

Task Agreement Number P15AC00730-UNM-113

Under

Cooperative Agreement P14AC00921

Between

The United States Department of the Interior

National Park Service

And

Regents of the University of New Mexico

DUNS No: 868853094

Contract and Grant Administrators

Research Administration

MSC01 1247

University of New Mexico

Albuquerque, NM 87131-0001

CFDA: 15.945

Project Title: Establishing a Baseline for Bat Microbiota and Discovering Clues to Natural Defenses Against WNS in Bat Microbiota in El Malpais National (ELMA) Monument

Park Unit: ELMA

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Amount of Federal Funds Obligated: \$64,500

Total Amount of Task Agreement Award: \$64,500

Funding source: NR Project Fund Source (BRMD-ONPS)

Period of Performance: 15 April 2015- 31 July, 2016

Student Involvement: Yes

Sensitive Information: No, cave coordinates will not be published in final report.

ARTICLE I – BACKGROUND AND OBJECTIVES

Cooperative Agreement Number P14AC00921 was entered into by and between the Department of the Interior, National Park Service, (NPS), and Regents of the University of New Mexico (hereafter referred to as ‘Recipient’) for the purpose of providing research, technical assistance, and/or education, as described below. Unless otherwise specified herein, the terms and conditions as stated in the Cooperative Agreement will apply to this Task Agreement.

For performance under this task agreement, the regulations set forth in 2 CFR, Part 200, supersedes OMB Circulars A–21 (2 CFR 220), A–87 (2 CFR 225), A–110, and A–122 (2 CFR 230); Circulars A–89, A–102, and A–133; and the guidance in Circular A–50 on Single Audit Act follow-up. The recipient shall adhere to 2 CFR, Part 200 in its entirety in addition to any terms and conditions of the master agreement not superseded by 2 CFR 200, as well as the terms and conditions set forth in this agreement. In the event of a

conflict between the original terms of the master agreement and 2 CFR, Part 200, relating to this task agreement, 2 CFR, Part 200 shall take precedence.

Establishing a Baseline for Bat Microbiota and Discovering Clues to Natural Defenses Against WNS in Bat Microbiota in El Malpais National (ELMA) Monument

Project Description:

White-Nose Syndrome (WNS), caused by the fungus *Pseudogymnoascus destructans*, threatens bat populations throughout the U.S. Western bat populations provide an excellent opportunity to understand bats' external bacterial and fungal inhabitants and their potential to provide natural defenses against this newly emerging pathogen. Using next gen sequencing and microbial culturing techniques we propose to analyze bat microbiota across eight bat species and to isolate Actinobacteria for testing of anti-fungal activity against *P. destructans*. Actinobacteria are rich producers of antibiotics, including antifungals. In 2014, we netted bats in ELMA caves and surface sites. Eight target species of bats were swabbed, including species very likely and less likely susceptible to WNS. Next gen and metagenomic sequencing performed on DNA from swabs suggests that bats caught on the surface versus those caught in the cave have different microbial communities. Some species of bats have many Actinobacteria present, and we have identified some isolates that show significant inhibition of *P. destructans*. We will followup on the metagenomics by doing additional analysis of the metagenomes we acquired in 2014, and will obtain additional metagenomes from the bats to be swabbed in 2015. We will also photodocument this research to provide interpretive materials for ELMA's staff to promote public education and outreach on WNS and its impact on bats. Much remains to be learned about ELMA's bats, their microbiota, the microclimate of their roosting sites, and climate change impacts. Funding will allow us to expand our dataset to a statistically adequate level.

ARTICLE II – LEGAL AUTHORITY

FA Legal Authority for this TA (Note: Must be included in the Master CA)

ARTICLE III – STATEMENT OF WORK

A. Statement of work:

Objectives:

- Identify and describe the bacteria and fungi present within microbial communities among key bat species at El Malpais National Monument.
- Isolate Actinobacteria that may have the potential to inhibit *P. destructans* growth.
- Test the potential of cultured Actinobacteria from bats to inhibit the growth of *P. destructans*.

- Research the metagenomics of bat microbiota to examine potential natural defenses that bats have to inhibit *P. destructans* growth.
- Record the work with photography for a WNS exhibit in Science in Action.

