JAN09'19 PM12:58 DAS

HAR



# New Hampshire Fish and Game Department

11 Hazen Drive, Concord, NH 03301-6500(+ Headquarters: (603) 271-3421 Web site: www.WildNH.com TDD Access: Relay NH 1-800-735-2964 FAX (603) 271-1438 E-mail: info@wildlife.nh.gov

January 3, 2019

His Excellency, Governor Christopher T. Sununu And the Honorable Council State House Concord, New Hampshire 03301

# **REQUESTED ACTION**

 Authorize the New Hampshire Fish and Game Department (NHFG) to acquire fee title with conservation restrictions to 50.8 acres in Colebrook, New Hampshire from the Law Office of Mark R. Dunn (vendor code 160143) acting as agent for The Nature Conservancy, at the fair market value of \$83,000, plus pay up to \$24,504 for associated transaction costs for a total project cost of \$107,504, effective upon Governor and Council approval through June 30, 2019. Funding is 100% Federal.

Funding for this purchase is available as follows:

03 75 75 751520-2155 Wildlife Prop		
		<u>FY2019</u>
020-07500-21550000-033-500150	Land Acquisitions & Easements	\$107,504

2. Authorize the New Hampshire Fish and Game Department to enter into a sole source Management Agreement with The Nature Conservancy to restore floodplain forests on the Connecticut River Drivers Wildlife Management Area. No funding involved.

# **EXPLANATION**

NHFG proposes to purchase 50.8 acres including 30.7 acres of land and 20.1 acres under the Connecticut River in Colebrook. This parcel has approximately a mile of frontage on the River and will add to the 33 acre Connecticut River Drivers Wildlife Management Area along its southern boundary. This will lead to the permanent protection of two and one quarter miles of frontage on the River enhancing wildlife habitat protection and public access.

We also propose to reimburse The Nature Conservancy, through Mark Dunn, up to \$24,504 for transaction costs associated with this project. Those costs include a survey of the property (\$6,800), appraisals (\$9,100), title opinion (\$4,163), environmental hazards assessment (\$1,890), closing costs and recording fees (\$2,551).

His Excellency, Governor Christopher T. Sununu And the Honorable Council State House Concord, New Hampshire 03301 Page 2

Funding for this project will be provided by the U.S. Fish and Wildlife Service Wildlife Restoration Program.

The Department also seeks authorization to enter into a Management Agreement with the Nature Conservancy to restore floodplain forest on the Connecticut River Drivers Wildlife Management Area in Colebrook as outlined in the attached project planning report.

Floodplain forests provide important habitat to a variety of species from insects to large mammals. They also protect water quality and help control erosion. Most of the floodplain forests along the Connecticut River have been converted to agricultural use. The restoration of floodplain forest on a portion of this WMA will enhance habitat for those species that require forested floodplain habitat.

The Nature Conservancy has been working for nearly a decade throughout the Connecticut River valley with public and private landowners to restore floodplain forest. They have been awarded grant funds to undertake this work on the Department's property.

Respectfully submitted,

Glenn Normandeau Executive Director

Kathy Ann LaBonte Chief, Business Division

# STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE October 2, 2018

FROM: Christopher G. Aslin Senior Assistant Attorney General AT (OFFICE) Department of Justice Environmental Protection Bureau

SUBJECT: Brunault Acquisition, Colebrook, NH

TO: Richard Cook, Land Agent New Hampshire Fish and Game Department

The Office of the Attorney General has reviewed the title work, Warranty Deed, and supporting documents, as outlined in your memo dated September 26, 2018, for the Brunault property located in the Town of Colebrook, New Hampshire owned by the Nature Conservancy, and pursuant to RSA 212:7 approves the title of the property for acquisition. The Warranty Deed provided is approved for form and substance only. Following approval by Governor and Council, the fully executed Warranty Deed should be submitted to this office for approval of execution prior to recording in the Registry of Deeds.

Christopher G. Aslin

This is a conveyance to an Instrumentality of the State of New Hampshire which is exempt from the New Hampshire Real Estate Transfer Tax pursuant to New Hampshire RSA 78-B:2(I) and from the LCHIP Surcharge pursuant to RSA 478:17-g(II).

# LIMITED WARRANTY DEED AND CONSERVATION RESTRICTIONS

KNOW ALL PERSONS BY THESE PRESENTS THAT THE NATURE CONSERVANCY, a nonprofit corporation organized under the laws of the District of Columbia and having its principal office at 4245 North Fairfax Drive, Arlington, Virginia 22203, and having a New Hampshire Field Office at 22 Bridge Street, 4th Floor, Concord, New Hampshire 03301 ("Grantor"), for consideration paid, grants to THE STATE OF NEW HAMPSHIRE acting by and through its FISH AND GAME DEPARTMENT, with an address of 11 Hazen Drive, Concord, County of Merrimack, State of New Hampshire 03301 (the "State"),

with LIMITED WARRANTY COVENANTS, the following described property:

A certain tract of land (the "Property") in Colebrook, in the County of Coos and State of New Hampshire on the westerly side of the "old railroad location" so-called, more particularly described in Exhibit A attached hereto and made a part hereof and shown as the property of David M. Brunault, Tax Map 201, Parcel 1, Colebrook, New Hampshire surveyed for The Nature Conservancy by York Land Services, LLC dated April 11, 2017 and recorded at the Coos County Registry of Deeds, Plan # 4213 (the "Plan"). Containing 50.8 acres, 30.7 acres of land and 20.1 acres under the Connecticut River.

Otherwise meaning and intending to describe and convey the same premises conveyed to Grantor by Warranty Deed of David M. Brunault dated June 28, 2017 and recorded at Book 1467, Page 147 in the Coos County Registry of Deeds.

This Property is being acquired with funding received by the State from the U.S. Fish and Wildlife Service (the "Service") under Grant Agreement <u>F14AF01270</u>, NH W-108-L-1. All present and future uses of the Property are and shall remain subject to the terms and conditions described in the Notice of Federal Grant Agreement attached hereto as Exhibit B and recorded herewith in the Coos County Registry of Deeds, and to other administrative requirements of the applicable grant funding program of the Service.

CONSERVATION RESTRICTIONS AND RIVER BUFFER AREA: This conveyance is also made subject to the following restrictions, which shall run with the land and be enforceable as permanent conservation restrictions, as defined in NH RSA 477:45-47, for the benefit of The Nature Conservancy and its successors and assigns:

The following activities are prohibited:

- 1. the manipulation of water levels and filling or dredging of wetlands, except to restore the Property to its natural condition, to construct permitted roads and trails, and for conservation, and wildlife habitat management purposes;
- 2. the placement or construction of new structures, unless such structures are used solely for conservation, wildlife habitat management and/or outdoor education purposes and are consistent with the purposes stated below;
- 3. the placement or construction of docks or boat launches or arming of any sort along the river shoreline or river bank;
- 4. the building of trails, except for conservation, wildlife habitat management, outdoor recreation and education purposes;
- 5. the building of roads except those necessary for the agricultural use of the property;
- 6. the cutting or manipulation of floodplain forest trees or trees within the River Buffer Area, as defined below, unless such activity is part of management activities designed to restore or maintain the forest, and such activities are approved in advance by The Nature Conservancy, its successors or assigns; and
- 7. any division, subdivision, partitioning in kind, other division of the Property into separate and distinct ownership interests, unless approved in advance by the State in writing.

Within the "River Buffer Area", defined below, the following restrictions also apply:

- 1. No agricultural activities shall occur.
- 2. No timber harvesting shall be allowed except when the Property is included in a Forest Management Plan approved by the Grantee. Harvesting must be conducted consistent with a forest management prescription, which has the primary purpose of maintaining a vegetated riparian buffer, a healthy floodplain forest community, and is consistent with the purposes set forth below.

