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STATE OF NEW HAMPSHIRE
DEPARTMENT of NATURAL and CULTURAL RESOURCES
DIVISION of FORESTS and LANDS

172 PEMBROKE ROAD CONCORD, NEW HAMPSHIRE 03301
PHONE: (603) 271-2214 FAX: (603) 271-6488 WWW.NHDFL.ORG

December 4, 2018

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

REQUESTED ACTION

Authorize the Department of Natural and Cultural Resources (DNCR), Division of Forests and Lands to accept and expend \$40,000 of federal funds from grant #14-DG-11420004-216 upon approval of Governor and Executive Council for the period through May 30, 2019. 100% Federal Funds

Forest Health					
03-35-35-351010-35160000					
Fiscal Year 2019					
Class	Class Description	Account	Current Budget	Requested Change	Adjusted Budget
Revenue					
000	Federal Funds	404796	(\$207,122)	(\$40,000)	(\$247,122)
Total:			(\$207,122)	(\$40,000)	(\$247,122)
Expense					
010	Personal Services- Permanent	500100	56,213		56,213
018	Overtime	500106	8,000		8,000
020	Current Expenses	500200	16,980		16,980
023	Heat-Electricity-Water	500264	2,500		2,500
030	Equipment	500304	4,000	40,000	44,000
039	Telecommunications	500188	3,200		3,200
040	Indirect Costs	500800	19,281		19,281
041	Audit Fund Set Aside	500801	194		194
042	Additional Fringe Benefits	500620	4,041		4,041
050	Personal Services - Temporary	500109	13,484		13,484
060	Benefits	500612	36,778		36,778
066	Employee Training	500543	300		300
070	In-State Travel Reimbursement	500704	10,220		10,220
072	Grants Federal	500575	23,931		23,931
080	Out-of-State Travel	500710	8,000		8,000
Total:			\$207,122	\$40,000	\$247,122

EXPLANATION

This requested action is to accept and expend \$40,000 of federal funds remaining from an Emerald Ash Borer Management grant to replace a 21-year-old bucket truck belonging to the DNCR, Division of Forests and Lands that was no longer serviceable. DNCR would like to use these federal funds towards the purchase of a smaller, lighter, and taller tow-behind aerial lift. This piece of equipment will be used by the Forest Health Bureau and other programs within DNCR for the purposes of emerald ash borer surveys, hazard tree management, arborist trainings, forestry applications, and pest trapping.

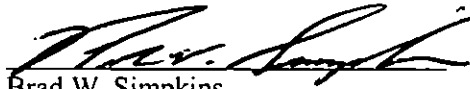
The following additional appropriation is requested for Fiscal Year 2019:

Class 030 – Equipment \$40,000, to purchase a tow-behind aerial lift.

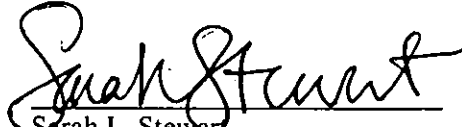
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Respectfully submitted,

Concurred,



Brad W. Simpkins
Director



Sarah L. Stewart
Commissioner

**State of New Hampshire
Department of Natural and Cultural Resources
Division of Forests and Lands**

Fiscal Situation

03-35-35-351010-35160000 FOREST HEALTH	Balance
Federal Grant FFY14 #14-DG-11420004-216	\$ 43,606
Federal Grant FFY16 #16-DG-11420004-132	7,466
Federal Grant FFY17 #17-DG-11420004-114	85,528
Federal Grant FFY17 #17-DG-11420004-261	11,347
Federal Grant FFY17 #17-DG-11420004-262	11,920
Federal Grant FFY18 #18-DG-11420004-207	89,951
Total Federal Grant funds available	\$ 249,818
Current SFY 2019 budget	(207,122)
Federal Grant funds in excess of budget	\$ 42,696
Funds reserved for future periods	(2,696)
Additional appropriation request	\$ 40,000