Objective 1: Identify and describe the bacteria and fungi present within microbial communities among key bat species at El Malpais National Monument.

Our previous bat sampling (Project#: P14AC00588, UNM-99) for microbiota included 23 cave-caught *Corynorhinus townsendii* (COTO), 1 cave and 9 surface-caught *Eptesicus fuscus* (EPFU), 1 cave and 6 surface-caught *Lasionycteris noctivagans* (LANO), 1 cave and 7 surface-caught *Myotis ciliolabrum* (MYCI), 9 surface-caught *Myotis evotis* (MYEV), 1 cave and 1 surface-caught *Myotis thysanodes* (MYTH), 1 surface-caught *Myotis volans* (MYVO), and 1 surface-caught *Tadarida brasiliensis* (TABR). This year's focus will be on filling in additional non-COTO bats, while still balancing out captures from caves as much as possible given our inability to predict which bats we will capture. We will do additional surface netting with Dr. Ernie Valdez in other areas of the Monument to increase the variety of bat species caught. Debbie Buecher will conduct all bat cave captures and handling, which will be done during April 2015 and April 2016 expeditions to our ELMA study caves. In total we will swab 39 bats (mixture of cave and surface-caught) during this year's WNS funding. Swabbing and bat handling will be done under UNM and NPS IACUC protocols issued to Northrup and NM Game and Fish permits issue to Buecher. Swabs will be stored in RNA Later to preserve the DNA and transported on a combination of dry ice and a liquid nitrogen dry shipper to further ensure that the nucleic acids are preserved for extraction. The bacterial and fungal microbiota present on the bats will be identified by MR DNA who will do the DNA extraction and sequencing of the 16S rRNA gene (bacteria) and ITS genes (fungi). These sequences will be analyzed with the Qiime pipeline and the R statistical package to provide information about what controls the diversity we observe on the bats. Our previous work is currently up on a well-known pre-print server to obtain feedback before formal submission in about two weeks to a journal for consideration for publication. These new results will also be incorporated into additional publications.

Objective 2: Isolate Actinobacteria that may have the potential to inhibit *P. destructans* growth.

Bats that are captured for microbiota swabbing will also be swabbed to inoculate three media that target Actinobacteria: humic acid vitamin agar (HV), Actinobacteria Isolation Agar (AIA), and gellum gum (GG). These media are supplemented with additional chemicals that enhance the ability of the media to target just Actinobacteria. The inoculated plates will be grown in the laboratory at 20 degrees Celsius until developed enough to pick individual colonies for isolation into pure subcultures. A selection of different morphologies will be selected, their DNA will be extracted and sequenced and the resulting sequences will be clustered using BioEdit. Representative isolates will be chosen from each cluster for further testing against *Pseudogymnoascus destructans* at

Western Illinois University (WIU) (we don't want to bring this deadly pathogen to New Mexico) by our colleague Dr. Andrea Porrás-Alfaro and her students. All isolates will be freezer stocked for long-term availability. The 39 swabbed bats will generate 117 parent plates, which will generate approximately 1,170 pure isolates for sequencing to identify the Actinobacteria present. These results will also be written up for publication.

Objective 3: Test the potential of cultured Actinobacteria from bats to inhibit the growth of *P. destructans*.

The representative isolates will be shipped to WIU for testing against *Pseudogymnoascus destructans* using a plate overlay technique developed and refined by our Azorean colleague, Dr. Lurdes Dapkevicius in her antibiotics from cave bacteria research. R2A medium is poured in the plates and the bat actinobacterium is inoculated into the center of the plate. After sufficient growth is observed, an overlay of fungal medium (richer) is poured, allowed to harden, and a liquid suspension of *Pseudogymnoascus destructans* spores is poured on this. The plate is incubated for a few days and antifungal production that is effective against *Pseudogymnoascus destructans* is observed as a cleared zone of inhibition where no *P. destructans* can grow. We are currently entering into negotiations with other researchers who will further explore the antifungal activity of these isolates.

Objective 4: Research the metagenomics of bat microbiota to examine potential natural defenses that bats have to inhibit *P. destructans* growth.

