

**To:** Pilmanis, Adrienne[apilmani@blm.gov]  
**Cc:** Luke John Zachmann[Luke.Zachmann@nau.edu]; khmiller@blm.gov[khmiller@blm.gov]; Brett G Dickson[Brett.Dickson@nau.edu]; Casey Addy[caddy@blm.gov]; Bradshaw, James[jbradshaw@blm.gov]; Matthew Betenson[mbetenso@blm.gov]  
**From:** Backer, Dana  
**Sent:** 2017-08-21T12:56:08-04:00  
**Importance:** Normal  
**Subject:** Re: LCI GSENM Draft Final Report  
**Received:** 2017-08-21T12:56:20-04:00  
[L13AC00249 Mod 2.pdf](#)

Hi Brett and Luke,

I read the draft of the report and certainly have some items to discuss with you. Primarily, the datasets used are quite old at this point and more recent data are available (AIM). As you indicated the plot stratification for AIM would change in 2014, well it changed again in 2015.

I have been holding off in responding because I need to get some background information from my supervisor and Kevin. Kevin has been in/out of office and we have not yet connected. I'm also waiting to hear back from my supervisor regarding his comments to the report.

I would like to discuss the 2015 modification to the agreement for Spatially explicit state-and-transition models to support management planning and improve the statistical efficiency and utility of the AIM Strategy at Grand Staircase-Escalante National Monument (\$35K) and get the status of this component.

The point of contact at GSENM was also a point of clarification. We were going to ask a Range Specialist to be the POC but now my supervisor has appointed me to be the POC. Again, sorry for the delay and the confusion.

Thanks  
Dana

Dana Backer  
Science Program Administrator  
Grand Staircase Escalante National Monument  
Kanab, UT 84741  
435-644-1257

On Mon, Aug 21, 2017 at 10:16 AM, Pilmanis, Adrienne <[apilmani@blm.gov](mailto:apilmani@blm.gov)> wrote:

Hello Luke -

Darn, that all sounds really interesting, but I am no longer the PO for this agreement. It has been passed off to our new Monitoring Coordinator, Casey Addy, and Dana Backer, new GSENM Science Coordinator, is a Technical Contact.

Incidentally, I think that all three of us BLM UT folks will be in Flagstaff for the Biennial in a few weeks. Will you?

Best,  
Adrienne

Adrienne Pilmanis  
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Colorado Plateau Native Plant Program  
Bureau of Land Management  
440 West 200 South, Suite 500  
Salt Lake City, UT 84101  
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[apilmani@blm.gov](mailto:apilmani@blm.gov)

On Fri, Aug 18, 2017 at 4:33 PM, Luke John Zachmann <[Luke.Zachmann@nau.edu](mailto:Luke.Zachmann@nau.edu)> wrote:

Hi Kevin and Adrienne,

I wanted to touch base quickly to see whether there's anything you'd like to follow up on regarding the final Phase I report. Adrienne, last time we spoke you mentioned the possibility of a new PO. We'd be happy to bring someone else up to speed, as necessary. Additionally, I wanted to mention some travel I'm scoping to Denver / Fort Collins in Oct. If necessary, I could also build in some travel to the BLM's headquarters in Salt Lake City. It would be great to meet up to discuss wrapping up Phase II.

Finally, we wanted to mention that there's been a lot of activity here at NAU and at Conservation Science Partners related to the development, analysis, and applications of other national monitoring datasets. Specifically, we've been working with NRCS's NRI, USFS FIA, and NPS I&M data to develop approaches that permit linking samples (even at a national scale) to the bevy of remote sensing data available in the cloud (e.g., through portals such as Earth Engine) in a way that is both flexible, fast, and repeatable, but most importantly doesn't compromise the confidentiality of the underlying data. In short, it's a way to create appendices of covariate data, including remotely sensed data, that can be linked to the monitoring data directly for analysis, inference, and reporting purposes. I've also been working closely Tom Hobbs at CSU to develop a fairly comprehensive statistical framework for analyzing data that are coming out of such programs (often from some sort of 'master sample', in which plots are visiting in a rotating panel). At any rate, there's a lot we could talk about, and certainly a considerable amount of material that may be suitable for rolling up into a phase II report and even future work.

