownership.

## 9. Assurances

In accordance with the Service's CCAA Policy and only with respect to the Covered Species, provided the CCAA is being properly implemented by the Property Owner, the Service assures the Property Owner that no additional conservation measures or additional land, water, or resource use restrictions, beyond those voluntarily agreed to and described in Section 6, above, and the Changed Circumstances section that follows, will be required of the Property Owner.

Upon the Effective Date of the Permit

If this CCAA is being properly implemented and as to the Covered Species, pursuant to 50 C.F.R. §§17.22(d)(5) and/or 17.32(d)(5), the Service provides the following assurances to the Property Owner:

A. For Changed Circumstances

"Changed Circumstances" are changes in circumstances affecting the Covered Species or Enrolled Land that can reasonably be anticipated and planned for by the Parties. [See 50 C.F.R. §17.3] If the Service determines that additional conservation measures are necessary to respond to a Changed Circumstance and such measures are set forth in a CCAA, the Property Owner will implement the agreed upon measures to address the circumstance. If, on the other hand, the Service determines that additional conservation measures not provided for in the CCAA are necessary to respond to a Changed Circumstance, the Service will not require any conservation measures in addition to those provided for in the CCAA without the consent of the Property Owner. [See also 50 C.F.R. §§ 17.22(d)(5)(i)-(ii) and 17.32(d)(5)(i)-(ii)]

The Parties agree that the occurrence of either or both of the events set forth in Section 6(A)(6), above, e.g., drought and/or new hydrological information indicating a 15% or greater decline in the Covered Species' range-wide population, and the Property Owner's actions are part of the reason of the decline, will constitute a Changed Circumstance under this CCAA. Should either or both events occur, the Parties agree that the Property Owner shall implement additional water management measures in accordance with Section 4 and 6(A)(6), above, and that the implementation of such additional water management measures shall constitute "additional conservation measures" for purposes of this section. These measures, as specified in

Section 4 under the prupose of this CCAA, will only take place for those threats under the Property Owner's control.

B. Unforeseen Circumstances

"Unforeseen Circumstances" are changes in circumstances affecting the Covered Species or Enrolled Land that could not reasonably have been anticipated by the Parties at the time of the negotiation and development of the CCAA and that result in a substantial and adverse change in the status of the Covered Species [See 50 C.F.R. § 17.3]. In negotiating Unforeseen Circumstances, the Service will not require the commitment of additional land, water or financial compensation or additional restrictions on the use of land, water or other natural resources beyond the level otherwise agreed upon for the Covered Species without the consent of the Property Owner.

1. If the Service determines that additional conservation measures are necessary to respond to Unforeseen Circumstances and such measures are not contemplated through the Adaptive Management component of this CCAA or otherwise addressed herein, the Service may require additional measures of the Property Owner only if such measures maintain the terms of this CCAA to the maximum extent possible. Additional conservation measures will not involve the commitment of additional land, water, or financial compensation or additional restrictions on the use of land, water, or other natural resources otherwise available for development or use under the original terms of this CCAA without the consent of the Property Owner.

2. The Service will have the burden of demonstrating that Unforeseen Circumstances exist, using the best scientific and commercial data available. These findings must be clearly documented and based upon reliable technical information regarding the status and habitat requirements of the Covered Species. The Service will consider, but not be limited to, the following factors:

   (a) Size of the current range of the Covered Species;
   (b) Percentage of the Covered Species' range that is adversely affected by this CCAA;
   (c) Percentage of the Covered Species' range that is conserved by this CCAA;
   (d) Ecological significance of that portion of the Covered Species' range affected by this CCAA;
   (e) Level of knowledge about the Covered Species and the degree of specificity of the species' conservation program under this CCAA; and

A. Additional Actions

Nothing in this section will be construed to limit the Service, other parties including additional landowners, organization or agencies, or the Property Owner from taking additional actions at their own expense to protect or conserve the Covered Species provided such actions are consistent with the conservation measures and conservation goals described in this CCAA. Upon request, the Service will provide technical advice, to the maximum extent practicable and subject to Section 16.3, below, to the Property Owner. Written agreement of the Parties is required prior to the Service, or other parties, engaging in any such additional actions within the Enrolled Land except in the event of emergency or as may be required under Section 15, below. Where written agreement is required, however, the Property Owner agrees that it will not unreasonably withhold such agreement.