The River Buffer Area ("RBA") is an undisturbed area, a minimum of one hundred feet (100') in width measured landward from the top of the bank of the River as it may move from time-to-time, and also any land located between the top of said bank and the low water mark of the River.

All of the above restrictions serve the following purposes:

- 1. Assuring that the Property will be retained in perpetuity in its scenic, forested, wetland and open space condition;
- 2. Protecting and conserving the native biological diversity of the Upper Connecticut River watershed, including any rare plants and animals and exemplary natural communities, the floodplain forest community as it currently exists on the tract and as it may be added to in the future, wetlands, waterfowl and migratory bird habitat, and other significant wildlife habitats on the Property.

3. Protecting and conserving the wetlands, farmland and/or forest lands of which the Property consists.

This conveyance is subject to all easements, restrictions, rights, and encumbrances of record and to any facts, rights, interests, or claims that are not shown by the public records.

Notwithstanding the foregoing, in making this conveyance Grantor hereby covenants that the Property is free and clear from any encumbrance done or suffered by Grantor, and that Grantor will warrant and defend the title to the Property unto the State and its successors and assigns forever against the lawful claims and demands of all persons claiming by, under or through Grantor.

The conservation restrictions set forth above shall burden the Property in perpetuity and shall be binding upon the State and its successors and assigns.

This Property has been restricted in compliance with the New Hampshire Aquatic Resources Mitigation Fund Final In-lieu Fee Program Instrument (U.S. Army Corps of Engineers, New England District, Regulatory Division, File Number NAE-2005-1142).

IN WITNESS WHEREOF, we have hereto set our hands on this \_\_\_\_ day of \_\_\_\_\_, 2018.

GRANTOR:

The Nature Conservancy

By:

Mark Zankel, New Hampshire State Director

STATE OF NEW HAMPSHIRE COUNTY OF MERRIMACK

On this \_\_\_\_\_\_day of \_\_\_\_\_\_, 2018, before me, the undersigned notary public, personally appeared Mark Zankel, New Hampshire State Director of The Nature Conservancy (a corporation), to me personally known or otherwise proved to me through satisfactory evidence of identification to be the person whose name is signed on the preceding document, and acknowledged to me that he signed such document voluntarily for its stated purpose.

Before me,

Notary Public/Justice of the Peace [seal] My Commission Expires:

# ACCEPTED: STATE OF NEW HAMPSHIRE, FISH & GAME DEPARTMENT

The State of New Ham	oshire, acting through its Fish and Game Department on this day $\underline{7}$ of
furning, 2	019.
0 (	MAL
	Glenn Normandeau, Executive Director

## STATE OF NEW HAMPSHIRE COUNTY OF MERRIMACK

Personally appeared before me on this <u>I</u> day of <u>TAMUM</u>, 2019, Glenn Normandeau, who acknowledges himself to be the Executive Director for the New Hampshire Fish and Game Department, and as such is duly authorized to executed the foregoing instrument for the purposes therein contained, by signing his name on behalf of the State of New Hampshire.

Notary Public/Justice of the Peace My Commission Expires:

> TANYA L. HASKELL, Notary Public My Commission Expires November 4, 2020

Approved by the Governor and Executive Council: \_\_\_\_\_\_, 2019, Item \_\_\_\_\_.

# EXHIBIT A

# Property Description

The following described parcel of land is located westerly of the former Maine Central Railroad and is parts of Lots 14, 15 and 16 in Colebrook, New Hampshire.

All Bearings of this description are turned from grid north based on the New Hampshire State Plane Coordinate System NAD83. Distances are U.S. Survey Feet.

Beginning at an iron pin at the intersection of the westerly sideline of the former Maine Central Railroad and the line between Stewartstown and Colebrook. Said pin being at 890430.2122 North, 1023561.8738 East.

Thence southerly along the westerly sideline of the former Maine Central Railroad the following eleven courses:

- 1. Arc of a curve to the left for 63.56 feet to an iron pin. Said curve has a radius of 1943.17 feet and a long chord of S06°44'01"W, 63.55 feet.
- 2. S05°47'48"W, 224.61 feet to an iron pin.
- 3. Arc of a curve to the left for 178.02' feet to an iron pin. Said curve has a radius of 1943.08 feet and a long chord of S03°10'19"W, 177.96 feet.
- 4. S00°32'50"W, 218.67 feet to an iron pin.
- 5. Arc of a curve to the right for 344.23 feet to an iron pin. Said curve has a radius of 1877.08 feet and a long chord of S05°48'03"W, 343.75 feet.
- 6. S11°03'16"W, 752.22 feet to an iron pin.
- 7. Arc of a curve to the left for 666.04 feet to an iron pin. Said curve has a radius of 1465.68 feet and a long chord of S01°57'49"E, 660.32 feet.
- 8. \$14°58'55"E, 234.76 feet to an iron pin.
- Arc of a curve to the right for 563.98 feet to an iron pin. Said curve has a radius of 3786.83 feet and a long chord of S10°42'55"E, 563.45 feet.
- 10. \$06°26'56"E for 387.67 feet to an iron pin.
- 11. Arc of a curve to the left for 84.50 feet to an iron pin. Said curve has a radius of 1345.43 feet and a long chord of S08°14'53"E, 84.49 feet.

Thence N80°03'26"W for 426.98 feet to a point on the Vermont and New Hampshire State Line witnessed by an iron pin on the westerly bank of the Connecticut River located S80°03'26"E, 157.55 feet distant.

Thence northerly along the Vermont and New Hampshire State Line, being the westerly low water line of the Connecticut River, for approximately 5800 feet to a point on the Stewartstown and Colebrook Town Line. The direct bearing and distance between the last two mentioned points is N03°59'27"E, 3630.89 feet.

Thence S80°49'14"E along the Stewartstown and Colebrook Town Line for 147.07 feet to the point of beginning.

Together with a Right-of-Way crossing other land of David M. Brunault, leading from U.S. Route 3 to the former Maine Central Railroad, the centerline described as follows:

Beginning at a point on the westerly sideline of U.S. Route 3 located S00°08'59"W 286.20 feet distant from a New Hampshire Highway Department concrete monument. Said point being at 888296.6926 North, 1023485.4607 East.

Thence along the centerline of said Right-of-Way the following three courses:

- . 1. Arc of a curve to the left for 42.75 feet to a point. Said curve has a radius of 50.00 feet and a long chord of S25°11'12"W, 41.46 feet.
- 2. \$00°41'25"W, 145.36 feet to a point.
- 3. Arc of a curve to the right for 93.32 feet to a point on the easterly sideline of the former Maine Central Railroad. Said curve has a radius of 100.00 feet and a long chord of S27°25'28"W, 89.97 feet.

Meaning and intending to describe a parcel of land containing approximately 50.8 acres together with a Right-of-Way as shown on York Land Services, LLC plan No. 16-110 titled "Property of David M. Brunault, Tax Map 201, Parcel 1, Colebrook, New Hampshire, Surveyed for The Nature Conservancy," dated February 6, 2017, to which reference may be made for a more particular description.

## EXHIBIT B

Í.

#### Notice of Federal Grant Agreement

The State of New Hampshire, Fish and Game Department and its successors and assigns (hereinafter "DEPARTMENT") acknowledges that the above described Property (hereinafter "PROPERTY') is acquired with federal funds received from the Wildlife Restoration Program administered by the U.S. Fish and Wildlife Service, Division of Federal Assistance and its successors and assigns (hereinafter "SERVICE") and that the PROPERTY is subject to all the terms and conditions of Grant Agreement <u>F14AF01270</u>, NH W-108-L-1 (hereinafter "GRANT AGREEMENT") between the Service and the Department. A copy of the Grant Agreement is kept on file at the offices of the Service, 300 Westgate Center Drive, Hadley, MA 01035-9589 and at the offices of the Department, 11 Hazen Drive, Concord, NH 03301.

