

## **2016 Annual Report**

to the USDA Forest Service under Sponsor Award

#16-DG-11031600-009 for 2016 (NAU Projects 1003026-1003031)

#17-DG-11031600-047 for 2017 (NAU Projects 1003334-1003338)



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## Summary

This report presents an integrated and coordinated series of actions for \$2.4 million awarded to the ERI in Fiscal Years 2016 and 2017 under CFDA 10.694, Southwest Forest Health and Wildfire Prevention.

The information provided herein reflects our annual progress as of 07/01/2017 and comprises the final report for 2016 deliverables under #16-DG-11031600-009 (NAU Projects 1003029-1003031). It also includes a progress report for deliverables received under 17-DG-11031600-047 (NAU Projects 1003334-1003338).

All of the activities (deliverables) summarized in this report respond to land manager and stakeholder requests and needs. The deliverables are informed by best available science and scientific evidence which is translated into the language and product appropriate for the target audience. The ERI actively delivers information using a variety of approaches that includes individual and group presentations and discussions, to printed and electronically accessible fact sheets, short technical reports, longer white papers and management reports, and peer reviewed archival literature.

# USFS FY16 Plan of Work - #16-DG-11031600-009

Annual Report to the **USDA Forest Service**

for 2016 and 2017

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## FY16 Deliverables (Final) - #16-DG-11031600-009

<b>Project 1: Science Support for Collaborative Restoration and Conservation from the Local to the Landscape Scale</b>	
<b>Deliverable</b>	<b>Status</b>
<b>1.1) Provide support for the Four Forest Restoration Initiative (4FRI), a Collaborative Forest Landscape Restoration Act project.</b>	
<p>a) <u>Deliverable</u>: Report on technical assistance to the multi-party monitoring board and the Forest Service as EIS#1 proceeds to implementation; and support for EIS#2 analysis.</p> <p>b) <u>Deliverable</u>: Report on leadership activities and work group participation.</p> <p>c) <u>Deliverable</u>: Report on IT support for the 4FRI website and BASECAMP (an online collaborative work space) and administrative support including minutes and agendas.</p>	<p>a) Report on technical assistance:</p> <ul style="list-style-type: none"> <li>• Sánchez Meador, A.J. Ongoing. Assists 4FRI ID Team and Stakeholder Group with current and future uses of LiDAR for assessing the Preponderance of Young Large Trees (PYLT) information and for quantifying current conditions in support of Rim Country Environmental Impact Statement (EIS) alternative “development” by preparing data layers.</li> <li>• Sánchez Meador, A.J. August 2, 2016. Attended the 4FRI PYLT field trip and provided discussion points.</li> <li>• Waltz, A. August 22, 2016. Completed a data needs assessment on “pine stringers” and delivered the information to Mary Lata from the USFS 4FRI ID Team.</li> <li>• Waltz, A., and T. Wasserman. August–December 2016. Coordination and technical assistance for the 4FRI Optimization Analysis. Conducted in cooperation with the Rocky Mountain Research Station and several stakeholders.</li> <li>• Waltz, A. October 5, 2016. Provided information to the 4FRI ID team regarding research on PIP0 regeneration by soil type.</li> <li>• Springer, J. October 28, 2016. Provided assistance to 4FRI ID Team with research design and species selection for study on ponderosa pine litter smoke on the sprouting of species native to northern Arizona.</li> <li>• Springer, J. May 22, 2017. Provided technical assistance on rare plants for Debra Crisp from the 4FRI ID Team, CNF.</li> <li>• Huffman, D.W., and A.J Sánchez Meador. June 2016. “Ecology and Restoration of Dry Mixed-Conifer Forests.” Presentation at the 4FRI Stakeholder Group’s Meeting. Pinetop, AZ. 40 participants.</li> <li>• Waltz, A. May 2017. Literature analysis and information sharing with the 4FRI ID Team and Stakeholder Group on the subject of dwarf mistletoe.</li> <li>• Waltz, A. May 16, 2017. Field trip presentation on dwarf mistletoe for R3 Regional Forester, 4FRI ID Team and Stakeholder Group. Flagstaff, AZ. ~50 participants.</li> </ul> <p>b) 4FRI leadership support:</p> <ol style="list-style-type: none"> <li>i. Stakeholder Group: <ul style="list-style-type: none"> <li>• Vosick, D. Ongoing. Monthly participation and leadership assistance to support the Stakeholder Group and Steering Committee.</li> </ul> </li> <li>ii. Working Groups: <ul style="list-style-type: none"> <li>• Vosick, D. Ongoing. Participation in monthly meetings of the Comprehensive Implementation Working Group.</li> </ul> </li> </ol>

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	<ul style="list-style-type: none"> <li>• Dubai, T. Ongoing. Support for Communications Working Group on an as-needed basis. Materials review and formatting.</li> <li>• Esch, B. Ongoing. Serves as the ERI representative on the 4FRI Multi-Party Monitoring Board. Monthly participation includes attendance at 1-3 meetings, completion of multiple data requests, and monitoring of field operations. Serves as group chair quarterly.</li> <li>• Esch, B. Ongoing. Leads a Multi-Party Monitoring Board subgroup focused on 4FRI forest structure monitoring. Annual participation includes attendance at 6–8 meetings and 3–5 days of field data collection.</li> <li>• Greco, B. May–December 2016. Served as the ERI representative on the 4FRI Planning Work Group. Monthly participation included attendance at 2–3 meetings including a minimum of 1 conference call and completion of multiple data requests. Various locations in northern and eastern Arizona.</li> <li>• Greco, B. July 15, 2016. Developed response (for the 4FRI Planning Work Group) to the 4FRI Planning Team regarding the Rim Country Analysis Proposed Action.</li> <li>• Waltz, A. May 2017. Drafted letter describing Stakeholder Group consensus on the issue of dwarf mistletoe management for the Regional Forester.</li> </ul> <p>c) Report on IT and administrative support:</p> <p>i. IT Support:</p> <ul style="list-style-type: none"> <li>• Norton, H. Year-round updating and maintenance of the 4FRI website.</li> </ul> <p>ii. Administrative Support:</p> <ul style="list-style-type: none"> <li>• Jourden, A. Ongoing. Monthly agenda preparation, minutes, site scheduling and management for stakeholder group general meetings.</li> <li>• Jourden, A. Ongoing. Management of BASECAMP, an internal online communication tool.</li> <li>• Esch, B. Ongoing. Monthly. Agenda preparation, minutes, and meeting coordination for steering committee calls.</li> </ul>
<b>1.2) Assistance to landscape-scale restoration projects across the West. Provide scientific and technical support and follow-up from the April 2016 National Restoration Workshop.</b>	
<p>a) <u>Deliverable</u>: Report on follow-up and actions in response to the April 2016 National Restoration Workshop.</p> <p>b) <u>Deliverable</u>: White paper describing lessons learned from a learning track (utilization or planning) and capturing science needs from stakeholders and agency partners, based on the April 2016 National Restoration Workshop.</p>	<p>a) Report on follow-up and actions:</p> <ul style="list-style-type: none"> <li>• Waltz, A. December 1, 2016. Organized and facilitated a workshop session on Regional (AZ, NM and CO) CFLRP learning at the Beyond Hazardous Fuels: Managing Fire for Social, Economic and Ecological Benefits – 3rd Southwest Fire Ecology Conference. Tucson, AZ. December 1, 2016. During this session ERI gave two (2) presentations:             <ol style="list-style-type: none"> <li>1. Waltz, A. December 1, 2016. “Continuing work on ecological metrics for success for large landscapes.” 50 participants.</li> <li>2. Stoddard, M.T. December 1, 2016. “Efficacy of resource objective wildfires for restoring ponderosa pine ecosystems in northern Arizona.” 50 participants.</li> </ol> </li> </ul> <p>b) Waltz, A. October 5, 2016. Conference call with Lindsay Buchanan to discuss lessons learned following the National CFLRP Workshop. ERI and the USFS Washington Office concluded that the ERI should respond to the information and questions that were developed at the conference on the</p>

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	topic of Best Available Scientific Information. The result is the draft paper for submission to Journal of Forestry, or Ecology and Society (“Land manager use of Best Available Science Information: Defining Best and Available”)
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### ***Project 2: Information Analysis to Assist Evidence-Based Conservation***

Deliverable	Status
<b>2.1) Evidence-based review of the literature describing fire regimes in ponderosa pine and dry mixed-conifer forests in the West.</b>	
a) <u>Deliverables:</u> i. Literature review. ii. Completed draft manuscript.	d) Deliverables: i. Literature review completed. ii. Huffman, D.W., W.W. Covington, A.J. Sánchez Meador, A.E.M. Waltz, and P.Z. Fulé. 2017. Historical fire regimes, current conditions, and climate change: the growing imperative for restoration of frequent-fire forests in the western United States. Manuscript for publication completed. (ERI# 246).