**10. Incidental Take of Covered Species**

The Property Owner will give the Service reasonable advance notice of at least thirty (30) days of when it expects to engage in activities that would result in incidental take of the Covered Species. Such notice will provide the Service the opportunity to relocate affected individuals of the Covered Species, if possible and appropriate. The Permit will specify the level and amount of incidental take of the Covered Species that may occur pursuant to this CCAA.

**11. <u>Reporting and Monitoring</u>**

A. Reporting

The Land Trust will be responsible for all reporting required by this CCAA including reports on the implementation of conservation measures, monitoring of the Covered Species and its habitat, and occurrences of incidental take. Reports will be due to the Service by no later than January 30 annually.

B. Monitoring

The Land Trust will be responsible for implementing the monitoring protocol set forth in this section as well as for monitoring occurrences of incidental take under this CCAA and the associated Permit. The monitoring protocol consists of the following activities:

1. When the Property Owner reports the presence of a member of the Covered Species within the Enrolled Land, the Service may come onto the Enrolled Land, after providing reasonable notice to the Property Owner, to engage in activities to assess the status, abundance, other determined natural history and/or ecological parameters of the Covered Species.

Enrolled Land, after providing reasonable notice to the Property Owner, to engage in activities to assess the status, abundance, other determined natural history and/or ecological parameters of the Covered Species.

2. Annual Habitat Analysis: The Land Trust will ensure that a Habitat Analysis is conducted within the Enrolled Land at least once each year in the spring and/or summer for the duration of the CCAA. This will be done in conjunction with the spring pygmy sunfish sampling referenced in Section 11(B)(3), below. The Habitat Analysis will consist of: (a) documenting and mapping the cover types and the persistence of plant life most strongly associated with the Covered Species; (b) documenting the presence of plant life believed to be detrimental to the Covered Species; (c) correlating habitat and habitat utilization with water levels in the Beaverdam Spring system; and (d) documenting any other factors within the Enrolled Land pertinent to the conservation of the Covered Species. A water level measuring device, or devices, will be installed within the spring pool(s) or run(s) at a site determined by Service biologists, with the Property Owner's consent. The device will be purchased and maintained by the Service or its designated representative. Individuals conducting the Habitat Analysis will be selected by the Executive Director of the Land Trust, subject to the Service's approval, and must have received appropriate training and experience to engage in the activities required of this paragraph. The individuals must also possess the necessary federal and state permits to engage in survey and sampling activities, if such permits are required. Individuals conducting the Habitat Analysis must make prior advance arrangements and secure permission from the Property Owner to come onto the Enrolled Land to conduct the activities. During the process to select individuals to conduct the Habitat Analysis, the Executive Director of the Land Trust and the Service must secure Property Owner approval that the particular individual(s) are permitted to enter the Enrolled Land.

3. Select Site Sampling: The Land Trust will ensure that select sites within the Enrolled Land, described below, are sampled in the spring, summer, and fall every year for the first three (3) years of the CCAA, to establish a baseline population estimate for the species. Following the establishment of a baseline estimate, sampling will be conducted a minimum of once every 3 years. The results of this sampling will allow the Parties to gain a more accurate assessment of the population numbers range-wide, and on the Enrolled Land, in addition to ascertaining the success of the conservation measures.

The sampling sites will be selected by the Service based on the best available science on the species' occurrence at the collection sites within the Enrolled Land for the five (5) years predating the effective date of this CCAA. The relative abundance of the Covered Species will be calculated using "catch per unit" to maximize efficiency of sampling, avoid undue

stress to the Covered Species, and correlate with habitat utilization and water levels of the Beaverdam Spring system. Additional ecological and/or natural history parameters for the sampled population may be included, if agreed upon by the Parties and the Land Trust.

Individuals performing the sampling will be selected by the Executive Director of the Land Trust, subject to the Service's approval. The individuals must be either qualified biologists or deemed by the Service or the State of Alabama to have the appropriate training and experience as well as possess the necessary federal and state permits to engage in such activities. The Service or the State of Alabama may recommend individuals to perform the sampling.