The Department acknowledges that the PROPERTY, which is the subject of this Grant Agreement, is acquired for the approved purpose of permanent protection of wild birds and mammals and their habitats. The Department further acknowledges that the PROPERTY will be administered for the long-term protection of these habitats and species dependent thereon. The Department, as the Grant Recipient hereby acknowledge that they are responsible for ensuring that the PROPERTY is used and will continue to be used for the approved purpose for which it is acquired and that the PROPERTY may not be conveyed or encumbered, in whole or in part, to any other party or for any other use, whatsoever, without the written consent of the Regional Director of the U.S. Fish and Wildlife Service.

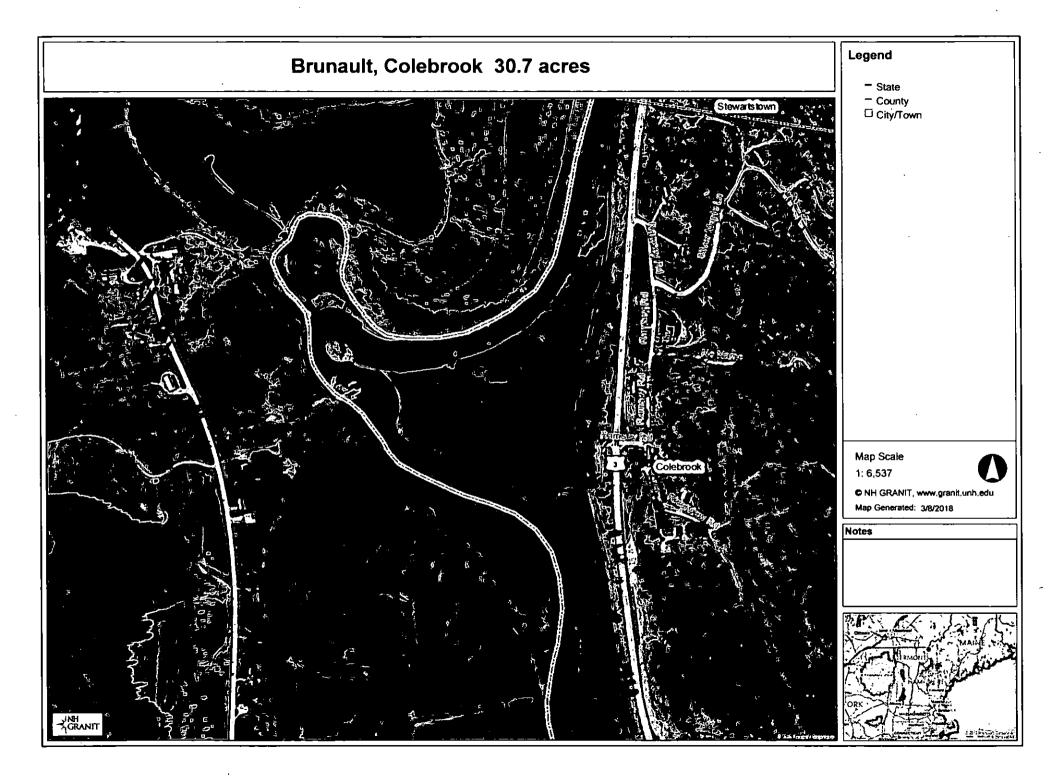
If the Department loses control of the PROPERTY, control must be fully restored to the Department or the PROPERTY must be replaced, within three years, with a like PROPERTY of equal value at current market prices and equal benefits. Further, if the PROPERTY is used for activities that interfere with the accomplishment of the approved purpose, the violating activities shall cease and any resulting adverse effects shall be remedied.

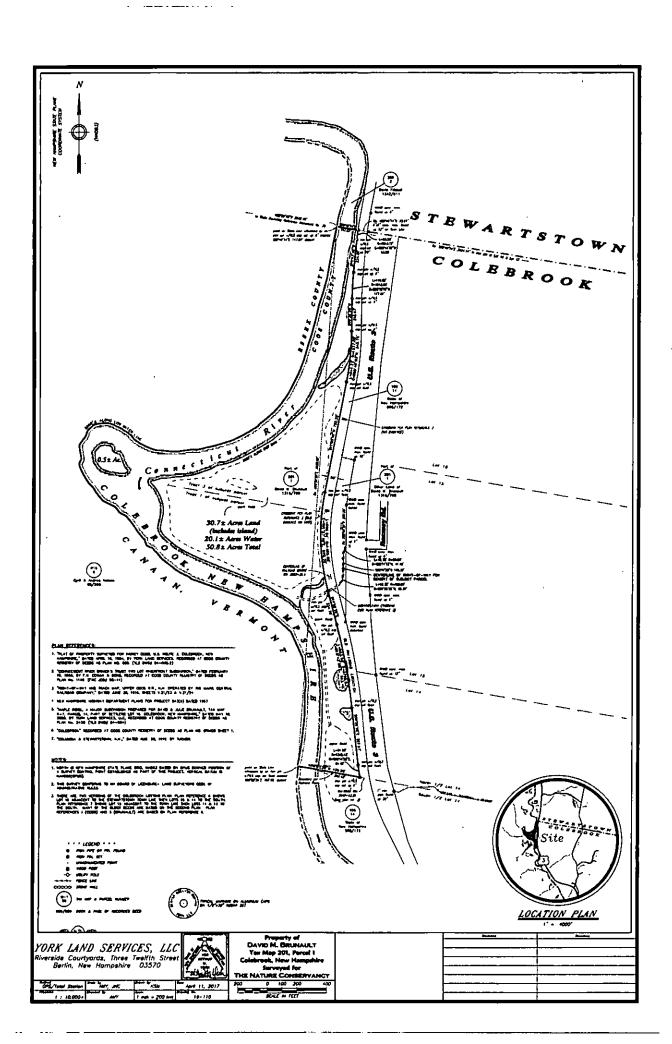
If the Department determines that the PROPERTY is no longer needed or useful for its original purpose and the Service concurs, the Department may, with the prior written consent of the Service, either (1) acquire a property or other interest in land of equal value that serves the same approved purpose as the original property and manage the newly acquired property or other interest in land for the same purposes specified in the original Grant Agreement, or (2) repay the Service, in cash, the proportionate federal share of funds invested in the original purchase price, or to repay the Service, in cash, the proportionate federal share of the current fair market value of the PROPERTY, or any portion thereof, whichever is higher, or (3) as a last resort, transfer the PROPERTY to the Service or to a third-party designated or approved by the Service.

The Department, as Grant Recipient hereby confirms its obligations and responsibilities with regards to the acquired property pursuant to terms and conditions associated with Grant Agreement <u>F14AF01270</u>, NH W-108-L-1.