### ***Project 3: Ecological Monitoring and Evaluation for Adaptive Management***

Deliverable	Status
<b>3.1) Continue development of long-term study in a mixed-conifer forest on the Mogollon Rim Ranger District of the Coconino National Forest (build from FY15).</b>	
a) <u>Deliverables:</u> i. Report on progress. ii. Coconino National Forest to train crews and implement treatment marking.	a) Deliverables: i. Report on progress: <ul style="list-style-type: none"> <li>• Waltz, A. Ongoing. Provides leadership, coordination and research support to the Mogollon LEARN project.</li> <li>• Sensibaugh, M. June 29, 2016. Facilitated a meeting with the USFS Mogollon Rim Ranger District leadership and staff to finalize the strategy and prescriptions for the mixed-conifer LEARN plots on the district. Mogollon Rim RD, Coconino NF. 7 participants.</li> </ul> ii. The Mogollon LEARN project cannot be moved toward marking and implementation until the Section 18 NEPA review is completed. Unfortunately, even with extra support from the Coconino Supervisor’s office (Michael Dechter, NEPA specialist), the district has not completed the Section 18. This is unfortunate, as the pre-treatment data is starting to get old enough to influence post-treatment data. Our last meeting determined only the wildlife BA needs to be completed, and then reviewed by USFWS, which is confident of approval (only a control unit is within ¼ mile of an MSO PAC).
<b>3.2) Effects of pre-wildfire, restoration, and fuels treatments on mixed-conifer forest understory communities: Re-measurement of Wallow Fire sites.</b>	
a) <u>Deliverables:</u> i. Manuscript prepared for publication. ii. Presentation for USFS leadership and staff, collaborative stakeholder groups,	a) Deliverables: i. Springer, J.D., M.T. Stoddard, D.W. Huffman, A.J. Sánchez Meador, A.E.M. Waltz. 2017. Impacts of hazardous fuels treatments on warm-dry mixed-conifer plant communities prior to high-intensity wildfire. Manuscript for publication completed. (ERI #244) ii. Presentation:

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and/or professional conference.	<ul style="list-style-type: none"> <li>Waltz, A., J.P. Roccaforte, and A.J. Sánchez Meador. May 17, 2017. “Wallow Fire After 5-years: Metrics of Forest Resiliency.” Forest Leadership Team, Apache-Sitgreaves National Forests. Eagar, AZ. 20 participants. <i>Presentation</i>.</li> </ul>
<b>3.3) Secondary mortality of trees after wildfire in mixed-conifer forests: Comparison of treated and untreated sites. Collaborative project with USFS Forest Health and Protection.</b>	
a) <u>Deliverables:</u> <ol style="list-style-type: none"> <li>i. Manuscript prepared for publication.</li> <li>ii. Presentation for USFS leadership and staff, collaborative stakeholder groups, and/or professional conference.</li> </ol>	a) Deliverables: <ol style="list-style-type: none"> <li>i. Roccaforte, J.P., A.J. Sánchez Meador, A.E.M. Waltz, M.L. Gaylord, M.T. Stoddard, and D.W. Huffman. 2017. Delayed tree mortality, bark beetle activity, and regeneration dynamics influence resiliency and recovery following the Wallow Fire, Arizona, USA. Manuscript for publication completed. (ERI# 242).</li> <li>ii. Presentation:               <ul style="list-style-type: none"> <li>Waltz, A.E.M., J.P. Roccaforte, and A.J. Sánchez Meador. May 17, 2017. “Wallow Fire After Five Years: Metrics of Forest Resiliency.” Forest Leadership Team, Apache-Sitgreaves National Forests. Eagar, AZ. 20 participants. <i>Presentation</i>.</li> </ul> </li> </ol>
<b>3.4) Fire severity and climate effects on structure, species composition, and regeneration at the ponderosa pine–mixed-conifer forest ecotone.</b>	
a) <u>Deliverables:</u> <ol style="list-style-type: none"> <li>i. Manuscript prepared for publication.</li> <li>ii. Presentation for USFS leadership and staff, collaborative stakeholder groups, and/or professional conference.</li> </ol>	a) Deliverables: <ol style="list-style-type: none"> <li>i. Stoddard, M.T., D.W. Huffman, J.E. Crouse, and A.J. Sánchez Meador. 2017. Forest changes 15 years after the Leroux Fire in northern Arizona: A case study. Manuscript for publication completed. (ERI# 245).</li> <li>ii. Presentation:               <ul style="list-style-type: none"> <li>Crouse, J.E, and M.T. Stoddard. July 19, 2017. “The Ecological Restoration Institute’s ongoing research on the San Francisco Peaks.” Greater Flagstaff Forest Partnership. Flagstaff, AZ. 7 participants. <i>Presentation</i>.</li> </ul> </li> </ol>
<b>3.5) How does re-entry with resource benefit wildfire affect stand structure at multiple scales? This project builds on work completed in FY15. New sites will be identified for study on USFS and/or NPS lands in northern Arizona.</b>	
a) <u>Deliverables:</u> <ol style="list-style-type: none"> <li>i. Manuscript prepared for publication.</li> <li>ii. Presentation for USFS leadership and staff, collaborative stakeholder groups, and/or professional conference.</li> </ol>	a) Deliverables: <ol style="list-style-type: none"> <li>i. Huffman, D.W., J.E. Crouse, A.J. Sánchez Meador, J.D. Springer, and M.T. Stoddard. Restoration benefits of re-entry with resource objective wildfire on a ponderosa pine landscape in northern Arizona, USA. Manuscript for publication completed. (ERI# 243).</li> <li>ii. Presentation:               <ul style="list-style-type: none"> <li>Huffman, D.W. November 5, 2016. “Efficacy of resource objective wildfires for restoration of ponderosa pine forests in northern Arizona.” Society of American Foresters, National Congress. Madison, WI. 50 attendees. <i>Presentation</i>.</li> </ul> </li> </ol>

### ***Project 4: Understanding and Solving the Economic, Social, and Political Issues and Opportunities of Ecological Restoration.***

Deliverable	Status
<b>4.1) Actions to increase understanding of innovative funding approaches for achieving forest restoration and wildfire risk reduction.</b> Past and future actions may include helping to facilitate	

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<p>discussions in southeastern Arizona designed to achieve restoration on the Coronado National Forest and outreach to other communities explaining the funding mechanisms of the Flagstaff Watershed Protection Project.</p>	
<p>a) <u>Deliverable</u>: Report on actions that support innovative funding approaches to restoration.</p>	<p>a) Report on actions that support innovative funding approaches to restoration:</p> <ul style="list-style-type: none"> <li>• Vosick, D. June 21, 2016. Presented the Flagstaff Watershed Protection Project to 150 Hill Staff in Washington DC. The FWPP was a case study in a new report prepared by the National Wildlife Federation titled “Natural Defenses.” The intent is to show how managing with nature can help mitigate potential damage from climate induced changes. 150 participants.</li> <li>• Vosick, D. October 25, 2016. Organized, in partnership with City of Flagstaff, a field trip for the Arizona County Supervisors Association to view the FWPP project. 25 participants. ERI also provided vans.</li> <li>• Vosick, D. October 28, 2016. Organized, in partnership with City of Flagstaff, a field trip for the Arizona Planners Association to view the FWPP project. 30 participants.</li> <li>• Vosick, D. March 15, 2017. Briefing for newly elected Flagstaff City Council members and Coconino County Supervisor. 4 participants.</li> <li>• Vosick, D. April 24, 2017. Presented information about the FWPP and role of ERI to Debbie Davis-Franco, Community and Rural Affairs Advisor to Governor Jerry Brown. California is contemplating a statewide watershed restoration fee. Sent follow-up information, as well.</li> </ul>
<p><b>4.2) Help facilitate private sector harvest, manufacturing, and utilization approaches.</b></p>	
<p>An example may include facilitating discussions and actions (such as a workshop or conference) that will lead to biomass utilization. In FY15 we worked with key interests to develop a long-term biomass utilization strategy. This work is likely to continue in FY16.</p> <p>a) <u>Deliverable</u>: Report on actions and outcomes.</p>	<p>a) Report on actions and outcomes:</p> <ul style="list-style-type: none"> <li>• Vosick, D. Ongoing. Serve on working group for Camp Navajo Biomass Feasibility Study. Invitation to participate July 14, 2016. Duties include: 1) Draft a Scope of Work (SOW), 2) Evaluate proposals to ensure objectives are met, 3) Monitor expenditure of funds.</li> <li>• Vosick, D. August 19, 2016. Provided review comments for Camp Navajo Biomass Feasibility Study SOW.</li> <li>• Greco, B. September 1, 2016. Meeting and review of business plan with private woods products investors, looking to establish additional wood industry infrastructure in northern Arizona, Flagstaff, AZ. 5 participants. <i>Technical Assistance</i>.</li> <li>• Vosick, D. October 21, 2016. Provided review comments for Camp Navajo Biomass Feasibility Study SOW Draft No. 2.</li> <li>• Covington, W.W. October 28, 2016. Speaker for Northern Arizona Leadership Alliance on the importance of biomass utilization. ERI provided vans and support for a tour of Camp Navajo where a feasibility study is underway for a biomass facility. 30 participants.</li> <li>• Vosick, D. March 14, 2017. Represented NAU at a meeting organized by the county to share ideas and interests with the new Lt. Colonel at Camp Navajo for a biomass facility. Subsequent discussions on May 18, 2017.</li> <li>• Covington, W.W. and D. Vosick. June 6, 2017. Promoted biomass potential at Camp Navajo during a meeting with investors from Texas. Our participation was requested by the LTC.</li> </ul>



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	<ul style="list-style-type: none"> <li>Covington, W.W. June 2017. NAU President Rita Cheng approved use of state funding to hire a new director of Forest Operations to be located at the ERI. The purpose of this position will be to work collaboratively to research and facilitate biomass and small wood utilization opportunities and to identify forest operations efficiencies that will improve the economics of wood harvest.</li> </ul>
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<b>Project 5: State, Tribal and Private Forestry – The All Lands Approach</b>	
Deliverable	Status
<b>5.1) Assist the Arizona Prescribed Fire Council (AZPFC).</b>	
<p>The mission and purpose of the Arizona Prescribed Fire Council is to serve as a forum for all prescribed fire practitioners (government, academic institutes, tribes, coalitions, and individuals) in order to work collectively to promote, protect, conserve, and expand the responsible use of prescribed fire in Arizona’s fire-dependent ecosystems.</p> <p>a) <u>Deliverable</u>: Report on technical support provided to the council and for website services.</p>	<p>a) Technical support provided:</p> <ul style="list-style-type: none"> <li>Greco, B. April 7, 2016. Organized a meeting with members of the Arizona Prescribed Fire Council to develop an organizational structure with the AZ Department of Forestry (ADF) to support ADF mission objectives. Flagstaff, AZ. 7 participants.</li> <li>Greco, B. July–December 2016. Facilitated AZ Prescribed Fire Council monthly conference call with membership. Approximately 17 participants.</li> <li>Greco, B. May–December 2017. Facilitated the monthly AZPFC conference calls with membership to lead and conduct council business and to meet mission objectives. Up to 40 participants.</li> <li>Greco, B. November 2, 2016. Facilitated meeting with Salt River Project staff regarding prescribed burning effects on power infrastructure and partnership with the AZPFC. Flagstaff, AZ. 3 participants.</li> <li>Norton, H., and T. Dubay. June 2017. Produced and printed 1,000 mission statement cards for the Arizona Prescribed Fire Council.</li> <li>Norton, H. Ongoing. Provides technical support for the Arizona Prescribed Fire Council website.</li> </ul>
<b>5.2) Assist the Arizona State Forester to revise the Arizona Natural Resource Assessment and Strategy.</b>	
<p>a) <u>Deliverable</u>: Report on technical support.</p>	<p>a) Report on technical assistance:</p> <ul style="list-style-type: none"> <li>The State Forester did not pursue a revision of the Arizona Natural Resource Assessment and Strategy. Time that would have been dedicated to this deliverable was used to complete information requests for Project 6.5.</li> </ul>
<b>5.3) Assist the Hopi Tribe to revise their forest management plan.</b>	
<p>a) <u>Deliverable</u>: Report on assistance.</p>	<p>b) Assistance provided:</p> <ul style="list-style-type: none"> <li>Greco, B. May 16, 2016. Facilitated a meeting between the Hopi Tribe and the USFS Enterprise Unit to develop an MOA for NEPA support and services for Hopi Forest Management Plan development. Flagstaff, AZ. 3 participants.</li> <li>Greco, B. July 7, 2016. Coordinated a meeting with USFS Enterprise Unit to finalize roles in NEPA analysis in support of the Hopi Forest Management Plan development. Flagstaff, AZ. 4 participants.</li> <li>Greco, B. September 22, 2016. Responded to a science delivery request for the Hopi tribe pertaining to their Tribal Lands Forest Management Plan. Flagstaff, AZ.</li> </ul>