The same DNA that is extracted by MR DNA for Objective 1 will be used to generate 12 bat metagenomes. These metagenomes will give us insights into the kinds of secondary metabolites (e.g. antifungals) that could be produced by the genes of the bacteria and fungi present on the bats. We will select bats from different bat species sampled at ELMA, which could include *Corynorhinus townsendii* (COTO), *Eptesicus fuscus* (EPFU), *Lasionycteris noctivagans* (LANO), *Myotis ciliolabrum* (MYCI), *Myotis evotis* (MYEV), *Myotis thysandodes* (MYTH), *Myotis volans* (MYVO), and *Tadarida brasiliensis* (TABR). If sufficient DNA is returned we may even be able to reconstruct some genomes for some of the organisms present. The other genes will shed light on other capabilities that the bacterial and fungal members of the bat microbiota have, which could provide insights into roles that these microbiota serve on the bats.

Objective 5: Record the work with science-in-action photography for a WNS exhibit.

Communicating about this research to the public is part of the NPS mission. One way to aid this communication is through stunning visual images showing the research as it occurs. In the photography aspect of this grant, Kenneth Ingham will record the research as it occurs, such as capturing the bats, swabbing them, processing the samples, and releasing the bats. In addition to bat-focused photos, Kenneth will also photograph the researchers as they work, providing a human component to the research. All photos will be provided to the ELMA staff as 21 megapixel jpegs during the project with tiff versions

available upon request. These photographs can be used as part of exhibits or other interpretive materials to help explain the threat that white-nose syndrome poses to ELMA bats as the disease moves westward.

Animal Care and Use. Capture and handling of bats will follow the Fort Collins Science Center Standard Operating Procedure (SOP) SOP#: 2013-01 2001-01 (Ellison et al. 2013). Buecher has the permits from New Mexico Game and Fish that allow us to conduct these activities and Northup holds a University of New Mexico IACUC Protocol, as well as an NPS IACUC. We will follow current decontamination protocols established by the U.S. Fish and Wildlife Service to prevent any potential spread of *P. destructans* should it already be in New Mexico caves undetected.

Berdy, J. 1985. *CRC Handbook of Antibiotic Compounds, Part II: Bacterial Metabolites*. Berdy, J., ed. CRC Press, Publisher.

Caporaso, J.G., Kuczynski, J., Stombaugh, J., Bittinger, K., Bushman, F.D., Costello, E.K., Fierer, N., Pena, A.G., Goodrich, J.K., Gordon, J.I., Huttley, G.A., Kelley, S.T., Knights, D., Koenig, J.E., Ley, R.E., Lozupone, C.A., McDonald, D., Muegge, B.D., Pirrung, M., Reeder, J., Sevinsky, J.R., Tumbaugh, P.J., Walters, W.A., Widmann, J., Yatsunenko, T., Zaneveld, J., Knight, R. 2010. QIIME allows analysis of high-throughput community sequencing data. *Nature Methods* 7(5): 335-336.

Lorch, J.M., A. Gargas, C.U. Meteyer, B.M. Berlowski-Zier, D.E. Green, V. Shearn-Bochsler, N.J. Thomas, and D.S. Blehert. 2010. Rapid polymerase chain reaction diagnosis of white-nose syndrome in bats. *Journal of Veterinary Diagnostic Investigation*. 22:224-230.

Minnis, A.M., and D.L. Lindner. 2013. Phylogenetic evaluation of *Geomyces* and allies reveals no close relatives of *Pseudogymnoascus destructans*, comb. Nov., in bat hibernacula of eastern North America. *Fungal Biology* 117(9): 638-649.

Nett, M., Ikeda, H., Moore, B.S. 2009. Genomic basis for natural product biosynthetic diversity in the actinomycetes. *Nat. Prod. Rep.* 26(11):1362-1384.

B. Project schedule and products:

- Project start Date – 15 April 2015
- Technical progress reports – Annually
- Investigator's Annual Report (IAR) – March 31, 2016
- Database, Collections/Specimens, Archives, and Maps provide to the NPS ATR or Technical Expert—June 30th, 2016.
- Draft Final Report – May 15, 2016
- Final Report – 30 June 2016
- Project End Date – July 31, 2016 (project reports/deliverables are due)
- Final SF424 FFR must be submitted within 90 days of project and date.