Date: //7/2019, 2019 By:

Glenn Normandeau, Executive Director





#### PURCHASE AND SALE ASSIGNMENT AGREEMENT

The Nature Conservancy, a nonprofit corporation organized under the laws of the District of Columbia, having its principal office at 4252 North Fairfax Drive, Arlington, Virginia 22203-1606, and maintaining a New Hampshire Field Office at 22 Bridge Street, 4<sup>th</sup> Floor, Concord, New Hampshire 03301 (the Conservancy) agrees to sell and the State of New Hampshire, by and through its Fish and Game Department, with a mailing address at 11 Hazen Drive, Concord, NH 03301 (the "State") agrees to purchase in accordance with the terms and conditions set forth below:

1. Premises: A 30.7 acre parcel of land on the west side of U.S. Route 3 in Colebrook, NH. Said parcel being the parcel acquired by The Nature Conservancy from David M. Brunault on June 28, 2018 and recorded in the Coos County Registry of Deeds Book 1467, Page 147 and being shown on a plan entitled "Property of David M. Brunault Tax Map 201, Parcel 1 Colebrook, New Hampshire Surveyed for the Nature Conservancy" by York Land Services dated April 11, 2017 and recorded at the Coos County Registry of Deeds as Plan recorded at the Coos County Registry of Deeds as Plan #4213.

2. Purchase Price; Transaction Costs: The purchase price under the P&S is \$83,000. This represents fair market value as determined by an appraisal completed by McManus and Nault Appraisal Company dated March 18, 2018. The State shall also pay to The Nature Conservancy up to \$24,504 in transaction costs including survey, title insurance, legal fees, appraisal costs, environmental hazard assessment and closing costs.

3. Conditions Precedent: The State's obligations under this assignment agreement, including its obligation to purchase the Premises, are subject to each of the following conditions precedent, which run to the State's exclusive benefit:

a. The State must obtain approval from the New Hampshire Governor and Executive Council to use the State's funds to purchase the Premises and pay associated transaction costs. The State agrees to promptly seek such approval and shall provide notice to the Conservancy within fourteen (14) days of receipt of such approval.

b. The State must obtain approval from the U.S. Fish and Wildlife Service to expend Wildlife Restoration Funds to purchase the Premises and pay for associated transaction costs. The State agrees to promptly seek such approval and shall provide notice to the Conservancy within fourteen (14) days of receipt of such approval.

c. The State may perform, at its cost, any necessary activities to assure that the Premises meets the State's programmatic objectives and complies with applicable federal and state land acquisition laws and regulations, including but not limited to the following:

1) level of hazardous waste

2) federal and state endangered/threatened plants & animals

3) federal and state historic/prehistoric resources

4) floodplains and wetlands protection

5) farmland preservation policies.

e. The State must be satisfied with the level of hazardous waste or contaminated materials, if any, upon the Premises. The State shall provide notice to the Conservancy

within thirty (30) days of the results of such assessment, including in such notice a statement as to whether the State is satisfied with the state of the Premises with regard to hazardous waste or contaminated materials.

f. If the State perceives any time before closing that it will need additional time in order to complete any necessary approval process, it shall notify the Conservancy in writing of the remaining approvals necessary and the expected time frame in which such approvals can be reasonably obtained.

5. Governing Law: This Agreement is made in accordance with New Hampshire law and shall be interpreted, governed and enforced under New Hampshire law.

6. Counterparts: This Agreement may be executed in two (2) or more counterparts, all of which shall constitute but one (1) agreement.

This purchase and sales agreement replaces an agreement between the parties dated June 23, 2017. Paragraph 2 of said agreement stated: "Any forthcoming information that may affect the value of the Premises will require that this agreement be renegotiated.

This document has been executed in duplicate

IN WITNESS WHEREOF, the parties have caused this instrument to be executed this //th day of Marg., 2018.

The Nature Conservancy

Witness:

By: Mark *Mankel* 

State Director

STATE OF NEW HAMPSHIRE FISH AND GAME DEPARTMENT

Witness:

BA: Glenn Normandeau,

Executive Director

#### MANAGEMENT AGREEMENT

between The Nature Conservancy and the NH Fish and Game Department regarding management of the CT River Drivers Wildlife Management Area, Colebrook, NH

THIS AGREEMENT is entered into by and between the Nature Conservancy, a non-profit corporation organized and existing under the laws of the District of Columbia and having its principal office at 4245 North Fairfax Drive, Suite 100, Arlington, VA 22203-1606, and maintaining a New Hampshire Business Unit at 22 Bridge Street, 4th Floor, Concord, NH 03301-4987 (the "Conservancy"), and the State of New Hampshire, acting through the NH Fish and Game Department, a state agency operating under the laws of the State of New Hampshire with offices at 11 Hazen Drive, Concord, NH 03301 ("Fish and Game").

WHEREAS, Fish and Game is the owner of certain real estate referred to as the CT River Drivers Wildlife Management Area located in Colebrook, New Hampshire, which contains natural resources of recognized value, hereinafter referred to as the "Premises"; and

WHEREAS, Fish and Game is the state agency that is the guardian of the state's fish, wildlife and marine resources that works in partnership with the public to: conserve, manage and protect these resources and their habitats; inform and educate the public about these resources; and provide the public with opportunities to use and appreciate these resources; and

WHEREAS, the Conservancy is a non-profit conservation organization whose conservation objectives include the identification, protection and stewardship of ecologically significant natural areas; and

WHEREAS, Fish and Game and the Conservancy have worked in partnership to permanently protect and conserve the Premises; and

WHEREAS, Fish and Game and the Conservancy both are committed to conserving the natural resources of the Premises including restoring floodplain forest habitat; and

WHEREAS, the Conservancy, through its efforts to conserve the Premises, has obtained grant funding and has the expertise and experience to undertake floodplain forest restoration on the Premises, and the parties wish to have this work performed on the Premises;

NOW, THEREFORE, the parties mutually covenant and agree as follows:

1. DESCRIPTION OF PREMISES. The Premises subject to this Agreement are described in Exhibit A.

2. CONSIDERATION. The consideration for this Agreement consists of the mutual promises contained herein and the agreement of the Conservancy to manage and protect the Premises in

accordance with this Agreement. The sufficiency of the consideration is hereby acknowledged by the parties.

3. TERM OF AGREEMENT. The term of this Agreement shall be for 6 years, commencing on the date the Governor and Executive Council approve this Agreement (the "Effective Date").

4. USE OF PREMISES. During the term of this Agreement, the Conservancy shall have the right and the obligation to restore floodplain forest and monitor the success of the restoration effort on the Premises in accordance with the Forest Operation Planning Report attached hereto as Exhibit B and made a part hereof, plus any future amendments to same as agreed to by both parties (the "Planning Report"). Unless otherwise agreed to by the parties in writing, the Conservancy shall have no right or obligation to engage in any other management activities outlined in the Planning Report save for those related to floodplain forest restoration. Without limiting the generality of the foregoing, the Conservancy shall have no right to use the Premises for any revenue producing activities.

5. PUBLIC USE. The lands under this agreement shall remain open to use by the public at all times and shall remain free from dangerous conditions or obstructions created by the Conservancy's activities under this agreement. The Conservancy shall not prohibit or regulate recreational activities including hiking, hunting, trapping and fishing. No signs or gates shall be erected without the written permission of Fish and Game.

6. ANNUAL REPORT. The Conservancy shall furnish Fish and Game with an annual report on the use and management of the Premises, on or before the first day of November of each year during the term of this Agreement, along with copies of such other documents, including scientific reports, if any, relating to the use or management of the Premises as Fish and Game may reasonably request from time to time.

7. ASSIGNMENT. This Agreement shall not be assigned by the Conservancy without the prior written consent of Fish and Game, which may be withheld for any reason.

8. INDEMNIFICATION/INSURANCE. The Conservancy shall defend, indemnify, and hold harmless Fish and Game, its officers and employees, from and against any and all claims, liabilities or penalties asserted against Fish and Game, its officers and employees, by or on behalf of any person, for injuries to persons (including the Conservancy or their employees, agents or representatives), damage to property or expense of every kind and nature (including, without limitation, court costs, expenses and reasonable attorney's fees) arising in any manner, caused by, resulting from, incident to, connected with or growing out of the rights granted hereunder, unless caused solely by the negligent acts or omissions of Fish and Game, or its employees, agents, licensees or delegees.