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<b>Project 6: Services to the Intermountain West</b>	
<b>Deliverable</b>	<b>Status</b>
<b>6.1) Provide support to federal land managers with treatment planning and implementation.</b>	
<p>a) <u>Deliverable</u>: Report on actions to support project assessments, data collection, treatment design, and use of best available science by federal land managers to achieve desired conditions and outcomes.</p> <p>i. A combination of 10 total services based on previous and anticipated demand that may include: workshops, technical assistance, science support, field trips, and presentations.</p> <p>ii. Deliver webinars in partnership with the Southwest Fire Science Consortium and National Forest Foundation to present emerging science to land managers and practitioners.</p> <p>iii. Two Rapid Assessments (RAPs) are presently planned to support landscape restoration projects at the forest level.</p> <ol style="list-style-type: none"> <li>1. Apache-Sitgreaves NF: Black Forest River Restoration Project.</li> <li>2. Tonto NF: All conifer types.</li> </ol>	<p>a) Report on actions:</p> <p>i. Services provided:</p> <ul style="list-style-type: none"> <li>• Sensibaugh, M. May 23, 2016. Provided technical assistance and input to the District Ranger regarding scoping on the Luna Restoration Project Proposed Action. Quemado RD, Gila NF. <i>Technical Assistance</i>.</li> <li>• Greco, B. July 25–29, 2016. Responded to data and science delivery request by A-S NF Lakeside District Ranger, Ed Collins, regarding a managed wildfire on the Upper Rocky Arroyo Restoration Project. <i>Technical Assistance</i>.</li> <li>• Greco, B. July 27, 2016. Field visit and consultation with District Ranger Ed Collins and staff regarding managed wildfire and project impacts on the Upper Rocky Arroyo Restoration Project. Lakeside RD, A-S NF. <i>Technical Assistance</i>.</li> <li>• Esch, B. August 8, 2016. Provided information on developing a collaborative process for multiparty monitoring to Frank Sturges at the BLM Washington Office. <i>Information Request</i>.</li> <li>• Greco, B. August 17, 2016. At the request of the A-S NF, conducted field review of the effects of managed wildfire in the Upper Rocky Arroyo Restoration Project. Lakeside Rd, A-S NF. 13 participants. <i>Technical Assistance</i>.</li> <li>• Springer, J. August 18, 2016. Provided literature and a narrative response to Kent Stella at the Denver NPS office regarding seeding times in monsoon-influenced systems, particularly warm season grasses. <i>Information Request</i>.</li> <li>• Greco, B. September 19, 2016. Conducted a field visit for A-S NF staff on the Upper Rocky Arroyo Restoration Project. Lakeside RD, A-S NF. 11 participants. <i>Technical Assistance</i>.</li> <li>• Greco, B. August 31, 2016. Facilitated a meeting with A-S NF staff to develop the prescribed and managed wildfire strategy for the A-S NF, Springerville, AZ. 12 participants. <i>Technical Assistance</i>.</li> <li>• Stoddard, M. October 26, 2016. Assisted Dave Dean at USGS with a data request and data interpretation. <i>Technical Assistance</i>.</li> <li>• Greco, B., A. Waltz, T. Wasserman, and B. Esch. October 27, 2016. Organized and led a workshop (with field visit) for A-S NF staff on the Upper Rocky Arroyo Restoration Project. Lakeside RD, A-S NF. 16 participants. <i>Workshop</i>.</li> <li>• Springer, J. October 28, 2016. Ran queries for occurrence records for rare species in A-S (from Wallow Fire, Dr. Carol Chambers project and WMSP) for Shannon Houlette. Alpine RD, A-S NF. <i>Technical Assistance</i>.</li> <li>• Springer, J. October 28, 2016. Assisted with plant identification and provided background research, assistance requested from Rob Hastings, NPS. <i>Technical Assistance</i>.</li> </ul>

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	<ul style="list-style-type: none"><li>• Springer, J. November 2, 2016. Supplied papers on vegetation responses to chaining in pinyon-juniper; phenology of <i>Penstemon clutei</i>. Request from Julie Crawford at USFWS. <i>Information Request</i>.</li><li>• Greco, B. November 21, 2016. Provided science information regarding effects on watershed conditions and services due to restoration treatments for the A-S NF resource staff. Springerville, AZ. <i>Information Request</i>.</li><li>• Springer, J. December 2, 2016. Completed a narrative response and provided research articles regarding reference conditions (HRV) for Jim DeCoster at the NPS – Southern Colorado Plateau Network. <i>Information Request</i>.</li><li>• Springer, J. December 13, 2016. Provided research articles on <i>Penstemon clutei</i> to Lisa Baril at Utah State NPS – SCNM. <i>Information Request</i>.</li><li>• Dubay, T. January 9, 2017. Request from Charles McHugh, USFS Fire Spatial Analyst, for an historical report (Drake, W.M. 1910. A report on the Coconino National Forest.) The report was provided by D.W. Huffman, and T. Dubay placed it in the ERI library. <i>Information Request</i>.</li><li>• Crouse, J. January 11, 2017. Provided data and data links regarding Mount Trumbull area spatial data to Greta Hyland, BLM. <i>Technical Assistance</i>.</li><li>• Sánchez Meador, A.J., A. Azpeleta, M.T. Stoddard, B. Bagdon, S. Nepal. March 2017. “Using Climate-FVS to Inform Management Decisions: Three Case Studies from the American Southwest.” 2017 Forest Vegetation Simulator (FVS) e-Conference. Fort Collins, CO. ~150 participants. <i>Presentation</i></li><li>• Springer, J. March 3, 2017. Provided protocols for rare plant surveys to Debra Crisp at the Coconino SO. Flagstaff, AZ. <i>Technical Assistance</i>.</li><li>• Springer, J. March 7, 2017. Sent papers on effects of high-severity fire on soil seed bank to Julie Crawford at USFWS. <i>Information Request</i>.</li><li>• Huffman, D. March 19, 2017. Request from Craig Allen at USGS for information on recent ERI publications/research, Huffman et al. 2017 was sent. <i>Information Request</i>.</li><li>• Esch, B. March 23, 2017. “Broader-scale Monitoring strategies for Regions 2 and 3.” USFS Region 3 Planners Meeting. Albuquerque, NM. 25 participants. <i>Presentation</i>.</li><li>• Huffman, D. March 27, 2017. Request from Thomas Monaco at the USDA Agricultural Research Service for information on recent ERI publications/research, Huffman et al. was sent. <i>Information Request</i>.</li><li>• Waltz, A., and B. Esch. May 2, 2017 “Broader-scale Monitoring Strategy: Results of R2 – R3 Pilot Study.” USFS Region 3 Watershed, Air, Ecology, Climate Change, and Invasives Workshop. Flagstaff, AZ. 50 participants. <i>Presentation</i></li><li>• Springer, J. May 15, 2017. Request from Neil Weintraub from Kaibab NF, Williams Ranger District, to participate in field trip and provide plant identification assistance. Tusayan, AZ. 9 participants. <i>Field Trip</i>.</li><li>• Springer, J. May 18, 2017. Request to identify plant species located near Tusayan, AZ from Neil Weintraub from Kaibab NF, Williams RD. <i>Technical Assistance</i>.</li></ul>
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	<ul style="list-style-type: none"> <li>• Springer, J. June 6, 2017. Provided plant identification assistance to Chris Ives from Kaibab NF. <i>Technical Assistance.</i></li> <li>• Springer, J. June 11, 2017. Provided plant identification assistance to Justin Bettis from Kaibab NF. <i>Technical Assistance.</i></li> <li>• Springer, J. June 11, 2017. Provided plant identification assistance to Greg Woodall from NAP – Grand Canyon Parashant, NM. <i>Technical Assistance.</i></li> <li>• Springer, J. June 12, 2017. Provided information to Shannon Houlette from A-S NF, Alpine Ranger District, on rare plant surveys in the White Mountains. <i>Information Request.</i></li> </ul> <p>ii. Webinar Delivered</p> <ul style="list-style-type: none"> <li>• Huffman, D. April 12, 2017. “Efficacy of resource objective wildfires for restoration of ponderosa pine forests in northern Arizona.” Webinar provided through the Southwest Fire Science Consortium. 30 participants.</li> </ul> <p>iii. Complete two Rapid Assessments (RAPs)</p> <ol style="list-style-type: none"> <li>1. Apache-Sitgreaves NF: Black Forest River Restoration Project             <ul style="list-style-type: none"> <li>• Greco, B. September 4–10, 2016. Conducted field trips, data collection, mini-workshops, and presentations over a two-week period with the A-S NF Black River Forest Restoration Project ID Team. Results led to development of a Rapid Assessment Report completed December 2016. <b>LINK TO REPORT</b></li> </ul> </li> <li>2. Tonto NF: All Conifer Types             <ul style="list-style-type: none"> <li>• Greco, B., and M. Sensibaugh. October 2016. Completed Rapid Assessment (RAP) data collection and RAP Report for the two proposed projects on the Payson and Pleasant Valley Ranger Districts, Tonto NF. The report was prepared for Payson RD staff only and is available upon request.</li> <li>• Greco, B. September 12–14, 2016. Developed a Mixed-Conifer Restoration Demonstration Project (Completed photo documentation of pre-treatment) at Treasure Park Restoration Demo site (PERP project). Safford RD, Coronado NF.</li> <li>• Waltz, A. May 2017. Re-took photo points following mechanical treatment at Treasure Park Restoration Demo Site.</li> </ul> </li> </ol>
<p><b>6.2) Assist with forest planning and implementation by recommending best available science and program support.</b></p>	
<p>Science and timing of support are variable for each national forest based on its individual planning schedule.</p> <p>a) <u>Deliverable</u>: Report on actions to support forest plan revisions on the Tonto and Carson national forests.</p>	<p>a) Report on actions:</p> <ul style="list-style-type: none"> <li>• Waltz, A. February 7, 2017. Broader-scale monitoring strategy briefing to Chris French, Director of the USFS Ecosystem Management Coordination. Provided BSMS results for future Planning Rule application.</li> <li>• Waltz, A. March 2, 2017. “Final Report – Region 2 and 3 broader-scale monitoring strategy pilot.” Webinar presentation for RIMC team call. 35 attendees. <i>Presentation.</i></li> <li>• Waltz, A. March 27, 2017. “Final Report – Region 2 and 3 broader-scale monitoring strategy pilot.” Presentation for the Ecosystem Management Coordination team call. 35 attendees. <i>Presentation.</i></li> </ul>
<p><b>6.3) Provide website support for ERI, SWERI, and 4FRI (see Project 5 for support to the Arizona Prescribed Fire Council).</b></p>	