During the process to select individuals to conduct the site sampling, the Executive Director of the Land Trust and the Service must secure Property Owner approval that the particular individual(s) is/are permitted to enter the Enrolled Land.

4. Supplemental Population Sampling: If deemed warranted by the Service and upon notice to the Property Owner, the Service may supplement the species' sampling efforts set forth in the preceding Section 11.B.3, with additional efforts if such efforts would better enable the Service to determine the success of the conservation measures, efforts, and strategies during the term of this CCAA.

5. Monitoring results will be analyzed to determine if the expected benefits of the conservation measures are realized. If data from three consecutive population samples conducted in accordance with Section 11(B)(3) or (4), above, indicate a 15% or greater decline in the range-wide population status of the Covered Species, and additional measures identified in the CCAA need to be implemented, additional conservation measures will be implemented in accordance with Section 6(A)(6), with the Assurances outlined in Section 9, above.

6. Annual Reporting: The Property Owner will submit annual reports to the

Service to certify that its water use is within the water usage limit outlined in Sections 6(A)(3)-(4), above.

Upon providing notice to the Property Owner and subject to Section 16.3, below, the Service may assist in monitoring, evaluating, modeling, and assessing and in the activities set forth in this Section 11(B).

## 12. Modifications and Amendments of the CCAA

Either Party may propose modifications or amendments to this CCAA by providing written notice to, and obtaining the written concurrence of, the other Party. Such notice will include a statement of the proposed modification, the reason for it, and its expected results. Proposed modifications related to monitoring or reporting will also require written notice to, and the written concurrence of, the Land Trust. The Parties will use their best efforts to respond to a proposed modification or amendment within thirty (30) days of receipt of such; however, where the Service proposes a modification or amendment based on a belief that there is a decline in the number and population of the Covered Species and/or that perceived threats may impact the recovery of the species, the Property Owner agrees to review and respond to such proposal within twenty-four (24) hours. A proposed modification or amendment of the CCAA will become effective upon the other Party's written concurrence or, when applicable, with the written concurrence of the Land Trust.

## 13. Amendment of the Permit

The Permit may be amended in writing pursuant to 50 C.F.R. §13.23.

## 14. Termination of the CCAA by Property Owner

Pursuant to Part 8 of the Service's CCAA Policy, the Property Owner, with good cause, may terminate the CCAA prior to its expiration date, even if the expected benefits and terms and conditions of the CCAA have not been realized. The Permit would be terminated at the same time as the CCAA. The Property Owner is required to give the Service and the Land Trust ninety (90) days prior written notice of its intent to terminate the CCAA and to provide the Service the opportunity to relocate the Covered Species, if the Service chooses, prior to termination of the CCAA.

## 15. Suspension and Revocation of the Permit

The Service may suspend the Permit in accordance with 50 C.F.R. §13.27. The Service also may revoke the Permit for any reason set forth in 50 C.F.R. §13.28(a)(1)-(4). The Service also may revoke the Permit if continuation of the permitted activity would either appreciably reduce the likelihood of the survival and recovery in the wild of any federally-listed species or directly or indirectly alter designated critical habitat such that it appreciably diminishes the value of that critical habitat for both the survival and recovery of a listed species. Before revoking the Permit for either of the last two reasons, the Service, with the consent of the Property Owner, will pursue all appropriate options to avoid permit revocation. These options may include, but are not limited to: (1) extending or modifying the existing permit; (2) capturing or relocating the species; (3) compensating the Property Owner to forgo the activity; (3) purchasing an easement or fee simple interest in the Enrolled Land; or (4) arranging for a third-party acquisition of an interest in the Enrolled Land. [See also 50 C.F.R. §§ 13.49, 17.22(d)(7), and 17.32(d)(7)]

## 16. General Provisions

### 16.1. Remedies

Each Party will have all remedies otherwise available to enforce the terms of this CCAA and the Permit.

### 16.2. Dispute Resolution

The Parties agree to work together in good faith to resolve any disputes that may arise from this CCAA. The Parties may engage in dispute resolution procedures agreed upon by the Parties subject to Section 16.3, below.

### 16.3. Availability of Funds

The Service's implementation of this CCAA is subject to the requirements of the Anti-Deficiency Act [31 U.S.C. §1341] and the availability of appropriated funds. Nothing in this CCAA will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be required to expend any available and appropriated funds unless and until an authorized official of the Service affirmatively acts to commit to such expenditures as evidenced in writing.