The Conservancy shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance: comprehensive general liability insurance against all claims of bodily injury, death or property

Initials

damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 general aggregate. Said policy shall name Fish and Game as an additional named insured and shall provide that Fish and Game shall receive at least thirty (30) days' written notice of cancellation or material alteration to the policy. The Conservancy shall furnish Fish and Game with a certificate establishing that such insurance is in force upon execution of this Agreement and periodically thereafter, as requested by Fish and Game.

9. HAZARDOUS SUBSTANCES. The Conservancy agrees that it shall not generate, store, use or dispose on the Premises any hazardous materials or oil, including, without limitation, any materials which are toxic, explosive, corrosive, flammable, or otherwise hazardous to health.

10. CONDITION OF THE PREMISES: The Conservancy acknowledges and agrees that it is fully familiar with the physical condition of the Premises, that Fish and Game has made no representations of any nature concerning such condition, and that Fish and Game shall not be liable to the Conservancy for any dangers thereon, whether patent or latent.

11. TERMINATION. Either party may terminate this Agreement without penalty for any reason by providing at least thirty (30) days' prior written notice to the other party.

12. NOTICES. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties herein.

13. BINDING EFFECT. All of the terms, conditions, and covenants to be observed and performed by the parties shall be applicable to and binding upon their several successors and assigns, as the case may be.

14. SEVERABILITY/WAIVER. All agreements and covenants contained herein are severable, and in the event any of them shall be held to be invalid by any competent court, this Agreement shall be interpreted as if such invalid agreements or covenants were not contained herein. Should one or more covenants or conditions be waived by either party, such waiver shall not be deemed to waive or render unnecessary the consent or approval of the waiving party to or of any subsequent similar act by the other party.

15. NO WAIVER OF SOVEREIGN IMMUNITY. Nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State and of New Hampshire Fish and Game Department as a subdivision of the State, which immunity is hereby reserved.

16. INSPECTION OF PREMISES. The Conservancy agrees that Fish and Game or its duly authorized agent(s) may, at any time, examine and inspect any and all areas of the Premises which are included in this agreement.

17. NON-CONFORMANCE. The Conservancy shall comply with all applicable State and local laws, zoning ordinances, rules and regulations in connection with its performance of the services under this agreement.

Initials

#### **18. COMPLIANCE WITH LAWS AND REGULATIONS.**

- a) The Conservancy and all persons using these premises with the consent of the Conservancy, shall comply with all laws, rules and regulations of the State of New Hampshire governing Wildlife Management Areas.
- b) In connection with the performance of services the Conservancy shall comply with all statues, laws, regulations and orders of federal, state, county or municipal authorities which impose obligations upon the Conservancy, including, but not limited to, civil rights, and equal opportunity laws. In addition, the Conservancy shall comply with all applicable copyright laws.
- c) During the term of this agreement, the Conservancy shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap or national origin and will take affirmative action to prevent such discrimination.
- d) If this agreement is funded in any part by monies of the United States, the Conservancy shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Conservancy further agrees to permit the State or United States access to its books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants and conditions of this agreement.

#### 19. PERSONNEL.

- a) Except as otherwise provided in Section 21 below, the performance of services shall be carried out by employees of the Conservancy. The Conservancy shall provide, at its own expense, all personnel necessary to perform the services. The Conservancy warrants that all personnel engaged in services shall be qualified to perform the services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.
- b) The Conservancy shall not hire, and shall permit no subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the services, to hire any person who has a contractual relationship with the State, or who is a State officer or employee, elected or appointed.
- c) By signing this agreement, the Conservancy agrees, certifies and warrants that the Conservancy is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("Workers' Compensation").



d) Fish and Game, its successors, assigns and agents, shall be the State's representative. In event of any dispute concerning the interpretation of this agreement, Fish and Game's decision shall be final.

20. CONSERVANCY'S RELATIONS WITH THE STATE. In the performance of this agreement the Conservancy is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Conservancy nor any of its officers, employees, agents or members shall have the authority to bind the State or receive any benefits, worker's compensation or other emoluments provided by the State to its employees.

21. ASSIGNMENT, DELEGATION AND SUBCONTRACTS. This agreement is not transferable. The State acknowledges that some or all of the services may be subcontracted by the Conservancy, and hereby consents to such subcontracting; provided, however, the Conservancy shall be responsible and liable to the State for the complete performance of the services hereunder notwithstanding the use of subcontractors or work performed by anyone else under the Conservancy's direction or control.

22. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof shall be deemed a waiver of its rights with regard to that event, or any subsequent event.

23. AMENDMENT. This agreement may be amended only by a written instrument signed by both parties, and only after approval of such amendment by the Governor and Executive Council may the amendments come into effect.

24. CONSTRUCTION OF AGREEMENT AND TERMS. This agreement shall be binding upon and inures to the benefit of the parties and their respective successors and assigns.

25. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this agreement shall not be construed to confer any such benefit.

26. ENTIRE AGREEMENT. This agreement, which may be executed in up to three (3) counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings relating hereto.

27. CHOICE OF LAW. This Agreement is being executed and is intended to be performed in the State of New Hampshire and shall be governed in all respects by the laws of that State.

IN WITNESS WHEREOF, the parties hereto have hereunto caused their names to be set and their seals to be affixed as of the day and year first above written.

Mark Zankel, State Director The NH Chapter of the Nature Conservancy

STATE OF NEW HAMPSHIRE

COUNTY OF HILLSBDRODGH

I, hereby certify that Mark Zankel, who acknowledges himself as the State Director of the NH Chapter of the Nature Conservancy, and as such is duly authorized to execute the foregoing instrument for the purposes therein contained, personally appeared before me on this <u>18</u> day of <u>DELEMBER</u> 2018 and acknowledged the foregoing management agreement.

Notary Public/Justice of the Peace [seal]

My Commission Expires: 11/16/2021

The STATE OF NEW HAMPSHIRE, acting through its Fish and Game Department:

Glenn Normandeau, Executive Director

STATE OF NEW HAMPSHIRE

COUNTY OF

Personally appeared before me on this 10 day of 1900

2018, Glenn

Normandeau, who acknowledges himself to be the Executive Director for the New Hampshire Fish and Game Department, and as such is duly authorized to execute the foregoing instrument for the purposes therein contained, by signing his name on behalf of the State of New Hampshire.

Notary Public/Justice of the Peace [seal]

My Commission Expires:

TANYA L. HASKELL, Notary Public My Commission Expires November 4, 2020

Initials

Page 6 of 8

APPROVALS:

Approved by the Department of Justice as to form, substance, and execution on this \_\_\_\_\_day of \_\_\_\_\_, 2018;

Assistant Attorney General

Approved by the Governor and Executive Council: date:\_\_\_\_\_\_#:\_\_\_\_\_

.

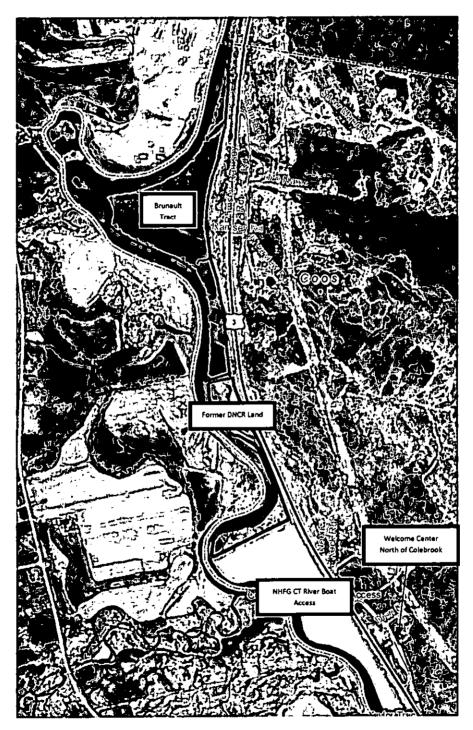
÷

.