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<p>a) <u>Deliverable</u>: Report on technical support for ERI, SWERI, and 4FRI websites.</p>	<p>a) Report on technical support:</p> <ul style="list-style-type: none"> <li>• Reports on technical support for the ERI, SWERI, and 4FRI websites are included in this report. <b>LINK TO REPORT</b></li> </ul>
<p><b>6.4) Translate biophysical and social-political-economic information for affected entities.</b></p>	
<p>a) <u>Deliverable</u>: Editorial support for a total of three (3) white papers and/or working papers.</p> <ol style="list-style-type: none"> <li>i. White paper compiling lessons learned on implementation or other restoration topics from the 2016 National Restoration Workshop.</li> <li>ii. Two (2) working papers in cooperation with the Southwest Fire Science Consortium.</li> </ol> <p>b) <u>Deliverable</u>: Eight (8) fact sheets that translate and summarize scientific papers and journal articles.</p>	<p>a) Editorial support:</p> <ol style="list-style-type: none"> <li>i. White Paper: <ul style="list-style-type: none"> <li>• Esch, B.E., A.E.M. Waltz, T. Wasserman, and L. Kalies. Land Manager Use of Best Available Science Information: Defining Best and Available. Manuscript for publication completed. (ERI#250).</li> </ul> </li> <li>ii. Two (2) Working Papers: <ul style="list-style-type: none"> <li>• O'Donnell, F.C. 2016. The Influence of Restoration Treatments on Hydrologic Output in Fire-Adapted Forests of the Southwest. ERI Working Paper No. 37. Ecological Restoration Institute and the Southwest Fire Science Consortium, Northern Arizona University. 14 pp. (ERI# 235)  <a href="http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2016023.dir/doc.pdf">http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2016023.dir/doc.pdf</a></li> <li>• Dubay, C.T. 2017. Restoration for Homeowners: A Guide to Fire Safety and Native Landscaping in Southwestern Ponderosa Pine Forests. ERI General Report. Ecological Restoration Institute, Northern Arizona University. (ERI# 249)  <a href="https://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/887/rec/1">https://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/887/rec/1</a></li> </ul> </li> </ol> <p>b) Eight (8) Fact Sheets:</p> <ol style="list-style-type: none"> <li>1. Kalies, E.L., and L.L. Yocom Kent. 2017. Tamm Review: Are Fuel Treatments Effective at Achieving Ecological and Social Objectives? A Systematic Review. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 224)  <a href="http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2017004.dir/doc.pdf">http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2017004.dir/doc.pdf</a></li> <li>2. Huffman, D.W. 2017. Understory Responses to Tree Thinning and Seeding Indicate Stability of Degraded Pinyon Juniper Woodlands. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 225)  <a href="http://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/885/rec/1">http://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/885/rec/1</a></li> <li>3. Strahan, R.T. 2017. Shifts in Community-Level Traits and Functional Diversity in a Mixed-Conifer Forest: A Legacy of Land-Use Change. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 226)  <a href="http://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/879/rec/8">http://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/879/rec/8</a></li> <li>4. Rodman, K.C. 2017. Reference Conditions and Historical Fine-Scale Spatial Dynamics in a Dry Mixed-Conifer Forest, Arizona, USA. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 227)  <a href="http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2017006.dir/doc.pdf">http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2017006.dir/doc.pdf</a></li> </ol>

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	<p>5. Kalies, E. 2017. A Meta-Analysis of Management Effects on Forest Carbon Storage. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI#228)  <a href="http://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/886/rec/2">http://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/886/rec/2</a></p> <p>6. Huffman, D.W. 2017. Efficacy of Resource Objective Wildfires for Restoration of Ponderosa Pine (<i>Pinus ponderosa</i>) Forests in Northern Arizona. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 229)  <a href="http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2017009.d/ir/doc.pdf">http://library.eri.nau.edu/gsd/collect/erilibra/index/assoc/D2017009.d/ir/doc.pdf</a></p> <p>7. Huffman, D.W. 2017. Reference Conditions and Restoration of Transitional Ponderosa Pine Forests in the Southwest. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 230)  <a href="https://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/889/rec/1">https://cdm17192.contentdm.oclc.org/digital/collection/p17192coll1/id/889/rec/1</a></p> <p>8. Sánchez Meador, A.J. 2017. Ecological Restoration and Fine-Scale Structural Regulation in Southwestern Ponderosa Pine Forests. ERI Fact Sheets. Ecological Restoration Institute, Northern Arizona University. 2 p. (ERI# 231)  <a href="http://cdm17192.contentdm.oclc.org/digital/api/collection/p17192coll1/id/17583/page/0/inline/p17192coll1_17583_0">http://cdm17192.contentdm.oclc.org/digital/api/collection/p17192coll1/id/17583/page/0/inline/p17192coll1_17583_0</a></p>
<p><b>6.5) Initiate and facilitate knowledge services and science support for non-federal entities through field trips, filling information requests, and presentations for affected entities.</b> These numbers may vary based on demand.</p>	
<p>a) <u>Deliverable</u>: Report on actions to educate and support affected entities. Provide a minimum of then (10) services that may include field trips, presentations, and information requests.</p>	<p>a) Report on actions:</p> <ul style="list-style-type: none"> <li>• Esch, B. Ongoing. Serves as the ERI representative on the Greater Flagstaff Forest Partnership Board. Monthly participation includes attendance at 1–2 meetings and completion of multiple data requests.</li> <li>• Greco, B. July–December 2016. Served as ERI representative at the monthly Natural Resources Working Group (NRWG) meeting in various locations in eastern Arizona. Responsibilities included providing small-group leadership, preparing presentations and assisting in the planning and organization of meetings and field trips.</li> <li>• Vosick, D. May 26, 2016. Request from Charlie Ester from SRP for information about the economics of forest restoration and watershed protection. <i>Information Request.</i></li> <li>• Vosick, D. June 1, 2016. Request from Arizona State Representative Lisa Otondo for information about watersheds and forest restoration. <i>Information Request.</i></li> <li>• Vosick, D. June 7, 2016. Assist Brandon Loom from the <i>Arizona Republic</i> to identify the appropriate people to interview for a 4FRI retrospective piece. <i>Information Request.</i></li> <li>• Vosick, D. June 7, 2016. Presentation on forest restoration and the 4FRI for the Summer Agricultural Institute sponsored by the University of Arizona for elementary and high school teachers, Foxglenn Park, Flagstaff. 40 participants. <i>Field Trip.</i></li> <li>• Vosick, D. June 13, 2016. Request from retired Forest Service, Michael Borens for information about Firewise and homeowner</li> </ul>