C. Recipient agrees to:

- Conduct work and provide reports as requested above.

- Provide WNS research science-in-action photos with appropriate text, which can be used by NPS to create exhibits and other interpretive materials.
- Conduct a public and/or NPS personnel presentation concerning the proposed research and results obtained.

D. NPS agrees to:

- Assist with WNS fieldwork but not be directly involved in the authoring of any publications.
- Be involved in the planning of what WNS research science-in-action photos will be taken.
- Utilize results and photos in providing interpretation to the public concerning WNS and the potential threat it poses to southwestern bats.
- Encourage rangers to assist with WNS photography and fieldwork.

E. Cooperative Agreements or Task Agreements involving Student Interns or Student Employees or Research Associates

Background

In cooperative agreements or task agreements with universities where the university utilizes interns, student employees, research associates (RAs) or cooperators on-site (hereafter called “cooperator personnel”), these cooperator personnel sometimes work on government sites in close proximity to federal employees. It is illegal (without specific statutory authority) for federal employees to directly supervise the cooperator personnel or any university employees or for the students or other university employees to supervise federal employees. When cooperator personnel are working on an NPS site, it is important that there is a clear distinction between students and federal employees.

Office Environment and Vehicles

- The office space of the cooperator personnel and NPS personnel should be clearly labeled (Name and NPS or University affiliation on office or cubicle space).
- Cooperator personnel should be listed separately from NPS personnel in telephone lists, other identification or organizational rosters, and publication credits.
- Cooperator personnel should not receive “all-employee” e-mail or other communications intended for NPS personnel (unless it relates directly to the work the cooperator is doing for the NPS). When the e-mail does relate to the work being done, a copy of the same e-mail message should be sent to the University or cooperator’s supervisor.
- Cooperator personnel may use NPS e-mail systems when the communication relates directly to the work the cooperator is doing for the NPS. The e-mail addresses of the cooperator personnel must include a label associated with their

NPS e-mail address that identifies the cooperator's status (i.e., "Linda Webb, Cooperator" would be the label associated with the e-mail address, linda_webb@contractor.nps.gov). Doing so clearly identifies this individual each time they send an e-mail message using the NPS system, and it identifies their status as a research associate, student intern or student employee in the e-mail directory.

- Unless stipulated in the agreement, cooperator personnel should not drive government vehicles.
- Unless stipulated in the agreement, cooperator personnel should not ride as a passenger in a government vehicle. When this is planned as part of the agreement, an appropriate amount of liability insurance should be negotiated.
- Prior written approval by the Park Superintendent or Center Manager must be obtained in order for a task to allow cooperator personnel to drive or ride in government vehicles.

Supervision and Scheduling

- Each task must specify the university's/cooperator's supervisor for the cooperator personnel.
- Unless stipulated in the agreement, NPS staff should not set hours for cooperator personnel, specify where the work should be done, or conduct performance appraisals. National Park Service staff may give performance feedback to the cooperator personnel supervisor.
- Cooperator personnel should report leave, scheduling, and other related issues to the university or cooperator's supervisor, not to NPS employees. The supervisor of the cooperator personnel should then communicate with the NPS. National Park Service employees cannot directly supervise cooperator personnel on a day-to-day basis. Work should be given to the cooperator personnel (via the cooperator's supervisor) on a "task basis." Cooperators should work without NPS supervision to accomplish each task, although technical consultations and cooperation is permissible.
- The Cooperator will be responsible for any disciplinary action needed to correct student employee conduct or performance problems. The NPS agreements technical representative will inform the university/cooperator's supervisor of any conduct or performance problems.
- The Cooperator will remove student employees from their positions if they fail to improve performance or address conduct issues.
- The NPS will review and provide feedback to students or interns regarding work assignments.

- The NPS will inform the cooperator of conduct or performance problems with cooperator personnel so that the university can counsel employees and correct the performance problems.
- The NPS will recommend to the cooperator dismissal of cooperator personnel based on conduct or performance issues.
- The Cooperator will hire students, interns or RAs to work on NPS tasks identified in the agreement. Hiring will be conducted in consultation with the NPS Agreements Technical Representative (ATR).
- The Cooperator will: pay students, interns or RAs for hours they have worked in support of the agreement.