### 16.4. No Third-Party Beneficiaries

This CCAA does not create any new right or interest in any member of the public as a third-party beneficiary nor does it authorize anyone not a party to this CCAA to maintain a suit for injuries or damages pursuant to the provisions of this CCAA. With respect to third parties, the duties, obligations, and responsibilities of the Parties to this CCAA will remain as imposed under existing law.

### 16.5. Notices and Reports

Any notices and reports, including monitoring and annual reports, required by this CCAA will be delivered to the persons listed below, as appropriate:

Property Owners:

Mark Russell McDonald
Co-Manager of Greenbriar Enterprises, L.L.C.
2004 Big Cove Road
Huntsville, AL 35801

The Service:

Field Supervisor

c/o Daniel J. Drennen
U. S. Fish & Wildlife Service
6578 Dogwood View Parkway, Suite A
Jackson, Mississippi 39213

The Land Trust:

The Land Trust of North Alabama
c/o Executive Director
907 Franklin Street Southeast
Huntsville, Alabama 35801-4313

**16.6. Access to Enrolled Land**

In accordance with 50 C.F.R. §§13.21(e)(2) and 13.47, the Property Owner consents to and will allow the Service to access areas of Covered Species habitat within the Enrolled Land with reasonable notice.

**16.7. Successors and Assigns**

Subject to Section 8, above, this CCAA and each of its covenants and conditions will be binding on and accrue to the benefit of the Parties and their respective successors. The term "Service" will include its employees, personnel, agents and designees.

**16.8. References to Regulations**

Except where otherwise expressly provided herein, any reference in this CCAA to any Service implementing regulation also will be deemed to be a reference to such regulation or rule in existence at the time an action is taken.

**16.9. No Guarantee regarding Listing**

The Parties agree and acknowledge that this CCAA is not a guarantee that the Covered Species will not be listed as "threatened" or "endangered" under the ESA in the future.

Each Party and The Land Trust warrants that its respective signatory is authorized to execute this CCAA on its behalf.

**Greenbriar Enterprises, L.L.C.**

By: ALBERT McDonald (print)
Management Representative
Signature: Albert McDonald
Dated: 11/11/13

**Mark Russell McDonald**
By: MARK RUSSELL MCDONALD (print)
Signature: Mark Russell McDonald
Dated: 11-11-13

**Caroline McDonald Aderholt**
By: Caroline McDonald Aderholt (print)
Signature: Caroline McDonald Aderholt
Dated: 11-11-2013

**Leah McDonald Engler**
By: Leah McDonald Engler (print)
Signature: Leah McDonald Engler
Dated: 11/11/2013

**U.S. Fish and Wildlife Service:**
By: Stephen Rich (print)
Its: Field Supervisor MSFO
Signature: Stephen Rich
Dated: 11/22/13

**The Land Trust of North Alabama**
By: Cynthia Potts (print)
Its: Executive Director
Signature: Cynthia Potts
Dated: 11/13/13