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	<p>actions to protect property. Sent him link to our homeowner's pamphlet. <i>Information Request.</i></p> <ul style="list-style-type: none"><li>• Vosick, D. June 29, 2016. Request from Susan Rich for Schultz Fire Full Cost Accounting analysis. Sent links. <i>Information Request.</i></li><li>• Vosick, D. June 29, 2016. Request from Brandon Loomis of the <i>Arizona Republic</i> about the credibility of a recent report on climate and fire. Referred to W. Covington who fulfilled request. <i>Information Request.</i></li><li>• Norton, H. June 29, 2016. Request to assist Anne Mottek Lucas with website updates and tutorial for FWPP site. <i>Technical Assistance.</i></li><li>• Vosick, D. July 2016. Request from John Miller from the Office of Management and Budget regarding the FWPP bond. Sent information and forwarded to Paul Summerfelt. <i>Information Request.</i></li><li>• Dubay, T. July 8, 2016. Request from environmental consultant with SWCA for ERI publications on historical tree density and basal area for PJ types and ponderosa pine. Sent links to several related publications. <i>Information Request.</i></li><li>• Vosick, D. July 13, 2016. Request from Rebecca Davidson, SRP for information on the impact of tree removal on soils. Assisted with the interpretation of two papers. <i>Technical Assistance.</i></li><li>• Vosick, D. July 13, 2016. Request for information about slash and soil nutrients from Ann DeMarco at Campbell Global. Sent references and made further inquiries. <i>Information Request.</i></li><li>• Dubay, T. July 23, 2016. Request from Steven Rosenstock, AZ Game &amp; Fish, for before/after restoration treatment photos and in-progress photos for a presentation he was developing for his director for a forthcoming meeting with BLM, FS, et al. Photos were provided. <i>Information Request.</i></li><li>• Vosick, D. August 16, 2016. Request from the World Resources Institute to review and edit a case study of the Flagstaff Watershed Protection Project titled, "Protecting Drinking Water at the Source: Lessons from Watershed Investment Programs in the United States." <i>Technical Assistance.</i></li><li>• Dubay, T. August 17, 2016. Request from Barb Satink-Wolfson with SW Fire Science Consortium for forest operations and post-treatment fire photos for an economic working paper they are publishing. Photos were provided. <i>Information Request.</i></li><li>• Springer, J. August 24, 2016. Request for negative occurrence records for <i>Potentilla sanguinea</i> from Glenn Rink, a private botanical consultant. <i>Information Request.</i></li><li>• Springer, J. August 29, 2016. Request to correct coordinates in collection entered in SEINET from Glenn Rink, a private botanical consultant. <i>Technical Assistance.</i></li><li>• Springer, J. August 30, 2016. Request to review and provide edits on invasive weed documents from Hailey Reeves at the Coconino County Community Development Office. Flagstaff, AZ. <i>Technical Assistance.</i></li><li>• Vosick, D. September 8, 2016. Field trip for Coral Evans (running for mayor of Flagstaff), John Grahame and Diane Hope (community activist) to discuss forest treatments on Observatory Mesa. Flagstaff, AZ. <i>Field Trip.</i></li></ul>
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	<ul style="list-style-type: none"><li>• Springer, J. September 12, 2016. Request to identify plant species located in the White Mountains from Jim Howeck at the Arizona Revegetation &amp; Monitoring Company. Elgin, AZ. <i>Technical Assistance.</i></li><li>• Springer, J. September 12, 2016. Request to assist Mare Nazaire from the Santa Ana Botanical Gardens with a workshop in northern Arizona, potential contacts were provided. <i>Information Request.</i></li><li>• Stoddard, M. September 13, 2016. Provided plant identification assistance to Chris Updike, an NAU Research Specialist. Flagstaff, AZ. <i>Technical Assistance.</i></li><li>• Dubay, T. September 14, 2016. Request from Andrew Spaeth (Sustainable NW) and Ann Moote via Norm Johnson (Oregon State) for the original figure from A. Moote's sourcebook (Fig. 1. Adaptive Management Cycle) to use in an upcoming book on Ecological Forest Management. PDF of figure was provided. <i>Information Request.</i></li><li>• Dubay, T. September 16, 2016. Request from Channel 12 (NBC affiliate in Phoenix) for a story idea on forestry and restoration. Connected producer with Dr. Sánchez Meador and his silviculture class collecting data in the field. <i>Information Request.</i></li><li>• Dubay, T. September 20, 2016. Request from private citizen, via H. Provencio, for 4FRI publications. A link to the 4FRI history white paper was provided via email and he was informed that he'd been added to the distribution list for the 4FRI lessons learned white paper. <i>Information Request.</i></li><li>• Vosick, D. September 22, 2016. Request for information about the per acre cost of prescribed fire. Matthew Millar from Flagstaff Fire Department. <i>Information Request.</i></li><li>• Stoddard, M. September 24, 2016. Provided plant identification assistance to Chris Updike, an NAU Research Specialist. Flagstaff, AZ. <i>Technical Assistance.</i></li><li>• Covington, W.W. September 28, 2016. "Restoring Self-Regulation in Frequent Fire Forests." For The Nature Conservancy Restoring America's Forests conference. 50 participants. <i>Presentation.</i></li><li>• Vosick, D. September 28, 2016. "The beginnings of collaboration." Co-presented with Henry Provencio for The Nature Conservancy Restoring America's Forests conference. 50 participants. <i>Presentation.</i></li><li>• Vosick, D. September 29, 2016. Request for publications. Lloyd McGee, The Nature Conservancy Eastern Washington Forests Program Manager. Sent History of 4FRI and Administrative and Legal Review Opportunities for Collaborative Groups white papers. <i>Information Request.</i></li><li>• Vosick, D. November 16, 2016. Request from Chris Topik from The Nature Conservancy on full cost accounting of wildfire. <i>Information Request.</i></li><li>• Sánchez Meador, A.J. November 2016. "Vegetation Dynamics of a 20-Year Ecological Restoration Experiment on Fort Valley Experimental Forest, Arizona." Society of American Foresters, National Congress. Madison, WI. ~30 participants. <i>Presentation.</i></li><li>• Waltz, A. November 28, 2016. Taught three (3) sessions and reviewed selected talks. Teaching Cadre: Rx310. <i>Information Request.</i></li></ul>
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	<ul style="list-style-type: none"> <li>• Springer, J. December 8, 2016. Provided plant identification assistance to Glenn Rink, a private botanical consultant. <i>Technical Assistance.</i></li> <li>• Vosick, D. December 16, 2016. Request from Matt Millar on the cost per acre for hand thinning. <i>Information Request.</i></li> <li>• Covington, W.W. January 5, 2017. “Restoration and Fire.” Presentation for the Arizona Legislative Academy. 20 participants. <i>Presentation.</i></li> <li>• Waltz, A., and S. Curran. January 6, 2017. Responded to data management questions regarding how ERI manages data and database software from Jeffery Cannon and Kevin Barret at CFRI. <i>Technical Assistance.</i></li> <li>• Vosick, D. January 11, 2017. “Implementation challenges for the first 4FRI EIS.” Presented on a panel at the Rural Voices for Conservation Coalition meeting. Troutdale, Oregon. 15 participants. <i>Presentation.</i></li> <li>• Vosick, D. January 22, 2017. Request from Alex Finkral, Forestland Group for an analysis of H.R. 2647. The Emergency Wildfire and Forest Management Act of 2016. <i>Information Request.</i></li> <li>• Springer, J. January 30, 2017. Request from Kirstin Phillips at the Museum of Northern Arizona for information on <i>Penstemon clutei</i> molecular work and findings. <i>Information Request.</i></li> <li>• Vosick, D. March 15, 2017. Request from Lucy Murfitt, Senate Energy and Natural Resources, for information regarding economic impact of restoration. <i>Information Request.</i></li> <li>• Vosick, D. April 2, 2017. Request from Evan Jurkovich, U.S. House of Representatives Agriculture Committee, for information on contracting. <i>Information Request.</i></li> <li>• Vosick, D. April 11, 2017. Request from Richard Lunt, Greenlee County Supervisor, for the Full Cost Accounting of the Schultz Fire. <i>Information Request.</i></li> <li>• Sánchez Meador, A.J. April 2017. “Technological Developments in Forestry: The Inevitable Change.” Keynote Speaker at the 2017 Society of American Foresters Southwestern Section Meeting. Flagstaff, AZ. ~40 participants. <i>Presentation.</i></li> <li>• Springer, J. May 6, 2017. “Landscaping with Firewise Plants.” Presentation for the Yavapai County and the Yarnell Fire Abatement Project. 60 participants estimated. <i>Presentation.</i></li> <li>• Springer, J. May 22, 2017. Provided plant identification assistance to Carol Blaney a private citizen. <i>Technical Assistance.</i></li> <li>• Vosick, D. June 6, 2017. Field trip for the University of Arizona, Agriculture Extension Summer Institute focused on forest restoration and 4FRI. 30 teachers from throughout Arizona. <i>Field Trip.</i></li> <li>• Vosick, D. June 20, 2017. Field trip for Environmental Funders about FWPP. 15 participants. <i>Field Trip.</i></li> </ul>
<p><b>6.6) Use media to educate the general public.</b></p>	
<p>a) <u>Deliverable</u>: Two (2) newspaper articles in response to fire events to educate the general public about the need for forest</p>	<ol style="list-style-type: none"> <li>1. Sagara, E., E. Martinez, and I. Sriskandarajah. Reveal News, Podcast. October 8, 2016. “America’s ring of fire.” <a href="https://www.revealnews.org/episodes/americas-ring-of-fire/">https://www.revealnews.org/episodes/americas-ring-of-fire/</a></li> <li>2. Cowan, E. <i>Arizona Daily Sun</i>. April 10, 2017. “Managed wildfires could be doing more in forests around Flagstaff.” <a href="http://azdailysun.com/news/local/managed-wildfires-could-be-doing-more-">http://azdailysun.com/news/local/managed-wildfires-could-be-doing-more-</a></li> </ol>

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restoration to restore frequent fire forests.	<a href="http://in-forests-around-flagstaff/article_f04a157d-fcf1-5304-9a7d-d9cb5922ff72.html">in-forests-around-flagstaff/article_f04a157d-fcf1-5304-9a7d-d9cb5922ff72.html</a>
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### ***Project 7: Duty 5 under the ACT. Provide annual progress reports***

<b>Deliverable</b>	<b>Status</b>
a) Complete annual progress report on June 30, 2017.	<i>Complete</i>

# USFS FY17 Plan of Work - #17-DG-11031600-047

## FY17 Deliverables (In Progress) - #17-DG-11031600-047

<b>Project 1: Science Delivery and Support for Collaborative Restoration and Conservation from the Local to Landscape Scale</b>	
<b>Deliverable</b>	<b>Status</b>
<b>1.1) Provide West-wide science delivery and collaborative support for collaborative landscape restoration projects.</b>	
a) <u>Deliverable</u> : Report on support to West-wide collaborative efforts via national and regional planning and learning efforts. <ul style="list-style-type: none"> <li>i. Webinar series</li> </ul> b) <u>Deliverables</u> : Sponsor, support and participate in a national CFLRP social science lessons-learned and policy review writing workshop. <ul style="list-style-type: none"> <li>i. Sponsor workshop</li> <li>ii. 1–2 book chapters</li> <li>iii. Fact Sheet for audience</li> </ul>	All deliverables are in progress.
<b>1.2) Science delivery and support for the Four Forest Restoration Initiative (4FRI), a Collaborative Forest Landscape Restoration Act project.</b>	
a) <u>Deliverable</u> : Report on science delivery to 4FRI Stakeholder Group and Forest Service ID Team. b) <u>Deliverable</u> : Report on leadership activities. c) <u>Deliverable</u> : Report on IT support for the 4FRI website and BASECAMP (an online collaborative workspace) and administrative support including minutes and agendas.	All deliverables are in progress.