The date of approval by the Governor and Executive Council shall constitute the Commencement Date of this Management Agreement.



Exhibit A. Map of the CT River Drivers Wildlife Management Area, Colebrook, NH. The WMA is comprised of the 30.7 acres of land of Brunault Tract that NH Fish and Game and the Nature Conservancy are partnering to conserve, plus an abutting 10± acres to the south formerly owned by the Department of Natural and Cultural Resources (transferred to Fish and Game in 2018), and the 20± acre CT River boat access area to the south (never fully developed but still used for car top access).



Page 8 of 8

# EXHIBIT B

Project # <u>NHFG 2018.05</u>

## State of New Hampshire Division of Forests and Lands Forest Management Bureau

# **Forest Operation Planning Report**

**PROPERTY:** CT River Drivers WMA – Brunault Tract

DATE OF PROJECT: 2018-2024

**LOCATION:** Riparian buffers and ag fields on the CT River Drivers WMA located 2.75 miles north of downtown Colebrook on the west side of US Route 3.

TOWN: Colebrook ESTIMATED RE-ENTRY: NA

**PROJECT DESCRIPTION:** Restore 13 acres of floodplain forest using a combination of invasive plant control and planting. Tilling will also be used to facilitate natural recruitment of silver maple via onsite seed. Also remove an undersized culvert within the riparian buffer of the CT River and replace this management access point with a more appropriately located access off of the rail trail; and remove another culvert altogether. Lastly, retain 15 acres of agriculture field to be leased out to a local farmer for a grain crop.

LAND USE: Wildlife Habitat Management

ZONING: NA

**COORDINATION/REVIEW**<sup>1</sup>: This project was reviewed by the State Lands Management Team on June 5, 2018.

Summary of Concurrence					
Agency	Concur	Concur w/	Do Not	No	Issues
		Conditions	Concur	Comment	
DRED - Natural Heritage				x	
DRED – Parks Operations				X	
DRED – Trails				x	
Cultural Resources – DHR		X			
Fish & Game - Wildlife	X				
Fish & Game – Non Game	X				

# **Public Notification**

Abutters Contacted: All landowners owning property directly adjacent to the project area will be contacted via letter prior to implementation of this plan.

*PAIs Contacted:* The town of Colebrook Conservation Commission will be contacted via letter or phone prior to implementation of this plan.

Is a field tour or public meeting needed? None planned at this time.

Acreage Information		
Property Acres	51	
Project Acres	28	

2018. Combined with NHFG-owned land to the south, it will become the ~90-acre CT River Drivers Wildlife Management Area (WMA). However, TNC will continue to take the lead on implementing the floodplain forest restoration part of this project. As such, a management agreement will need to be developed and approved by Governor and Council prior to NHFG taking ownership of the property to provide TNC the authority to carry out the restoration.

Additionally, permission and perhaps a right-of-way agreement or other legal document will need to be executed with the NH Trails Bureau to provide authority to NHFG to use 250' of their rail trail to establish an appropriate management access to the property.

**NHI SITE:** TNC contracted with Rick Van de Poll to conduct a survey for Rare, threatened, and endangered species on the property including plants and animals. The survey was completed in June and October of 2017. The only rare species found was satiny willow in some of the marsh and shrub wetlands on adjacent land still owned by David Brunault. These areas will not be impacted by this project.

Historic records found in the vicinity include brook lobelia, American spurred gentian, and variegated horsetail. According to NHB, these species are unlikely to occur on the property.

HISTORY & CULTURAL RESOURCES: The property was purchased by TNC in 2017 from David Brunault. Historical topographical maps (1929-1930, 1953, 1963, 1989 and 2012), aerial photography (1975, 1978, 1986, 1994, 1999, 2006, 2008, 2009, 2011 and 2012), tax cards and interviews with individuals knowledgeable of the property indicate it has only been utilized as farm land connected with the production of hay and corn. There are no known historic resources on the property, and as the work will be very low impact and will be conducted within the plow zone of existing agricultural fields, DHR has no concerns.

**ROADS/TRAILS/PUBLIC USE:** Management access is via a gravel single track road across US Route 3 from Ramsey Rd. It crosses private property but is a deeded right-ofway to the Brunault Tract. This will be the primary access for this project. The access road continues on to the Brunault Tract, becomes a grassy path, and crosses a stream via an undersized culvert crossing before leading to an ~15 acre agricultural field. The culvert, which is within the river's riparian buffer, is too small to handle typical flows and also prevents passage of aquatic organisms, will be removed and the streambanks graded to match surrounding slopes (Figure 1). This will take place once the bulk of the floodplain forest activities are completed, likely the spring or summer of 2020. A DES wetlands permit will be required for this work. Another culvert, along the river bank just south of TA5 will also be pulled at the same time. As management access will not be needed south of this culvert in the future, it will not be replaced.

The property is located adjacent to a historical railway dating back to circa 1887. Currently the iron rails and wooden cross ties have been removed from the rail bed and is being utilized as a multi-use recreational trail that includes snowmobiles and motorized all-terrain vehicles. It is owned and maintained by the NH Trails Bureau. A more appropriate access to the field is proposed to be established 250 feet north along the rail trail (Figure 1). This location will also require an approximately 3 foot wide culvert to cross a ditch between the rail trail and the field with gravel placed atop. Permission will be required of the NH Trails Bureau to utilize this section of rail trail as permanent management access. If permission is not granted, another potential option is a crossing of the same wetland, 100 feet from CT River. This area could potentially be crossed with a skidder or timber bridge. The crossing at that location is 13.5 feet from top of bank to top of bank and the wetted width is 10 feet. Regardless of the access option chosen, given proximity to the rail trail the original access road west of the rail trail will be blocked with boulders or other appropriate blockade while leaving room for a couple of vehicles to park.

How much use this property sees by the public is largely unknown. There's currently a rope swing along the river bank (origin unknown) so there is some level of use. There shouldn't be any public use conflicts associated with this project. The only public use concern is if motorized all-terrain vehicles access the property and damage planted crops or floodplain forest species. Gates at the proposed new access and boulders or other suitable blockade on the original access will aim to deter this from happening.

**SOILS:** Soils play an important role in the health of forests and wildlife habitats. Soils provide nutrients, water, and stability to trees and plants, and soil characteristics have a significant influence on where plant species grow. The Natural Resources Conservation Service (NRCS) generates and updates soils maps for each state. A combination of GIS data and the NRCS Web Soil Survey has been used to identify the soils and their characteristics present within the project area. Soils in the project include  $\pm 51\%$  Fryeburg very fine sandy loam (0 - 3% slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy loam (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy loam (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, frequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes, firequently flooded);  $\pm 29\%$  Lovewell very fine sandy load (0 - 3%) slopes); and  $\pm 15\%$  slopes);  $\pm 4\%$  Tunbridge-Lyman-Rock outcrop complex (25 - 60\%) slopes); and  $\pm 1\%$  Masardis gravelly fine sandy load, (15 - 60%) slopes). Given floodplain forest species are already found on site, it's clear the soils are suitable for floodplain forest restoration. Some concern was mentioned at the SLMT that the long history of tillage may impact the ability of the soil to support floodplain forest species. However, tilled soils on other TN

WILDLIFE ANALYSIS: The Brunault Tract is almost all classified as Tier 1 habitat according to the *Wildlife Action Plan* (2015) with the river bank and narrow buffer classified at Tier 2. Tier 1 habitat is classified as grassland while Tier 2 is classified as floodplain forest. The Tier 1 area has potential to be grassland habitat but the decision has been made to restore a portion of it to floodplain forest. The remainder will be retained as a crop field to support local farmers and provide a food source for wildlife (see Wildlife Impact section for more information).