Please let me know if you're expecting to be available in mid- to late-Oct or even early Nov as this might help me finalize travel dates.

Luke

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Luke Zachmann  
Senior Research Specialist

Lab of Landscape Ecology and Conservation Biology  
School of Earth Sciences and Environmental Sustainability  
Northern Arizona University  
Tel 530.214.8905; Fax 530.214.8907

On June 15, 2017 at 5:05:35 PM, Brett G Dickson ([brett.dickson@nau.edu](mailto:brett.dickson@nau.edu)) wrote:

Hi Adrienne and Kevin,

Our apologies for the delayed delivery of this final report (on the original, 'phase I' of the work). You may know Valerie went to work for the USFS last year and Luke has moved to half time at NAU, so I've been short staffed for a while. Nevertheless, we've pulled together the attached, draft final report for your review. We look forward to your comments and discussing when convenient.

Considering the data and results in this report, one (as-yet informal) take-home we'd like to discuss entails the idea that all information is good information as long as it is modeled appropriately. If these data did not arise from a probabilistic sampling design, or are otherwise not highly informative, then it may not be worth the expense to digitize these data (or implement in the context of a statistical model). As such, your final judgement and knowledge about the available resources, such as funding, interns, etc., will be critical as we consider moving this particular effort any further forward.

Also, all of the code used for the representation analyses and the matching is available via Bitbucket: <https://bitbucket.org/lzachmann/gsenm>. We can invite collaborators upon request.

In light of the delays in reporting the attached work to you, we still would be excited by the opportunity to advance the outcomes and discuss future possibilities when convenient. Thanks for your patience.

Best,

Brett

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Brett G. Dickson, Ph.D.

Associate Professor

Lab of Landscape Ecology and Conservation Biology

Landscape Conservation Initiative

School of Earth Sciences and Environmental Sustainability

Northern Arizona University

Flagstaff, AZ 86011-5694

Tel 928.523.3592 - Fax 928.523.7423

<h2>Grant and Cooperative Agreement</h2>				CHOOSE ONE: <input checked="checked" type="checkbox"/> COOPERATIVE AGREEMENT <input type="checkbox"/> GRANT	
CHOOSE ONE: <input type="checkbox"/> EDUCATION <input type="checkbox"/> FACILITIES <input type="checkbox"/> RESEARCH <input type="checkbox"/> SDCR <input type="checkbox"/> TRAINING					
1. GRANT/COOPERATIVE AGREEMENT NUMBER L13AC00249		2. SUPPLEMENT NUMBER 0002		3. EFFECTIVE DATE 09/03/2015	
4. COMPLETION DATE 09/30/2018					
5. ISSUED TO NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip) NORTHERN ARIZONA UNIVERSITY Attn: ATTN GOVERNMENT POC 523 S KNOLES DR ROOM 106 FLAGSTAFF AZ 86011-0001			6. ISSUED BY    BLM UT-STATE OFC ADM SVCS BR(UT952) Mailing Address: 440 WEST 200 SOUTH, SUITE 500 SALT LAKE CITY UT 84101		
7. TAXPAYER IDENTIFICATION NO. (TIN)			9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (Name & Phone) Dr. Brett G. Dickson, 928-523-3592		
8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO.			brett.dickson@nau.edu		
10. RESEARCH, PROJECT OR PROGRAM TITLE BLM UT Integration of Historic & Contemporary Data to Inform Assessment, Monitoring, and Decision-Making on the GSENM.					
11. PURPOSE See Schedule					
12. PERIOD OF PERFORMANCE (Approximately) 09/15/2013 through 09/30/2018					
13A.		AWARD HISTORY		13B.	
PREVIOUS		\$24,675.00		PREVIOUS	
THIS ACTION		\$35,000.00		THIS ACTION	
CASH SHARE		\$0.00		TOTAL	
NON-CASH SHARE		\$0.00			
RECIPIENT SHARE		\$0.00			
TOTAL		\$59,675.00			
14. ACCOUNTING AND APPROPRIATION DATA 01					
PURCHASE REQUEST NO.		JOB ORDER NO.		AMOUNT	
0020074630				STATUS	
15. POINTS OF CONTACT					
		NAME		E-MAIL ADDRESS	
TECHNICAL OFFICER		Kevin Miller		khmiller@blm.gov	
NEGOTIATOR					
ADMINISTRATOR		Melanie Beckstead		mbeckstead@blm.gov	
PAYMENTS					
16. THIS AWARD IS MADE UNDER THE AUTHORITY OF: Federal Land Policy and Management Act of 1976, 43 USC. 1737 (b), as amended, Public Law 94-579					
17. APPLICABLE STATEMENT(S), IF CHECKED:			18. APPLICABLE ENCLOSURE(S), IF CHECKED:		
<input type="checkbox"/> NO CHANGE IS MADE TO EXISTING PROVISIONS <input type="checkbox"/> FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT			<input type="checkbox"/> PROVISIONS <input type="checkbox"/> SPECIAL CONDITIONS <input type="checkbox"/> REQUIRED PUBLICATIONS AND REPORTS		
UNITED STATES OF AMERICA			COOPERATIVE AGREEMENT RECIPIENT		
CONTRACTING/GRANT OFFICER Maria Gochis			AUTHORIZED REPRESENTATIVE		DATE