<b>Project 2: Evaluation and Synthesis of Best Available Scientific Information (BASI) for Landscape Restoration West-Wide</b>	
<b>Deliverable</b>	<b>Status</b>
<b>2.1) Evidence-based review of the literature.</b>	

## USFS FY17 Plan of Work - #17-DG-11031600-047

a) <u>Deliverable</u> : Synthesis of Best Available Science. b) <u>Deliverable</u> : Presentation at professional conference or to stakeholder group or practitioners.	All deliverables are in progress.
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### ***Project 3: Monitoring, Evaluation, and Adaptive Management of Landscape Restoration in Western Fire-Adapted Forests and Woodlands***

Deliverable	Status
<b>3.1) Continue development of long-term study in a mixed-conifer forest on the Mogollon Rim Ranger District of the Coconino National Forest (build from FY15).</b>	
a) <u>Deliverable</u> : Report on Progress with the Coconino National Forest to complete marking, administer timber sale, and develop slash treatment options.	All deliverables are in progress.
<b>3.2) Initiate reference conditions study in transitional ponderosa pine forests, Prescott and/or Tonto national forests.</b>	
a) <u>Deliverable</u> : Progress report that includes: consultations with national forests, study plan development, collection on preliminary data, processing existing samples and data analysis. b) <u>Deliverable</u> : Presentation for USFS leadership and staff, collaborative stakeholder groups, and/or professional conference.	All deliverables are in progress.
<b>3.3) Re-measurement (11-yr) of pinyon-juniper fuels reduction study (LEARN), Tusayan Ranger District, Kaibab National Forest.</b>	
a) <u>Deliverable</u> : Manuscript prepared for publication. b) <u>Deliverable</u> : Presentation for USFS leadership and staff, collaborative stakeholder groups, and/or professional conference.	All deliverables are in progress.

### ***Project 4: Understanding and Solving the Economic, Social, and Political Issues and Opportunities of Ecological Restoration.***

Deliverable	Status
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## USFS FY17 Plan of Work - #17-DG-11031600-047

<b>4.1) Advance economically practical solutions for biomass harvest, removal, and processing.</b>	
a) <u>Deliverable</u> : Report on actions that advance economically practical and efficient solutions for biomass removal and processing.	All deliverables are in progress.
<b>4.2) Facilitate workshop to identify changes in the Forest Service Handbook and Manual that will improve the efficiency of sale preparation.</b>	
a) <u>Deliverable</u> : Organize a workshop and prepare a compilation of recommendations for Forest Service consideration.	All deliverables are in progress.

### ***Project 5: Science Delivery and Outreach to National, Western, and Southwestern Audiences: Federal, State, Tribal and Private Forestry***

Deliverable	Status
<b>5.1) Provide support to federal land managers for restoration treatment planning and implementation.</b>	
a) <u>Deliverables</u> : Report on actions to deliver science. <ul style="list-style-type: none"> <li>i. A combination of ten (10) total services based on previous and anticipated demand that may include: workshops, technical assistance, field trips, and presentations.</li> <li>ii. Present two (2) webinars in partnership with the Southwest Fire Science Consortium and/or National Forest Foundation to present emerging science to land managers and practitioners.</li> <li>iii. Rapid Assessment (RAP) support for restoration projects at the forest level.</li> </ul> 3. Project-level BASI synthesis to localize	All deliverables are in progress.

## USFS FY17 Plan of Work - #17-DG-11031600-047

<p>peer-reviewed literature.</p> <p>4. Project-level demonstration area.</p>	
<p><b>5.2) Assist with forest planning and implementation by recommending best available science and program support.</b></p>	
<p>Science and timing of support are variable for each national forest based on its individual planning schedule.</p> <p>a) <u>Deliverable</u>: Report on actions to support forest plan revisions on the Region 3 forests undergoing plan revision.</p>	<p>All deliverables are in progress.</p>
<p><b>5.3) Provide website science-delivery support for ERI, SWERI, the Arizona Prescribed Fire Council, and 4FRI (see Project 1 for 4FRI web support).</b></p>	
<p>a) <u>Deliverable</u>: Redesign ERI website and website maintenance for AZ PFC, SWERI and 4FRI.</p> <p>b) <u>Deliverable</u>: Report on technical support for ERI, SWERI, and AZ PCF websites.</p>	<p>All deliverables are in progress.</p>
<p><b>5.4) Edit and deliver biophysical and social-political-economic information for affected entities.</b></p>	
<p>a) <u>Deliverables</u>: Editorial support for a total of three (3) white papers and/or working papers.</p> <ul style="list-style-type: none"> <li>i. Working or White paper for elected officials describing the steps required to conduct a prescribed burn.</li> <li>ii. Working paper describing the role of mistletoe and mistletoe management in ecological restoration.</li> <li>iii. Working paper on smoke and smoke management in cooperation with the Southwest Fire Science Consortium.</li> </ul> <p>b) <u>Deliverable</u>: Eight (8) fact sheets that translate and</p>	<p>All deliverables are in progress.</p>

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summarize scientific papers and journal articles.	
<b>5.5) Initiate and facilitate knowledge services and science support for non-federal entities through field trips, filling information requests, and presentations for affected entities.</b> These numbers may vary based on demand.	
a) <u>Deliverable</u> : Report on actions to educate and support affected entities. Provide a minimum of ten (10) activities that may include field trips, presentations, and information requests.	All deliverables are in progress.
<b>5.6) Educate the general public through media.</b>	
a) <u>Deliverable</u> : Two (2) newspaper articles to educate the general public about the need for forest restoration to restore frequent-fire forests.	All deliverables are in progress.

<b><i>Project 6: Duty 5 under the ACT. Provide annual progress reports</i></b>	
<b>Deliverable</b>	<b>Status</b>
b) Complete annual progress report on June 30, 2018.	All deliverables are in progress.

## **Web Accomplishments: *July 1, 2016–June 30, 2017* 4Fri.org Accomplishments**

### **4Fri.org Accomplishments**

- Updated site content including meeting minutes, agendas, maps, and other pertinent materials.
- Updated calendar and event locations
- Provided updates on site on important 4Fri related news, news articles, and press releases

### **NAU.edu/ERI Accomplishments**

- Added current /relevant ecological related news articles
- Updated the site with current ERI publications including journal articles, ERI working papers, ERI Fact Sheets, and technical papers
- Added relevant events and conferences
- Upgraded ERI library to a new system that provides more security, better content accessibility, and increased search functionality

### **SWERI Accomplishments**

- Added and updated conference agendas, and conference presentations
- Updated and maintained server software to improve security

### **AZPFC.org**

- Added new events and posts to keep users informed about topics relevant to the council
- Updated board member information as needed



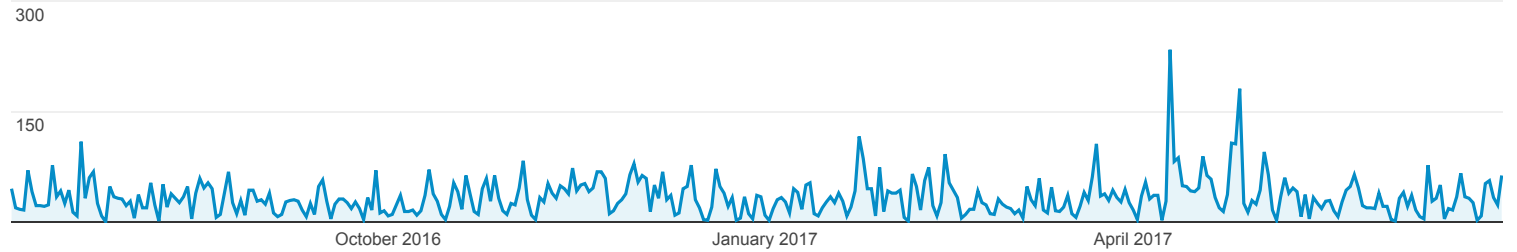
Jul 1, 2016 - Jun 30, 2017

Pages

All Users  
100.00% Pageviews

Explorer

Pageviews



Page	Pageviews	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	12,257 % of Total: 100.00% (12,257)	9,654 % of Total: 100.00% (9,654)	00:01:28 Avg for View: 00:01:28 (0.00%)	4,716 % of Total: 100.00% (4,716)	49.07% Avg for View: 49.07% (0.00%)	38.48% Avg for View: 38.48% (0.00%)	\$0.00 % of Total: 0.00% (\$0.00)
1. /	3,881 (31.66%)	3,189 (33.03%)	00:01:34	3,145 (66.69%)	46.20%	48.75%	\$0.00 (0.00%)
2. /stakeholders.html	836 (6.82%)	630 (6.53%)	00:01:36	126 (2.67%)	61.90%	29.55%	\$0.00 (0.00%)
3. /index.html	815 (6.65%)	592 (6.13%)	00:01:07	253 (5.36%)	36.36%	30.31%	\$0.00 (0.00%)
4. /maps.html	787 (6.42%)	636 (6.59%)	00:02:22	100 (2.12%)	72.00%	40.66%	\$0.00 (0.00%)
5. /background.html	784 (6.40%)	624 (6.46%)	00:02:03	245 (5.20%)	57.96%	39.16%	\$0.00 (0.00%)
6. /documents.html	709 (5.78%)	599 (6.20%)	00:02:32	111 (2.35%)	78.38%	48.38%	\$0.00 (0.00%)
7. /description.html	677 (5.52%)	541 (5.60%)	00:01:28	61 (1.29%)	57.38%	23.78%	\$0.00 (0.00%)
8. /meetings.html	519 (4.23%)	428 (4.43%)	00:01:16	69 (1.46%)	62.32%	35.45%	\$0.00 (0.00%)
9. /press.html	482 (3.93%)	355 (3.68%)	00:01:25	31 (0.66%)	87.10%	23.44%	\$0.00 (0.00%)
10. /workinggroups.html	384 (3.13%)	317 (3.28%)	00:00:37	34 (0.72%)	44.12%	13.28%	\$0.00 (0.00%)
11. /sharebutton.to	337 (2.75%)	118 (1.22%)	00:00:00	118 (2.50%)	5.08%	35.01%	\$0.00 (0.00%)
12. /photos.html	311 (2.54%)	269 (2.79%)	00:01:58	33 (0.70%)	90.91%	38.26%	\$0.00 (0.00%)
13. /goals.html	247 (2.02%)	231 (2.39%)	00:01:46	27 (0.57%)	70.37%	28.74%	\$0.00 (0.00%)
14. /workshops.html	221 (1.80%)	192 (1.99%)	00:00:45	27 (0.57%)	88.89%	25.79%	\$0.00 (0.00%)
15. /contacts.html	174 (1.42%)	145 (1.50%)	00:00:52	32 (0.68%)	87.50%	41.95%	\$0.00 (0.00%)
16. /getinvolved.html	163 (1.33%)	138 (1.43%)	00:00:34	18 (0.38%)	88.89%	23.93%	\$0.00 (0.00%)
17. /faq.html	158 (1.29%)	134 (1.39%)	00:01:45	22 (0.47%)	81.82%	39.24%	\$0.00 (0.00%)
18. /links.html	126 (1.03%)	103 (1.07%)	00:01:19	20 (0.42%)	80.00%	42.06%	\$0.00 (0.00%)