MODIFICATION OF GRANT OR AGREEMENT

PAGE	OF PAGES
1	2

1. U.S. FOREST SERVICE GRANT/AGREEMENT NUMBER: 14-DG-11420004-216	2. RECIPIENT/COOPERATOR GRANT or AGREEMENT NUMBER, IF ANY:	3. MODIFICATION NUMBER: A1
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4. NAME/ADDRESS OF U.S. FOREST SERVICE UNIT ADMINISTERING GRANT/AGREEMENT (unit name, street, city, state, and zip + 4): Tony I. Ferguson, Area Director Northeastern Area State & Private Forestry 11 Campus Blvd., Suite 200 Newtown Square, PA 1907 vcaldwell@fs.fed.us / 610-557-4131	5. NAME/ADDRESS OF U.S. FOREST SERVICE UNIT ADMINISTERING PROJECT/ACTIVITY (unit name, street, city, state, and zip + 4): Nathan W. Siegert, PHD USDA Northeastern Area, S&PF nwsiegert@fs.fed.us/603-868-7717
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6. NAME/ADDRESS OF RECIPIENT/COOPERATOR (street, city, state, and zip + 4, county): Mr. Brad Simpkins Division of Forests and Lands New Hampshire Department of Resources and Economic Development 172 Pembroke Road Concord, NH 03301 brad.simpkins@dred.nh.us 603-271-2214 leslie.sherman@dred.nh.us 603-271-2214 x312	7. RECIPIENT/COOPERATOR'S HHS SUB ACCOUNT NUMBER (For HHS payment use only):
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8. PURPOSE OF MODIFICATION

CHECK ALL THAT APPLY:	This modification is issued pursuant to the modification provision in the grant/agreement referenced in item no. 1, above.
<input checked="" type="checkbox"/>	CHANGE IN PERFORMANCE PERIOD: This action extends the ending date to May 30, 2019
<input type="checkbox"/>	CHANGE IN FUNDING:
<input type="checkbox"/>	ADMINISTRATIVE CHANGES:
<input checked="" type="checkbox"/>	OTHER (Specify type of modification): REBUDGET TO ADD EQUIPMENT IN THE AMOUNT OF \$25,000

Except as provided herein, all terms and conditions of the Grant/Agreement referenced in 1, above, remain unchanged and in full force and effect.

9. ADDITIONAL SPACE FOR DESCRIPTION OF MODIFICATION (add additional pages as needed):

Nathan W. Siegert, Program Monitor, approves this request as written for rebudget.

FUNDING EQUIPMENT FOR STATE RECIPIENTS. Federal funding under this award is available for reimbursement of the State's purchase of equipment. Equipment is defined as having a fair market value of \$5,000 or more per unit and a useful life of over one year. States will adhere to State laws and procedures regarding purchase, use, and disposition of equipment.

Except as set forth above, all other terms and conditions of the agreement shall remain the same, unchanged, and in full force and effect.

10. ATTACHED DOCUMENTATION (Check all that apply):

<input type="checkbox"/>	Revised Scope of Work
<input type="checkbox"/>	Revised Financial Plan
<input type="checkbox"/>	Other:


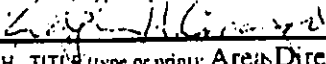
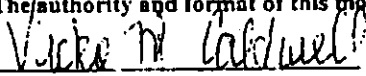
11. SIGNATURES

AUTHORIZED REPRESENTATIVE: BY SIGNATURE BELOW, THE SIGNING PARTIES CERTIFY THAT THEY ARE THE OFFICIAL REPRESENTATIVES OF THEIR RESPECTIVE PARTIES AND AUTHORIZED TO ACT IN THEIR RESPECTIVE AREAS FOR MATTERS RELATED TO THE ABOVE-REFERENCED GRANT/AGREEMENT.



USDA Forest Service

OMB 0596-0217
FS-1500-19

11.A. SIGNATURE 	11.B. DATE SIGNED 5/11/17	11.C. U.S. FOREST SERVICE SIGNATURE 	11.D. DATE SIGNED 5/5/17
(Signature of Signatory Official)		(Signature of Signatory Official)	
11.E. NAME (type or print): Brad W. Simpkins		11.F. NAME (type or print): KATHLEEN ATKINSON	
11.G. TITLE (type or print): Director		11.H. TITLE (type or print): Area Director for	
12. G&A REVIEW			
12.A. The authority and format of this modification have been reviewed and approved for signature by:  VICKIE M. CALDWELL U.S. Forest Service Grants & Agreements Specialist			12.B. DATE SIGNED 5/3/17

COOPERATIVE EMERALD ASH BORER MANAGEMENT PROJECT
Forest Health Program Narrative
NEW HAMPSHIRE
Federal Fiscal Year 2014-2019 (with extensions)

Lead Contacts:

Kyle Lombard, Forest Entomologist, Forest Health Program Coordinator
NH Division of Forests and lands
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Leslie Sherman, Grants Technician
NH Division of Forests and Lands
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leslie.sherman@dncr.nh.gov

Purpose:

This project will impact the spread of EAB from the known generally infested area by developing silviculture techniques to collapse localized EAB populations and minimize spread from the broader insect population. Slowing ash mortality will: 1) allow ash-rich communities time to develop preparedness and management plans; 2) maximize economic returns through sound demonstrations of ash silviculture; and 3) lower overall costs such as tree removals and replacements. Implementing a program to slow ash mortality within New Hampshire is cost-effective because the known EAB population is limited to several small populations poised just outside the geographic boundaries of the greater ash forests of central and northern New Hampshire and expansion potential is high, with six of New Hampshire's ten counties bordering the single quarantine of Merrimack County. The State has implemented several measures including an interior county quarantine, a delimitation survey, an established forest pest outreach program, permits for biological control releases, and two new state-funded positions.