Digitally signed by MARIA GOCHIS  
 DN: c US, o U.S. Government,  
 ou Department of the Interior, ou Bureau  
 of Land Management, cn MARIA GOCHIS,  
 0.9.2342.19200300.100.1.1 1400100094001  
 4  
 Date: 2015.09.04 11:56:25 -06'00'

DOI-2019-05 01424

## Grant and Cooperative Agreement

ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)	QUANTITY (C)	UNIT (D)	ESTIMATED COST	
				UNIT PRICE (E)	AMOUNT (F)
	<p>CFDA Number: 15.231</p> <p>DUNS Number: 806345542+0000</p> <p>BLM-UT Integration of historical and contemporary data to inform assessment, monitoring, and decision-making on the Grand Staircase-Escalante National Monument</p> <p>11. PURPOSE:</p> <p>The purpose of this modification is to increase funding will increase in the amount of \$35,000 for ongoing work as stated in recipient's proposal package entitled Spatially explicit state and transition models to support management planning and improve the statistical efficiency and utility of the AIM Strategy at Grand Staircase Escalante National Monument, dated June 1, 2015. The following recipient documents are incorporated herein, by reference only SF424, SF424a, SF424b and budget detail and justification.</p> <p>1. Section VIII. Deliverables and Reports:</p> <p>Reporting requirements will change to Semi-Annual for both Financial and Performance reporting.</p> <p>Semi-Annual Reporting Period:</p> <p>Semi-annual financial and performance reports are due 30 calendar days past the reporting period end date and each reporting period end date thereafter for the term of the agreement. Below shows the reporting periods and their corresponding report submission due dates</p> <p>January 1 through June 30, submit report by July 30th</p> <p>July 1 through December 31, submit report by January 30th</p> <p>The next SF425 - Federal Financial Report will cover July 1 through September, so recipient can get on track with the new reporting requirements. Performance report will cover October 1, 2014</p> <p>Continued ...</p>				