19.	<a href="#">/calendar.html</a>	<b>121</b> (0.99%)	110 (1.14%)	00:00:30	21 (0.45%)	85.71%	30.58%	\$0.00 (0.00%)
20.	<a href="#">/www1.free-share-buttons.top</a>	<b>83</b> (0.68%)	29 (0.30%)	00:00:00	29 (0.61%)	6.90%	34.94%	\$0.00 (0.00%)
21.	<a href="#">/42552800-1.compliance-barak.xyz</a>	<b>56</b> (0.46%)	20 (0.21%)	00:00:00	20 (0.42%)	10.00%	35.71%	\$0.00 (0.00%)
22.	<a href="#">/42552800-1.compliance-ivan.xyz</a>	<b>54</b> (0.44%)	18 (0.19%)	00:00:00	18 (0.38%)	0.00%	33.33%	\$0.00 (0.00%)
23.	<a href="#">/42552800-1.compliance-alex.xyz</a>	<b>46</b> (0.38%)	16 (0.17%)	00:00:00	16 (0.34%)	6.25%	34.78%	\$0.00 (0.00%)
24.	<a href="#">/fire_reintroduction.html</a>	<b>36</b> (0.29%)	36 (0.37%)	00:03:19	21 (0.45%)	95.24%	63.89%	\$0.00 (0.00%)
25.	<a href="#">/news.html</a>	<b>34</b> (0.28%)	30 (0.31%)	00:00:55	11 (0.23%)	72.73%	41.18%	\$0.00 (0.00%)
26.	<a href="#">/News/030113-thinning-will-save-millions.html</a>	<b>31</b> (0.25%)	30 (0.31%)	00:01:56	29 (0.61%)	86.21%	83.87%	\$0.00 (0.00%)
27.	<a href="#">/treatments.html</a>	<b>29</b> (0.24%)	24 (0.25%)	00:00:38	5 (0.11%)	80.00%	34.48%	\$0.00 (0.00%)
28.	<a href="#">/biodiversity.html</a>	<b>28</b> (0.23%)	25 (0.26%)	00:00:17	6 (0.13%)	83.33%	32.14%	\$0.00 (0.00%)
29.	<a href="#">/42552800-1.compliance-george.xyz</a>	<b>27</b> (0.22%)	9 (0.09%)	00:00:00	9 (0.19%)	0.00%	33.33%	\$0.00 (0.00%)
30.	<a href="#">/42552800-1.compliance-irvin.xyz</a>	<b>22</b> (0.18%)	8 (0.08%)	00:00:00	8 (0.17%)	12.50%	36.36%	\$0.00 (0.00%)
31.	<a href="#">/42552800-1.compliance-elena.xyz</a>	<b>21</b> (0.17%)	7 (0.07%)	00:00:00	7 (0.15%)	0.00%	33.33%	\$0.00 (0.00%)
32.	<a href="#">/News/040913-4fri-environmental-analysis.html</a>	<b>11</b> (0.09%)	8 (0.08%)	00:00:24	8 (0.17%)	50.00%	45.45%	\$0.00 (0.00%)
33.	<a href="#">/News/013112-historic-thinning-plan.html</a>	<b>7</b> (0.06%)	7 (0.07%)	00:02:53	6 (0.13%)	50.00%	57.14%	\$0.00 (0.00%)
34.	<a href="#">/News/042712-4fri-forest-thinning.html</a>	<b>7</b> (0.06%)	4 (0.04%)	00:01:26	3 (0.06%)	0.00%	28.57%	\$0.00 (0.00%)
35.	<a href="#">/News/051712-large-scale-thinning.html</a>	<b>5</b> (0.04%)	5 (0.05%)	00:03:57	5 (0.11%)	40.00%	40.00%	\$0.00 (0.00%)
36.	<a href="#">/timeline.html</a>	<b>5</b> (0.04%)	5 (0.05%)	00:00:17	3 (0.06%)	100.00%	80.00%	\$0.00 (0.00%)
37.	<a href="#">/donations.html</a>	<b>4</b> (0.03%)	4 (0.04%)	00:02:38	3 (0.06%)	0.00%	0.00%	\$0.00 (0.00%)
38.	<a href="#">/home</a>	<b>4</b> (0.03%)	4 (0.04%)	00:00:00	4 (0.08%)	100.00%	100.00%	\$0.00 (0.00%)
39.	<a href="#">/News/072612_forest_service.html</a>	<b>2</b> (0.02%)	2 (0.02%)	00:00:03	1 (0.02%)	0.00%	50.00%	\$0.00 (0.00%)
40.	<a href="#">/News/111612-KNAU-part4.html</a>	<b>2</b> (0.02%)	1 (0.01%)	00:00:57	0 (0.00%)	0.00%	0.00%	\$0.00 (0.00%)
41.	<a href="#">/?_sm_au_=ijVf6SrLQkWfkffp</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
42.	<a href="#">/analytics-ads.xyz</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
43.	<a href="#">/news_2010.html</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
44.	<a href="#">/news_2011.html</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
45.	<a href="#">/News/111312-KNAU-part1.html</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
46.	<a href="#">/News/111412-KNAU-part2.html</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
47.	<a href="#">/News/111512-KNAU-part3.html</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
48.	<a href="#">/translate_c?depth=1&amp;hl=es&amp;prev=search&amp;rurl=translate.google.com.mx&amp;sl=en&amp;u=http://www.4fri.org/&amp;usg=ALkJrhjrd7PO4lAvLVnHtxJD0eOLQwh3bA</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
49.	<a href="#">/translate_c?depth=1&amp;hl=es&amp;prev=search&amp;rurl=translate.google.com.pe&amp;sl=en&amp;u=http://www.4fri.org/&amp;usg=ALkJrhgjf03ojFM5zfU5N9XEbcx71Rz_iw</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
50.	<a href="#">/translate_c?depth=1&amp;hl=pl&amp;prev=search&amp;rurl=translate.google.pl&amp;sl=en&amp;sp=nmt4&amp;u=http://4fri.org/&amp;usg=ALkJrhgi69TdzeFWWTvk9RlyCqacyY-orQ</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)
51.	<a href="#">/translate_c?depth=1&amp;hl=pl&amp;prev=search&amp;rurl=translate.google.pl&amp;sl=en&amp;sp=nmt4&amp;u=http://4fri.org/&amp;usg=ALkJrhiCEZxskfiAVxy4vmfz4HwMqYmuw</a>	<b>1</b> (0.01%)	1 (0.01%)	00:00:00	1 (0.02%)	100.00%	100.00%	\$0.00 (0.00%)



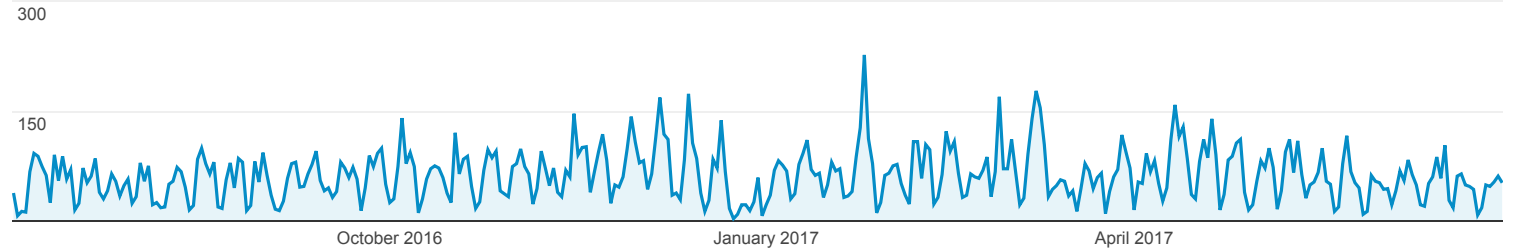
Overview

All Users  
100.00% Pageviews

Jul 1, 2016 - Jun 30, 2017

Overview

Pageviews



<p>Pageviews</p> <p><b>22,751</b></p>	<p>Unique Pageviews</p> <p><b>19,247</b></p>	<p>Avg. Time on Page</p> <p><b>00:02:03</b></p>	<p>Bounce Rate</p> <p><b>66.16%</b></p>	<p>% Exit</p> <p><b>52.77%</b></p>
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Page	Pageviews	% Pageviews
1. <a href="/eri/">/eri/</a>	4,982	21.90%
2. <a href="/eri/resources/for-practitioners/controlling-invasive-species/">/eri/resources/for-practitioners/controlling-invasive-species/</a>	1,006	4.42%
3. <a href="/eri/directory/directory-list-view/">/eri/directory/directory-list-view/</a>	984	4.33%
4. <a href="/eri/directory/">/eri/directory/</a>	916	4.03%
5. <a href="/eri/publications-media/">/eri/publications-media/</a>	838	3.68%
6. <a href="/eri/restoration/the-er-process/adaptive-management/">/eri/restoration/the-er-process/adaptive-management/</a>	825	3.63%
7. <a href="/eri/resources/for-policymakers/effects-of-thinning/">/eri/resources/for-policymakers/effects-of-thinning/</a>	742	3.26%
8. <a href="/eri/research/">/eri/research/</a>	514	2.26%
9. <a href="/eri/directory/directory-dept-view/">/eri/directory/directory-dept-view/</a>	482	2.12%
10. <a href="/eri/resources/for-practitioners/preventing-soil-compaction/">/eri/resources/for-practitioners/preventing-soil-compaction/</a>	383	1.68%