Representation and Communication

- Cooperator personnel cannot in any way represent themselves to the public as NPS employees.
- Cooperator personnel are required to wear visible identification at all times.

Other Issues

- Cooperator personnel should not list an NPS affiliation on publications, but rather should list the cooperative agreement under which the work was performed.
- Cooperator personnel should not be invited to official NPS “social” events.
- Cooperator personnel are not authorized to purchase property and supplies with government funds.
- Cooperator personnel will follow the local policy of the facility when federal facilities are closed due to early release for holidays, snow days, etc.

ARTICLE IV – TERM OF AGREEMENT

This Task Agreement will become effective on the date of final signature and extend through 30 June 2016.

ARTICLE V – KEY OFFICIALS

A. Key officials are essential to ensure maximum coordination and communication between the parties and the work being performed. They are:

1. **For the NPS:**

Agreement Technical Representative:

Steve Baumann

Resources Management Chief
National Park Service
Intermountain Region/ELMAO
123 East Roosevelt Avenue
Grants, NM 87020
Phone: 505-285-4641 x32
Fax: 505-285-5661
steve_baumann@nps.gov

Awarding Officer:

Kelvin A. Delaney
Financial Assistance Officer
National Park Service
Intermountain Region
12795 W. Alameda Parkway
Lakewood, CO 80228
Phone: 303-969-2796
Fax: 303-969-2786
Email: kelvin_delaney@nps.gov

CPCESU Research Coordinator:

Todd Chaudhry, Ph.D.
Research Coordinator
Colorado Plateau Cooperative Ecosystem Studies Unit
National Park Service
Northern Arizona University
PO Box 15018
Flagstaff, AZ 86011
Phone: 928-523-6638
Email: todd_chaudhry@nps.gov

2. **For Recipient:**

Principal Investigator:

Diana E. Northup, Ph.D.
Visiting Associate Professor; Professor Emerita
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Administrative Contact:

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- B. **Communications** - Recipient will address any communication regarding this Agreement to the Awarding Officer with a copy also sent to the ATR. Communications that relate solely to routine operational matters described in the current work plan may be sent only to the ATR
- C. **Changes in Key Officials**-Neither the NPS nor Recipient may make any permanent change in a key official without written notice to the other party reasonably in advance of the proposed change. The notice will include a justification with sufficient detail to permit evaluation of the impact of such a change on the scope of work specified within this Agreement. Any permanent change in key officials will be made only by modification to this Agreement.

ARTICLE VI – AWARD AND PAYMENT

- A. Financial Assistance: NPS will provide funding to Recipient in an amount not to exceed \$64,500.00 for the work described in Article III and in accordance with the approved budget (Attachment A). Any award beyond the current fiscal year is subject to availability of funds.
- B. Recipient shall request payment in accordance with the following:
 - 1. **Method of Payment.** Payment will be made by advance and/or reimbursement through the Department of Treasury's ASAP system.
 - 2. **Requesting Advances.** Requests for advances must be submitted via the ASAP system. Requests may be submitted as frequently as required to meet the needs of the FA Recipient to disburse funds for the Federal share of project costs. If feasible, each request should be timed so that payment is received on the same day that the funds are dispersed for direct project

costs and/or the proportionate share of any allowable indirect costs. If same-day transfers are not feasible, advance payments must be as close to actual disbursements as administratively feasible.