This EAB Project will be one of the primary vehicles to accomplish statewide strategies related to "protecting New Hampshire's forests from harm" (priority #2) as set forth in the *New Hampshire Forest Assessment* and accompanying *Forest Resource Strategies* document.
<http://www.nhdfl.org/library/pdf/Planning/NH%20Forest%20Resource%20Strategies%20Final.pdf>

Scope of Work:

1. **Outreach and communication to all affected forest landowners in NH regarding EAB treatment actions and costs. (with UNHCE).** Outreach and communication with affected landowners will generate a pool of sites to investigate for possible treatment based on location, ash stocking, proximity to known ash resources, severity of infestation and harvest potential. nhbugs .org maintains up to date spatial information about infested areas and the surrounding expansion regions. Landowners wishing to include their forest in silviculture options will be prioritized.
2. **Demonstration of sound silvicultural options. Silviculture in and around infested ash forests will play a key role in slowing EAB population spread, maintaining ash in our environment and reducing costs associated with EAB infestations.**

**Establishment of sink sites in the infested area using “girdle, cut and destroy” AND a potentially more efficient “girdle, cut and utilize”(GCU) methodology . GCU would be recommended when timber harvesting is an option for infested forests. The ash component being harvested would be girdled during the growing season to create a large sink site with hundreds of ash highly attractive to local EAB populations. During the nin-flight season ash is harvested and utilized by the traditional wood products industry under current quarantine rules and logistics. Scaling up the trap tree concept with the use of mechanized forestry could improve the efficacy.

3. **Partnering insecticides with trap trees as long-term population sinks.** Where timber harvesting is not an option but we need to create sink sites to slow the spread of EAB we will co-mingle treated ash trees within the plot of girdled trap trees to increase the long-term efficacy of the trap site. Pesticide treatments will be an emamectin benzoate (EB) product. The lure of the tree and the killing power of EB will remain in the environment killing larvae for several seasons longer than girdling and killing the tree in one year. Three sites will be chosen the first year and 6 sites in year two.
4. **Demonstrate the use of FHTET risk map data layers, local property ownership layers, survey data, and infestation data to inform the multiple aspects of control, regulation and management of EAB.** Geo-spatial maps will be available at nhbugs.org.
5. **Targeted insecticide applications of select ash trees on a continuing three-year cycle.** As highly attractive, valuable ash trees are identified in the infested region we will treat with EB to retain valuable ash species in the environment and reduce insect population drift.
6. **Use available trapping options including green panel traps, trap trees, and various lure combinations throughout the EAB infested forests and surrounding uninfested communities.** Monitoring the spread of EAB is important as control strategies are employed in the infested forests. At least 100 Green panel traps or funnel traps will be baited with both 3Z-Lactone and 3Z-Hexinol (Environ Entomol. 2011) each year and placed strategically to monitor movement of EAB radiating out from sites used as GCU or to detect outbreaks in new Counties. Trap trees can also be deployed and a minimum of 30 trap tree sites will be created to fill gaps where pheromone traps are lacking or we need population density data near pheromone traps.

7. Employ visual survey for signs and symptoms within urban ash plantings and forested edges where high risk activities such as moving firewood to campgrounds and racetracks take place. Potential survey site locations like Portsmouth, NH and Nashua, NH have many of the same key elements the infested cities in NH and MA share. Elements like major highways all merging, railway hubs, overnight accommodations, and large human populations.

8. Demonstrate sound safe hazard tree management and portable milling of infested ash trees that creates deregulated forest products that can be transported free of regulation. Additionally demonstrate safe urban tree removal and EAB survey techniques using portable aerial lifts and climbing techniques where appropriate. User group meetings and the fostering of communication between land owners, arborists, tree climbers, lift operators and portable mill operators is the key. The Division will demonstrate through the use of a contracted mill, certified arborists, contracted aerial lifts, or purchased mill, or purchased aerial lifts the sound utilization of ash trees and the value to land owners.

This scope of work directly meets the goals and strategies as defined in the NH State Forest Assessment, are all the direct responsibility of the NH Division of Forests and Lands Forest Health Program with cooperative funding and support of the USDA, USFS S&PF program.