An assessment of WAP species and other species of management concern that could potentially occur in and around the project area was completed based on knowledge of on the ground habitat conditions, and these species were each assigned as either primary or secondary targets for this project. This analysis resulted in the following table:

Primary Targets	Secondary Targets
Northern leopard frog	Canada geese
Wood turtles	Mink
Black duck	Otter
Mallards	Black bear
Red-shouldered hawks	Silver-haired bat
Woodcock	Eastern red bat
Wild Turkey	
White-tailed Deer	

Primary targets meet all of the following criteria:

- Species is of conservation concern (endangered, threatened, special concern, SGCN) or a management priority in NH.
- High likelihood of occurring at WMA or historically occurred at WMA and restoration is possible.
- Existing plans call for increasing populations, or existing populations highly threatened.
- Suitable habitat exists or could exist through active habitat management or restoration.
- Ecological conditions at WMA are such that required habitat to sustain species is feasible to attain and would not have a significant negative impact on other priority species.

Secondary targets meet one or more of the following criteria:

- Species is of conservation concern (endangered, threatened, special concern, SGCN) and species potentially occurs (but not known) at WMA.
- OR
- Species are management priorities in NH but existing plans call for stabilizing or decreasing populations.

#### **MANAGEMENT CONDITION & OBJECTIVES:**

#### Landscape Condition

The Brunault Tract is situated within a rural, low density, agriculturally developed section of the Town of Colebrook. It is bound on the west by the Connecticut River. Abutting to the east is an inactive rail line and a state highway right-of way. Other neighboring and surrounding properties are generally agricultural and/or residential in nature. The property is generally flat, having been formed as a river terrace, and is situated within a floodplain of the Connecticut River. There are a number of small, shallow bodies of water and accompanying wetlands situated in the southern portion of the property. A small brook (possibly seasonal), located adjacent to the western end of

the gravel access road, flows across a section of the property towards the Connecticut River.

#### Management Objectives

The objectives for this project include:

- Establish a 100' forested buffer along the river.
- Restore 18.5 acres of the property to floodplain forest.
- Retain 15 acres of agriculture field and maintain in grain crops for wildlife food.
- Remove two culverts after the restoration project is complete, and create a new access to the main agricultural field.
- Monitor efficacy of floodplain forest restoration for at least five years.

#### MANAGEMENT SUMMARY:

Treatment units were delineated based on management activities (Figure 2).

Treatment Area	Acres	Current Condition	Prescription/ Treatment
TAI	15	Ag field	Retain and plant grain crop
TA2	2	Ag field	Floodplain Forest Restoration - Disk and plant
TA3	4	Old fields	Floodplain Forest Restoration – Mow, control invasives, and plant
TA4	3	Ag field	Floodplain Forest Restoration - Disk and plant
TA5	3	Ag field/ Floodplain Forest	Floodplain Forest Restoration - Allow to reseed naturally

#### STAND EVALUATION: TA1

#### Prescription: Retain and plant grain crop

*Soils:* Soils in this ag field are primary Fryeburg very fine sandy loam (0 to 3 percent slopes, frequently flooded) and some Lovewell very fine sandy loam (0 to 3 percent slopes, frequently flooded). Both are considered prime ag soils.

**Overstory Conditions: NA** 

#### Understory Conditions: NA

**Regeneration Conditions:** Ag field was planted with corn in recent years. Previously, it was hayed for at least a few decades based on aerial photos. It is currently planted with oats by a local farmer under an ag agreement with The Nature Conservancy.

#### Other Considerations: NA

**Treatment:** Once in NHFG ownership, the ag field will be put out to bid to local farmers with the aim of having a farmer plant and maintain a grain crop suitable as waterfowl food (e.g., corn or oats). The farmer will be allowed to harvest most of the crop, retaining some for wildlife.

Alternative Prescriptions: Restore to floodplain forest – Fields on WMAs along the CT River have historically been planted with corn to provide food for waterfowl. The CT River is a major waterfowl flyway. Several other species of wildlife will also benefit (see *Wildlife Impact*). Additionally, TNC is going to continue to seek out properties along the CT River to conserve with an eye towards floodplain forest restoration and want to maintain support among local communities, including the farming community. That support will likely dissolve if ag lands are purchased and wholly converted to forest. As such, we are trying to take a balanced approach, restoring some but not all of the property while leaving some for continued farming and the wildlife benefits that practice offers.

Restore to grassland – At 15 acres, the ag field would provide some grassland bird habitat if planted to hay, likely benefitting a few pairs of bobolink and savannah sparrow. However, planting to grassland would not provide as favorable of feeding habitat for migratory waterfowl including mallard and black duck. The decision has been made to favor the latter. If a local farmer interested in a grain crop cannot be found, then this alternative will be further explored.

*Wildlife Impact:* Fields on WMAs along the CT River have historically been planted with corn to provide food for waterfowl but certainly several other species would benefit as well. Wildlife that will take advantage of this food source include Canada goose, wood duck, mallard, black duck, wild turkey, white-tailed deer, and black bear. These species will benefit from the food from the few rows of grain crops left unharvested plus waste grains that spill over during harvest or otherwise can't be harvested. Having standing stalks of corn available in the winter is particularly important for wild turkey in northern NH where food is limited and winter survival more difficult. NHFG's goal is to increase wild turkey populations somewhat in this region.

**Recreation / Visual Impact:** There is little recreational activity occurring on this property. That coupled with the fact that this field has been in agricultural production for many years means that the continued farming of this field will have little if any recreational or visual impact.

**Soil / Water Controls:** A 100 foot buffer will be established between the field and the CT River. This buffer will be restored to floodplain forest, which will help stabilize the river bank and prevent erosion that might otherwise be associated with farming so close to the river.

#### STAND EVALUATION: TAs 2, 4, and 5

#### Prescription: <u>TAs 2 and 4 - Floodplain Forest Restoration - Disk and plant</u> <u>TA 5 - Floodplain Forest Restoration - Allow to reseed naturally</u>

*Soils:* Soils in the retired ag fields that comprise Treatment Area 2 are Lovewell very fine sandy loam (0 to 3 percent slopes, frequently flooded). The soils in Treatment Areas 4 and 5 are primarily Fryeburg very fine sandy loam (0 to 3 percent slopes, frequently flooded). Prior to being placed in agriculture many decades ago, these soils likely supported floodplain forest as evidenced by the remnant floodplain forest along portions of the river bank.

**Overstory Conditions:** NA for Treatment Areas 2 and 4. Portions of Treatment Area 5 contain mature silver maple including the state champion at 288 inches in circumference.

Understory Conditions: NA for all Treatment Areas.

**Regeneration Conditions:** All ag field areas in Treatment Areas 2, 4, and 5 are currently planted with oats by a local farmer under an agreement with TNC, the current owners of the property. This will help to keep these Treatment Areas weed free in preparation for planting or natural seeding next fall.