3. **Requesting Reimbursement.** Requests for reimbursements must be submitted via the ASAP system. Requests for reimbursement should coincide with normal billing patterns. Each request must be limited to the amount of disbursements made for the Federal share of direct project costs and the proportionate share of allowable indirect costs incurred during that billing period.
4. **Adjusting payment requests for available cash.** Funds that are available from repayments to, and interest earned on, a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds must be disbursed before requesting additional cash payments.
5. **Bank Accounts.** All payments are made through electronic funds transfer to the bank account identified in the U.S Treasury ASAP system by the FA Recipient.
6. **Supporting Documents and Agency Approval of Payments.** Additional supporting documentation and prior Agency (NPS) approval of payments may be required when/if a FA Recipient is determined to be “high risk” or has performance issues. If prior Agency payment approval is in effect for an award, the ASAP system will notify the FA Recipient when they submit a request for payment. The Recipient must then notify the NPS Awarding Officer identified on the Assistance Agreement that a payment request has been submitted. The NPS Awarding Officer may request additional information from the Recipient to support the payment request prior to approving the release of funds, as deemed necessary. The FA Recipient is required to comply with these requests. Supporting documents may include invoices, copies of contracts, vendor quotes, and other expenditure explanations that justify the reimbursement requests.

ARTICLE VII – REPORTS AND/OR DELIVERABLES

- A. Specific projects or activities within this agreement will be tracked and reported by quarterly submission of a SF-425 Federal Financial Report (FFR) and quarterly submission of a Performance Report. A final SF-425 and Performance Report shall be submitted at the completion of the Agreement. The following reporting period end dates shall be used for interim reports: 3/31, 6/30, 9/30, 12/31. For final the SF-425 and Performance Report, the reporting period end date shall be the end date of the agreement. Interim reports shall be submitted no

later than 30 days after the end of each reporting period. Annual and final reports shall be submitted no later than 90 days after the end period date. All reports shall be submitted via email to the NPS Awarding Officer with a copy to the NPS Agreements Technical Representative via email.

- B. An electronic version of the final report and separate abstract suitable for public distribution will be submitted by the Recipient to the ATR. The ATR will send the final report electronically to NPS's Technical Information Center and carbon-copy the CESU Research Coordinator. Please send Catherine Kisluk at Technical Information Center (TIC) one hard copy and one digital copy of the final report and abstract. Mail the hard copy to: NPS Technical Information Center (TIC) 12795 West Alameda Parkway, Lakewood, Colorado 80228
Attn: Catherine Kisluk and email the digital version to catherine_kisluk@nps.gov and cc the CESU Research Coordinator.

If the report does not contain sensitive material, the Research Coordinator will send it to the host university for posting on the CESU website. If it does contain sensitive material, then a brief abstract must be supplied that will be posted on the CESU website.

ARTICLE VIII – MODIFICATION AND TERMINATION

This Task Agreement may be modified at any time, prior to the expiration date, by the mutual concurrence of the Recipient and the NPS. Modifications will be in writing, approved and signed by the NPS Awarding Officer and the Recipient's signatory official.

ARTICLE IX – GENERAL PROVISIONS

1. **OMB Circulars and Other Regulations.** The following Federal regulations are incorporated by reference into this Agreement (full text can be found at <http://www.ecfr.gov>):

- a) **Administrative Requirements:**

2 CFR, Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, in its entirety;

- b) **Determination of Allowable Costs:**

2 CFR, Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Subpart E;

and

c) **Audit Requirements:**

2 CFR, Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, Subpart F.

ARTICLE IX – ATTACHMENTS

The following documents are attached and made a part of this Task Agreement:

- A. Detailed Budget
- B. SF-424s

**ARTICLE X. - MINIMUM WAGES UNDER EXECUTIVE ORDER 13658
(JANUARY 2015)**

(a) *Definitions.* As used in this clause—

“United States” means the 50 states and the District of Columbia.

“Worker”—

(1) Means any person engaged in performing work on, or in connection with, an agreement covered by [Executive Order 13658](#), and

(i) Whose wages under such agreements are governed by the Fair Labor Standards Act (29 U.S.C. chapter 8), the Service Contract Labor Standards statute (41 U.S.C. chapter 67), or the Wage Rate Requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV),

(ii) Other than individuals employed in a bona fide executive, administrative, or professional capacity, as those terms are defined in [29 C.F.R. § 541](#),

(iii) Regardless of the contractual relationship alleged to exist between the individual and the employer.

(2) Includes workers performing on, or in connection with, the agreement whose wages are calculated pursuant to special certificates issued under [29 U.S.C. § 214\(c\)](#).

(3) Also includes any person working on, or in connection with, the agreement and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.