Strategy 95: ***Detect, monitor, and evaluate forest pests and forest health conditions.**
Key cooperators: APHIS, ISA, New Hampshire Arborists Association, USFS S&PF, New Hampshire Landscape Association, and NHDOA

Key cooperators: APHIS, Forest Pest Advisory Council, NHDOA, USFS – S&PF

Strategy 98: ***Reduce damage through effective pest management, including suppression and/or eradication.**

Key cooperators: APHIS, Forest Pest Advisory Council, NHDOA, USFS – S&PF

Strategy 99: ***Develop flexibility to respond to emerging situations that threaten forest health, such as new insect or disease outbreaks or introductions of invasive species.**

Key cooperators: APHIS, Forest Pest Advisory Council, NHDOA, USFS – S&PF

Strategy 102: **Engage in an aggressive education program for public decision makers, natural resource professionals and the public to increase awareness of the threats to our forests from invasive plants, insects and diseases so they are able and willing to significantly contribute to detection of threats, adopt practices which reduce the chances of introducing problems into our ecosystems and support programs to limit adverse impacts. Include targeted education efforts where needed, such as the "do not move firewood" campaign to limit the spread of invasive insects.**

Key cooperators: Fire Chiefs Association, NHFAB, NCRC&D, and SRC&D

Strategy 95: ***Detect, monitor, and evaluate forest pests and forest health conditions.**

Key cooperators: APHIS, Forest Pest Advisory Council, NHDOA, USFS – S&PF

Strategy 103: Conduct activities to maintain and improve forest health conditions and sustainability.

Key cooperators: Consulting Foresters, Foresters, Forest Pest Advisory Council, Conservation Districts, and NHDOA

Strategy 104: *Conduct monitoring projects for damaging pests in high risk communities.

Key cooperators: APHIS, Foresters, Forest Pest Advisory Council, UNH, and USFS Research

Methodology and Timeline:

Activities to accomplish scope of work	Timeline and milestones
Implement timber harvests in the infested forests using demonstration of recommended EAB mitigation techniques. Intense basal area reductions of ash but leave small diameter ash trees to maintain ash in the environment and keep residual EAB population from scattering to new properties.	Harvest January through March and set up projects year round. Demonstrate technique on one State and one private forest lot in each year of the project.
Outreach materials will be created and distributed to key stakeholders regarding timber management options and movement of infested ash wood products.	Year round. Direct mailings and workshops will exceed 2000 parties.
Monitor for Emerald ash borer using multiple methods.	May-August. Trap trees will be cut in the winter and lured traps will be examined in September.
Employ pesticides where treated trees can lure local EAB populations and kill multiple generations of feeding larvae.	May-September. 3-5 pesticide treated sink sites each year.
Conduct detection monitoring at sites where there is a high risk for EAB.	Year-round. Visual survey will be completed by seasonal technicians during the growing season.

Accomplishment Reporting:

Accomplishment/Performance Measure	Type	Grant Target
Number of priority acres managed for Emerald Ash borer prevention and slow spread.	State	500
Number of priority communities surveyed for new infestations	State	4
Number of landowners contacted	State	4,000
Acres monitored using pest trapping techniques	State	50,000
Forest pest outreach material delivered	State	5,000
Training sessions completed	State	3/yr

**Total summary of funds received by the NH Division of Forests and Lands for this agreement: Amount to NH Division of Forests and Lands= \$95,000
Amount to UNH Cooperative Extension= \$10,000**

F&L Budget:

Budget Items by SF/424A Object Class Categories	Federal \$	State Match \$	Other Match \$	Source of "Other Match"
a. Personnel	\$15,000	\$ 95,000		UNH Cooperative Extension State and County Funds
b. Fringe Benefits	\$ 2,093			
c. Travel	\$ 9,000			
d. Equipment	\$42,000			
e. Supplies	\$22,092			
f. Contractual	\$10,000		\$10,000	
g. Construction				
h. Other	\$ 105			
pesticide, arborist & milling work, audit set aside				
i. Total Direct Charges (sum of a-h)	\$100,290			
j. Indirect Charges	\$ 4,710			
k. Totals (i + j)	\$105,000	\$95,000		

Summary budget of funds received by UNH Cooperative Extension for this agreement:

UNH Cooperative Extension Budget:

Budget Items by SF/424A Object Class Categories	Federal \$	State Match \$	UNH Match \$
a. Personnel	\$5,730		\$5,730
b. Fringe Benefits	\$2,206		\$2,206
c. Travel			
d. Equipment			
e. Supplies			
f. Contractual			
g. Construction			
h. Other			
audit set aside	\$10		
i. Total Direct Charges (sum of a-h)	\$7,936		\$2,937
j. Indirect Charges	\$2,064		\$2,064
k. Totals (i + j)	\$10,000		\$10,000