#### Other Considerations: NA

**Treatment:** Oats will be harvested this fall. In lieu of payment, the farmer will disc these treatment areas in the spring of 2019 to prepare for planting. Shortly after disking, 4-5 foot tall floodplain trees will be planted using hand tools in Treatment Areas 2 and 4 at approximately 3m x 5m spacing. Planted trees will primarily be silver maple as this is the dominant species of local floodplain forests. Fifty Dutch elm disease resistant American elms will be intermixed with the silver maple. Plants will be from seed sources or cuttings originating in northern New England and will be wrapped to help prevent herbivory and damage from other disturbances. Trees may also be treated with deer repellent as deer herbivory has been an issue across the river at the Johnson Farm floodplain forest restoration site. A licensed applicator will be required for this application. Overall the target is to plant 3,000 trees.

Treatment Area 5 will be left for natural recruitment of the silver maple seeds from surrounding trees to fall into. No planting will occur here as plantings may be lost due to riverbank erosion or seasonal ice scour.

Floodplain forests are unique because of their periodic flooding. These regular disturbances, which deposit silt and sand along the banks of waterways, help create and maintain unique communities of plants that tolerate flooding and require nutrient-rich soils. Floodplain forests contribute many free ecological services to our society: they help filter pollutants to prevent them from entering streams and rivers, improve water quality, are critical in controlling erosion, and help buffer rivers against catastrophic flooding.

Alternative Prescriptions: Maintain in agriculture – This is the only other viable alternative consider. However, maintaining these treatment areas in agriculture will increase the likelihood or riverbank erosion, and increased nutrients and sediments entering the CT River impacting water quality.

#### Wildlife Impact:

Floodplains are home to a diversity of wildlife. The damp soils create rich insect and amphibian breeding habitats, and these species in turn become prey for birds such as woodcock and barred owl, for mammals such as mink, otter, and raccoon, and for reptiles such as wood turtle.

Research in the Connecticut River region has shown that spring flooding thaws the soils of floodplain forests earlier than soils in surrounding areas. This early thaw means that insects become available to birds (as food) earlier in floodplain forests, so birds will feed in, follow, and depend more heavily on floodplain forests than other forested habitats during the early spring migration.

The northern leopard frog is strongly associated with grassy floodplain areas along major rivers in the state, including the CT. These amphibians require slow moving water for breeding and dense, low vegetation as cover and feeding habitat. Red-shouldered hawks inhabit mature forests, with a preference for floodplain forests and forested wetlands. Floodplain forest restoration may provide nesting opportunities for this species. Silver-haired bat and Eastern red bat may find suitable roosting habitat in the foliage or loose bark of floodplain forest trees.

**Recreation / Visual Impact:** Much of the floodplain forest restoration activity will look much like the farming activity that has taken place here for several decades. Overtime, visitors or passersby may find the restored floodplain forest buffer visually appealing with the backdrop of the CT River. Once restoration is successful, bird watchers will certainly find greater opportunity to view songbirds, particularly during spring and fall migrations.

Soil / Water Controls: With the completion of the final disking and planting in spring 2019, a 100 foot buffer between the ag field and the river will have been established which will help in reducing erosion entering into the river.

## **STAND EVALUATION:** TA 3

#### Prescription: TA 3 - Floodplain Forest Restoration - Mow, control invasives, and plant

**Soils:** Soils in these old ag fields are Lovewell very fine sandy loam (0 to 3 percent slopes, frequently flooded). Prior to being placed in agriculture many decades ago, these soils likely supported floodplain forest as evidenced by the remnant floodplain forest along portions of the river bank.

**Overstory Conditions: NA** 

Understory Conditions: NA

**Regeneration Conditions:** These old field areas are dominated by grasses and forbs particularly reed canary grass and other hayland species, as well as goldenrods, meadowsweet, virgin's bower, and bedstraw.

#### Other Considerations: NA

**Treatment:** Reed canary grass is an aggressive competitor. Floodplain forest restoration will not be successful in these areas without first controlling this grass. As such, a licensed herbicide applicator will be hired to complete two treatments of reed canary grass – one in the spring of 2019, the second in the fall. These areas will then be brush hogged prior to planting with 4-5 ft. tall floodplain trees with 3m x 5m spacing.

Alternative Prescriptions: Maintain as old field – These areas are located very close to the river bank. Establishing floodplain forest here will help deter river bank erosion far better than if they retained as old field habitat dominated by grasses and forbs.

Wildlife Impact: See Wildlife Impact section for TAs 2, 4, and 5.

**Recreation / Visual Impact:** Much of the floodplain forest restoration activity will look much like the farming activity that has taken place here for several decades. Overtime, visitors or passersby may find the restored floodplain forest buffer visually appealing with the backdrop of the CT River. Once restoration is successful, bird watchers will certainly find greater opportunity to view songbirds, particularly during spring and fall migrations.

Soil / Water Controls: There are no soil erosion concerns associated with this Treatment Area.

The recommendations of Good Forestry in the Granite State – Recommended Voluntary Forest Management Practices for New Hampshire (2010) were considered in the preparation of this document.

# References:

ł

Clyde, M. 2008. Floodplain Forests: New Hampshire Wildlife Action Plan Habitat Stewardship Series. UNH Cooperative Extension, Durham, NH. <u>https://extension.unh.edu/resources/files/resource000414\_rep436.pdf</u>

.

APPROVALS:		
Signature	Title	Date
Jan J. Oche	NHFG State Lands Habitat Biologist	10/30/2018
John Phongee	TNC Director of Stewardship and Ecological Management	10/30/2018

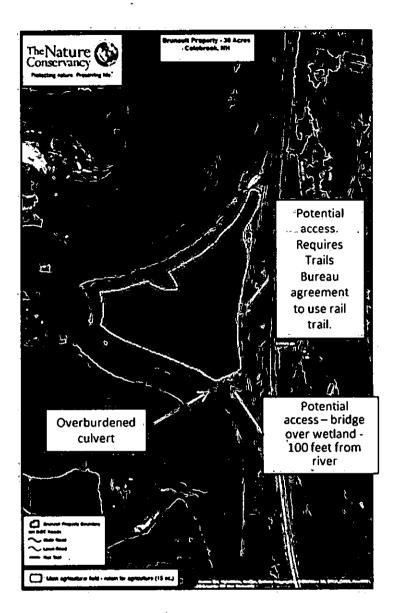
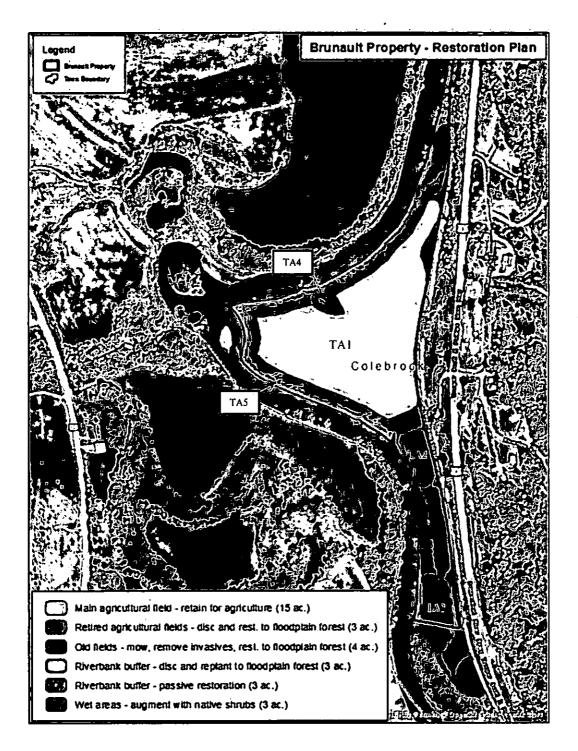


Figure 1. Location of current culvert to be removed and proposed location of new access to ag field on the CT River Drivers WMA – Brunault Tract.



I

Figure 2. Proposed treatment areas and treatments on the CT River Drivers WMA – Brunault Tract.