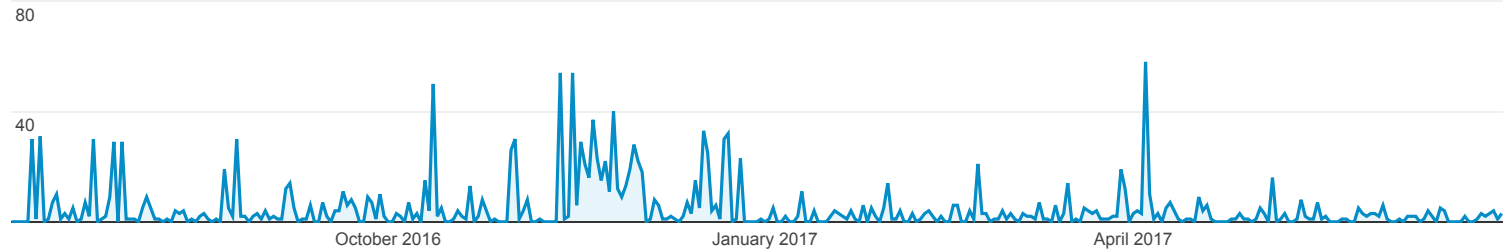
Jul 1, 2016 - Jun 30, 2017

Pages

All Users  
100.00% Pageviews

Explorer

Pageviews



Page	Pageviews	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	1,786 % of Total: 100.00% (1,786)	1,226 % of Total: 100.00% (1,226)	00:01:34 Avg for View: 00:01:34 (0.00%)	964 % of Total: 100.00% (964)	55.91% Avg for View: 55.91% (0.00%)	53.98% Avg for View: 53.98% (0.00%)	\$0.00 % of Total: 0.00% (\$0.00)
1. /	<b>787</b> (44.06%)	623 (50.82%)	00:03:25	617 (64.00%)	64.02%	69.63%	\$0.00 (0.00%)
2. /sharebutton.to	<b>321</b> (17.97%)	112 (9.14%)	00:00:00	112 (11.62%)	4.46%	34.89%	\$0.00 (0.00%)
3. /BroadscaleMonitoring.html	<b>169</b> (9.46%)	133 (10.85%)	00:03:44	89 (9.23%)	80.90%	70.41%	\$0.00 (0.00%)
4. /www1.free-share-buttons.top	<b>78</b> (4.37%)	27 (2.20%)	00:00:00	27 (2.80%)	3.70%	34.62%	\$0.00 (0.00%)
5. /team.html	<b>57</b> (3.19%)	44 (3.59%)	00:00:44	4 (0.41%)	25.00%	24.56%	\$0.00 (0.00%)
6. /index.html	<b>47</b> (2.63%)	42 (3.43%)	00:00:50	15 (1.56%)	40.00%	40.43%	\$0.00 (0.00%)
7. /legislation.html	<b>38</b> (2.13%)	27 (2.20%)	00:02:36	3 (0.31%)	0.00%	21.05%	\$0.00 (0.00%)
8. /dfc_wksp.html	<b>37</b> (2.07%)	29 (2.37%)	00:00:54	1 (0.10%)	0.00%	18.92%	\$0.00 (0.00%)
9. /newsstories/cutting_edge.html	<b>34</b> (1.90%)	31 (2.53%)	00:01:11	31 (3.22%)	83.87%	82.35%	\$0.00 (0.00%)
10. /reviews.html	<b>33</b> (1.85%)	25 (2.04%)	00:00:39	4 (0.41%)	100.00%	33.33%	\$0.00 (0.00%)
11. /contactus.html	<b>31</b> (1.74%)	24 (1.96%)	00:00:54	18 (1.87%)	44.44%	45.16%	\$0.00 (0.00%)
12. /42521592-1.compliance-brian.xyz	<b>26</b> (1.46%)	9 (0.73%)	00:00:00	9 (0.93%)	0.00%	34.62%	\$0.00 (0.00%)
13. /42521592-1.compliance-alex.xyz	<b>22</b> (1.23%)	8 (0.65%)	00:00:00	8 (0.83%)	12.50%	36.36%	\$0.00 (0.00%)
14. /aboutus.html	<b>17</b> (0.95%)	16 (1.31%)	00:02:24	4 (0.41%)	75.00%	47.06%	\$0.00 (0.00%)
15. /recent_news.html	<b>10</b> (0.56%)	9 (0.73%)	00:02:52	1 (0.10%)	100.00%	50.00%	\$0.00 (0.00%)
16. /dfc_wksp_may9_2012.html	<b>9</b> (0.50%)	7 (0.57%)	00:01:24	2 (0.21%)	50.00%	44.44%	\$0.00 (0.00%)
17. /dfc_wksp_septoct2011.html	<b>9</b> (0.50%)	6 (0.49%)	00:01:30	2 (0.21%)	0.00%	22.22%	\$0.00 (0.00%)
18. /faq.html	<b>8</b> (0.45%)	8 (0.65%)	00:01:38	1 (0.10%)	100.00%	37.50%	\$0.00 (0.00%)
19. /newsstories/uncompahgre.html	<b>7</b> (0.39%)	7 (0.57%)	00:00:49	7 (0.73%)	85.71%	85.71%	\$0.00 (0.00%)
20. /reports.html	<b>7</b>	6	00:00:07	0	0.00%	0.00%	\$0.00

21. <a href="#">/press.html</a>	<b>6</b> (0.34%)	<b>4</b> (0.33%)	00:00:17	<b>1</b> (0.10%)	0.00%	16.67%	<b>\$0.00</b> (0.00%)
22. <a href="#">/dfc_wksp_oct17_2012.html</a>	<b>5</b> (0.28%)	<b>4</b> (0.33%)	00:03:41	<b>0</b> (0.00%)	0.00%	0.00%	<b>\$0.00</b> (0.00%)
23. <a href="#">/activities.html</a>	<b>4</b> (0.22%)	<b>4</b> (0.33%)	00:00:09	<b>1</b> (0.10%)	100.00%	50.00%	<b>\$0.00</b> (0.00%)
24. <a href="#">/home</a>	<b>4</b> (0.22%)	<b>4</b> (0.33%)	00:00:00	<b>4</b> (0.41%)	100.00%	100.00%	<b>\$0.00</b> (0.00%)
25. <a href="#">/dfc_wksp_apr2012.html</a>	<b>3</b> (0.17%)	<b>2</b> (0.16%)	00:00:12	<b>0</b> (0.00%)	0.00%	0.00%	<b>\$0.00</b> (0.00%)
26. <a href="#">/dfc_wksp_oct10_2012.html</a>	<b>3</b> (0.17%)	<b>2</b> (0.16%)	00:00:26	<b>0</b> (0.00%)	0.00%	0.00%	<b>\$0.00</b> (0.00%)
27. <a href="#">/dfc_wksp_sep2012.html</a>	<b>3</b> (0.17%)	<b>2</b> (0.16%)	00:00:22	<b>0</b> (0.00%)	0.00%	0.00%	<b>\$0.00</b> (0.00%)
28. <a href="#">/maps.html</a>	<b>3</b> (0.17%)	<b>3</b> (0.24%)	00:00:05	<b>0</b> (0.00%)	0.00%	0.00%	<b>\$0.00</b> (0.00%)
29. <a href="#">/BroadscaleMonitoring.html.</a>	<b>2</b> (0.11%)	<b>2</b> (0.16%)	00:00:00	<b>1</b> (0.10%)	100.00%	100.00%	<b>\$0.00</b> (0.00%)
30. <a href="#">/dfc_wksp_common.html</a>	<b>2</b> (0.11%)	<b>2</b> (0.16%)	00:02:22	<b>0</b> (0.00%)	0.00%	0.00%	<b>\$0.00</b> (0.00%)
31. <a href="#">/links.html</a>	<b>2</b> (0.11%)	<b>2</b> (0.16%)	00:00:06	<b>0</b> (0.00%)	0.00%	50.00%	<b>\$0.00</b> (0.00%)
32. <a href="#">/newsstories/14feb2011.html</a>	<b>1</b> (0.06%)	<b>1</b> (0.08%)	00:00:00	<b>1</b> (0.10%)	100.00%	100.00%	<b>\$0.00</b> (0.00%)
33. <a href="#">/newsstories/14sept2011.html</a>	<b>1</b> (0.06%)	<b>1</b> (0.08%)	00:00:00	<b>1</b> (0.10%)	100.00%	100.00%	<b>\$0.00</b> (0.00%)

Rows 1 - 33 of 33

AZPFC Website Statistics				
Month	Unique visitors	Number of visits	Pages	Hits
Jun-16	311	745	2,027	6,941
Jul-16	239	745	2,579	5,268
Aug-16	306	1,026	2,885	5,731
Sep-16	225	726	2,728	6,252
Oct-16	248	724	3,342	7,151
Nov-16	260	665	3,329	6,567
Dec-16	305	763	2,808	5,955
Jan-17	147	397	1,306	2,450
Feb-17	70	157	504	970
Mar-17	344	917	3,108	5,252
Apr-17	437	988	3,485	5,471
May-17	318	798	3,214	4,873
Jun-17	482	851	3,651	5,054

Top 5 Visited Pages
Home
About
Event-Resources
Contact
Events