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	<p>through September 30, 2015, starting Semi-Annual thereafter.</p> <p>2. Section XI. Award Terms and Conditions: Due to changes to Federal grant regulations on December 26, 2013, the Office of Management and Budget (OMB) issued final rules for implementation of the new Uniform Guidance for grants. The Uniform Guidance consolidates guidance previously contained in the OMB circulars governing grants administration (A-21, A-87, A-110, and A-122, A-89, A-102, and A-133: and the guidance in Circular A-50 on Single Audit Act follow-up). The new Uniform Guidance provides a streamlined format to improve clarity and consistency and may affect how you receive, manage, expend and report Federal grant funds. Currently, guidance is posted in Title 2 of the Code of Federal Regulations (CFR).</p> <p>The U.S. Department of the Interior agencies, including the Bureau of Land Management implemented the new regulations on December 26, 2014 in the 2 CFR, Part 200: UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS</p> <p>This replaces language in the current agreement to read as follows:</p> <p>1. Administrative and National Policy Requirements</p> <p>a. Office of Management and Budget Circulars. By accepting additional Federal funding under the current Federal assistance, your organization agrees to abide by the applicable OMB Circulars in the expenditure of Federal funds and performance under this program. OMB circulars are available at the following web site:  <a href="http://www.whitehouse.gov/omb/circulars/">http://www.whitehouse.gov/omb/circulars/</a></p> <p>b. Administrative Requirements.</p> <p>1) 2 CFR Part 200 Subparts A through D - Uniform Administrative Requirements and Cost Principles.</p> <p>Continued ...</p>				

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	<p>2) 2 CFR, Subpart B, 200.112 Conflict of Interest</p> <p>Conflict of Interest:</p> <p>The Recipient must establish safeguards to prohibit its employees and Subrecipients from using their positions for purposes that constitute or present the appearance of a personal or organizational conflict of interest. The Recipient is responsible for notifying the Grants Officer in writing of any actual or potential conflicts of interest that may arise during the life of this award. Conflicts of interest include any relationship or matter which might place the Recipient or its employees in a position of conflict, real or apparent, between their responsibilities under the agreement and any other outside interests. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, consideration of future employment arrangements with a different organization, or decision-making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Recipient and/or Recipient's employees and Sub-recipients in the matter.</p> <p>The Grants Officer and the servicing Ethics Counselor will determine if a conflict of interest exists. If a conflict of interest exists, the Grants Officer will determine whether a mitigation plan is feasible. Mitigation plans must be approved by the Grants Officer in writing. Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award.</p> <p>Failure to make required disclosures may result</p> <p>Continued ...</p>				



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	<p>in any of the remedies described in 2 CFR Â§ 200.338, Remedies for Noncompliance, including suspension or debarment (see also 2 CFR Part 180).</p> <p>Definitions:</p> <p>This section incorporates by reference 2 CFR Part 200, Subpart A, Acronyms and Definitions including, but not limited to the following additional terms:</p> <p>A. Conflict of Interest is defined as any relationship or matter which might place the Recipient, its employees, and/or its Subrecipients in a position of conflict, real or apparent, between their responsibilities under the agreement and any other outside interests. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, consideration of future employment arrangements with a different organization, or decision-making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Recipient and/or Recipient's employees and Subrecipients in the matter.</p> <p>B. Close Personal Relationship means a Federal award program employee's childhood or other friend, sibling, or other family relations that may compromise or impair the fairness and impartiality of the Proposal Evaluator and Advisor and Grants Officer in the review, selection, award, and management of a financial assistance award.</p> <p>C. Discretionary Federal Financial Assistance means Federal awards including grants and agreements that are awarded at the discretion of the agency.</p> <p>D. Employment means:</p> <p>Continued ...</p>				

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	<p>1. In any capacity, even if otherwise permissible, by any applicant or potential applicant for a Federal financial assistance award.</p> <p>2. Employment within the last 12 months with a different organization applying for some portion of the award's approved project activities and funding to complete them OR expected to apply for and to receive some portion of the award and/or</p> <p>3. Employment with a different organization of any member of the organization employee's household or a relative with whom the organization's employee has a close personal relationship who is applying for some portion of the award's approved project activities and funding to complete them OR expected to apply for and to receive some portion of the award.</p> <p>E. Non-Federal entity means a State, local government, Indian tribe, institution of higher education, or nonprofit organization that carries out a Federal award as a Recipient or Subrecipient.</p> <p>F. Recipient means a non-Federal entity that receives a Federal award directly from a Federal awarding agency to carry out an activity under a Federal program. The term Recipient does not include Subrecipients.</p> <p>G. Subrecipient means a non-Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program, but does not include an individual who is a beneficiary of such program. A Subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency.</p> <p>2. Program Legislation and/or Regulations.</p> <p>a. Cost Principles: 48 CFR 1, Subpart 31.2, Contracts with Commercial Organizations</p> <p>Continued ...</p>				