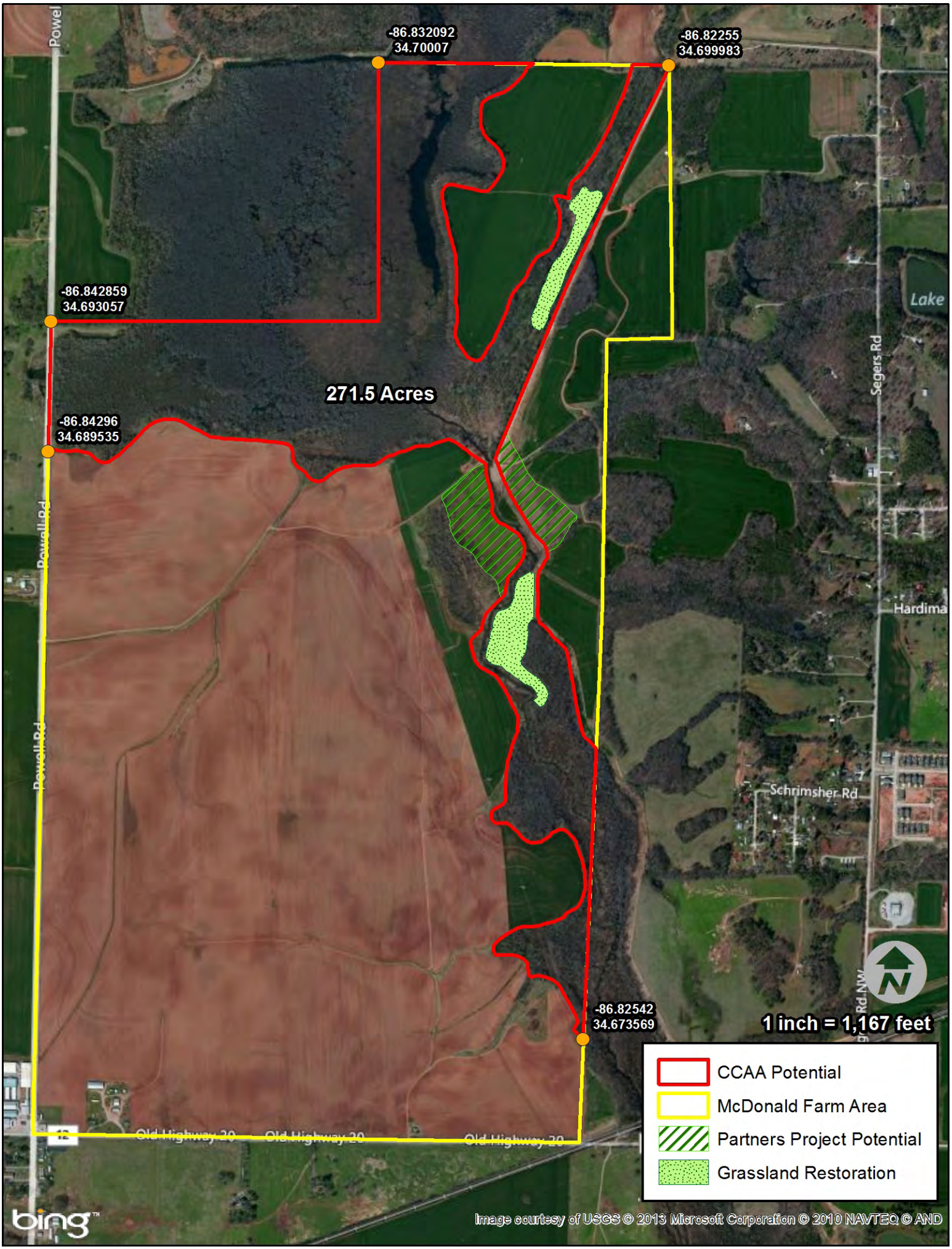
Attachments

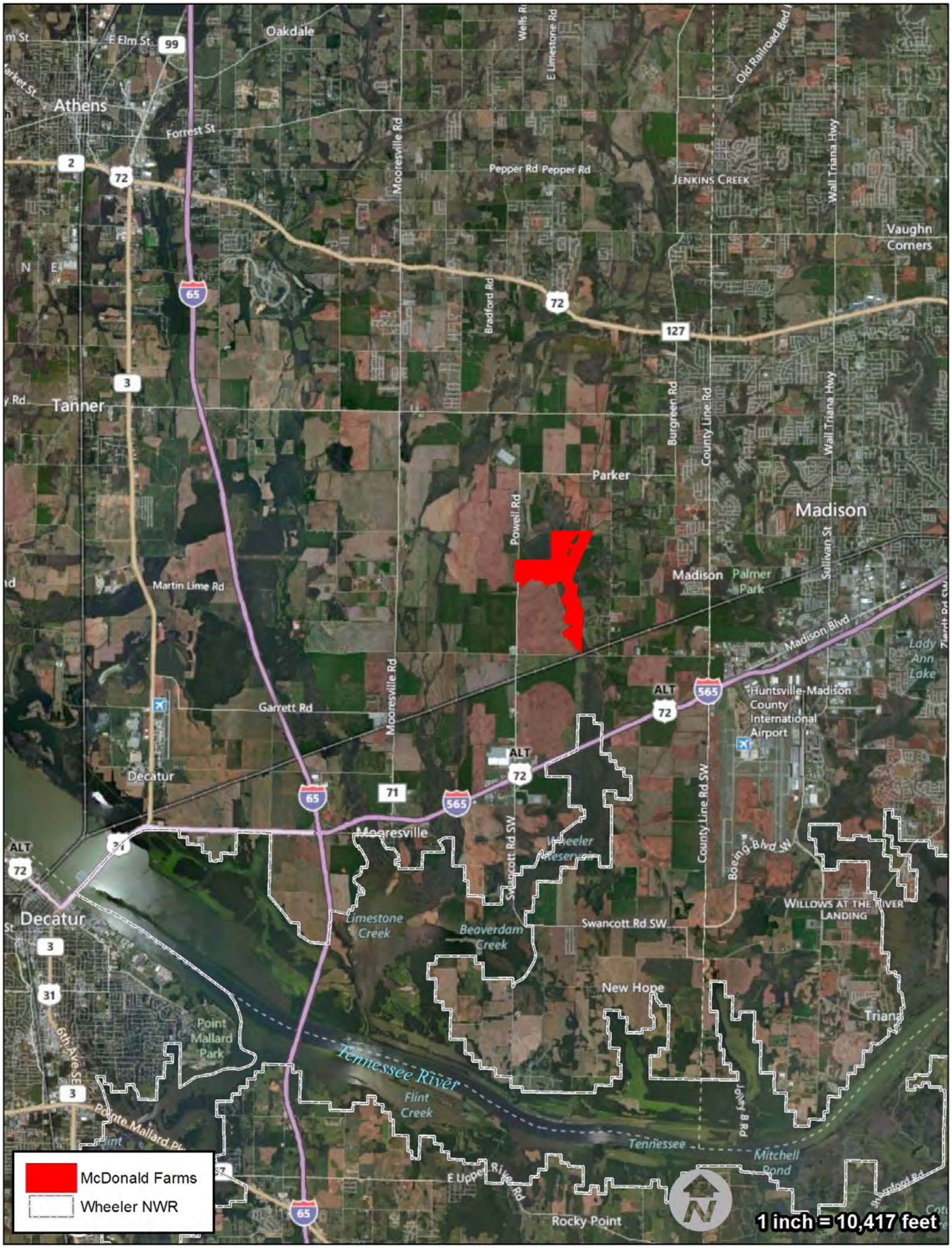
Appendix A-1: Map and coordinates of the Enrolled Land.

Appendix A-2: General location map and surrounding area.

Appendix B: Typical annual water use estimates from Beaverdam Spring/Creek by Greenbriar L.L.C./McDonald Farm Private Irrigation System, provided by the McDonald Farm partnership.

Appendix C: Horton Springs Typical Monthly Water Use as documented by Limestone County Water and Sewer Authority, October 2006 – July 2011.


-86.832092
34.70007
-86.82255
34.699983
-86.842859
34.693057
271.5 Acres
-86.84296
34.689535
-86.82542
34.673569
Powell Rd
Segers Rd
Lake
Hardima
Schrimsher Rd
Old Highway 20
1 inch = 1,167 feet
CCAA Potential
McDonald Farm Area
Partners Project Potential
Grassland Restoration
bing
Image courtesy of USGS © 2013 Microsoft Corporation © 2010 NAVTEQ © AND


Oakdale
Athens
E Elm St
Forrest St
Pepper Rd
Jenkins Creek
Vaughn Corners
Tanner
Parker
Madison
Madison Palmer Park
Martin Lime Rd
Madison Blvd
Lady Ann Lake
Huntsville-Madison County International Airport
Garrett Rd
Decatur
Mooresville
Swancott Rd SW
Wheeler Reservoir
Boeing Blvd SW
Willows at the River Landing
Limestone Creek
Beaverdam Creek
New Hope
Point Mallard Park
Tennessee River
Flint Creek
Tennessee
Mitchell Pond
Rocky Point
McDonald Farms
Wheeler NWR
1 inch = 10,417 feet

# APPENDIX B

**McDonald Farms Partnership - Estimated Irrigation Water Usage**

One week cycle - 3 days large system, 3 days small system, I day off

| | days on | gal/min | min/hr | hours | gals/week |
|---|---|---|---|---|---|
| Large system | 3 | 2,000 | 60 | 72 | 8,640,000 |
| Small System | 3 | 1,600 | 60 | 72 | 6,912,000 |
| Total/week | | | | | 15,552,000 |