(b) *Executive Order Minimum Wage rate.*

(1) The Recipient shall pay to workers, while performing in the United States, and performing on, or in connection with, this agreement, a minimum hourly wage rate of \$10.10 per hour beginning January 1, 2015.

(2) The Recipient shall adjust the minimum wage paid, if necessary, beginning January 1, 2016 and annually thereafter, to meet the Secretary of Labor's annual E.O. minimum wage. The Administrator of the Department of Labor's Wage and Hour Division (the Administrator) will publish annual determinations in the Federal Register no later than 90 days before the effective date of the new E.O. minimum

wage rate. The Administrator will also publish the applicable E.O. minimum wage on www.wdol.gov (or any successor Web site) and on all wage determinations issued under the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute. The applicable published E.O. minimum wage is incorporated by reference into this agreement.

(3) (i) The Recipient may request a price adjustment only after the effective date of the new annual E.O. minimum wage determination. Prices will be adjusted only if labor costs increase as a result of an increase in the annual E.O. minimum wage, and for associated labor costs and relevant subaward costs. Associated labor costs shall include increases or decreases that result from changes in social security and unemployment taxes and workers' compensation insurance, but will not otherwise include any amount for general and administrative costs, overhead, or profit.

(ii) Subrecipients may be entitled to adjustments due to the new minimum wage, pursuant to paragraph (b)(2). Recipients shall consider any Subrecipient requests for such price adjustment.

(iii) The Awarding Officer will not adjust the agreement price under this clause for any costs other than those identified in paragraph (b)(3)(i) of this clause, and will not provide duplicate price adjustments with any price adjustment under clauses implementing the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute.

(4) The Recipient warrants that the prices in this agreement do not include allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(5) The Recipient shall pay, unconditionally to each worker, all wages due free and clear without subsequent rebate or kickback. The Recipient may make deductions that reduce a worker's wages below the E.O. minimum wage rate only if done in accordance with [29 C.F.R. § 10.23](#), Deductions.

(6) The Recipient shall not discharge any part of its minimum wage obligation under this clause by furnishing fringe benefits or, with respect to workers whose wages are governed by the Service Contract Labor Standards statute, the cash equivalent thereof.

(7) Nothing in this clause shall excuse the Recipient from compliance with any applicable Federal or State prevailing wage law or any applicable law or municipal ordinance establishing a minimum wage higher than the E.O. minimum wage. However, wage increases under such other laws or municipal ordinances are not subject to price adjustment under this subpart.

(8) The Recipient shall pay the E.O. minimum wage rate whenever it is higher than any applicable collective bargaining agreement(s) wage rate.

(9) The Recipient shall follow the policies and procedures in [29 C.F.R. § 10.24](#)(b) and 10.28 for treatment of workers engaged in an occupation in which they customarily and regularly receive more than \$30 a month in tips.

(c) (1) This clause applies to workers as defined in paragraph (a). As provided in that definition—

(i) Workers are covered regardless of the contractual relationship alleged to exist between the Recipient or Subrecipient and the worker;

(ii) Workers with disabilities whose wages are calculated pursuant to special certificates issued under [29 U.S.C. § 214](#)(c) are covered; and

(iii) Workers who are registered in a bona fide apprenticeship program or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship, are covered.

(2) This clause does not apply to—

(i) Fair Labor Standards Act (FLSA) – covered individuals performing in connection with contracts covered by the E.O., *i.e.* those individuals who perform duties necessary to the performance of the agreement, but who are not directly engaged in performing the specific work called for by the agreement, and who spend less than 20 percent of their hours worked in a particular workweek performing in connection with such agreements;

(ii) Individuals exempted from the minimum wage requirements of the FLSA under [29 U.S.C. § 213](#)(a) and 214(a) and (b), unless otherwise covered by the Service Contract Labor Standards statute, or the Wage Rate Requirements (Construction) statute. These individuals include but are not limited to—

(A) Learners, apprentices, or messengers whose wages are calculated pursuant to special certificates issued under [29 U.S.C. § 214](#)(a).

(B) Students whose wages are calculated pursuant to special certificates issued under [29 U.S.C. § 214](#)(b).