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	<p>b. Indirect Cost Rate Negotiations. For information on indirect cost rate negotiations, contact the Interior Business Center (IBC) Indirect Cost Services Division by telephone at (916) 566-7111 or by e-mail at: ics@ibc.doi.gov. Visit the IBC Indirect Cost Services Division website at <a href="http://www.doi.gov/ibc/services/Indirect%20Cost%20Services/index.cfm">http://www.doi.gov/ibc/services/Indirect Cost Services/index.cfm</a> for more information</p> <p>3. Standard Award Terms and Conditions</p> <p>a. Code of Federal Regulations/Regulatory Requirements, as applicable (contact your program officer with any questions regarding the applicability of the following):</p> <p>1) 2 CFR Part 25, Universal Identifier and System of Award Management</p> <p>2) 2 CFR Part 170, Reporting Subawards and Executive Compensation</p> <p>3) 2 CFR Part 175, Award Term for Trafficking in Persons</p> <p>4) 2 CFR Part 1400, Government-wide Debarment and Suspension (Non-procurement)</p> <p>5) 2 CFR Part 1401, Requirements for Drug-Free Workplace (Financial Assistance)</p> <p>6) 43 CFR 18, New Restrictions on Lobbying: Submission of an application also represents the applicant's certification of the statements in 43 CFR Part 18, Appendix A, Certification Regarding Lobbying.</p> <p>7) 41 USC Â§4712, Pilot Program for Enhancement of Recipient and Sub-recipient Employee Whistleblower Protection: This requirement applies to all awards issued after July 1, 2013 and shall be in effect until January 1, 2017.</p> <p>8) 41 USC Â§6306, Prohibition on Members of Congress Making Contracts with Federal Government: No member of or delegate to the</p> <p>Continued ...</p>				

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	<p>United States Congress or Resident Commissioner shall be admitted to any share or part of this award, or to any benefit that may arise therefrom; this provision shall not be construed to extend to an award made to a corporation for the public's general benefit.</p> <p>9) Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving: Recipients are encouraged to adopt and enforce policies that ban text messaging while driving, including conducting initiatives of the type described in section 3(a) of the order.</p> <p>10) Executive Order 13043 , Increase Seat Belt Use in the United States Recipients of grants/cooperative agreements and/or sub-awards are encouraged to adopt and enforce on-the-job seat belt use policies and programs for their employees when operating company-owned, rented, or personally owned vehicles. These measures include, but are not limited to, conducting education, awareness, and other appropriate programs for their employees about the importance of wearing seat belts and the consequences of not wearing them.</p> <p>11). Executive Order 13658, Minimum Wage for Contractors, seeks to increase the efficiency and cost savings in the work performed by parties who contract with the Federal Government by increasing the hourly minimum wage paid by those contractors (see 79 CFR 9851). The Executive Order requires agencies to include a clause in applicable contracts and Contract like instruments that specifies, as a condition of payment, that the Executive Order Minimum wage be paid to workers in the performance of the contract and any subcontracts.</p> <p>Delivery Location Code: 0004276651</p> <p>BLM-GRAND STAIRCASE</p> <p>Continued ...</p>				

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00020	<p>669 South Highway 89A KANAB UT 84741 US</p> <p>Account Assignment: K G/L Account: 6100.411C0 Business Area: L000 Commitment Item: 411C00 Cost Center: LLUT030000 Functional Area: L16100000.DF0000 Fund: 15XL1109AF Fund Center: LLUT030000 Project/WBS: LX.SI.MONI0000 PR Acct Assign Line: 01 Period of Performance: 09/15/2013 to 09/30/2018</p> <p>Provide technical assistance to BLM in developing remote sensing approaches to improving AIM sampling design on Grand Staircase-Escalante National Monument</p> <p>Mod L13AC00249 AIM Obligated Amount: \$35,000.00</p> <p>The purpose of this modification is to change the period of performance begin date from 09/15/2015 to 09/15/2015. This is an administrative error. Recipient is not required to sign on administrative changes.</p>				35,000.00