Max annualwater usage - 16 weeks (May 1 - August 25) 248,832,000 gals

Average annual water usage - every other week (May 1 - August 25) 124,416,000 gals

Appendix C

August 30, 2011

Kathy Horton Garrett

Subject: Horton Springs

Dear Ms. Garrett:

Please see the following responses to your questions:

1. Historical data for the amount LCWSA has pumped from the spring. How far Back?
    - I have attached a spreadsheet with 5 years of use. Please keep in mind that we had the spring shut down part of 2008-2009 and also again for four (4) months in 2010. We had issues with the pumps which have since been corrected.
2. Is the water treated on site and if so, how.
    - We do treat it on site with chlorine only and then distribute the water into the system.
3. Do we backwash the pump into the spring?
    - No
4. Do we have a water management plan for the spring?
    - We do not have a conservation plan for this spring.
5. How did LCWSA decide what size pump to use?
    - ADEM determined the size. It is a 50 hp pump. ADEM has set a maximum of 450 gpm for Horton Springs.

Sincerely,

Greg Holland

Greg Holland
Assistant General Manager

LIMESTONE County
WATER + SEWER AUTH.

# Horton Springs Monthly Water Useage

| | |
|---|---|
| Oct. 2006 | 15,018,600 |
| Nov. 2006 | 13,659,000 |
| Dec. 2006 | 15,419,050 |
| Jan. 2007 | 14,891,250 |
| Feb. 2007 | 14,271,067 |
| Mar. 2007 | 15,104,283 |
| Apr. 2007 | 14,550,600 |
| May. 2007 | 15,347,300 |
| Jun. 2007 | 14,652,990 |
| Jul. 2007 | 16,016,000 |
| Aug. 2007 | 17,432,700 |
| Sept. 2007 | 18,588,450 |
| **Total** | 184,951,290 |
| | |
| Oct. 2007 | 18,893,200 |
| Nov. 2007 | 16,903,100 |
| Dec. 2007 | 18,507,505 |
| Jan. 2008 | 17,868,400 |
| Feb. 2008 | 15,910,900 |
| Mar. 2008 | 18,336,750 |
| Apr. 2008 | 18,728,250 |
| May. 2008 | 19,205,950 |
| Jun. 2008 | 18,985,150 |
| Jul. 2008 | 18,976,650 |
| Aug. 2008 | 19,227,400 |
| Sept. 2008 | 18,535,900 |
| **Total** | 220,079,155 |
| | |
| Oct. 2008 | - |
| Nov. 2008 | - |
| Dec. 2008 | - |
| Jan. 2009 | - |
| Feb. 2009 | - |
| Mar. 2009 | - |
| Apr. 2009 | 1,601,600 |
| May. 2009 | 11,969,900 |
| Jun. 2009 | 9,431,200 |
| Jul. 2009 | 10,355,300 |
| Aug. 2009 | 10,011,000 |
| Sept. 2009 | 10,614,100 |
| **Total** | 53,983,100 |
| | |
| Oct. 2009 | 10,380,600 |
| Nov. 2009 | 10,270,900 |

| | |
|---|---|
| Dec. 2009 | 11,220,600 |
| Jan. 2010 | 1,469,500 |
| Feb. 2010 | - |
| Mar. 2010 | - |
| Apr. 2010 | - |
| May. 2010 | - |
| Jun. 2010 | 8,293,200 |
| Jul. 2010 | 15,082,698 |
| Aug. 2010 | 14,735,900 |
| Sept. 2010 | 14,035,280 |
| **Total** | 85,488,678 |
| | |
| Oct. 2010 | 13,199,700 |
| Nov. 2010 | 11,378,300 |
| Dec. 2010 | 3,107,298 |
| Jan. 2011 | 12,369,200 |
| Feb. 2011 | 12,168,900 |
| Mar. 2011 | 15,418,500 |
| Apr. 2011 | 8,155,100 |
| May. 2011 | 14,896,900 |
| Jun. 2011 | 10,616,500 |
| Jul. 2011 | |
| **Total** | 101,310,398 |
| | |
| **Total 5 years** | 1,190,314,844 |