(C) Those employed in a bona fide executive, administrative, or professional capacity ([29 U.S.C. § 213](#)(a)(1) and [29 C.F.R. § part 541](#)).

(d) *Notice.* The Recipient shall notify all workers performing work on, or in connection with, this agreement of the applicable E.O. minimum wage rate under this clause. With respect to workers covered by the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, the Contractor may meet this requirement by posting, in a prominent and accessible place at the worksite, the applicable wage determination under those statutes. With respect to workers whose wages are governed by the FLSA, the Recipient shall post notice, utilizing the poster provided by the Administrator, which can be obtained at www.dol.gov/whd/govcontracts, in a prominent and accessible place at the worksite. Recipients that customarily post notices to workers electronically may post the notice electronically provided the electronic posting is displayed prominently on any Web site that is maintained by the Recipient, whether external or internal, and customarily used for notices to workers about terms and conditions of employment.

(e) *Payroll Records.* (1) The Recipient shall make and maintain records, for three years after completion of the work, containing the following information for each worker:

- (i) Name, address, and social security number;
- (ii) The worker's occupation(s) or classification(s);
- (iii) The rate or rates of wages paid;
- (iv) The number of daily and weekly hours worked by each worker;
- (v) Any deductions made; and
- (vi) Total wages paid.

(2) The Recipient shall make records pursuant to paragraph (e)(1) of this clause available for inspection and transcription by authorized representatives of the Administrator. The Recipient shall also make such records available upon request of the Contracting Officer.

(3) The Recipient shall make a copy of the agreement available, as applicable, for inspection or transcription by authorized representatives of the Administrator.

(4) Failure to comply with this paragraph (e) shall be a violation of [29 C.F.R. § 10.26](#) and this agreement. Upon direction of the Administrator or upon the Awarding Officer's own action, payment shall be withheld until such time as the noncompliance is corrected.

(5) Nothing in this clause limits or otherwise modifies the Recipient's payroll and recordkeeping obligations, if any, under the Service Contract Labor Standards statute,

the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, or any other applicable law.

(f) *Access.* The Recipient shall permit authorized representatives of the Administrator to conduct investigations, including interviewing workers at the worksite during normal working hours.

(g) *Withholding.* The Awarding Officer, upon his or her own action or upon written request of the Administrator, will withhold funds or cause funds to be withheld, from the Recipient under this or any other Federal agreement with the same Recipient, sufficient to pay workers the full amount of wages required by this clause.

(h) *Disputes.* Department of Labor has set forth in [29 C.F.R. § 10.51](#), Disputes concerning Recipient compliance, the procedures for resolving disputes concerning an Recipient's compliance with Department of Labor regulations at [29 C.F.R. § 10](#). Such disputes shall be resolved in accordance with those. This includes disputes between the Recipient (or any of its Subrecipients) and the contracting agency, the Department of Labor, or the workers or their representatives.

(i) *Antiretaliation.* The Recipient shall not discharge or in any other manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under or related to compliance with the E.O. or this clause, or has testified or is about to testify in any such proceeding.

(j) *Subcontractor compliance.* The Recipient is responsible for Subrecipient compliance with the requirements of this clause and may be held liable for unpaid wages due Subrecipient workers.

(k) *Subawards.* The Recipient shall include the substance of this clause, including this paragraph (k) in all subawards, regardless of dollar value, that are subject to the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, and are to be performed in whole or in part in the United States.

ARTICLE XI - SIGNATURES

IN WITNESS WHEREOF, the parties hereto have executed this Task Agreement on the date(s) set forth below.

FOR RECIPIENT

ARTICLE X - SIGNATURES

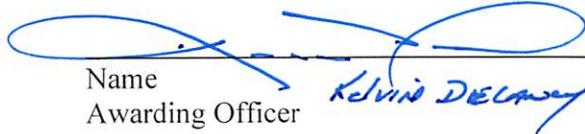
IN WITNESS WHEREOF, the parties hereto have executed this Task Agreement on the date(s) set forth below.

FOR RECIPIENT

Name
Title

Date

FOR THE NATIONAL PARK SERVICE



Name
Awarding Officer *Kelvin DeLaney*

7-1-2015

Date